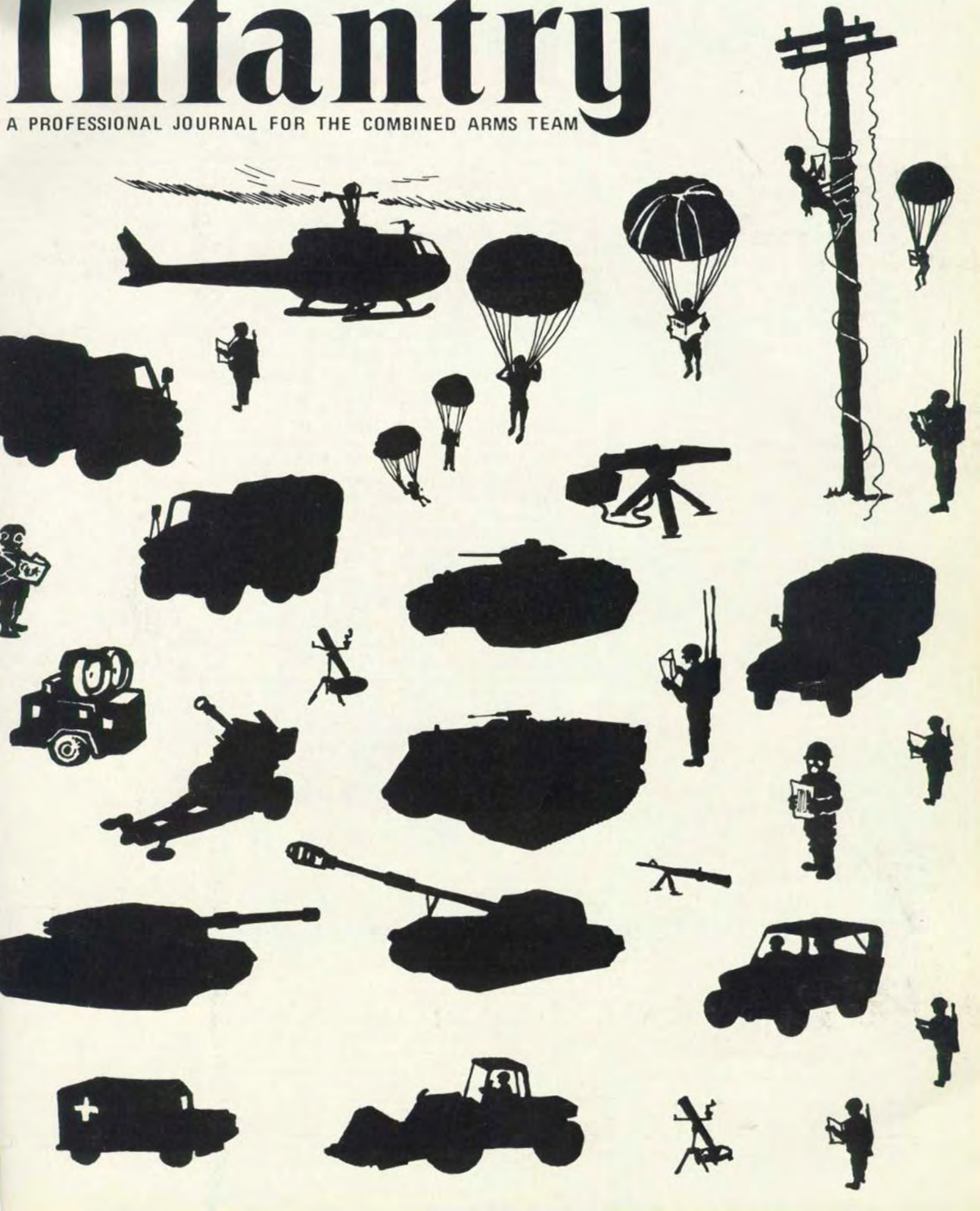
MARCH–APRIL 1983

Infantry

A PROFESSIONAL JOURNAL FOR THE COMBINED ARMS TEAM



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Infantry

A PROFESSIONAL JOURNAL FOR THE COMBINED ARMS TEAM

March-April 1983 Volume 73, Number 2

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FRONT COVER

All the parts of the combined arms team must work together and function smoothly as a whole on the battlefield if it is to be successful. (And it helps to read INFANTRY.)

INFANTRY: Published bimonthly at the United States Army Infantry School, it provides current information on infantry organization, weapons, equipment, tactics, and techniques It also includes relevant historical articles and serves as a forum for professional ideas Unless otherwise stated the views herein are those of the authors and not necessarily those of the Department of Defense or any element thereof The use of funds for printing INFANTRY was approved 10 September 1982 by Headquarters, Department of the Army, The Honorable John O Marsh, Jr., Secretary. Official distribution three copies to each infantry and infantry related unit and to appropriate staff agencies and service schools

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USAIS

Commandant's NOTE

MAJOR GENERAL SAM WETZEL

1982 INFANTRY ASSOCIATION CONFERENCE

As Chief of Infantry and Commandant of the Infantry School, I had the pleasure of hosting the 1982 Infantry Association Conference at Fort Benning this past December. It was a resounding success. Nearly 200 Active Army, Army Reserve, Army National Guard, and senior retired officers and noncommissioned officers from around the world attended. I believe they left with the distinct feeling that today's Infantry is, indeed, a robust and vigorous force.

The conference had three main purposes: to bring those who attended up to date on the latest in Infantry tactics and in training and combat developments; to develop mutually agreed-on positions on certain issues of importance to the Infantry community resulting from the proponency role that was recently assigned to me as Chief of Infantry; and to reestablish the Infantry Association.

The conference also gave those in attendance a chance to witness at first hand the Bradley Infantry Fighting Vehicle and our real pride and joy — the new Infantrymen who are now training at our Infantry Training Center.

We are extremely proud of the Bradley, and this was an excellent opportunity for us to demonstrate its maneuverability and awesome firepower capabilities to our senior Infantry leaders.

Our new soldiers are different from the soldiers we were getting just a few years ago. On the average, they are older, more mature, more responsible, and better educated, and they know what they want and what to expect.

We had a number of excellent individual presentations at the conference. For example, at the opening night's dinner General Richard E. Cavazos, Commander of the U.S. Forces Command, provided very moving remarks about his belief in the *spirit of America and the treasures we all share and protect* in this free land. He then highlighted the American soldier as one of these treasures.

General William B. Rosson, U.S. Army (Retired), speaking on behalf of the retired members of the Association and as the senior infantryman present, presented eloquent remarks that made us aware of the importance of the conference and of the necessity to forge ahead with the issues formulated during the session.

Lieutenant General William Livsey, who commands the VII Corps in Europe, gave us a personal account of the status of training in Europe and expressed his pride in the quality of today's soldier.

Major General John Galvin, who commands the 24th Infantry Division at Fort Stewart, highlighted the unique aspects of the heavy and light mix and the effects it will have on the Army during the Division 86 transition period.

Major General Carl McNair, the Commandant of the Aviation School, gave us some insights into the ongoing developments in Army Aviation.

Brigadier General William S. Carpenter, a 9th Infantry Division assistant division commander, outlined what has been done and what is being done by the High Technology Test Bed at Fort Lewis. (By the way, General Carpenter was recently inducted into the College Football Hall of Fame.)

And Brigadier General Colin Powell, from the Combined Arms Center at Fort Leavenworth, explained the Army 86 initiatives that are key to the evolution of force modernization.

Then we divided the conferees into four panels, each of which addressed itself to specific issues: officer personnel; enlisted personnel; doctrine, training, equipment, and organization; and the Infantry Association.

The results of the panel discussions were presented by panel spokesmen to all of the attendees on the final day of the conference. (A fuller discussion of the reestablishment of the Infantry Association is contained in the editor's note, which can be found on the inside back cover of this issue.)

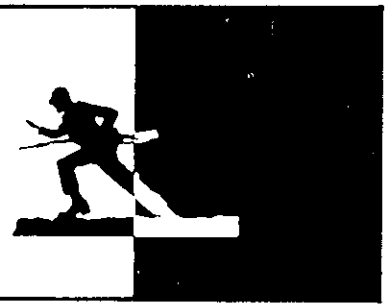
The mixture of Active Army, Reserve Component, and retired Infantrymen gave the conference considerable depth. It also provided an excellent opportunity for our Active Army and Reserve Component people to discuss more fully such important subjects as the CAPSTONE program, which aligns Active Army and Reserve Component units; all agreed that CAPSTONE needs increased emphasis.

The Reserve Component attendees, with their collective years of distinguished service, were also able to enlighten the other conferees on many topics of importance to mobilization, force modernization, and the readiness of the total force.

In terming the conference a success, we must now work to develop the issues that the conferees addressed. As Chief of Infantry, I ask your help so that we at Fort Benning can continue to provide the leadership all Infantrymen have come to expect from their "home."

PRACTICE COMBINED ARMS!

INFANTRY NEWS



RECENTLY, THE INFANTRY SCHOOL completed a comprehensive review of its officer basic and advanced course curricula. Instructors, specialists in training support, and training developers conducted the review, which was aimed at reviewing and updating the curricula. During the review process, students' end-of-course critiques, comments from field commanders, and the most recent changes in tactical doctrine and equipment were considered.

The basic officer course, which all newly commissioned Infantry lieutenants attend, is designed to give those lieutenants confidence in themselves, a mastery of the rudimentary skills and knowledge concerning tactics and equipment, an understanding of their moral and ethical responsibilities, and a high degree of physical and mental toughness.

The 16-week program of instruction is aimed at training the lieutenants in their combat-related skills so that when they arrive at their units they will be motivated to take charge of their first platoons and continue their own training process under the tutelage of their company and battalion commanders.

Accordingly, the first few weeks of the course emphasize basic individual and collective infantry skills at the squad level. The remaining weeks are devoted to collective training at the platoon level with the student-officers participating as members of an infantry platoon in company and team operations.

Leadership training is continuous and demanding. The student-officers are watched closely as they occupy leadership positions in both garrison and field situations. Each student-officer is also graded on his ability to teach and lead physical training and to present instruction.

Overall, more flexibility has been added to the instructional program, 79 percent of which is now field training time; there is more physical training than before; and there has been an increase in the number of field training exercises — there are now five, with the first exercise being conducted in the third week. The course continues to emphasize both mechanized and light infantry training, and the graduates complete most of the weapons and tactics tasks required of the soldiers they will soon be leading.

The officer advanced course curriculum is quite different, of course. Its primary goal is to prepare the officers to command companies and to serve as battalion staff officers, while providing flexibility for individual study and physical training.

The School's overall training strategy for the advanced course is reflected in the course's sequence of instruction. Thus, the subjects that support such instruction as battlefield logistics, chemical and biological warfare, weapons, and fire support are presented before, but are then integrated with, instruction in offensive, defensive, and special operations. The subjects that relate primarily to command and staff functions — such as training management, supply accountability, legal matters, and maintenance — are taught near the end of the course because these functions are the ones a graduate of the course is most likely to perform soon after he takes over a company or begins an assignment as a staff officer.

Where possible, the new program of instruction is based on a six-hour day for all classroom instruction. This has been made possible by doing away with redundant training and by eliminating certain excess time. Programmed and self-study texts have been developed for other instruction.

The major additions to the course's instructional program include an eight-hour tactical exercise without troops, a two-hour hands-on block of instruction with the Bradley Infantry Fighting Vehicle, a fifteen-hour ethics package, and a twelve-hour history program. A new integrated writing program designed to sharpen the student-officers' writing and communication skills is being developed.

The two new curricula that have been developed present the School's student-officers a full schedule of challenging learning events, and they reflect the Infantry School's understanding of where it is going and how it plans to get there.

THREE UNITS OF THE 172d INFANTRY BRIGADE (Alaska) recently became the first Army units to be redesignated under the new regimental system. The 1st Battalion, 60th Infantry, the 4th Battalion, 23d Infantry, and the 4th Battalion, 9th Infantry were redesignated the 4th, 5th, and 6th Battalions, respectively, of the 327th Infantry Regiment during ceremonies on 6 January 1983.

The 327th Infantry Regiment, based at Fort Campbell, is the first of 26 infantry regiments that will be formed eventually under the new system. The Alaskan units are now paired with three sister battalions at Fort Campbell.

The other infantry regiments that will be part of the new system are the 1st, 2d, 3d, 4th, 5th, 6th, 7th, 8th, 9th, 12th, 15th, 16th, 17th, 18th, 21st, 23d, 41st, 52d, 75th, 187th, 325th, 502d, 504th, 505th, and 5th Cavalry.

Under the regimental concept, whole companies — and eventually

battalions — will move between assignments in the continental U.S. and overseas bases. This should cut down on personnel turbulence and improve combat readiness, unit cohesion, and esprit de corps by keeping soldiers together longer in one unit. In the case of career soldiers, the system's goal will be to keep them associated with one regiment throughout their Army careers.

Companies of soldiers will complete their basic and advanced individual training together and then will be assigned to the regiment's home base for an 18-month tour. After that a company will be assigned to the overseas base at which the remainder of the regiment is assigned.

At the end of that tour, the company will be dissolved, with first-term soldiers who have not reenlisted being sent home and the remainder being reassigned either within the regiment or to schools, recruiting duty, or a staff or headquarters assignment. In the meantime, another unit will be assigned to the overseas base from the regiment's home base, where a new unit would be trained to replace the departing one.

THE NATIONAL INFANTRY MUSEUM is currently in the midst of a renovation and expansion project in which the third floor of the museum building is being prepared for use as additional exhibit space. This will add 6,000 square feet to the viewing area, a significant increase.

The present plans call for moving the foreign exhibits and other special collections to the third floor and for expanding the remaining exhibits on the first and second floors. The Museum will then be able to display many interesting artifacts that have been packed away for lack of adequate exhibit space.

Recently, some significant additions have been made to the collection: A Navy dress uniform belonging to President Jimmy Carter was donated for use in the Presidential collection. A mid-19th century Chickering grand piano was also donated, and it fits nicely into the Benning Room display. And at a ceremony held in the Museum's auditorium, the Leslie Clan Society presented a handsome King's Own Scottish Border dress uniform that is in perfect condition.

In remembrance of Pearl Harbor Day last December, the Museum prepared a special exhibit for display in Infantry Hall. The Museum staff makes a special effort to honor special occasions such as this by preparing specially constructed exhibits or by providing support for exhibits that have been prepared by other groups or units.

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.

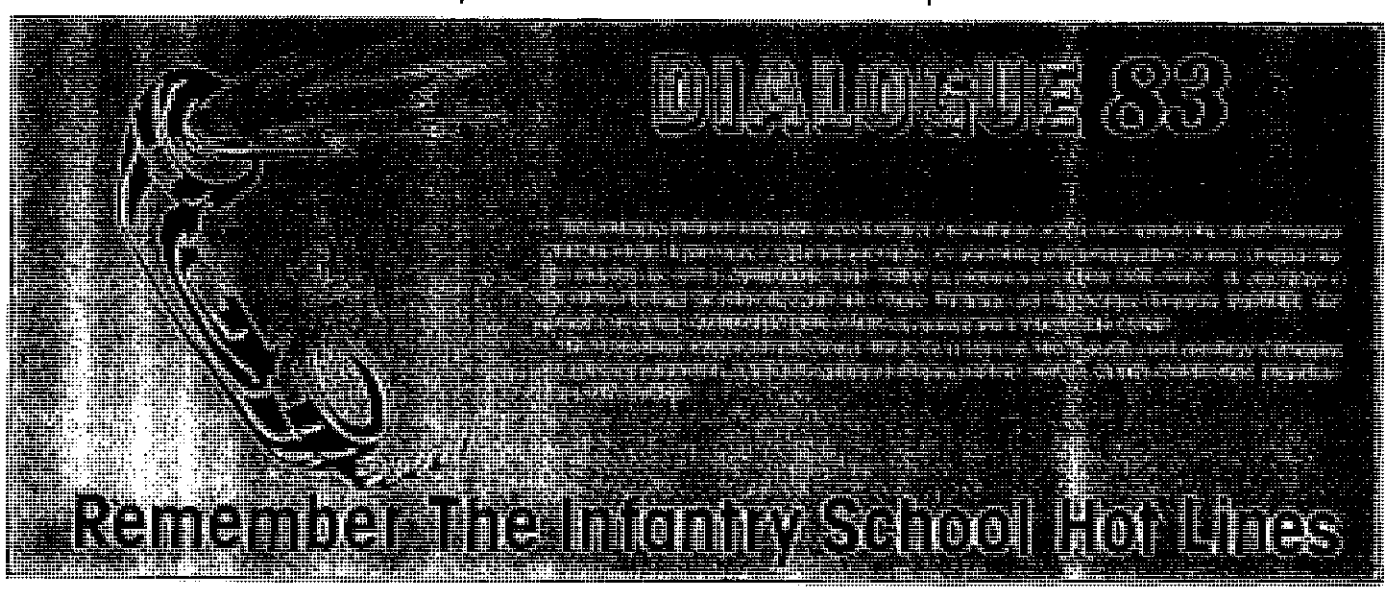
Additional information about the Museum and the Society is available from the Director, National Infantry Museum, Fort Benning, Georgia 31905; telephone AUTOVON 835-2958, or commercial 404/545-2958.

THE INFANTRY BOARD HAS FURNISHED the following news items:

• **Long-range Rifles.** Special Forces and Ranger personnel need a sniper weapon system that can hit targets at greater ranges than the present M21, 7.62mm sniper rifle system can reach.

The search for such a weapon is now on, and the Infantry Board recently conducted an evaluation of candidate rifle systems provided by the United States Army Institute for Military Assistance (USAIMA). The objective was to provide accuracy and comparative data on the candidate systems and the M21.

During the test, nine shooters fired four types of rifles, using two interchangeable telescopic sights and appropriate ammunition. The shooters were from the USAIMA, the 7th Special Forces Group, the 10th Special Forces Group, the 2d Battalion, 75th Infantry, and the XVIII Airborne Corps' marksmanship



training unit. They used a 7.62mm semiautomatic rifle, a 7.62mm bolt action rifle, a caliber .338 bolt action rifle, and a standard M21 sniper rifle.

The current standard telescopic sight that the U.S. Marine Corps uses with its sniper rifle system — the UNERTL — and the Army's sniper rifle system's standard telescopic sight — the ART II — completed the systems. The cartridges used were the Match, M118, 7.62mm and the .338 Winchester Magnum.

After zeroing, each test firer fired two three-round groups from each system at 400-, 600-, and 1,000-meter targets from a bench rest with sandbag support. The firers stated their opinions and gave their observations concerning safety and human factors aspects by answering questionnaires and taking part in interviews at the end of the test.

The USAIMA will use the test results as one data source for establishing a near-term acquisition program for the Special Operational Forces Sniper Weapon System.

The test officer for this evaluation was Captain Michael H. Camilletti.

• **Plastic Training Cartridges.** Some foreign armies have been using plastic training cartridges for years. Recently, a number of U.S. Army commanders in Europe decided that they could use these cartridges to advantage in several different training areas. So the Infantry Board was tasked to determine the capability of the .50 caliber plastic training cartridge (PTC) to indicate a hit on standard pasteboard and polyethylene "E" and "F" type silhouette targets and to "kill" those targets mounted on the standard target-holding mechanism.

The PTC, both ball and tracer, is about the same size and shape as a corresponding service round. The base of the cartridge, which encloses the primer, is made of aluminum while the rest of the case is blue plastic. The tip of the projectile is red. The cartridges are linked with M9-type metallic links for use with the Browning machinegun (BMG). Although the PTC's initial muzzle velocity is over 4,000 feet per second, its velocity drops rapidly because of the projectile's light weight (about 50 grains) and its low sectional density.

A special recoil amplifier barrel is used with the BMG for firing the PTC and is assembled to the gun like a standard barrel. Extra support is provided by clamps secured to the gun barrel, and these also hold the barrel firmly in place. Gas ports in the barrel bleed off some of the gases that are generated by firing into a special recoil amplifier chamber located near the center of the barrel. Enough forces are generated to cause the barrel to recoil and the gun to function.

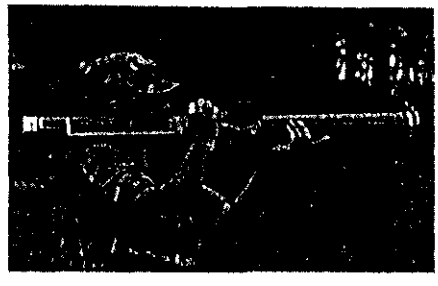
A special plastic round discriminator, or stop, made of blue plastic allows the proper feeding of the cartridges and prevents the feeding of standard service rounds, which are slightly longer.

Seven test soldiers used the PTCs and the specified targets during firing exercises. A round-by-round record was kept of the functioning, target hits, target marking, and target mechanism activations.

The Army's Test and Evaluation Command will use the test data in a technical feasibility test it is conducting on the PTC.

The test officer was Sergeant First Class Alphonso Millender.

• **Viper Subcaliber Rocket Trainer.** In 1981, the Infantry Board conducted an Operational Test II of the Viper lightweight antitank and assault weapon system. During that test, two kinds of Viper training devices were evaluated: a subcaliber rocket trainer (SRT) and a subcaliber tracer bullet trainer (STBT).



Viper SRT.

The SRT failed several times during gunnery training and was removed from the test. The STBT was type classified standard as part of the Viper system, although it did not provide the launch effects — noise, smoke, backblast, overpressure — that simulate or even approximate those of the actual Viper. Consequently, it is not completely satisfactory for Viper training, and major field commanders have indicated a preference for a rocket trainer.

The Infantry Board recently evaluated another proposed Viper SRT that consists of two components. The first is a launcher that uses an expended Viper tactical round, modified to accept a mechanical rather than an electrical firing mechanism, and a 25-inch inner steel tube through which a 35mm rocket is fired. The second component is the rocket, a modification of the standard M73 35mm subcaliber rocket, which is used as a training device with the M72A2 LAW system; this rocket, which is designed to match the launch and flight characteristics of the Viper's tactical round, provides a visible smoke trace to the target and a flash and smoke signature effect when it hits the target.

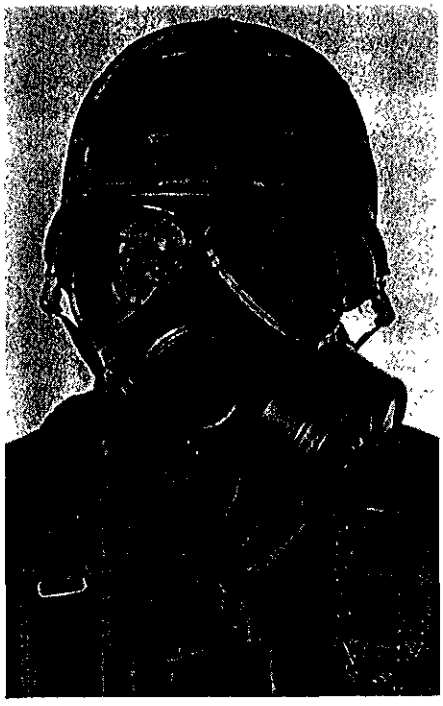
Ten test soldiers received training on the operation and use of the SRT. They were then tested on their ability to perform such tasks as conducting a prefire inspection, placing the system in operation, assuming the correct firing position, taking the SRT out of operation, applying misfire procedures, and demonstrating correct sight pictures using sighting training devices. After those exercises, each test soldier engaged stationary and moving targets with the SRT according to the established tables of fire.

Data was collected on the effectiveness of the SRT training program, on safety and human factor aspects of the SRT, and on the system's reliability and maintainability. The test results will be used by the Infantry School in deciding whether the SRT has the potential for meeting the requirements of a rocket trainer.

The test officer was Major Randy C. Gallatin.

• **Protective Mask.** The Army needs a new protective mask that provides increased protection against field concentrations of chemical and biological agents. The new mask, which would replace all types of field masks now in use, must also reduce the logistical burden and have improved storage characteristics.

Different models of masks have been tested during the past few years, but none have been an improvement over the masks they were intended to replace. The Army's Chemical Systems Laboratory recently designed and fabricated a prototype Minimum Change/Minimum Risk (MC/MR) mask design concept that combined the desirable features of previously tested masks.



MC/MR mask.

The Infantry Board tested this design to provide data to the Chemical Systems Laboratory on the compatibility of the mask with infantry equipment, on the optical properties of the mask, and on the design and safety considerations of the mask. The MC/MR masks that were tested had been fabricated with a green silicone faceblank and nose cup assembly with integrally molded harness tabs and an adjustable head harness. A natural rubber panel was bonded over the faceblank, which contained a side-mounted filter canister, outlet valve and cover, and two voice transmitters. The M17 and M25A1 field protective masks were used as control items during the test.

Test soldiers were riflemen, machinegunners, mortar crewmen (including fire direction center personnel), TOW gunners, and armored vehicle crewmen. Each fired his assigned weapon three times according to published qualification or familiarization tables — once wearing the test mask. The crew-served weapons gunners also fired a night familiarization course using night sights while wearing the test and control masks.

Drivers alternated the use of the test and control masks with night vision goggles and their vehicles' night vision periscopes. Combat spectacles with uncorrected lenses were worn by selected test soldiers to determine whether the masks provided enough face relief.

The Chemical Systems Laboratory will use the test results to formulate decisions concerning the full-scale development of the MC/MR masks.

The test officer was Captain Tim F. Prouty.

• **Museum.** When an infantryman pulls on his socks, laces his boots, and reaches for his weapon he probably does not give a passing thought to the fact that everything he wears or uses has been throroughly tested before it is issued to him.

The Infantry Board at Fort Benning has been in the testing business for almost 80 years, always trying to provide ONLY THE BEST FOR THE FINEST. It has tested everything from back packs for mules to the Bradley Infantry Fighting Vehicle, and from wrap-around leggings to athletic shoes.

Today, the Board is organizing a museum that will contain, among other things, a collection of test reports dating as far back as 1921, photographs of different items and equipment that the Board has tested, and actual test items. A large room on the second floor of the Board's headquarters building is being renovated to accommodate the collection.

Contributions — news items, photographs, test items, or any other related material — are being solicited. Anyone who wishes to donate to the Board's museum is asked to contact the Sergeant Major of the Board by calling him at AUTOVON 835-1519 or commercial 404/545-1519 or by writing to: President, U.S. Army Infantry Board, ATTN: Sergeant Major, Fort Benning, GA 31905.

THE ARMY PLANS to activate its first fighting force trained in mountain warfare since World War II.

The unit — 100 strong — is Company A, 1st Mountain Battalion, 72d Infantry, assigned as an adjunct to the Vermont Army National Guard.

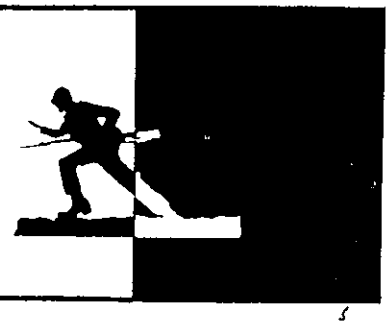
The unit was approved in May 1982. Vermont was chosen as its permanent home because of the state's hilly terrain and harsh winters, and because the Army holds its annual biathlon training there.

THE U.S. CENTRAL COMMAND (USCENTCOM) was formally established on 1 January 1983. With headquarters at MacDill Air Force Base, USCENTCOM is the country's sixth unified command.

As an outgrowth of the U.S. Rapid Deployment Joint Task Force, the new command is committed to military cooperation with friendly governments in the region from Egypt to Pakistan and from Jordan south to Kenya.

MILITARY PERSONNEL ASSIGNED to Fairbanks, Alaska, will now serve 36 months instead of the former 30 months if they have their dependents with them. All other personnel will serve 24 months, up from the previous 18 months. This change also includes Fort Wainwright.

FORUM & FEATURES



The Third Army:

Past and Present

CAPTAIN DANNY M. JOHNSON

The Third United States Army, best known perhaps for its distinguished service in World War II under the command of General George S. Patton, Jr., was formally reactivated recently at Fort McPherson, Georgia, after nine years in an inactive status. It has been around, performing one function or another, for more than 60 years.

The Third Army was originally activated on 15 November 1918 at Ligny-en-Barrios, France, as Headquarters, Third Army, American Expeditionary Forces. General John J. Pershing named Major General Joseph T. Dickman as its first commander. It was composed initially of the III Corps, which included the 2d, 32d, and 42d Divisions, and the IV Corps, which included the 1st, 3d, and 4th Divisions. To these were added, on 22 November 1918, the VII Corps, containing the 5th, 89th, and 90th Divisions. In the same month, the Americans and their allies began their march into Germany to assume occupation duties. The Third Army moved to Coblenz, Germany, as the principal headquarters in the American sector for units assigned to the American Army of Occupation.

The return of our troops to the United States progressed rapidly, and the Third Army was disbanded on 2 July 1919 in Germany. It was reconstituted, though, in October 1921 as part of the Organized Reserves and allotted to the Seventh Corps area, but was withdrawn from the Organized Reserves and allotted to the Regular Army as an inactive unit in August 1932.

REACTIVATED

In October 1933, it was activated again at Fort Sam Houston, Texas, this time as a Regular Army unit, one of the four field armies created by General Douglas MacArthur, then the Army's Chief of Staff, within the continental limits of the United States. It was responsible for the Fourth and Eighth Corps areas and for additional missions dealing with the region along the Gulf of Mexico and the country's southern border.

From the time of its activation as a Regular Army unit, the Third Army's headquarters alternated between Fort Sam Houston (the headquarters of the Eighth Corps area), and Atlanta, Georgia (the headquarters of the Fourth Corps area), depending upon the senior commander at the time.

Early in World War II, the Third Army engaged in training tactical units for service overseas, and in January 1943, it was called on to provide the original cadre for the activation of the Sixth Army, which was also formed at Fort Sam Houston.

On 12 January 1944, an advance detachment of Third Army headquarters departed for England, with the main body arriving there in March 1944. (Its duties at Fort Sam Houston were taken over by the Fourth Army, which moved from the Presidio of Monterey, California, on 26 January 1944.) Lieutenant General George S. Patton, Jr., assumed command of the Third Army in England, where it remained until July 1944, when the headquarters moved to the Cotentin area of Normandy, France. Many of its assigned units had seen action during June and July 1944 as

part of the First Army. The Third Army became operational on 1 August 1944.

A number of armored columns soon drove quickly to the tip of the Brittany peninsula, while others swung to the east and drove across France. The Third Army was halted on 25 September 1944 by orders from higher headquarters as it came up to the line formed by the Moselle River.

The drive for the fortress city of Metz began on 9 November, and after 12 hectic days of bloody fighting, the city, along with most of its protecting forts, surrendered. The Third Army then moved on to establish bridgeheads over the Saar River at Saarlautern and Dillingen, and stood ready for an all-out attack to pierce the Siegfried Line. It had penetrated that line at several points when it was dramatically diverted to Luxembourg for the Battle of the Bulge. The speed with which it moved from one sector to another and drove into the Bulge from the south was one of the outstanding feats of the war.

STEADY DRIVE

In early 1945, the Third Army drove steadily into the Siegfried Line against stubborn resistance, and captured the Saar-Moselle triangle, which led to the capture of the city of Trier on 2 March 1945. On 5 March, its 4th Armored Division drove through the enemy's lines, and by 9 March both the 4th and the 11th Armored Divisions had driven more than 80 miles to the Rhine River. Turning south, the Third Army on 13 March again crossed the Moselle and drove through the Saar Basin. On the night of 22 March, without artillery or air preparation, the 5th Infantry Division of the Army's XII Corps made the first assault crossing of the Rhine at Oppenheim. The 4th Armored Division followed this crossing by thrusting armored spearheads deep into Germany.

When a link-up with Russian forces became imminent, a restraining line was established beyond which Army units were not to advance. The Third Army reached this line on 16 April, and the following day it was ordered to pivot to the south and to attack into Austria and the so-called redoubt area. This drive carried the Third Army across the Danube, Isar, and Inn Rivers and into Czechoslovakia and Austria, where it was when the war in Europe ended on 8 May 1945.

At various times throughout the war, six corps (III, V, VIII, XII, XV, and XX) had operated under the Third Army. A total of 40 U.S. Army divisions and one foreign division had been assigned to it for varying periods. It had taken part in the Normandy, Northern France, Rhineland, Ardennes-Alsace, and Central Europe campaigns.

Following the surrender of Germany, the Third Army was once again assigned occupational duties, this time in Bavaria and western Czechoslovakia. On 15 March 1947, the War Department transferred the Third Army, less its personnel and equipment, from Germany to Atlanta, Georgia, where it replaced the Seventh Army, which was inactivated on the same date. In December 1947, the Third Army moved from a downtown location in Atlanta to Fort McPherson.

It was assigned the geographical areas of Tennessee, North Carolina, South Carolina, Georgia, Alabama, Mississippi, and Florida, and it was made responsible for the command support of all assigned and attached units, activities, and installations in its area. It was also responsible for organizing, training, and equipping its assigned Active Army and Army Reserve troop units, for insuring the combat readiness of these units, and for directing and supervising the training of the Army National Guard. The Third Army was redesignated on 1 January 1957 as Headquarters, Third United States Army.

In 1972 the United States Army began its most sweeping reorganization in ten years. As a result, the Continental Army Command and the Combat Developments Command were discontinued and the Forces Command (FORSCOM), with headquarters at Fort McPherson, and the Training and Doctrine Command, at Fort Monroe, Virginia, came into being. The Third Army was assigned to FORSCOM on 1 July 1973, but was eventually inactivated at Fort McPherson on 1 October 1973.

CENTCOM

Now reactivated and back at Fort McPherson, the Third Army will function as the Army component headquarters for the multi-service Central Command (CENTCOM), which has its headquarters at MacDill Air Force Base in Tampa, Florida. In peacetime, the Third Army will be under the operational control of the CENTCOM and under the command of FORSCOM. It will have operational control of the XVIII Airborne Corps, which is at Fort Bragg, North Carolina.

The Third Army headquarters was formed to improve the command and control of all Army forces assigned to the CENTCOM. Units slated for CENTCOM missions are the XVIII Airborne Corps, the 82d and 101st Airborne Divisions, the 24th Infantry Division, the 6th Cavalry Brigade (Air Combat), various Ranger and Special Forces units, and a variety of Army National Guard and Army Reserve combat support and combat service support units. This arrangement will allow the XVIII Airborne Corps to focus on detailed planning for employment while the Third Army focuses on planning for deployment and sustainment.

Most of the people assigned to the Third Army headquarters will be members of the Army Reserve. Accordingly, the Department of the Army has established Headquarters and Headquarters Company (HHC), Third Army (Augmentation), an Army Reserve unit also located at Fort McPherson. (During peacetime, HHC, Third Army (Aug) is assigned to the 81st Army Reserve Command in Atlanta.) It has an authorized strength of 376 Reservists. Upon mobilization, the unit will cease to exist,

and its personnel will be assigned directly to spaces in Third Army headquarters.

During peacetime, 95 members of the Active Army and 41 members of the Army Reserve will staff the headquarters on a full-time basis. Additionally, 150 people currently assigned to FORSCOM headquarters will be predesignated as members of the Third Army for planning, during exercises, or in the event of mobilization. (The activation of the Third Army will not require an increase in the Army's force structure.)

If the Third Army is mobilized, it will have an assigned strength of 662, organized under the Field Army Table of Organization and Equipment. The Deputy Commanding General of FORSCOM also serves as the Commanding General, Third Army, which gives him both a mobilization and a peacetime role.

Because of the various roles the units of the CENTCOM will have on any future battlefield, the Third Army can be expected to continue to serve with distinction in the future as it has in the past.

CAPTAIN DANNY M JOHNSON, U S Army Reserve, holds a master's degree from Northeastern University and has published several division histories in *Soldiers* and *Army* magazines He presently serves as a manpower specialist with the Office of the Army's Assistant Chief of Staff for Intelligence.

Able and Willing

DANDRIDGE M. MALONE

A really good soldier is both able and willing. But that's not really news. You probably already know that developing soldiers means building skill and will. And you know that building skill, or training, is the primary task and the principal responsibility for any company-level leader this side of the battlefield. You know, too, that every time you build skill, you automatically build will.

In general, these things apply to developing all soldiers. But because each soldier is different, you may need some *how-to*'s for developing the individual soldier, because what works well for building skill and will in one soldier may not work at all for the next. (It would if soldiers were machines, but they're not.)

Your goal, then, is a simple one — to produce a man who is both able and willing. Some soldiers are always able and willing. They have the skill and the will, no matter what task you give them to do. Others, of course, have the will (they try hard) but not the skill (whatever they touch turns to mud). Still other soldiers have the skill to do a task you give them, but not the will — you have to stand over them and make them do the task.

If you want to develop soldiers as individuals, you have to start by sizing each one up in terms of how able he is and how willing he is. You have to check his headspace with an "able and willing gauge."

So if you want to develop soldiers as individuals, you have to start by sizing each one up in terms of how able he is and how willing he is. In short, make an estimate; check his headspace with an "able and willing gauge." This simple basic estimate works, and it can save you time, help you do the right things right, and — in addition to all that — it's logical. It makes good sense for a leader to come down hard on a soldier who has the ability to do a task but won't do it. On the other hand, it makes no sense at all to come down hard on a man who is trying his best but has never really been taught the skills he needs to do a given task. Knowing how to judge a soldier in terms of "able and willing" is the first step in developing soldiers as individuals.

Listed below are some traits and characteristics of soldiers in each of the four different categories of "able and willing." As you study these, think about the immediate subordinates you have right now, about each one as an individual. Few individuals will fit clearly and completely in any one category. But if you'll think about a man, you'll see that one of these four categories seems to describe him better than the others.

An able and willing soldier

- Has done the task right before.
- Does many other tasks without being told.
- Never seems satisfied until a job is done "right."
- Accepts the need to put in extra time when necessary to get the job done.
- Works out ways to get the job done better.
- Has been satisfactory in his performance recently.

An unable but willing soldier

- Has never performed the task before, or can't recall it if he has.
- Has been enthusiastic, particularly in performing tasks similar to what you want him to do now.
- Pays close attention to your instructions.
- Watches others doing same task; asks questions.
- Spends some of his own time learning or practicing.

An able but unwilling soldier

- Has performed recently off and on — sometimes to standard, sometimes below standard.
- Has done the job right before, but keeps asking for instructions and assistance.
- Doesn't appear to be concentrating; work is sporadic, poorly planned.
- Lacks confidence in himself and his work.

An unable and unwilling soldier

- Has never performed the task to standard.
- Has performed below standard recently, even when he has received a lot of assistance and instructions.
- Works only when closely supervised.
- Seems satisfied with below standard results.
- Pays little attention to instructions; half-listens.

Go ahead and try it. In which category does Smith fit best? And Jones? And so on down the line. If you know your man, as the Sixth Principle of Leadership requires, you'll get the right man in the right category about 90 percent of the time.

The descriptions under each of these four categories are only rough indicators, of course, because each soldier is different. A big part of your job is knowing the differences, then using that knowledge to be a better and smarter leader. The ability to judge a subordinate on how well he measures up on both sides of the "able and willing" scale is another of those basics that you have to learn, practice, think about, and turn into an instinct.

But once you have decided generally which category each soldier fits into, how do you work with each different type?

QUARTERBACK

A soldier who is fully "able and willing" should be your living standard in the task of developing soldiers. You should work with an able and willing soldier as if you were a coach with a good quarterback. He can operate with mission-type orders and probably call most of his own plays. He does the right things right. He should not be given close supervision. What this soldier does best is to get your job done and save you time. He earns your trust. This is the kind of man you want to start growing to bring into the leadership ranks. And, finally, if you want to do the tricky business of developing your soldiers right, delegate important jobs only to soldiers like him — to the men you feel are able and willing. The others will seldom get the job done.

The "willing but unable" soldier is the one who usually comes to you in the replacement stream, the new guy. You work with this man as if you were a teacher. There will be a lot that he doesn't know. His initial entry training will have given him only two-thirds of the skills that his MOS calls for. And he's probably never seen an operational unit. This soldier needs careful handling. He believes most of the rumors he hears, and can easily become discouraged and frustrated. He can be led off on the wrong track. He needs patient instruction and a lot of feedback. He will eat up much of your time but, in his case, putting in the extra time is like putting money in the bank.

The "able and unwilling" soldier is your main challenge. You know you have a good horse, but when you take him to the water, he just won't drink. You work with this man as if you were a father. His unwillingness may be only a lack of confidence. If so, all he needs is a nudge — an opportunity and some encouragement. On the other hand, this able and unwilling soldier may have a real problem — maybe with a young wife, or with a big debt, or with himself. The best thing you can do is let him tell you about it. Listen to him carefully. About five percent of the time, the able but unwilling soldier may just be shirking. In either case — the man with the problem, or the shirker — insist that he complete the task, and make him do it to your standards. The man with the problem will feel he's done something worthwhile; the shirker will learn that, with you, the "shirk" won't work.

The "unable and unwilling" soldier shouldn't be in your unit in the first place. But somewhere along the line, the poor leader knowlingly passed him on, or just let him slip through. You work with this man as if you were a warden. He doesn't know how to do his job, and he doesn't care about learning. He is a "quitter." But you don't punish him. If you punish a quitter, that means he's smarter than you are. Why? Well, if he doesn't want to do his job, and you punish him instead of making him do it, then he gets what he wants — he gets out of doing the job. You are actually rewarding him. He has outsmarted you. So, instead of punishing him when he quits on you, make him complete the task.

Making the unable and unwilling soldier complete a task to standards has another advantage. Maybe you'll lead him to something he's never learned much about — success at some skill. And maybe that success will build a little more willingness, and he'll try another skill. And there he goes, a finally turned-on soldier.

He is salvaged. That will happen about one time out of five, after you've invested more hours in these five problem soldiers than in all of your other men put together.

Putting a lot of time in with the unable and unwilling soldier is noble and human. But it is not "leadership effective" in terms of the effort you must invest and the return the Army gets on that investment. Your other soldiers will benefit far more from your time and effort. But don't pass this man on or let him slip through. There is no place for him on the battlefield when that "thing" we call a unit does its work.

There it is — a simple and practical tool for identifying four different categories of soldiers, and a simple strategy for developing the individual soldiers in each category. The differences between them have nothing to do with race, creed, color, sex, or anything else. The differences have to do simply with skill and will, which is what you as a leader are responsible for developing in your soldiers. Skill plus will equal performance. Performance is what gets the job done. And the purpose of leadership is, after all, to do the job.

DANDRIDGE M. MALONE, a retired Infantry colonel, has published numerous articles, books, and technical reports. He holds a master's degree in social psychology from Purdue University and has completed several military schools, including the Armed Forces Staff College. In addition to his Infantry leadership assignments, he has also served in either staff or faculty assignments at the U.S Army Command and General Staff College, the U.S. Military Academy, and the U.S. Army War College.

Building Morale Through PT

CAPTAIN DAVID H. PETRAEUS

In recognition of the need for its soldiers to be physically ready for any future conflict, the Army is emphasizing physical training more than ever. As a result, more units are running and exercising as a group. Unfortunately, too many of them fail to make the most of the opportunity to build morale, esprit, and cohesion at the same time they are developing stamina and fitness.

The problem is that PT is often seen as a boring, tedious activity, usually performed at an early hour, often before sunrise, and occasionally when it is quite cold. In the grey chill before dawn, the members of many organizations stumble out of their barracks or their automobiles and shuffle through the daily routine without ever gaining a feeling of togetherness or enthusiasm. On the other hand, units with high levels of motivation and spirit normally shout and sing their way along, helping each other and developing a close-knit feeling and considerable pride in their units. More than likely, such units will carry this same positive attitude throughout the day in performing their other duties.

Knowingly or not, units that effectively build morale through PT usually practice several basic principles. These are principles that other units can use to improve their own programs.

MANDATORY

First, attendance at PT sessions should be mandatory. If the program is to be effective, everyone must participate, especially the company commander, the first sergeant, the company clerk, the commander's driver, and the motor sergeant. Certainly, there should be an allowance for exceptions on a day by day, mission by mission basis, but these should be granted sparingly and only by the commander or the first sergeant.

At the beginning of each regular PT session the instructor should announce the exercise and the number of repetitions to be performed as well as the distance and time for the run that is to follow. This lets everyone in the group know the program for that day and allows them to pace themselves through it.

The PT instructors must be thoroughly professional. They must know the exercises they will conduct and lead their units in these exercises crisply and with confidence. They should never act self-conscious or unsure of themselves, but neither should they show off their superior fitness at the expense of others. They need to be in complete control of the formation and should not tolerate marginal performance by any member of it.

Other leaders in the unit must support them completely in this by never allowing their soldiers' unsatisfactory performance to go uncorrected. In

units that have pride in their PT program, the soldiers, too, will usually help through positive peer pressure. They will not tolerate others who are out of step or who are not doing the exercises correctly. The senior leader present should also provide a critique or feedback to the PT instructors immediately following each session.

The pace of the PT session should be reasonable. The number of repetitions for each exercise and the length of the run should challenge the soldiers but should not totally exhaust them.

The instructors should choose exercises that work on different parts of the body and should perform them in a sensible order. As an example, good instructors avoid following the four-count pushup with the squat thrust, because both are upper body exercises. Pushups, situps, and a run should be included in each session.

STANDARDS

Recognized, published physical fitness standards are vital, and the PT program must be oriented toward those standards. A unit should not run faster than the standard unless everyone can make it. If the successful completion of the PT test is the minimum, that's fine, but unit members should be aware of it.

Testing should be done frequently to measure progress and to provide a visible goal; those who fail to meet the standards, especially leaders, need to be quickly identified for a remedial program.

A unit's remedial program should not be for those who fall out of a run that is twice as long as the standard, or one that is three minutes faster than the standard. It should be only for those who fail to perform at the level of the announced minimum standards. Remedial activities should be announced in advance and attendance should be strictly enforced. The progress of those in the program should be carefully monitored.

But in the process of dealing with the standards and the remedial programs, the PT leaders should be careful not to stifle the overachievers. They must be given an opportunity to show their stuff, and they can be, through several techniques. Letting them pair off and do pushups or situps (or other exercises) for an announced time (one or two minutes, for example), rather than a fixed number of repetitions, will allow the hard chargers such an opportunity. The same goes for letting them run a fixed distance individually for time. A third method is to have a separate group that, on certain mornings, does PT separately, performing more repetitions and running farther and faster. Still, these PT superstars should not be allowed to lose their unit identity through too many of these individual sessions.

Most good units also vary the level of their PT sessions, conducting them at platoon level most days, at company level once or twice a week, and at battalion level once or twice a month. This practice adds variety, allows initiative at platoon (or squad) level, and fosters cohesion and esprit at all organizational levels. (The platoons should also be encouraged to incorporate different programs that are most appropriate to that level, such as grass drills or rifle PT.)

Whatever the level, units should never be permitted to march or run a single step without someone calling cadence. Few things build morale more quickly. And the cadences should be adapted to the unit: Tank companies don't extol the virtues of airborne ranger life; they sing about diesel smoke and end connectors. By the same token, paratroopers don't sing about APCs and bustle racks; they sound off about C130s rolling down the strip.

The singing must be constructive — it should not include profanity or other material that is in questionable taste; it should not be about drugs; and it should not run down others. Leaders or units that feel compelled to deride any person or element they pass are normally quite insecure.

It is important to remember that good cadence callers are not born, they are developed and trained. To help with this, some leaders keep copies of cadences and pass them out to further their programs. Another point to keep in mind is that formations should not be so long that those in the front or rear can no longer hear the calls. When in doubt, the leader should break the unit into smaller elements, each with its own cadence caller.

Finally, most good PT programs also include organized athletics. Whether the organization is a post league or an intra-company competition, such activities can be beneficial if properly pursued. Within a unit, organized athletics should consist of contests that provide for even competition and a good workout. Games such as two-ball soccer, basketball, field handball, or pushball are ideal and give excellent exercise (better than softball, horseshoes, or bowling). Post league sports are good for unit morale if the unit's team is successful. But it is normally better not to enter than to put together a poorly supported, shoestring effort. On the other hand, if teams in post leagues are run professionally and are reasonably supported, they can become a great source of pride for the entire unit.

The very nature of a soldier's life requires that he be physically and mentally ready for the stress of combat. A good PT program can contribute tremendously to such physical readiness if it is properly organized and conducted. But morale, cohesion, and esprit are also a part of unit readiness, and if a PT program can help achieve these goals as well, then it can be considered truly successful.

CAPTAIN DAVID H. PETRAEUS, a graduate of the U.S. Military Academy, is now attending the Army's Command and General Staff College at Fort Leavenworth. He previously served as a rifle platoon leader in Europe and in several assignments with the 24th Infantry Division at Fort Stewart.

Mortars in Cities

CAPTAIN WILLIAM B. CREWS

In the event of a major conflict in Europe, the major battles will probably be fought in or near urban centers, and NATO forces will most likely find themselves on the defensive. This means that these forces will need the support of large numbers of indirect fire weapons, but that may present some problems.

First, Army Reserve and National Guard units deploying from the continental United States may find themselves without enough artillery pieces when they first enter combat. And even if such a unit has enough supporting artillery, the urban battlefield will probably prevent its effective use, because many parts of a city simply cannot be reached by artillery fire. Obviously, if an indirect fire weapon fires at an elevation of less than 800 mils, and if its projectile must clear a three-story building on its descent, a deadspace 10.5 meters wide is created. At that point, the best that can be hoped for is a hit on the roof or the face of a building, neither of which is likely to damage the enemy much.

Artillery pieces can fire at greater elevations, of course, but the times of flight and the maximum ordinates of their projectiles are dramatically increased, and neither of these factors aids the survivability of the piece that is firing.

For these reasons, then, a maneuver commander's primary indirect fire weapons will probably be his unit's organic mortars. Unfortunately, too many of our mortar units today are not up to taking on this expanded role because of a lack of tactical doctrine, and because they are not properly trained to operate in an urban environment.

Although FMs 23-90, 23-91, and 23-92 were excellent in their day, that day has passed. There are several things a unit needs to know about employing mortars in urban terrain that they may not be able to find in the tactical doctrine.

First, narrow frontages are typical in MOUT; for example, a company usually occupies fronts of from 300 meters in the older city centers to 1,100 meters in industrial areas. Although these narrow frontages tend to give a mortar platoon a centralized location, its guns can best be employed in three squads with the 81mm or four squads with the 107mm. This aids survivability without affecting the performance of an 81mm platoon and with little effect on a 107mm platoon.

Selecting firing positions is critical. For track-mounted guns this is relatively simple and, obviously, the guns and crews have more protection. The tracks can easily create hide positions by driving into most buildings, and with the vehicles buttoned up they should survive counterbattery barrages.

Whether the mortars are vehicle or ground mounted, though, the standard criteria for the selection of a position in any kind of terrain must be observed — particularly in the consideration of mask and overhead clearance. If mask is used properly, the gun will be far less vulnerable: A mortar located in a narrow city street, firing at near-maximum elevation (which just clears the frontal mask) is virtually impervious to counterfire, because incoming rounds will strike only the roof tops on either side of the street. (This is assuming, of course, that the mask will withstand the impact of an incoming round.) Therefore, the more mask, the safer the position. And when considering this, gun crews must also realize that mask to the rear is every bit as important as mask to the front.

PROBLEMS

One of the problems with ground-mounted mortars in urban terrain is the lack of an area suitable for the baseplate. Although the 81mm mortar can be fired from a sandbag-supported baseplate with some success, field trails have shown that the 107mm has too much recoil to be buffered by sandbags. Thus, with ground-mounted mortars the terrain may force the platoon to disperse its mortars whether it wants to or not.

Another problem is that all magnetic instruments such as compasses are affected by the presence of the massive amounts of structural steel and electrical cables usually found in a city. This means that the minimum distance guidelines given in FMs 23-90 and 23-92 for the use of the M-2 aiming circle are impossible

to apply. The M-2 and lensatic compasses will also be less accurate, though the lensatic compass will be less affected.

The best way to lay the gun for direction is to use the orienting angle method. This method, which is outlined in FM 6-50, is basically as follows:

An azimuth is obtained to a distant aiming point. From this azimuth the back azimuth of the direction of fire is subtracted. The difference is indexed on the red scale and the gun is manipulated until the vertical crosshair of the sight is on the aiming point. Such features as the direction of a street may be used instead of a distant aiming point. Either of these methods is much more reliable than using the aiming circle or a compass.

No matter what aiming procedures are used, though, the mortar is by nature an area fire weapon. This is both its strength and its weakness. Usually, precision firing is not required of mortars. For one thing, the fire control equipment has trouble handling small corrections, and for another, the probable error of the mortar makes it useless to compute anything under 25 meters.

In a conventional environment accuracy to 25 meters is more than enough, but in MOUT it is a serious shortcoming because of the amount of deadspace. A 107mm mortar firing at a range of 3,500 meters, for example, and at an elevation of 1065 (its maximum) has a range probable error of 21 meters. This means that 25 percent of the rounds fired will land up to 21 meters beyond the target and 25 percent will land up to 21 meters short of the target. Essentially, the best that can be hoped for is for half the rounds to land in a 42-meter diamond pattern. The other half will, in this case, land somewhere between the muzzle of the gun and 84 meters beyond the target. And this does not account for human error or for the internal and external ballistics that can affect the round.

This fact and the nature of the terrain also greatly affect a forward observer's attempts to adjust fire. To adjust fire effectively the adjusting gun, or the FDC, should send the range probable error to the FO as a message to observer (MTO). This will allow the observer to make an intelligent decision on whether an additional correction is required or whether the probable error of the rounds in the fire for effect (FFE) will achieve target coverage.

POINT TARGETS

Most MOUT targets have to be treated as point targets unless the attitude of the target is plotted, or unless the target is parallel to the section's attitude. If a target on a street is engaged by a mortar section firing a parallel sheaf, it is obvious that if the street is not parallel to the section, only one round, that of the adjusting piece, will hit the target. The others will be wasted.

If the section is fired, the sheaf must be converged. The preferred method is as outlined in FM 23-91. Firing a large number of rounds with one gun increases the probability that at least one round will hit the target. The effectiveness of the FFE probably can be improved by firing a 50-meter zone mission with the 107mm or a search mission with the 81mm. This would increase the distribution of rounds in the target area and allow the range probable error to work to the gun's advantage.

Other factors also work against the firing of precision missions by mortars. As an infantry or armor battalion has no organic survey capability, the best grid location that can be hoped for is one obtained by use of a map and a coordinate scale. Registration is of doubtful value, once again, because of the lack of survey data and because the range probable error will make it easy to lose rounds in streets and behind buildings. In addition, registration needlessly expends ammunition and exposes the platoon to counterbattery fires. If a registration is desired, the first target engaged should serve as the registration point, because a fairly good 8-digit grid can be obtained.

When a platoon is firing its mortars from three or four one-gun positions, it can increase its survivability by allowing a single gun to move after each fire mission instead of forcing the entire platoon to displace. Such shoot-and-scoot tactics can diminish the effectiveness of counterbattery fires. Too, the FDC should be used as an operations center and a clearing house for information. Round counts should be maintained for each gun, and fire missions should be parceled out to the gun best able to fire that mission. The plotting function of the FDC should be limited to massing the fires of the platoon. Using organic wire, control can be maintained over a span of three-fourths to one mile. With company or battalion assistance, this distance can be increased.

The 107mm FDC is particularly suited for this function. A 1:25,000-scale map can be placed under the plotting sheet, if the acetate type is used, or it can be used instead of the plotting sheet. This will allow a situation map to be mated to the fire control system. The FDC can mass the fires of the four guns by simply placing the vertex pin at each gun location and using the 1:25,000 ballistic plate instead of the 1:12,500.

When it comes to weapon effects, little information is available on the effect of mortar fires on MOUT targets. A study of the urban warfare techniques used in Beirut did conclude that a mortar round of a size less than 120mm had a negligible effect on buildings and roads. Although there were no 107mm mortars involved in that study — only 120mm, 82mm, and 81mm mortars — the 107mm probably has effects similar to those of the Soviet 120mm.

One fact is certain, mortars should not be assigned a preparatory fire mission. Because of their throw weight, the projectiles simply will not do enough damage to justify the expenditure of ammunition. The best solution is to mass the fires of the platoon and fire a short, intensive barrage of 20 to 30 seconds. This drumfire barrage, pioneered by the

Germans in World War I, will suppress defenders long enough for attacking forces to close with them. It will also limit ammunition expenditure.

The choice of fuze is also critical. Proximity fuzes may not be particularly effective, and they may pose more of a threat to friendly troops along the gun-to-target line than to the enemy; buildings, possibly occupied by friendly troops, will probably activate their fuzes.

The mechanical time super quick (MTSQ) fuze is probably the best all around fuze, but it is not available for the 81mm mortar. The decision on whether to fire point detonating (PD) or delay fuze options is also important. The only way an 81mm mortar can obtain an air burst is to fire delay-fuzed ammunition and have the round ricochet off surfaces that it cannot penetrate. Obviously, this will not always give the desired result.

The use of illumination in MOUT also needs to be seriously examined. When the illuminating element deploys, it will create shadows, shadows that could just as easily conceal enemy positions as friendly ones, and there is no apparent way to combat this. Perhaps the best use for illumination is harassment. If illumination bursts in the vicinity of a position, the soldiers there must assume they are under observation and that a coordinated firing mission is coming. Even if high explosive rounds do not follow, movement is still frozen for the burn time. Accordingly, illumination rounds fired over chokepoints and major lines of communication can slow traffic appreciably.

These various aspects of employing mortars in urban terrain are presented here as material for further study and development. If mortars are to play the prominent role that is being projected for them on any future battlefield, we need to do something now to bring our mortar doctrine up to date in its applications to military operations in urban terrain.

CAPTAIN WILLIAM B. CREWS, an Infantry officer, is Assistant G 3 Training Officer of the Berlin Brigade. A graduate of Old Dominion University, he also holds a master's degree from Webster College in Missouri. He previously served as leader of a rifle platoon and a 4.2-inch mortar platoon.

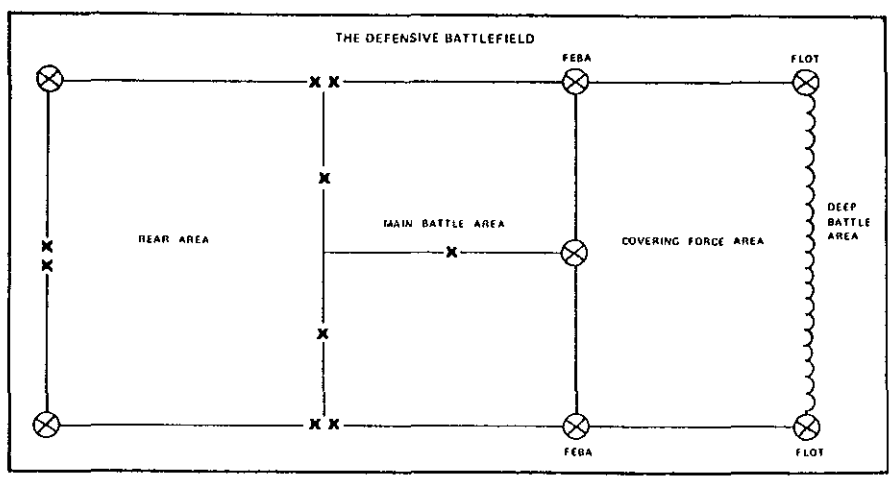
Handing Off the Battle

CAPTAIN TERRENCE THOMAS

If a war breaks out in Europe in the foreseeable future, the first battle the United States Army will fight there undoubtedly will be a defensive one. Unfortunately, one key aspect of fighting defensive battles has been largely neglected in our existing doctrinal manuals — that of handing off a covering force's battle to units in the main battle area. Unless this handoff is conducted properly, the success of the entire defensive battle can be seriously jeopardized.

A defensive battlefield is divided into four general areas — the deep battle area (DBA), the covering force area (CFA), the main battle area (MBA), and the rear area. (See the accompanying illustration.) A line just forward of the forward edge of the battle area (FEBA) between the MBA and the CFA is where the handoff of the battle actually takes place.

Detailed planning and coordination are required if a handoff is to proceed smoothly. Much of this should be done before the battle



begins, and it should be initiated by the headquarters that establishes the covering force. This will usually be a division or a corps headquarters.

As part of their initial planning, commanders at all levels should designate such control measures as boundaries, phase lines, and restricted fire lines, and should provide for exchanging liaison teams. Liaison teams are most important to the entire effort; they will be responsible for exchanging information on such important matters as current battle plans, obstacle plans, withdrawal routes, fire planning, pertinent CEOI and SOPs, logistical matters, and any critical control measures that are in effect.

The key element in the coordination process is for all concerned to consider, in detail, three basic "what ifs":

- What if everything goes according to plan and the covering force stays between the enemy and the FEBA? This is the easiest handoff to control and the one most people plan for.
- What if the covering force units and the enemy become intermingled and reach the FEBA at the same time? The problem here is how to separate the two forces.
- What if the covering force is bypassed and the enemy units reach the FEBA before the covering force? This is not as catastrophic as it sounds, but it does call for some special considerations and is the most difficult of the three to execute.

Each of these also requires certain specific considerations.

Under the first "what if," as the covering force fights its way toward the FEBA, it should dispatch its liaison team to the MBA task force that the covering force will pass through. This team should coordinate the actual handoff to include the covering force's status, the passage points and lanes it will use, and the handoff itself.

As the covering force's units near the handoff line, the MBA's task force security elements should begin to bring the enemy forces under fire. This will allow the covering force to disengage and begin moving to the passage lanes. Deception is the key in this phase of the handoff, and every attempt should be made to keep the enemy from realizing that the handoff is actually taking place.

The covering force should be guided through the FEBA and moved out of the area as quickly as possible. The security elements of the MBA's task force should delay the enemy as much as possible by using both direct and indirect fires. The command and control of the covering force should shift to the MBA task force at the handoff line so that the task force commander can control the movement of the covering force through his area.

In the second "what if," there are several ways of separating the covering forces from the enemy forces. First, the covering force might stop at a particular phase line and allow the enemy units to pass through it. The phase line then becomes a restricted fire line. This allows the MBA security elements to bring fire on the enemy but not on the covering force. Once the enemy units have been rendered incapable of causing the covering force any further major problems, the covering force continues its movement toward the FEBA. All of this, of course, depends on the number of enemy troops intermingled with the covering force and on how close the enemy's second echelon force is.

The second way to overcome the intermingling problem, and probably the best one to use, is for the covering force to move laterally into another sector and to use alternate routes through the FEBA. This allows the MBA security elements to engage the enemy units without hitting the covering force. This type of action must be coordinated with both higher and adjacent units, preferably before the start of the battle. In this way, alternate and emergency routes can be picked out in advance, although all the units in the immediate vicinity must know where those routes are. Recognition signals should also be made known to all units in the MBA.

As to the third "what if," the covering force has several ways to get back to the FEBA. One is to move laterally into an adjacent sector and then use its alternate withdrawal routes. Another method, especially if lateral movement is not possible, is to change a phase line to a restricted fire line. The covering force does not cross this line except on order. The enemy force can then be engaged by the MBA units. If the covering force is surrounded by the enemy, a no fire area (NFA) can be placed around the covering force, thus allowing all enemy units in the area to be engaged without hitting the friendly units.

The handoff occurs at a crucial point in a defensive battle. It and the subsequent passage of lines must be quick and orderly. The key to this is prior planning and detailed coordination, and these include a careful consideration of the three "what ifs."

If every unit uses well-coordinated plans and SOPs, the handoff will be successful. If they do not, the defensive battle can easily be lost.

CAPTAIN TERRENCE N. THOMAS is a writer of Infantry doctrine at the U.S. Army Infantry School. A graduate of Widener College, he completed the Infantry Officer Advanced Course. He has served as a rifle platoon leader, a weapons platoon leader, a company executive officer, and a battalion S-4.

PLATOON TEST

INFANTRY STAFF

In peacetime, an infantry leader's most difficult but most important job is to prepare and conduct training properly. And training that is properly prepared and conducted is the mark of a professional unit.

Today, the Army Training and Evaluation Program (ARTEP) is at the base of all collective training. The ARTEP, by design and intent, is a training and evaluation program.

Commanders and leaders should use the ARTEP to provide the tasks, the realistic combat conditions, the standards, and the training support requirements that are needed to conduct performance-oriented training. The ARTEP is the primary source that helps the commander assess training proficiency, establish training objectives, and program resources.

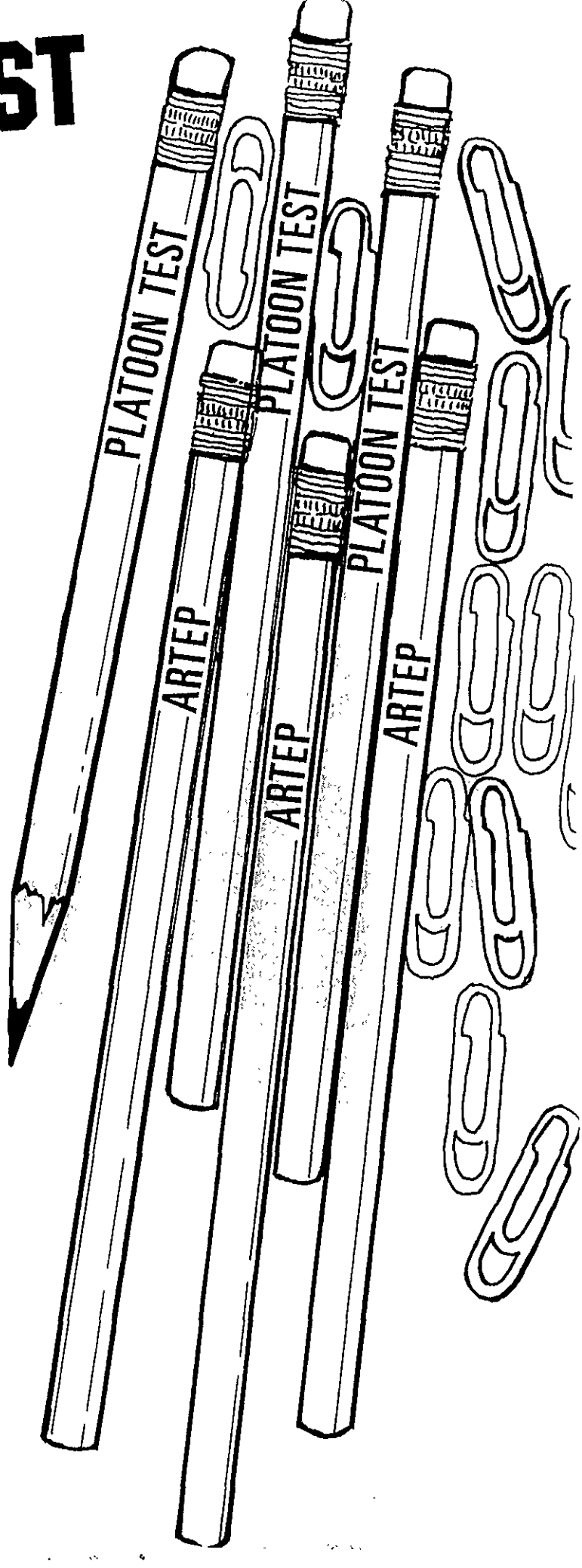
Although the ARTEP is used to evaluate training proficiency at the platoon level, it is felt that a more detailed and comprehensive test is needed to fully assess the combat readiness of platoons. The Army Training Board, working with the Army Research Institute and the U.S. Army Infantry School, is developing such a test. The proposed test will be performance-oriented and will be administered annually to each line infantry platoon by its parent battalion. The purpose of the test will be to provide comprehensive, externally evaluated, diagnostic information to a battalion's chain of command.

In essence, each unit will still train and be tested within the framework of the ARTEP. The major differences will be these: The test will be conducted in a continuous series of missions without stopping to reinforce deficiences, and the standards will be more detailed and therefore will hold subjective evaluations to a minimum.

The test results will be used by a battalion commander and his staff to identify additional training requirements and to provide the necessary resources for conducting that training. The test, in effect, will permit the ARTEP to be what it was intended to be — a training and evaluation program. And the test will be the only part of the Army Training System that will require a unit to demonstrate its ability to perform selected missions and tasks in a realistic manner under conditions involving stress.

As now proposed, the test is to be a quality control check, or measurement, of a platoon's maximum capabilities. It will use a strictly controlled opposing force (OPFOR) to make things happen. This standardization is considered vital, because the OPFOR must present the same picture to each platoon it engages. The platoon leaders will receive their orders and instructions from the evaluators, and then they will be on their own; their company commanders will not be permitted to provide guidance and assistance.

In spite of these basic differences between the proposed



test and the ARTEP, there is a close relationship between the two. Thus, the tasks that an infantry or a mechanized infantry platoon will be called on to do during its test will be the same as those listed in ARTEP 7-15.

The new test will not change any current training doctrine. But it will modify our existing evaluation doctrine. Platoons will continue to use the ARTEP for training purposes throughout their training year, and that training will continue to be evaluated both internally and externally. The platoon test, on the other hand, will be used just one time during a training year, and the platoon will be evaluated externally. The test should not be confused with the informal external training and evaluation that may be conducted by a battalion headquarters or with the internal training and evaluation conducted by a company or a platoon.

The new test will consist of a number of tasks — usually 15 — selected from ARTEP 7-15 by the battalion commander whose platoons must be tested. The tasks will then be incorporated into a continuous, logical test scenario that can last from 36 to 48 hours. As with any test, the platoon test, if it is to be successful, must be adapted to local conditions and conducted under stress.

A team of evaluators — probably five all told — will objectively determine how well a platoon meets the established standards. Each evaluator will answer a series of questions for each task: Yes (the activity was accomplished to standard), No (the activity was not accomplished to standard), NE (the activity was not evaluated because the question was inappropriate or the evaluator did not see the activity, for whatever reason). The evaluators will have to give their reasons for all of their NE answers.

SCENARIO

Historically, time and personnel have proved to be the two most difficult resources to manage in units. By way of comparison, equipment — or the lack of it — may cause some management frustrations, although these are usually resolved one way or another. Equipment is either available or can be made available, or it is not available and cannot be obtained. Usually, though, if an item or type of equipment is considered critical to the success of a particular mission, higher echelons or support units will ultimately provide that equipment.

Time and personnel problems are less easily resolved. People and time are harder to get and harder to retain. Accordingly, *every commander and training manager must make do with what he has.* For example, a commander should not augment understrength platoons or replace personnel for purposes of the test.

Time will always be a problem. But there is a way in which a platoon test can be conducted that will not require a unit to spend an inordinate amount of time on it. Considering the important results that a unit can get from the test, the time spent will pay rich dividends.

All nine platoons of a battalion should be evaluated during one compact, seven-day period. There would be a 12-hour lag between platoons at the starting point. For

instance, one platoon would begin at 0600 on Day 1, followed by another platoon at 1800 on Day 1, and by the other platoons at 12-hour intervals. Thus, the ninth platoon would start at 0600 on Day 5 and finish at 0600 on Day 7.

An important part of the proposed test plan will be a comprehensive, formal after-action review. This will offer the single most comprehensive and most readily available use of the test results at the small unit level.

If the battalion commander requests a computer-assisted analysis, reports have been developed that include reports for the platoon, the company, and the battalion.

The report given to the platoon will consist of three parts: a task performance and casualty report, a functional area report, and a tactical systems employment report.

The report of task performance and casualties will list each task that was evaluated and will show the overall number of "yes" ratings for a whole platoon, for its platoon leaders, for each of its squads, and for the forward observer. It will also show a platoon's total number of casualties as well as the casualties for each evaluated task. The report will further break down each task into its subtasks and standards showing the number of standards checked "yes" for each subtask and the number of "yes," "no," and "NE" responses for each standard for an entire platoon, its platoon leader, each of its squads, and the FO.

FUNCTION

The functional area report covers a "function" such as command and control as it applies to any or all the tasks. Because this report will show the inherent strengths and weaknesses of all the tasks tested, the platoon leader will be able to use it to spot deficiencies and to plan corrective training to remedy those deficiencies.

The tactical systems employment report will help the platoon leader spot the need for corrective training on the tactical employment of his weapon systems and vehicles. Thus, the platoon leader will be able to visualize and compare systems employment, and he will be able to look at each system in terms of its functional and subfunctional components and in terms of the related standards for each.

The company reports of platoon performances will be aggregates of the overall performance of each platoon by task, functional area, and tactical system. The reports will be arranged so that a company commander can compare his platoon's performances by looking at the percentage of "yes" answers recorded for the evaluated standards.

Similarly, the battalion report will show the platoon performances by company and by task, functional area, and tactical system. The information will be so arranged that a battalion commander can compare his companies by the results earned by their platoons.

The battalion will also receive platoon environmental and demographic comparisons. The performance data provided by the environmental comparisons will not single out any one unit but, rather, will reflect the actions performed by all the platoons in the battalion under each type of condition. The data will be displayed by functional and subfunctional categories to show a platoon's fundamental strengths and weaknesses as they relate to different environments. For instance, a unit may actually do better under bad environmental conditions than under good conditions.

The demographic comparison will be shown by functional and subfunctional categories to highlight the fundamental strengths and weaknesses as they pertain to a platoon's soldiers. The categories will range from one in which a platoon's leaders have been in their positions an average of 12 months or less with the platoon at or near full strength to one in which the platoon's leaders have been in their positions for an average of 24 months or less with the platoon's strength at or less than 80 percent.

In any test in which evaluators must tabulate performance in an objective yes-or-no, black-or-white manner, large gray areas can exist. There are times during such a test when neither "yes" nor "no" is a truly accurate answer, when an answer of "yes, but..." would more accurately reflect the unit's performance. But for the most part, during the proposed test the gray area will be covered by an evaluator's remarks in the appropriate column of the test question sheets. Even so, it is possible that, overall, a platoon may look either bad or good on the test but with extenuating circumstances that might alter an objective view. Therefore, a judgmental evaluation will be built into the test to allow the chief evaluator to give his opinion on how well that platoon performed on the test.

During recent months, the test design has been evaluated by several Active Army units, and, generally speaking, it has received favorable notices.

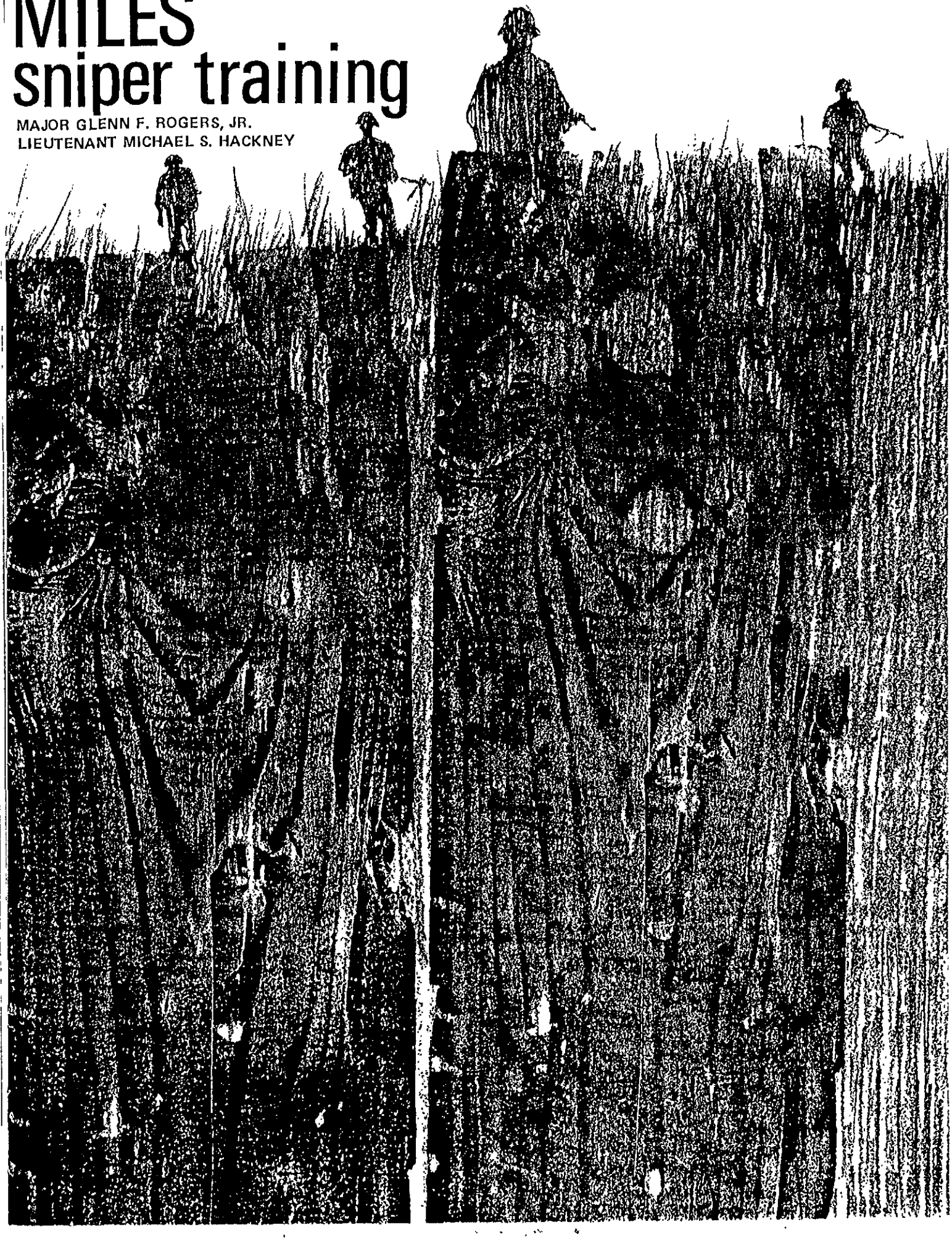
Negative comments, though, have come from other sources. These are:

- Everything the new test is designed to accomplish is currently being accomplished by the ARTEP.
- The ARTEP — no matter the intent — is being used by many units as a test; therefore, there is no need for another test.
- Let's not add to our already overburdened training program, one that is seldom carried out fully now because of the many training distractors, but let's support our unit training by producing better ARTEPs and by giving our commanders more time to train their units.

Tests of the new concept will continue in the months ahead. The Infantry School is interested in your comments on the proposed platoon test. You can either mail them to the Director of Training Developments, ATTN: Collective Training Branch (Platoon Test), USAIS, Fort Benning, Georgia 31905, or call AUTOVON 835-4759/1317.

MILES sniper training

MAJOR GLENN F. ROGERS, JR.
LIEUTENANT MICHAEL S. HACKNEY



The primary emphasis in any sniper training program, obviously, has to be marksmanship, and that alone presents enough of a challenge (the marksmanship of our infantry soldiers is clearly not what it once was). But such a program should also include training in sniper employment — in the tactics and techniques that distinguish a sniper from a marksman. For various reasons, few of our sniper training programs really do that.

In the past, sniper training in the 3d Armored Division suffered from these problems. Consequently, in 1980, the division obtained 50 M1D sniper rifles and charged its 2d Brigade with improving the division's sniper training program. The aim was to turn out soldiers who could kill with one shot at ranges not possible with the M16. (The M1D is a .30 caliber M1 Garand with a 4-power scope mounted on its left side.)

Because the students in the program showed a general lack of marksmanship skills, at first we were forced to concentrate our efforts strictly on teaching marksmanship. We eventually succeeded in getting at least some of our snipers proficient enough to hit E-type silhouettes at 600 meters from a standing, unsupported position. But because of an extremely tight program of instruction, we did not have much time to teach sniper employment. When we were able to teach it, it was done mainly in the classroom, although we also made some use of Realtrain techniques. But neither method was really successful.

Then in 1981 the division was issued some MILES (Multiple Integrated Laser Engagement System) equipment, which offered us hope for good, realistic sniper training. Unfortunately, though, this equipment included transmitters for M16 rifles and M60 machineguns, as well as for all other standard infantry and armor weapons, but none for a sniper rifle. We felt that if we could adapt one of these transmitters for use with the M1D, our sniper tactical training program could be conducted far more quickly and effectively. As it turned out, the program that resulted was even more successful than we had hoped it would be.

Our first step was to decide which of the transmitters should be used and how it should be zeroed.

It took about 10 days of research by several of our sniper-qualified noncommissioned officers to answer these questions and to adapt the MILES equipment to the sniper rifle. The obvious choice of transmitters was the one for the M60 machinegun, because its longer range approximated the range effectiveness of a well-trained sniper using live ammunition. The transmitter was mounted on the right side of the rifle's flash suppressor at the three o'clock position just in front of the front sight.

Zeroing the rifle was the next problem. Since the manufacturer of the SAAF (small arms alignment fixture) programmed it for the M16 and the M60, it will give "0-0" readings for those weapons only. We found that the approximate zero reading with the SAAF for the M1D rifle using the M60 transmitter was 9 down, 3 left. And because the angle subtended by a target at 600 meters is small, the M60 transmitter had to be zeroed with absolute precision by the best shooter available if we expected our soldiers to obtain hits at long range.

After the rifle was zeroed, we conducted a long range check by firing at a soldier wearing MILES equipment and standing at least 300 meters away.

The choice of terrain for a MILES sniper exercise is important. If the terrain defended by the snipers is too good, they may kill the attackers too easily. This will rob the snipers of the chance to use alternate and supplementary positions, to assist each other with ammunition resupply, or to practice other important sniper techniques.

On the other hand, if the terrain provides cover and concealment to the attackers, the snipers will not be able to kill at long range or to select as targets officers, radiotelephone operators, and soldiers carrying special weapons. In fact, if the attackers are given excellent concealment, the snipers will lose their effectiveness and will become little more than dismounted riflemen.

For these reasons, we chose for our MILES sniper exercise a relatively open area with scattered patches of bushes and trees. It also had a destroyed World War II bunker and the ruins of a stone house. A number of ditches, rock piles, and hummocks in the otherwise open area provided individual soldiers cover. On this terrain, we figured that the attackers would become visible to the defending snipers at about 800 meters as they came up over a ridge. From that point on, the attackers had to use fire and maneuver and take advantage of every bit of cover they could find if they were going to survive. The snipers, on the other hand, also had to take advantage of every small fold in the ground, including truck tire ruts. The ground varied laterally as well as along the axis of the attack, so that snipers positioned on the extreme flanks could not cover the entire axis of advance. Roads on three sides were used as lateral and rear boundaries.

SCENARIO

The scenario we developed called for a patrol of about 14 men to attack and attempt to kill two snipers, each with an observer. We planned to repeat the scenario three times, rotating the men through the key positions.

The defending snipers and their observers could position themselves within the general area of the attackers' objective. The snipers were told to defend the terrain at all costs; the attackers were told to eliminate the snipers.

This format guaranteed plenty of contact and opportunity to practice sniper employment techniques and to experiment. Normally, of course, snipers would not be required to defend to the death but would be withdrawn or repositioned as appropriate.

The program had two sets of objectives, one for the snipers and one for the attackers. The snipers were told to try to accomplish the following individual sniper tasks:

- Start and stay concealed.
- Select the positions that best command the terrain.
- Kill the enemy at distances greater than the range of the M16A1 rifle.

The attackers had to use fire and maneuver and take every advantage of cover they could find if they were going to survive.

- Use a minimum of ammunition.
- Select good alternate and supplementary positions, occupying each new position unobserved.
- Fire only when the attackers do (do not give away position).

The observers in each sniper-observer team were given these tasks:

- Assist in the selection of such priority targets as officers, attacking snipers, and radiomen.
- Assist in the selection of alternate and supplementary positions.
- Assist the sniper with ammunition loading.
- Cover the sniper during displacement.
- Provide close-in protection for the sniper.
- Take over the sniper's weapon if the sniper is hit.
- Detect enemy targets early.

In addition to these individual sniper tasks and sniper team tasks, the two sniper teams were told to cooperate with each other to make sure that they had chosen complementary sniper positions to cover the two most dangerous approaches; that an inactive sniper team moved to assist the other when required; that the observers were positioned to cover the approaches not covered by the snipers; that they practiced ammunition redistribution; and that they killed all of the attacking enemy troops.

For the sake of simplicity at this basic level of training, the snipers were not required (or allowed) to call for and adjust mortar or artillery fire and tactical air support, or to call for assistance.

The attacking patrol was given this set of objectives:

- Cross the LD on time.
- Attack on two or more axes.
- Coordinate the time of the attacks.
- Take action on contact.
- Locate defending snipers and observers quickly.
- Submit spot reports by radio.
- Use fire and maneuver.
- Use suppressive fire.
- Once decisively engaged, use three-to-five-second rushes.
- Practice ammunition conservation and redistribution.
- Occupy and clear sniper locations (clear the objective).
- Kill or capture defending snipers and observers.

The requirement to attack on two or more axes was designed to force the defending snipers to cover more than one axis of advance.

After the exercise, it was clear that the goals of the program had been more than met. Snipers and attackers alike had learned the lesson objectives well, quickly learning from their own mistakes and from those of others. We did repeat the exercise three times for each 18-man group, rotating the key personnel each time. Thus, six men were able to play snipers, and six more were able to play sniper-observers. In addition, we used three patrol leaders, three radiomen, six team leaders, and three attacking snipers.

We conducted an after-action review after each run-through with the players being drawn into the discussion. (The cadre personnel were careful not to let the review degenerate into a critique.) A substantial improvement was noted within each group as they went through the exercise the second and third times.

We found that snipers who had performed well on the live fire phase at long ranges also performed well with the MILES equipment. They had several kills at ranges of more than 750 meters against the attacking patrol. But once the range fell below 300 meters, the snipers lost their edge over the enemy and became no more than two additional riflemen.

The sniper teams that supported one another were usually successful in destroying the enemy patrol and suffered few, if any, casualties themselves. On the other hand, well-led patrols operating against sniper teams that did not tactically perform their mission or that did not fire effectively (that is, use mutual support) were able to kill the snipers.

As for spotting and killing priority targets, the snipers reported without exception that they could not identify officers by the shoulderboard insignia that had been provided; the epaulettes were simply too small for them to see at long range, even when they used their scopes or binoculars. But the snipers were able to identify the patrol leaders by their position within the formation, by their use of hand and arm signals, and by the attitudes and actions of other squad members, and these leaders were often the first killed. One of them, for example, was killed just as the patrol crested the initial ridge, 750 meters from the sniper position.

As the attackers came closer, it became easier for the snipers to identify the RTOs, attacking snipers, and team leaders. As the range dropped to 250 or 300 meters, the snipers quickly switched from killing priority targets to killing the most dangerous target — usually the closest enemy — for their own self protection.

One problem arose with the equipment during the exercise. Some M1D weapons would not fire the 7.62mm rifle grenade cartridges (Dragon LET ammunition) that were used. Although some weapons worked well with the blank ammunition, others would jam after a few rounds. Some weapons would not properly fire, chamber, or extract the blanks at all. All of the lots worked well in some weapons while none worked in others. This problem convinced the snipers of the need to keep cleaning equipment on hand, because a jammed cartridge could be cleared only with a cleaning rod.

Just after the MILES sniper training program was conducted, the division was issued the newer and much improved M21 sniper rifle with automatic ranging telescope (ART). Since the M21 fires 7.62mm ammunition, there should be no further problem with blanks. The MILES M60 machinegun transmitter can be mounted on the M21 and used in the same way as on the M1D.

EXCELLENT DEVICE

Soldiers and trainers alike felt that the MILES sniper program was an excellent training device for our sniper candidates, and other units that have snipers may want to try it in their own training programs. Beyond the training of the snipers themselves, the technique can be used to integrate sniper training into conventional platoon, company, or battalion level MILES exercises. Several battalions in the 3d Armored Division have since done this successfully.

It should be noted, however, that while the MILES sniper technique (like any other MILES training) is a powerful tool for use in teaching maneuver techniques and tactics, it is not a marksmanship tool. Obviously, there is a big difference between firing laser beams and firing live ammunition. And a sniper still has to be a marksman before he can be a sniper.

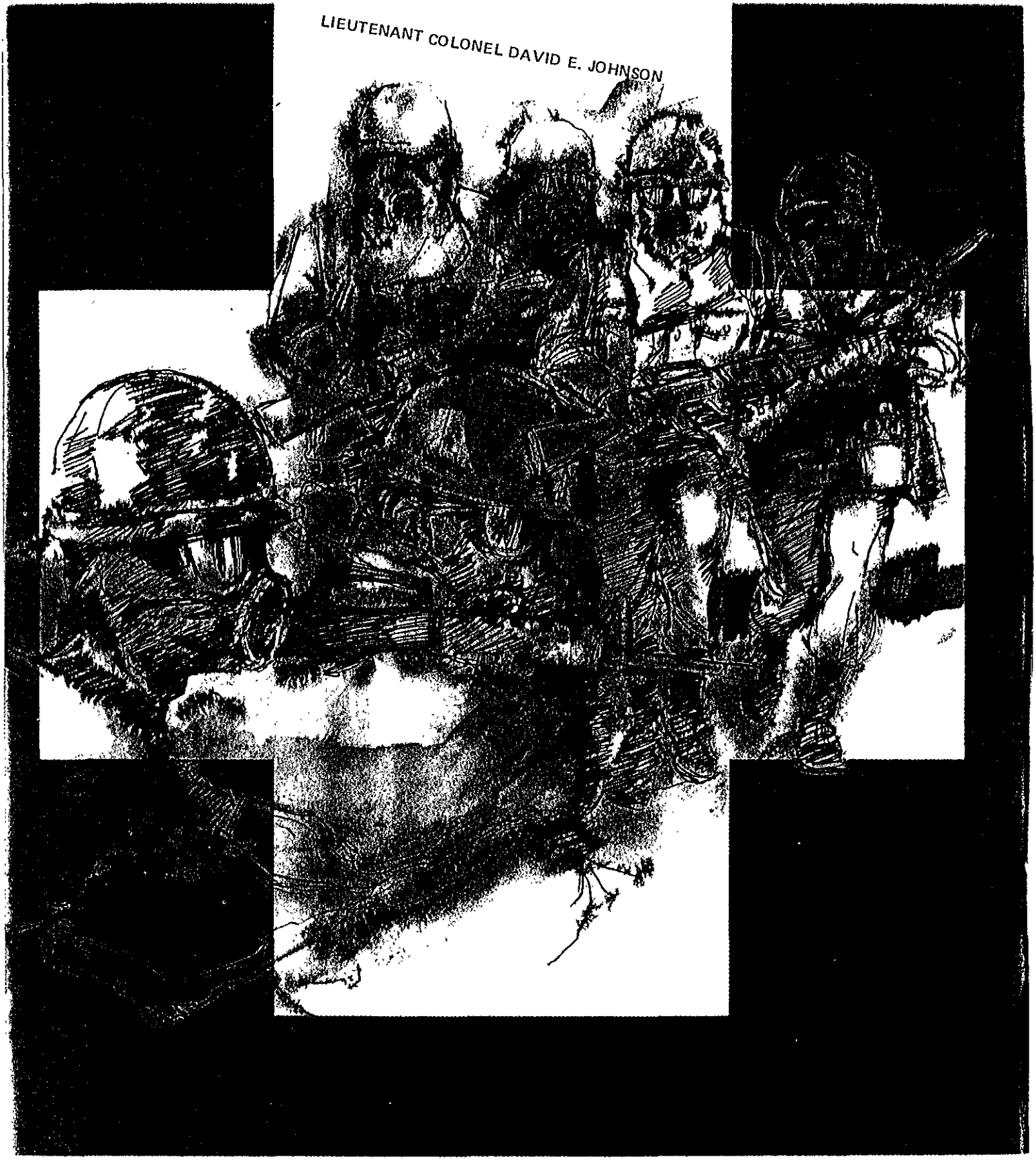
As a postscript, the 3d Armored Division is now enjoying the benefits of professional sniper training through the German Army's Infantry School. This intensive program includes training in both marksmanship and tactical skills, but it does not include MILES training, which must still be organized and run by a unit.

This MILES program is probably the best kind of training short of actual combat that can be used to teach snipers. With it they can master the various techniques that they will need if they are to perform their unique mission when a real combat situation presents itself.

MAJOR GLENN F. ROGERS, JR., an Armor officer, was formerly S-3 of the 2d Brigade, 3d Armored Division, and is now assigned to the Tank Automotive Command. He holds a master's degree from Virginia Polytechnic Institute and has completed the Command and General Staff College. He served as a mobile advisory team leader in Vietnam.

LIEUTENANT MICHAEL S. HACKNEY, an Infantry officer, is a graduate of the University of Alabama. He, too, was formerly assigned to the S-3 section of the 2d Brigade, 3d Armored Division, and before that served as leader of rifle and antitank platoons and as a company executive officer. He is now attending the Infantry Officer Advanced Course.

LIEUTENANT COLONEL DAVID E. JOHNSON



THE MEDIC ON THE CHEMICAL BATTLEFIELD

If chemical weapons are used in any future war, it will not be surprising to find conventional artillery rounds mixed in with chemical rounds or to find rapid enemy contact following the chemical attack in an attempt to exploit the unit's confusion and disarray. Consequently, a unit can expect to have a variety of conventional injuries, chemical casualties, and combinations of both.

For these reasons, dealing with chemical casualties will be a special challenge, not only for medical personnel but for unit commanders as well. The unit aidman will suddenly become an especially valuable resource, and he can easily find himself doing jobs that do not make the most efficient use of his time and skill. A commander and his medic, therefore, must work together in advance to determine what the medic's role is to be, what support he will need (and can get), and what effect this support might have on the unit's ability to sustain its operations.

The aidman's basic responsibility to the wounded will not change because of the chemical environment. But that environment, the clothing, and the contamination will all present some special problems. For example, the medic will find giving emergency medical care slower and more strenuous because of the protective clothing that everyone will be wearing. This will only increase the premium on his time. For this reason, the medic's first and perhaps most important task will be to decide which jobs he should do himself and which can be delegated to soldiers who do not have any special medical training.

The medic's chief function must be diagnosis, plain and simple. In that process he should decontaminate the area around the wound of the soldier he is treating and the area exposed by the penetration of the protective overgarment. But he will have neither the time nor the resources to perform even partial decontamination on anyone but himself. This means that others in the unit must take the responsibility for any emergency or partial decontamination of anyone who cannot do it for himself.

Similarly, non-medical personnel must be responsible for positioning protective clothing, administering antidotes, and providing artificial respiration. They must also handle casualties that result either from an adverse response to an antidote or from any psychological stress that might be induced by the confinement of the chemical protective overgarment. For the most part, the effectiveness of self-aid and buddy-aid will determine a chemical casualty's survival. And because of the important jobs the nonmedical personnel must do, the medic's pre-attack job, that of unit training in how to do these things, may be more valuable than any of the worthwhile and necessary things he does later on the battlefield.

But once on the battlefield, and once faced with chemical casualties, the medic, with command guidance, will have to engage in drastic triage procedures in regard to the priorities for his time as well as for the evacuation of the patients.

Throughout this process, too, he must act as an advisor to the commander on medical matters. As the local medical authority, the aidman must be prepared to tell the commander how many of his troops are functional and to what extent, how long they can be expected to remain functional, and how much help is going to be needed to handle, prepare, and evacuate the casualties.

BALANCE

Accordingly, the medic and the commander must balance the basic requirements of the mission and the swiftest possible requirements of casualties with the accomplishment of that mission. This means that the medic, in designating evacuation priorities, needs to take into consideration the type of chemical agent employed, the extent of decontamination, the presence of other injuries or illnesses, and the unit's missions, both immediate and for some time into the future until individual and unit replacements will be available.

Depending on the type of agent used and its persistence, those exposed may have a period of military usefulness before the onset of symptoms. Conversely, medical treatment in the rear may be a decisive factor in the eventual survival of some. Many others, of course, will not survive regardless of heroic efforts.

Non-chemical casualties can probably be expected to benefit the most from treatment, while making the most efficient use of scarce rear echelon medical services. A partially capable non-chemical casualty, if he can be spared from the unit, is the soldier most likely to be returned to his unit at some time in the future. On the other hand, chemical casualties, regardless of how severely they are affected, once evacuated, should not be expected to return, at least as far as that unit is concerned.

Neither dogmatic treatment nor evacuation priorities can be prescribed in advance, but the following is a list of likely priorities:

1. Moderate to severe non-chemical injuries.
2. Non-injury casualties, such as illness, heat stroke, and psychological stress reactions.
3. Light injuries, regardless of chemical status.
4. Moderate to severe chemical injuries.

A soldier with more than one category of injury would be placed in the lower category. That is, the soldier with a moderate leg injury and no apparent chemical complications would probably be evacuated before one with the same leg injury and chemical agent symptoms.

As to the means of evacuation, it is probably unrealistic to expect medical air evacuation from the battlefield on the scale seen in Vietnam. Even when aircraft are available, the serious problems associated with toxic vapors in the enclosed area of a helicopter will hinder the air evacuation of patients who are in need of decontamination regardless of their injuries. The vast majority of evacuation, therefore, will be by ground vehicle. And because there probably will not be enough battalion, brigade, and division ambulances, a unit commander must decide how many of his organic vehicles and what types of vehicles he can afford to commit to patient evacuation.

Armored personnel carriers may be the most readily

available because, by then, many of their usual passengers will be among the casualties. They may also be the most efficient vehicles to use because they are not as good at hauling ammunition as other vehicles are. But a commander must also consider the difficulties of internal decontamination and what the contaminated vehicle is to be used for later. Using cargo trucks to move patients will cause the least decrease in the unit's fire power, at least temporarily. All vehicles that are used to transport casualties who have not been fully decontaminated, or whose contamination status is unknown, must be considered contaminated for any further activities.

Patients who have not been decontaminated must be wrapped in impermeable material for evacuation. This effort, which is designed to protect other occupants of the vehicle and the vehicle itself, may in fact increase the exposure of the casualty to the chemical agent in his clothing. But the alternative, the potentially uncontrolled dissemination of the agent, is even less desirable. (These procedures should be thought out and planned for before the heat of battle.)

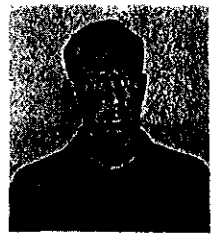
No matter what means of evacuation is used, wounded or ill patients will reach a battalion aid station either contaminated or in various states of decontamination. At this point, two equally correct principles will come into direct conflict: Contamination must not be introduced into enclosed clean operating spaces, but at the same time casualties must be treated and evacuated as quickly as possible. Forceful and intractable insistence on either of these rules will be self-defeating. If the first view prevails, it will lead to the total commitment of decontamination assets to the patient care system. If the second is followed, the medical facilities will be contaminated to the extent that medical personnel cannot function and still protect themselves and their other patients. As a result, some medical care, even if only to play for time, will have to be performed under less than "clean" conditions.

Medical personnel expect a great deal of decontamination support. They expect each patient to be undressed and completely decontaminated, if necessary. They expect contaminated clothing and other material to be disposed of before the patient is brought into a battalion aid station. In addition, they expect contaminated ambulances to be decontaminated before they pick up other patients who may not be contaminated or before they have to traverse uncontaminated areas (for example, for further evacuation to the rear areas). This assistance must come from the supported unit. The arguments for this use of relatively scarce assets are mainly humanitarian, but they also contribute to the morale of medical personnel and of other soldiers who are potential patients. But other units will also have a justifiable call on these resources to complete their missions, and an unpleasant decision may have to be made. This is another matter that is better considered before the battle rather than after it starts.

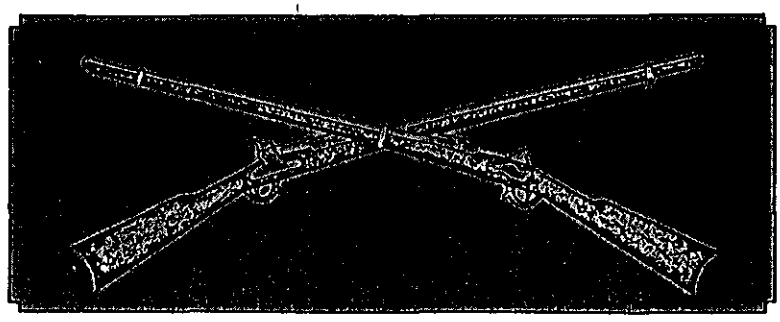
In any mass casualty situation, then, but particularly in the aftermath of a chemical assault, the unit medic has three basic roles: He provides individual treatment when it is absolutely necessary; he supervises others in providing that care whenever possible; and he serves as an advisor to his unit commander at all times. In each of these positions, the medic needs the assistance and cooperation of the unit, because it is the unit commander who must decide how much, if any, of the unit's resources can be devoted to the medical care system.

In the first of the medic's roles, that of aid-giver, he needs a constant and well-maintained medical supply line from higher headquarters. In his second position, supervisor, he needs the help of a significant number of people, non-casualties or those less seriously injured, to handle the more seriously ill. In his third role, that of an advisor on what to do next, he needs to know how many people he can evacuate and how soon. His support requirements may include vehicles, people to drive them, and a priority of movement for the vehicles. Finally, the people who conduct medical care operations, from platoon through corps, want and expect the men, machines, and resources they need for decontamination.

Both the medic and the commander will be able to do their jobs better on the chemical battlefield if they both know and understand the roles and needs of the unit medical corpsman on that battlefield. And that is not an understanding that can be left until the last minute.

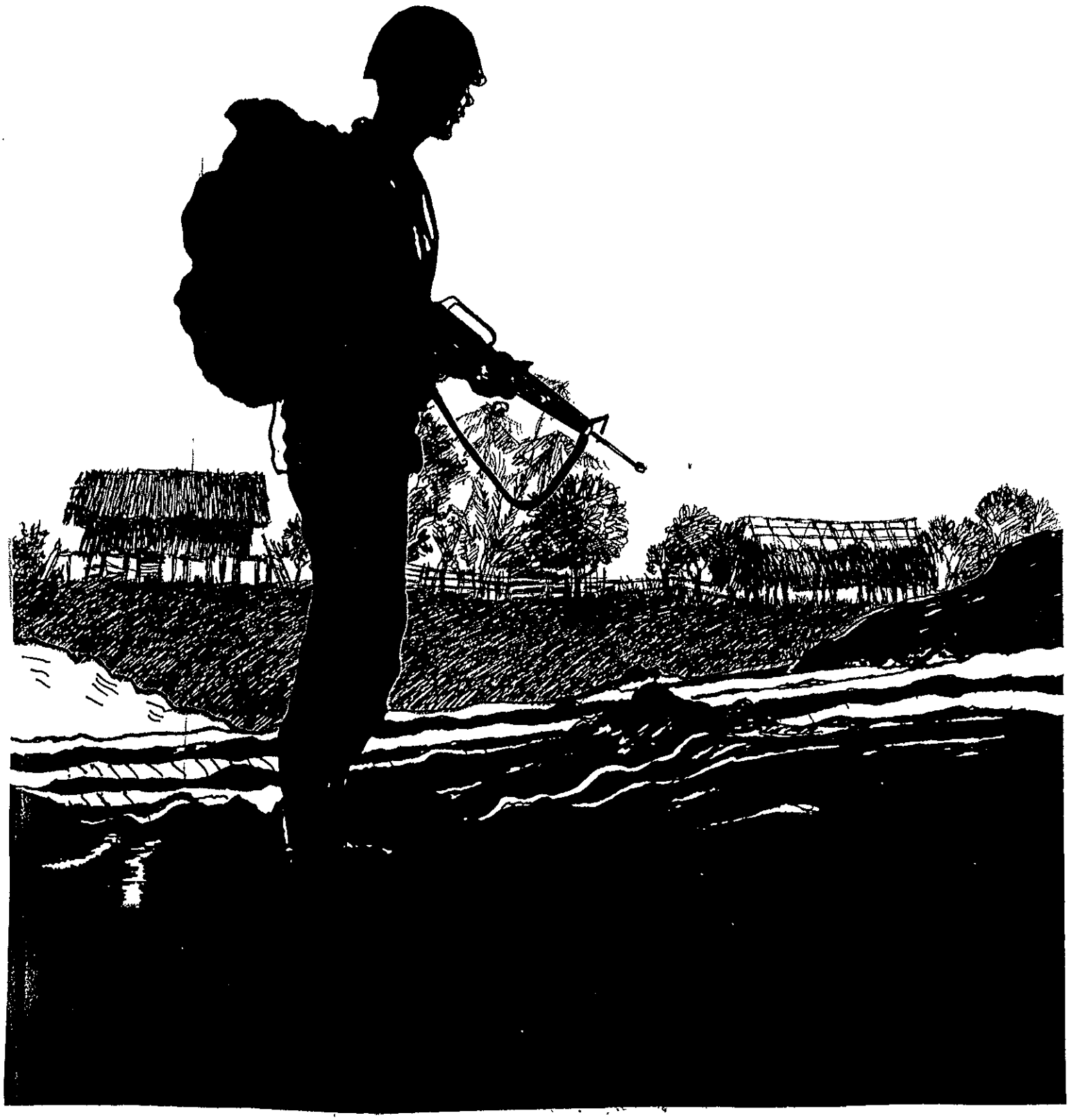


LIEUTENANT COLONEL DAVID E. JOHNSON, formerly an enlisted medic, is now division surgeon of the 4th Infantry Division at Fort Carson. He earned his medical degree from the University of Minnesota and also holds a master's degree in public health from Johns Hopkins University. He has completed the Command and General Staff College and has published numerous medical works, including "Botsball" in INFANTRY (July-August 1981).



LIEUTENANT COLONEL JOHN B. HASEMAN

LOOKING BACK
a lesson in strength



I didn't notice the burnished steel beneath the smiling face the first time I met Nguyen Thanh Liem. He was one of many officers I met during my whirlwind first day of duty as an advisor in Ham Long District, Kien Hoa Province, in the Mekong Delta region of the Republic of Vietnam. Tall for a Vietnamese and with a gaunt, almost ascetic face, Liem impressed me with his air of confidence, competence, and pride.

My assignment as a district-level advisor was one I had specifically requested for my second tour of duty in Vietnam. It gave me a chance to work at the grass roots, with the soldiers and the rural people of Vietnam. I was somewhat apprehensive, because I was not sure that I, a relatively young captain, could provide meaningful advice to troops who had been engaged in a struggle with an enemy for so long. I soon found I could, in fact, provide valuable assistance to my Vietnamese counterparts.

Far more important, though, I discovered I was learning far more than I taught, learning lessons in courage, character, and strength in a culture that had existed for a thousand years. Those lessons have remained and have strengthened me in the more than ten years that have followed. Liem played the major role in my education.

A PROFESSIONAL

Liem was a first lieutenant in the Army of the Republic of Vietnam (ARVN), assigned as the operations officer of Ham Long District. His duties included planning and leading tactical operations, overseeing the training of all local security forces, and constructing and maintaining outposts and watchtowers. He was a professional. Liem knew his men and his tactics well. His quiet competence in the performance of his duties had won him the confidence of his district chief and a well-earned reputation as a good soldier throughout the province.

Kien Hoa had a long history of strife as a stronghold of the Viet Cong. But by the early 1970s, a highly successful pacification program had achieved major successes in reducing the enemy's political and military strength. In Ham Long District a particularly able district chief had pushed strong civilian pacification and military security programs, and a bountiful agricultural economy had begun to bring material improvement to the district's citizens. But at the time of my arrival in July 1971, local Viet Cong forces still harassed the pacification program and much work remained to be done.

Liem was an easy man to meet but a hard man to know. He had served as district operations officer for five years, and he had seen a lot of American advisors come and go. Not all of them had been what he referred to as "friends of my country." Although he was friendly to the Americans in Ham Long, as a newcomer I sensed from the first the reserve behind his eyes. His gaze said "prove yourself worthy."

As the weeks passed and I found myself becoming accepted by the Vietnamese, he became more open. In fact, Liem and I became closely involved in tactical operations, and I slowly felt myself beginning to meet his high standards. Those standards came in large measure from his own background.

VETERAN

Born in the neighboring district of Mo Cay, Liem and his staunchly anti-communist family had fled their home village to escape the Viet Minh and later the Viet Cong forces. Liem grew up in the provincial capital of Ben Tre. Although when I met him he was only 30 years old, he had spent 12 of those years in the Army, rising slowly through the promotion system as an engineer and an infantryman. He was a veteran of the fighting in the infamous Iron Triangle north of Saigon, and had helped repulse the Viet Cong battalions that almost overran Kien Hoa Province during the 1968 Tet Offensive.

As the months passed, our mutual respect and friendship grew. I met his wife and six children and came to know his hopes and dreams. An infectious grin, a constant sense of humor, and a thoroughly professional performance of duty were Liem's chief characteristics. He expected no less from others. His determination and finely honed strength instilled in me a feeling of admiration I have seldom felt for another officer in any nation. His leadership ability, tactical knowledge, innate intelligence, and courage under enemy fire made him the type of officer who is easy to follow but hard to emulate. He was a fine example of courage and character in an army that was too often criticized for its failures. He was a memorable teacher.

Through Liem I came to know the Regional Force and Popular Force troops as the real strength in rural Vietnam. In Ham Long, which had no regular ARVN units, they were the backbone of strength against guerrilla forces whose presence was felt through terrorism, harassment attacks, assassinations, and deadly booby traps. Liem had the soldier's eye for the important. In his outpost visits he demanded strong defenses, effective weaponry, and alert soldiers. Though a complete soldier, Liem was no martinet. I remember the compassion in his eyes while he gave first aid to wounded soldiers, cradling their heads in his lap and comforting wailing families. And when I had to interrupt him at his work late at night, he had time to chat with a lonesome American friend.

Liem's personal courage was exhibited in countless combat situations. On occasion he commanded a small clearing operation in the dense coconut jungles of northern Ham Long. An enemy force ambushed the government column and for a few moments there was sharp fighting. Liem was everywhere, encouraging his men, directing fire, and endangering himself to provide the leadership necessary for survival. Though there were friendly casualties, his leadership rallied the defenders and drove the enemy from the battlefield. His relentless pursuit of the ambushers led to a small but well-earned tactical victory.

He was a very articulate man. Though my Vietnamese

was limited and his English not much better, we held long talks at night and somehow broke the communications barrier. Perhaps mutual understanding helped when we failed to find the right word in either language. But Liem talked at great length about his experiences, and about his strong and honest patriotism. He had great faith in the Vietnamese people and in their ability to persevere over the shattering experience of war. He often talked about how things would be when the fighting ended. It was amazing to me that after a lifetime of warfare he remained confident of attaining peace. He was a realist; he knew peace would be achieved only at great cost and after long and heartbreaking delay. But he always felt there would be peace.

HEAVY FIGHTING

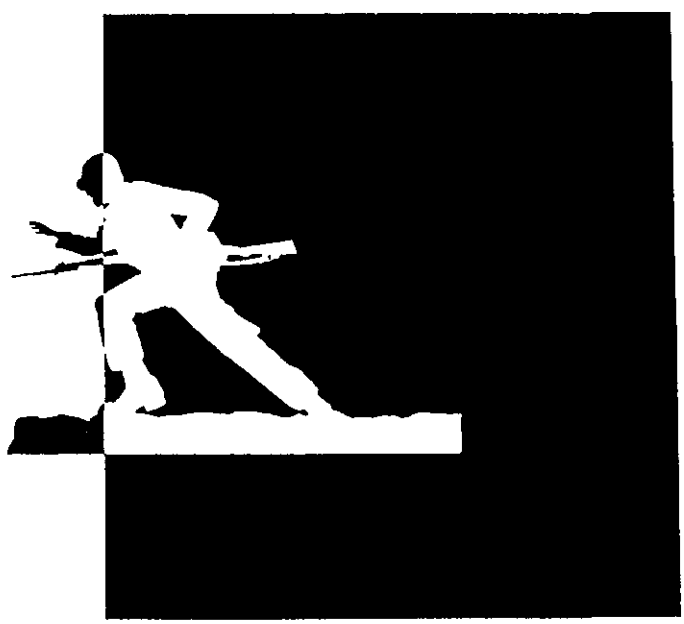
In August 1972 the North Vietnamese Army (NVA) launched a fierce invasion of southern Vietnam, and heavy fighting spread into Ham Long. Liem's talents and abilities were invaluable in reacting to the threat. In a three-month period of intense enemy pressure, Liem was a rock of strength. He planned, conducted, and led operations as the right-hand man to the District Chief. He assumed command of a battle-fatigued company in addition to his other duties and in short order rebuilt its shattered morale and strength. By November the enemy was ejected from Ham Long after some of the most valorous combat performances I have ever seen. It was then, I think, that I learned the most from Liem about the limits to which a man can stretch his own strength and still find the reserve to carry on with the mission.

When the cease-fire agreements were signed in January 1973, my tour of duty came to an end. Our parting after 19 months of shared friendship and hardship was a painful one. My last view of Liem was blurred by the emotion of the moment, but I still remember it: a smile on his face and a shouted farewell on his lips. The steel was there too, well hidden, but known to those like me who had had the privilege of knowing him closely and well.

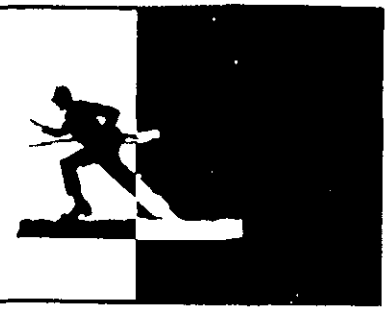
The so-called peace did not end Liem's battle to save his country from a communist foe. Treacherous breaches of the cease-fire continued long after the declaration of peace. On 14 March 1973, Nguyen Thanh Liem's long search for peace finally ended. Viet Cong artillery fired on a small outpost in a jungle clearing. Liem rallied the defenders, sprinting between bunkers to lead the defense against an attacking enemy company. But one shell landed too close and Liem, survivor of a lifetime of war, died in the first month of "peace," his last act one of courage and sacrifice. He would have been proud to know that his outnumbered force repulsed the enemy and retained possession of that small clearing called Tan Long.

In retrospect, perhaps it was best for Liem not to have been forced to endure the years since then, with the bitterness of surrender and defeat to live with. Nguyen Thanh Liem was neither famous nor high in rank. He was merely brave, loyal, a true leader of men, and an honest patriot. He was my friend and teacher, and I will never forget him and what he stood for.

LIEUTENANT COLONEL JOHN B. HASEMAN, a Military Intelligence officer, is Assistant Army Attache in Indonesia. He is a graduate of the University of Missouri and holds master's degrees from the University of Kansas and the U.S. Army Command and General Staff College. A Southeast Asia Foreign Area Officer, he has served in Korea, Indonesia, and Thailand in addition to his two and one-half years in Vietnam.



TRAINING NOTES



Cold Weather PT

CAPTAIN DEIRDRE CHRISTENBERRY
LIEUTENANT COLONEL ALBERT J. SIERRA

A military unit that is well-trained to conduct operations in extremely cold weather has a distinct advantage over the enemy in such an environment. When environmental extremes forced the Germans to discontinue operations during their invasion of Russia in 1941, the Russians were able to counterattack successfully. Two years earlier, in 1939, when blizzards were too severe even for the Russian troops, the Finns came ghosting out of the storms on their skis and overran the potentially stronger Russian forces.

Lack of acclimatization, fear of unknown extreme conditions, and cold injuries are all interrelated, and all can contribute to the incapacitation of a fighting force. In the United States Army alone during World War II, there were about 91,000 "lost time" cold injuries. There were more than 9,000 cases of cold injury among U.S. ground troops during the Korean War — more than 8,000 of them occurring in the winter of 1950-51 alone.

Acclimatization to the cold, in all its aspects, is particularly important to infantry units, because the effects of cold injury are selective and severe. In World War II, for example, 87 percent of the cold injuries occurred in infantry rifle companies, primarily during combat operations; only 15 percent of the casualties were ever returned to combat; the average period of hospitalization was 50 days; and the casualties, in most cases, were left with permanent residual damage.

VULNERABLE

Soldiers from warmer climates, with little personal experience in dealing with the cold, require intensive training and guidance if they are to function in severe cold. Other soldiers as well are especially susceptible to injury — untrained soldiers coming in from other units, for example, and those with medical histories of coronary disorders and upper respiratory or rheumatoid disease. Blacks and women are the most in danger of frostbite. (White, non-smoking males are the least vulnerable. Smoking clearly reduces the circulation of blood, and therefore heat, to the extremities.)

These and all other soldiers, therefore, need to participate in a well-planned physical conditioning program that is designed to acclimate them and give them some experience in dealing with the cold.

Granted, few physical training (PT) programs include conditions and environmental exposures that can compare to those of military units during wartime operations. But some distinct benefits can be realized from wintertime PT programs. Although winter weather at many stateside installations cannot be considered extreme, it does get cold enough to allow troops to learn what the physical effects of cold weather can be and what activities and precautions can counter those effects.

Accordingly, if troops are exposed to the cold daily for two or three weeks, they will become physically acclimated. Their skin will become drier and provide better insulation against cold. The circulatory heat input to the surface of their skin and to their extremities will also decrease less in response to cold. Thus, cold weather PT can allow them to retain their conditioning during the winter months. (In fact, for reasons that are still being studied, the conditioning benefits of cold weather training seem to ex-

ceed those of warm weather training.)

It should be noted that it is much easier to withstand cold temperatures than hot temperatures during vigorous physical activity and that it is possible, with intense activity, for a soldier to suffer heat injury even at temperatures below zero. (For this reason, rubber or plastic suits should never be used during winter running.) In fact, the Army probably has more heat exhaustion problems during peacetime operations in the Arctic than it has cold injuries. And in Arctic areas, outdoor activity is not completely stopped until the temperature reaches -70°F.

Soldiers who work hard seldom if ever have cold injuries. For obvious reasons, therefore, commanders should require vigorous activity of their troops when exposure temperatures reach -20°F or less. At rest, the average 154-pound man produces 90 kilocalories of heat per hour. During periods of strenuous physical effort, this same man can produce up to 700 kilocalories per hour. In other words, seven or eight times as much heat can be produced by increasing the level of physical activity.

Given this increased level of heat generation, and with proper precautions, it is reasonable to conduct PT at temperatures of -40°F or even below. Of course, commanders and trainers must have a basic understanding of the body's response to cold, and they must realize that cold injury can be prevented in only the following ways: By increasing heat production (through activity), by reducing heat loss (through insulation), or by some combination of the two.

The body's first line of defense against cold exposure is to shunt blood (which carries the heat) away from the surface areas, where it is lost, down into the deep body centers that are vital for life. The blood flow to the surface of the extremities — fingers and toes — is reduced the most. In fact, heat flow to the digits is reduced to one-tenth of normal, and the heat that is supplied can be lost rapidly. The small cylindrical shape of the digits results in a high surface-to-volume ratio and, consequently, a high heat loss rate. The ear tip, nose, and chin, while less vulnerable than the digits, also have a high surface-to-volume ratio.

The head is the only part of the body surface that maintains a good blood (heat) supply. For this reason, the head should be covered during cold weather PT so that heat circulated to it is not lost to the environment. The ears should definitely be covered, because they are more vulnerable than any other part of the head, and also because exposure can cause painful earaches in many people. The nose and the chin will generally not be frostbitten as long as a person is active, but many people are more comfortable running in cold weather if these areas are covered.

The respiratory tract is also affected by cold air, but the lungs do not really freeze as some people believe. This is a myth. Studies of air breathed in at -70°F have shown that, by the time it reaches the lungs, the air is warmed to well above the freezing level. The inhalation of cold air does, however, initially cause a degree of constriction of the air passages (and sometimes spasms, if the air is extremely cold).

Breathing in cold air can also cause another problem. All air holds some moisture, but warm air takes up more than cold air does. This means that if the air is warmed only upon entering the respiratory tract, it will steal moisture there, drying and damaging the lung tissues. (After vigorous work in extremely cold Arctic areas, for instance, soldiers frequently find themselves coughing up blood for an hour or so.)

This does not pose significant problems at the temperatures that are generally encountered at most stateside installations in the winter. Healthy people can run for up to two hours a day in temperatures of -40°F without adverse effects to their lungs. But cold weather running does result in the production of a more viscous mucus in the respiratory tract, and soldiers will find that if they cover their faces they can breathe considerably warmer, more humid air. A wool scarf over the mouth and nose works well for some. Those who wear glasses often use dust or dental masks, which do not cause fogging of the lenses as scarves sometimes do. Such masks should be provided for the troops to use at their own discretion.

A jogger's hands are probably more susceptible to frostbite than any

In Arctic areas, outdoor activities are not completely stopped until the temperature reaches -70°.

other portion of his body. Mittens are more protective than gloves, although GI gloves with clean woolen inserts offer adequate protection for some. Protection can be significantly increased by wrapping the gloves with plastic bags to trap warm air near the hands. If mittens are desired and not available (or if they are too heavy), one or more pairs of old woolen socks can be used. Handcovers should always cover the wrists as well.

LAYERS

The upper body should be covered by three layers. The first should be a good absorbent insulator with long sleeves and possibly a turtleneck. The second could be a long-sleeved, hooded sweat shirt, a wool sweater, or the top of a set of long johns. The third layer should be the issued PT shirt. Natural fabrics (cotton and wool) provide the best insulation. In extremely cold and windy weather a windbreaker (the field jacket without liner) should be used as the third layer to reduce windchill. It will not let sweat evaporate readily, though, and soldiers should be careful not to become overheated and wet. Wet areas conduct heat away from the body more than 240 times as fast as air trapped in clothing does, and this predisposes a person to rapid cold injury. For this reason, soldiers who begin to sweat should immediately remove a layer of clothing.

As for the lower body, men should be aware that frostbite of the penis is not unknown. (In fact, an article in the January 20, 1977 issue of the *New England Journal of Medicine* describes this condition and its prevention.) Synthetic fabrics (polyester trousers or dacron/cotton boxer undershorts) are not adequate for cold weather jogging. Instead, male joggers should wear cotton knit underwear or twill running shorts and natural fiber pants or sweat pants.

A jogger's legs should be covered with at least two layers: fatigue, BDU, or sweat pants over long underwear or old pajamas. Many joggers find that one layer is enough because the muscles of their legs generate enough heat.

Because cold weather can tighten muscles and tendons, the rate of knee and ankle injuries can be expected to increase during winter months. It is particularly important for soldiers to do stretching exercises indoors and then to warm up completely before running. Contributing to the injury rate, although to a lesser extent, is the fact that running shoes lose much of their cushioning effect in cold weather. Soldiers should not be allowed to run in combat boots.

The feet, because of the motion of running and the friction against the running shoes, generate enough heat to be safe and warm as long as running is sustained. But if a runner stops to rest or walks long distances, his nylon running shoes and his feet will cool off quickly. Wool socks are warmer than cotton, and one pair is enough.

The clothing used for exercising in cold weather should never constrict circulation. Tight socks, shoes, underwear, sweaters, jackets, or trousers should be avoided. The clothing should also be clean. Socks, gloves, or other items that contain dirt, grease, or mineral salts from perspiration lose many of their insulating characteristics and give less protection against cold.

The rule for outdoor activity is "keep covered, keep dry, keep moving." Stragglers should be carefully controlled during winter runs. If movement cannot be sustained, the soldiers should be transported to a warm area immediately. In some individuals, if the skin is allowed to cool, skin temperatures will not rise with exercise alone. (Blacks, who have five or six times as many cold injuries as the other categories studied, seem particularly prone to this condition.) For this reason, a pre-run warm-up should begin immediately after the soldiers leave a warm area or, even better, both stretching and warm-up exercises should be done in a warm area such as a gymnasium.

Hot drinks can help. They dilate the peripheral blood vessels and thus increase the heat that is circulated to the extremities and the skin. Additionally, coffee (specifically the caffeine in it) apparently increases the rate of fat oxidation (yielding both heat and mechanical energy), thus conserving muscle glycogen (the usual source of energy). This seems to result in a significant increase in a person's ability to do sustained work such as running. (Unfortunately, if coffee is consumed *immediately* before running, its diuretic effect sometimes interferes with the run.)

After running, runners should cool down indoors; remaining outdoors in a possibly sweaty condition without sustained activity can lead to a rapid loss of body heat and, consequently, to rapid cold injury.

In planning for cold weather PT, commanders can get informative data from installation weather offices: the average minimum temperatures for each of the winter months, for example, and the average humidity and windspeed for the different seasons and for different times of day. Records of extremes are also generally kept on hand.

Commanders and trainers have to put a lot of care, planning, and leadership into their physical conditioning programs if they are to be successful. But these investments are always rewarded with superior troop performance.

CAPTAIN DEIRDRE CHRISTENBERRY is commander of a medical detachment in the 4th Infantry Division at Fort Carson. She holds both a master's and a Ph.D. degree from Auburn University. She formerly served with the U.S. Army Environmental Hygiene Agency.

LIEUTENANT COLONEL ALBERT J. SIERRA, JR., is commander of the 4th Medical Battalion, 4th Infantry Division. He holds a master's degree from the University of Missouri at Kansas City and has also completed the Command and General Staff College.

Company Training Program

CAPTAIN WILLIAM D. HEWITT

MAJOR VERNON W. HUMPHREY

Our training isn't very good. You know it. I know it. And the Chief of Staff of the Army knows it. But how do we make it better?

It was probably this question that the Chief of Staff had in mind when he directed the Training and Doctrine Command to develop a *workable* training system, one that had "a balance of drills and ARTEP missions." He said that "units should drill the blocking, tackling, passing, trapping and plays (individual and small unit collectives) and then apply them in an innovative and flexible manner in response to differing conditions during scrimmages (ARTEP mission training)."

In response to this directive, a small team from the Army Training Board has developed prototype mechanized infantry company and platoon training programs. They resemble ARTEPs. But unlike conventional ARTEPs, the new programs are designed for the small unit leaders — the company commander and the platoon leader — not for staff planners, and they incorporate a wealth of "how to do it" material.

Each of the programs is based on a straightforward approach to training. The team, working from a list of the fundamental tasks that a mechanized infantry company must perform, developed field training exercises (FTXs), situational training exercises (STXs), and squad drills. It then packaged the whole into documents that are targeted for each echelon. The fundamental tasks are shown in the accompanying chart.

The heart of the company and platoon programs are the ARTEP mission training plans. Only five tasks are needed at each level, because three of the eight fundamental mission tasks — as shown in the chart —

EIGHT FUNDAMENTAL MISSIONS	FIVE ARTEP MISSIONS
* TACTICAL ROAD MARCH	MOVEMENT TO CONTACT
* PASSAGE OF LINES	HASTY ATTACK
MOVEMENT TO CONTACT	DELIBERATE ATTACK
HASTY ATTACK	DEFEND A BATTLE POSN
DELIBERATE ATTACK	DELAY IN SECTOR
* HASTY DEFENSE	
WITHDRAWAL UNDER PRESSURE AND DELAY	

* TRAINED IN CONJUNCTION WITH OTHER ARTEP MISSIONS

are done in conjunction with other tasks. Each training plan culminates in a 24- to 48-hour FTX.

The basic building blocks of the plans are the 11 company level and 14 platoon level STXs, each of which is designed to teach a single collective task such as the occupation of an assembly area, or a passage of lines. The FTXs are used to tie the tasks taught by the STXs into combat scenarios. (The squad drills — 18 all told — are spelled out in a pocket-sized training drills booklet, which can be easily carried and used in the field.) There are a total of 10 FTXs, five at company level and five at platoon level. These are designed to be flexible so that commanders and leaders can modify them as needed.

All of the products — FTXs, STXs, and drills — are laid out in detail in the documents. They incorporate leader training, tactical doctrine, support requirements, and scenarios.

Of course, any training plan requires good evaluation standards. Fortunately, the Army Training Board's team had on hand detailed evaluation standards for companies, platoons, and squads as a result of work the Board had done previously in other training areas.

The new company and platoon training programs, if adopted, will supplement the battalion ARTEP, which will remain unchanged. All a battalion commander will have to do is to announce his training priorities, and his company commanders, platoon leaders, and squad leaders will have ready-made training plans to use in meeting those priorities.

The prototype mechanized infantry company and platoon training programs will be tested this spring. Be ready for them.

CAPTAIN WILLIAM D. HEWITT, an Armor officer, is assigned to the Army Training Board at Fort Eustis. A 1976 ROTC graduate of Penn State University, he has commanded companies in the 3d Armored Division and has completed the Armor Officer Advanced Course and the Combined Arms and Services Staff School.

MAJOR VERNON W. HUMPHREY, an Infantry officer, is also assigned to the Army Training Board. He has commanded a company and has held several staff positions at battalion, brigade, and division level. He has completed the Command and General Staff College and holds a master's degree from Georgia State University.

Platoon Maintenance Program

CAPTAIN JOHN H. POWELL

AUTHOR'S NOTE: I wish to recognize the assistance given me during the preparation of this article by Captain James Skopek and Captain Andrew J. Hill (now retired).

By the time an officer has completed the Infantry Officer Basic Course (IOBC) he has been exposed to a tremendous amount of material on what his duties and responsibilities will be as a platoon leader. And he is probably a bit confused. But his effectiveness as a leader and a manager of resources will depend on how well he applies the instruction he has received.

In applying that instruction he may especially need some pointers to help him with his maintenance responsibilities. While the mechanics of doing his maintenance job are easy, the difficulty is to motivate his men, to see that they do their jobs "by the book," and to see that they achieve a well-defined maintenance standard.

The first thing a platoon leader has to do is to understand what his company commander expects and how his own efforts will fit into the company's overall maintenance operation. The company commander's orientation should provide some of that understanding, but the company's SOP (standing operating procedures) will be the platoon leader's primary guide; it represents the commander's view of how maintenance doctrine and procedures apply to the company's operations.

During his review of the SOP, the platoon leader should concentrate on the responsibilities of each leader in the chain of command, on the company's key maintenance personnel (including the armorer and the NBC, motor, and communications sergeants), and on the system maintenance team of each vehicle. (This team is nothing more than the squad members cross-trained in the operator level maintenance on that vehicle.) In addition, the platoon leader must understand how each maintenance team cooperates with the organizational maintenance people to accomplish the mission — such as, who must be present during quarterly service and what to do if something can't be fixed at the operator and system team level.

(When the platoon leader becomes more involved in the maintenance program, he should resolve any discrepancies he has noted between the SOP and the way in which the actual maintenance operations are being conducted.)

After he has reviewed the SOP, the platoon leader should take a good look at the condition of his equipment and at how well his soldiers perform their maintenance drills. When checking the equipment, he must use the appropriate manual for each item to determine his platoon's maintenance posture and, more important, he must see that his soldiers are using the manuals too.

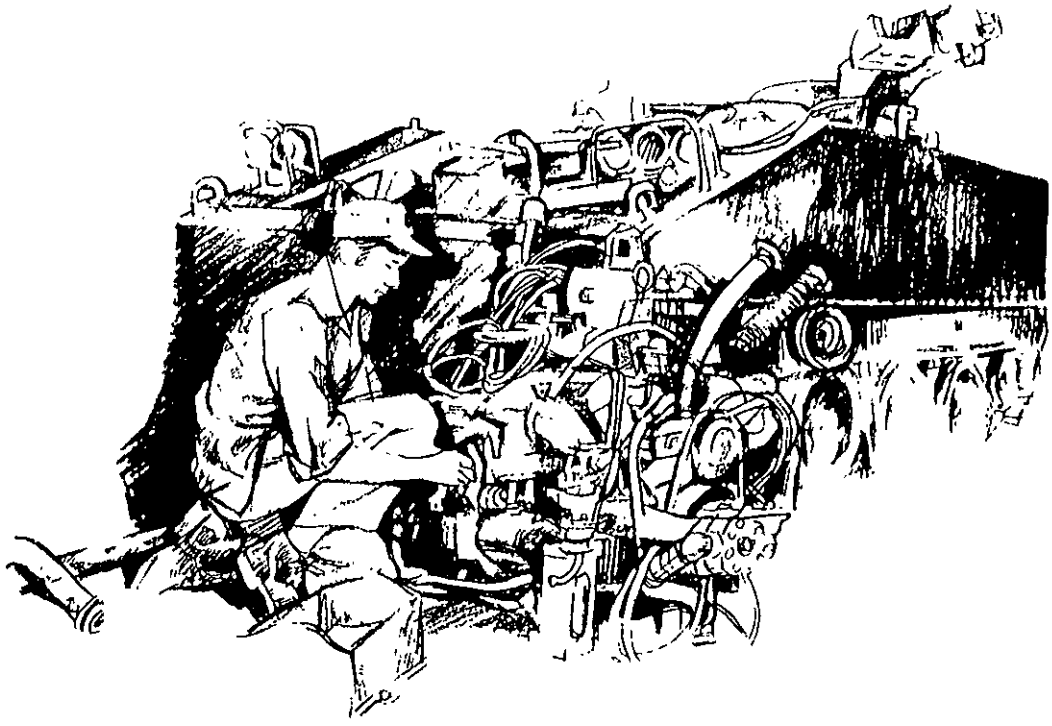
While in the motor pool he should ask questions and then evaluate and verify the answers using the SOP and the appropriate manuals. This is an excellent procedure for determining how well his soldiers know and perform the maintenance procedures outlined in the SOP and in the operator's manual. It is his responsibility, too, to see that the system maintenance teams for the equipment assigned to his platoon are trained through effective maintenance drills during scheduled motor stables.

The platoon sergeant should be able to provide explicit detail on the platoon's maintenance operations and on any shortcomings noted in the past. This information must include at least two points: The actions taken when organizational maintenance is required, and the strengths and weaknesses of each system maintenance team.

KEY MAN

It is especially important for the platoon leader to examine closely the relationship between the squad leaders and their soldiers. After all, the squad leader is the key man in the maintenance program. He supervises the first link of the maintenance chain — the operator — and trains his squad to operate as a system maintenance team to achieve the desired standards.

The platoon leader must thoroughly understand the forms and records that are used when equipment is dispatched. These forms include the Motor Equipment Utilization Record (DD Form 1970), the Equipment Inspection and Maintenance Worksheet (DA Form 2404); the



Operator's Report of Motor Vehicle Accident (SF 91); and the Accident-Indentification Card (DD Form 518). Other forms he must be familiar with are the Preventive Maintenance Schedule and Record (DD Form 314) and the Materiel Condition Status Report (DA Form 2406). (The key manual in the preparation of these forms is TM 38-750, The Army Maintenance Management Systems, with interim changes, I01, I02, I03.)

Another critical subject area is the timely and valid requisition of repair parts. The platoon leader must understand the entries on the document Register for Supply Actions (DA Form 2064). (DA Pamphlet 710-2-1, Using Unit Supply System, explains how to prepare this form.) He must use these manuals! It is his responsibility to know the correct and accurate status of all the equipment assigned to his platoon. And his commander will certainly ask about it!

Once the platoon leader has mastered the company's maintenance plan and its daily maintenance operation, has evaluated his soldiers' strengths and weaknesses, and has determined his present maintenance posture, he must develop a simple and comprehensive platoon maintenance plan. His plan should list specific training objectives with standards that can be achieved on either a daily, a weekly, or a monthly basis. The objective of the plan should be to promote unit cohesiveness and teamwork through effective maintenance training. He must also remember that maintenance is training.

The company commander will allocate maintenance time on the company training schedule. Often, he will give such specific guidance as "Before, during, and after operations PMCS will be accomplished." Normally the platoon leader will want to supplement the required training. This additional training should include subjects that have been identified as weaknesses in the platoon. The schedule might read, "In addition to PMCS, a 35-minute class will be given in the proper use of DA Form 2404 in quarterly services operations."

All training should focus on the team and not primarily on a single individual in the section or squad. When additional training is planned, the platoon leader must see that the individual responsible for presenting the instruction is well prepared. Then he should brief the commander informally on his maintenance plan and on the actions he plans to take to train his platoon in maintenance procedures.

Above all, throughout the entire maintenance process, the platoon leader must *use* all the manuals he has — TM 38-750, DA Pamphlet 710-2-1, and all the -10 manuals. The first two are essential in preparing forms properly and the -10s are essential in maintaining the platoon's equipment properly.

If the platoon leader applies these pointers, provides leadership, and demands that the operator and team maintenance be performed "by the book," he will have a good platoon maintenance program. And that program, in turn, will make a substantial and positive contribution to his unit's combat readiness.

CAPTAIN JOHN H. POWELL, a graduate of the U.S. Military Academy, is *an Infantry officer* assigned to the Weapons, Gunnery, and Maintenance Department of the Infantry School. He previously served in several assignments with the 1st Infantry Division (Forward) in Germany.

Support Platoon Leader

CAPTAIN ROBIN P. SWAN
CAPTAIN JAMES P. MOYE

The job of a battalion on the battlefield is well known. Briefly, that job is to "shoot, move, and communicate." But to do that job the battalion must depend on its logistics people to do *their* job, which (according to FM 71-2) is to "arm it, fuel it, fix it, and feed it," the *it* being the battalion — and everything, or everybody, in it. In this process, the battalion S-4 depends heavily on his primary logistics operator — the support platoon leader.

The importance of the support platoon to the battalion is clear. Its ammunition and transportation sections arm the battalion, its transportation section fuels it, its supply and transportation sections (in coordination with maintenance elements) fix it, and its mess and transportation sections feed it.

Unfortunately, though, when a new support platoon leader takes over his duties, he usually is without any kind of formal training for the job and without any really useful guidelines from field manuals or regulations. He, therefore, has to learn his job the hard way.

Garrison operations give the support platoon leader, along with the S-4, an opportunity to achieve some proficiency in resupply procedures for most supply classes. But when the battalion moves to the field, the real challenge comes: These two men must manage and control large quantities of Class I, III, and V supplies and must see that the battalion has what it needs. The support platoon leader and the field trains procure and deliver the supplies to the combat trains, and the S-4 and his combat trains distribute the supplies to the requesting combat units. These interlocking roles of the combat and field trains are vital to the effectiveness of the battalion's logistics management system, and the support platoon leader must understand his own role in the entire process.

SEVERAL FUNCTIONS

In the field, the support platoon leader is responsible for several functions:

- He is responsible for the operation of the battalion logistics operation center, where logistics information is coordinated. Located in the field trains, the center receives and processes supply requests. He sees that the assets are used efficiently to fill those requests and that proper coordination is made for the delivery of needed supplies to the combat trains or to the requesting unit.
- He ensures that all sections of the field trains (including the personnel administration center and the battalion maintenance section) maintain close liaison with their counterparts in the brigade support area, and that reports and requests are submitted promptly. He also keeps in touch constantly with the brigade's forward area support coordinator (FASCO) and monitors his platoon's actions at the ammunition supply point, the Class III point, and the ration breakdown point.
- He supervises the emplacement of his platoon's crew-served weapons and enforces the security plan. He sees that each member of his chain of command in the field trains knows what to do in the event the trains are subjected to ground, air, or NBC attack or receives indirect artillery fire. He must also see that information is disseminated to all members of the field trains.
- He maintains his unit's readiness to respond. There should never be an empty fuel or ammunition truck in the field trains. His platoon must anticipate the needs of the combat trains and have the proper mixes of supplies ready for distribution at all times.

Another of the support platoon leader's major tasks is to be prepared to assume the responsibilities of the S-4 in an emergency, just as a company executive officer must be prepared to take the place of a company commander. (In garrison, he may hold the title of assistant S-4.) His knowledge of what the S-4 does in the combat trains will help him anticipate requirements and provide timely support.

This means that he must understand property accountability, fund management, and the Class II, IV, VII, and IX requisition systems (in addition to the Class I, III, and V systems that he should know as the

support platoon leader). He must also be able to advise the commander on the status of each class of supply and how it affects training.

A good logistics SOP helps, but developing one takes time and experience. An effective time-tested SOP is especially valuable to a leader in training new personnel and in maintaining an efficient logistics system. Once written, the SOP should be constantly reviewed to ensure that it complies with the external SOPs of the supporting units and that it complements the SOPs of the higher headquarters as well as the battalion tactical SOP.

Something else that helps are checklists that show the actions of both the S-4 and the support platoon leader before, during, and after tactical exercises. (We have prepared our own set of such checklists and will be glad to make them available to anyone who is interested.)

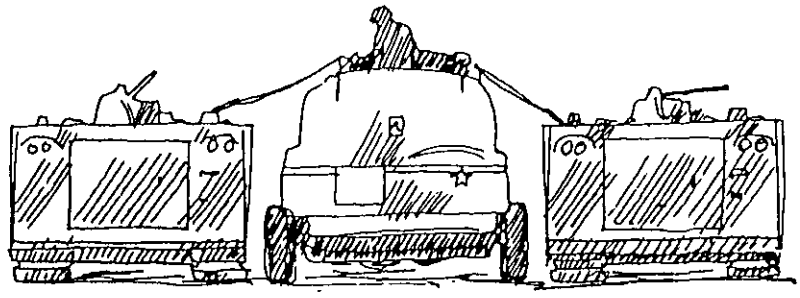
There are several other things the support platoon leader can do to aid in the efficient operation of the battalion logistics system.

First, he can use the Logistics Module (LOGMOD). It was designed to add realistic logistics play during CPXs to battalion simulation games such as PEGASUS and FIRST BATTLE, but it is readily adaptable for use in actual exercises.

If the various cards and boards in the LOGMOD are kept current, data on the distribution of assets, the delivery of supplies, and the estimated time of return data for the entire battalion can be determined instantly.

Second, he can practice air resupply. Often the demand for supplies is much greater than the battalion's cargo-carrying capacity, and sometimes surface transportation is too slow to deliver desperately needed supplies (especially during offensive operations). In such cases, the support platoon leader should exercise often overlooked aerial resupply means.

Helicopters are fast, relatively easy to load and unload (or to rig with external delivery equipment), and they



can deliver loads into areas that may be inaccessible by truck. Rations and water are two examples of supplies that can easily be delivered by air. Larger and heavier supplies such as ammunition may require the use of bags and slings for delivery, but they also lend themselves readily to air transport.

When selecting combat and field train sites, the S-4 and the support platoon leader should consider the proximity of those sites to helicopter landing zones. In addition, members of the supply, transportation, and ammunition sections of the support platoon should become familiar with helicopter safety and should be trained in the use of such aerial delivery equipment as A-22 bags and multi-leg slings.

Finally, the support platoon leader should practice the operation of the logistics center, because its efficiency directly affects the entire resupply system. He should make sure that the personnel who man the center are properly trained and that they completely understand their duties.

COMMUNICATIONS

The platoon leader should establish a communications system throughout the field trains that revolves around the logistics center. Field telephone communication between the PAC, battalion maintenance, and the mess teams will provide rapid internal response to requests and avoid the time lag created by sending runners. Also, distance permitting, he should insist that the brigade S-4 in the brigade support area establish wire communication to the battalion field trains. (Sometimes people need to be reminded that the rule is higher to lower and supporting to supported.) The battalion and brigade administration and logistics net must be monitored constantly, and the information passed over them must be acted upon quickly.

After all of these tasks of the support platoon leader have been considered, it must be noted, too, that he is first and foremost a "leader," a trainer. He is responsible for training his platoon to work as a team so that it can help orchestrate the resupply of the battalion.

He therefore needs a progressive training program that includes individual, section, and platoon level training. The individual training should include Soldier's Manual tasks for MOSs 11B, 64C, 76Y, 76W, and 94B. Specialized section training should include a discussion of the specific functions of the ammunition, transportation, supply, and mess sections. And, finally, the platoon training should be in the form of ARTEP tasks that integrate the functions of all the platoon's sections.

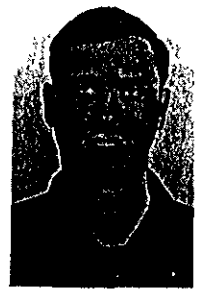
He and his section leaders must be careful not to become "too busy to train." This sometimes occurs when the time allotted for training is consumed by the daily support of battalion operations. To help avoid this pitfall, the leader should integrate training events into his daily support missions. Delivering ammunition to a range by helicopter sling load rather

than by truck is one example of incorporating a task (aerial delivery procedures) into a routine mission. There are many others, of course.

Maintenance, too, is important to mission accomplishment. Fortunately, the support platoon's transportation section is manned by soldiers whose job books require that they perform numerous maintenance-related tasks. The time they spend in the motor pool, therefore, not only increases equipment readiness but has a great training benefit.

The advice offered here was developed and tested during many months of battalion ARTEPs, FTXs, OPFOR missions, and a major joint readiness exereise. We hope that other leaders and logisticians will add their own ideas and experience to eventually develop the logistic organizational knowledge that is so sorely needed. Then, perhaps the new support platoon leader will find his job a little easier.

CAPTAIN ROBIN P. SWAN, an Infantry officer, recently completed the Engineer Officer Advanced Course. He has served as a support platoon leader in the 2d Battalion, 19th Infantry, and as a rifle platoon leader and a battalion motor officer. He is a 1978 graduate of Indiana University of Pennsylvania.



CAPTAIN JAMES P. MOYE, a 1978 graduate of the U.S. Military Academy and also an Infantry officer, has served as a battalion S-4, a scout platoon leader, a company executive officer, and a company commander. He is now assigned to the 2d Battalion, 19th Infantry at Fort Stewart.

No Simple Task

CAPTAIN GARTH T. BLOXHAM

The mechanized infantry company commander's Bible for offensive movement is Field Manual (FM) 71-1. It contains a lot of good and useful information, but when this "FM theory" is put to practical application on the ground, several things seem to be missing. The commander encounters too many variables in a hasty attack that the theory doesn't help him deal with.

For example, I will never forget the first mission statement I received from my battalion commander: "Captain, conduct a movement to contact along Axis White and attack Objective Foxtrot." I carefully analyzed the terrain over the five-kilometer route and thought to myself, "A piece of cake." Within minutes my mechanized infantry team was moving along the unknown terrain of Axis White and I was trying to command and control three infantry platoons, a tank platoon (cross-attached only hours before my LD time), an ITV section, the FIST track, and the medic track.

OVERWATCH

Soon I found myself also personally controlling the indirect fire war, acting as TC for my own track, and trying to keep the battalion commander informed of the situation. This was no simple task for an inexperienced, mechanized infantry commander of twenty days.

Suddenly, my sixth track was destroyed, one platoon was lost, two platoons were driving in cartwheels, and I was desperately frustrated and giving ambiguous orders over the radio. Quickly I realized there is more to a bounding overwatch than meets the eye.

FM 71-1 has the following guidelines on the bounding overwatch (pages 4-30, 4-31):

- The length of the bound is based on terrain and the range of the overwatch weapons.
- Bounding by platoon is a more secure method, but it is slower and needs terrain with good fields of fire.
- In bounding overwatch all movement is keyed to the next overwatch position.

The manual goes on to give a good example of a bounding overwatch, but it fails to give the inexperienced

commander the "how to's" he needs to control the confusion and the variables involved in that operation. To say the least, he needs some other things to help him. He needs, for example, a flag SOP that makes sense and is easy to remember, a method of controlling his maneuver elements, and, most important, a method of giving orders clearly and precisely in the heat of battle.

The first of these, an easy to remember flag SOP that makes sense, is shown in Figure 1. Since simplicity and standardization within the company are the keys to good communication, platoons should be discouraged from adding to these eight basic signals.

The following is an example of how the flag system works:

The first platoon is in bounding overwatch. The platoon leader takes his yellow flag (movement), points to the second squad leader, and then points with the yellow flag to a hilltop two hundred meters away. The squad track moves out using terrain driving. When the squad leader gets to his overwatch position, he places his track in a hide position, dismounts some soldiers to provide security, and uses his binoculars to study the terrain to his front. If he waves his green flag, then it is "all clear" (go). But if he picks up his red flag and points to his right front, he is saying, "Danger. Stop. Enemy to my right front."

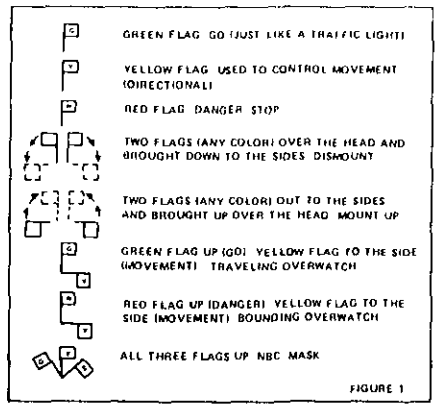


FIGURE 1

CHECKPOINTS

Although a good flag SOP offers a mechanized infantry platoon leader an excellent means of tactical communication, a company commander must have more than this if he is to control his maneuver elements. At the same time, his system must be simple and flexible so that he can handle rapidly changing situations. A solution to this problem is for him to use checkpoints, as the field manual recommends, to "help control maneuver" and to "serve as target reference points to coordinate direct and indirect fire."

Depending on the terrain, at least one checkpoint per grid square is needed, but in heavy woods as many as four or five per grid square could be used. All of the company's leaders must know where the checkpoints are.

Checkpoints are also needed along both flanks of the planned route and on all proposed platoon overwatch positions.

A platoon leader should be allowed 200 meters of leeway when he is given an order to move to a certain checkpoint. This gives him the freedom to use the terrain and to occupy the best overwatch position available. If he cannot stay within that 200-meter leeway, then he should be required to call in his new position.

Using checkpoints as target reference points does risk compromising the location of friendly units, but the practice has several advantages. One is the timeliness of spot reports. Another is that fire can be rapidly adjusted from these known points. If a FIST chief, monitoring the command net, hears a spot report, he can automatically call in a fire mission based on the company SOP that "silence is consent." If the company commander does *not* want the mission fired, he will say so. If a checkpoint is used for calling indirect fire, though, it should not be used to control the maneuver elements.

A good flag SOP and checkpoints help a lot, but something more is still needed to accomplish the mission.

8TH INF DIV (MECH) BREVMAT: Read right, then up; encrypt the indices

	STATUS	COORDINATION	MOVEMENT	RADIO	LOGISTICS
9	What is your overall combat status now?	Meet me at my CP	SP now	Listening silence imposed	What is your A (Fuel) B (Ammo status?)
8	My combat power is 90-100%	Meet me at _____	RP now	Listening silence lifted	Request A(Diesel)B(MOGAS)
7	My combat power is 80-90%	Send messenger or LNO	Move the advance	We are on radio minimize	___% fuel remaining
6	My combat power is 70-80%	New boundary from ___to___to___	Move out now	Go to Alt. Freq	___% ammo remaining
5	My combat power is 50-70%	Negative SITREP, no change	Requesting auth to move to next position	Return to primary Freq	Request___rounds Tank ammo
4	My combat power is below 50%	I am a unit atch OPCON to you	Enemy is within A. 1km, 2km, 3km	I am being jammed	RequestA(TOW) B (DRAGON) C (LAW)
3	I have _____ Tanks operational	I am in position	Crossing Checkpoint	CEOI Compromise	Request___(specify item needed)
2	I have _____ TOWs operational	My CP is located at_____	AVLB required at	have to high ground use high power	A(Wheel)B(Track) recovery needed at_____
1	I have ___rifle sqds w/carriers	My center of mass is at_____	CEV/Dozer required at_____	My Freq is_____ Encode	
0					
	A	B	C	D	E

FIGURE 2

What is needed is a unit SOP that will shorten radio instructions and at the same time allow the commander to give orders clearly and precisely in the heat of battle.

To accomplish this, the 8th Infantry Division uses the "Brevmat," or brevity matrix, a portion of which is shown in Figure 2. Using the coordinates on this matrix, the commander can communicate clearly and briefly. For example, if he says to his first platoon, "Brevmat C6, A," he means "Move out now to checkpoint A." A response of "Brevmat B3, A, Drop 200, Right 100," tells the commander that the platoon is not exactly on checkpoint A but that it is 200 meters south and 100 meters east of that point. Although its use may take some practice, this matrix can be very useful in improving radio communications.

Using these three techniques — a flag SOP, checkpoints, and Brevmat — a mechanized infantry company commander can avoid the confusion I encountered on my first movement to contact. He can really be in command and in control of his unit.

CAPTAIN GARTH T. BLOXHAM, a graduate of The Citadel, is assigned to G-3 Training, 8th Infantry Division, in Germany. Formerly, he commanded a company in the 8th Division, and served in several assignments in the 2d Battalion, 504th Infantry, 82d Airborne Division.

Improving M901 ITV Training

MAJOR V. PAUL BAERMAN

I visit many of our infantry units each year and am always impressed with their training innovations. Practically every unit has shown me some new method or tool they have developed that enables them to offer better training in a particular area or on a specific weapon system.

One such training innovation is the subject of the following article. It was developed and is being used quite successfully by the 2d Brigade, 3d Armored Division.

Unfortunately, many of these training innovations remain the "property" of the units that develop them, and other units never hear of or see them. Accordingly, I urge our infantry units to use INFANTRY Magazine to tell us about their new training developments so that we can all benefit from their experiences. From these exchanges, too, we can all become better infantrymen. (Major General Sam Wetzel, Chief of Infantry)

It will still be a number of years before units in the field get the Bradley Infantry Fighting Vehicle (BIFV) in large numbers. This means that the M901 Improved TOW Vehicle (ITV) will be with us for a while longer and that training ITV crews will continue to be important.

Presently, ITV crews have to rely primarily on the M-70 TOW tracker system in their TOW training, and difficulties with that system often cause training to suffer. In an effort to overcome some of these difficulties, the 2d Brigade, 3d Armored Division has devised a system for training its ITV crews that allows them to use the numerous subcaliber ranges and equipment normally used for tank training.

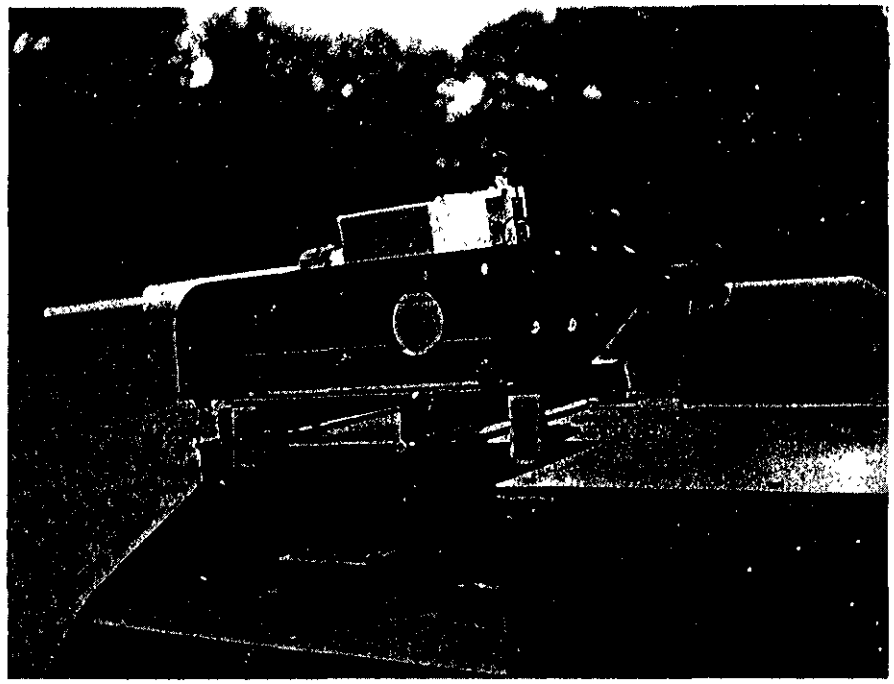
The system consists of a "homemade" bracket, a wiring harness, and the Brewster device (M181), which is available from Training and Audio-Visual Support Centers (TASCs). The bracket is used to mount either a standard M16 rifle or an M55 laser (also available from TASCs); it mounts on the ITVs turret above the sight, while the Brewster attaches to the bracket and adjusts for deflection and elevation. When the system is used with an M16, a TASC-issued solenoid is used to fire the rifle remotely. The system is powered by a standard military 24-volt electrical system.

To mount the system, the crewmen mount the TOW sight, close the cover above the sight, then mount the Brewster-bracket combination and boresight the weapon or laser at the desired scaled range. They can zero the system at a scaled range (60 meters, for example) by simply adjusting the Brewster for elevation and deflection based on the strike of the M16 round or the laser beam. The system is designed for a 1/35th scale range (see FM 17-12-7), so 60 meters would approximate 2,000 meters.

To fire the system, the gunner acquires a target, presses the trigger, and says, "Fire." The ITV squad leader allows the gunner to track the target for the required amount of time, then fires the rifle or laser by closing the circuit on the wiring harness. If the gunner is on target at the end of the set time period, he will see a visual target effect; that is, the target will turn over to indicate an M16 hit or there will be a red flash to show a laser hit.

This training system offers many advantages:

- It is simple and inexpensive. (The bracket can be built by unit welders, and the Brewster device is already available.)
- It is sturdy and easy to mount, operate, and maintain.
- It makes extensive use of the subcaliber ranges and scaled targets that have been developed for tank gunnery.
- It can be fired either indoors or out, depending on the type of weapon used with it. (With an M16 rifle, the system requires no more room than a standard rifle range or a tank subcaliber range, and with a laser it requires even less room.)
- No target jeep, crew, or infrared source is required as with the M70 trainer.



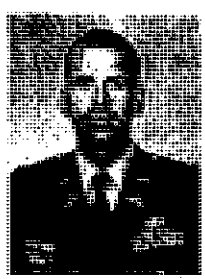
- Since the entire system is bolted on, it has no effect on the operationally ready (OR) rate of the TOW itself.
- With a mixed array of friendly and enemy targets in the system, the gunner can also be tested on armored vehicle recognition.

The most important advantage offered by this system is that it provides highly realistic training, because the TOW gunner actually sees and tracks a three-dimensional target (scale model) in his sights rather than the two-dimensional M70 target board. Because of the nature of the system, gunners can also engage multiple targets and targets that make evasive or tactical maneuvers, something that is not really possible with the M70 trainer. Night training with the system is no problem, either, because the scale model targets are easily discernible. Another key advantage is the shooting gallery effect, which the gunners enjoy. They like to see the visual target effect and tend to keep tracking until they do.

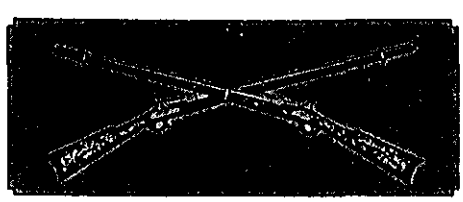
In addition, the laser can be fixed on its continuous mode against a "snake board" in the motor pool to check a gunner's tracking skill throughout a missile's time of flight and to provide him instant feedback.

This ITV subcaliber device could easily be modified for use with the Bradley Infantry Fighting Vehicle (BIFV) as well.

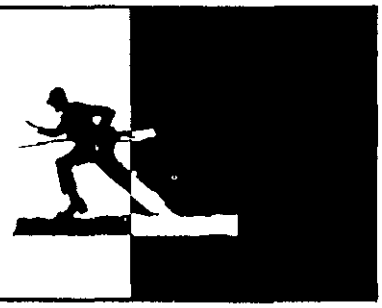
Plans for making the mounting bracket are available from Headquarters, 2d Brigade, 3d Armored Division, ATTN: AETFOB-SC, APO New York 09091.



MAJOR V. PAUL BAERMAN, an Armor officer, is a 1968 graduate of the U.S. Military Academy, where he is now serving on the faculty. His previous assignments include tours as battalion S-3 and brigade S-3. He has had his articles published in various military journals.



ENLISTED CAREER NOTES



ADVANCED NCO COURSE

Infantry Branch receives many inquiries from soldiers in the field who have not been selected to attend the Advanced Noncommissioned Officer Course (ANCOC). They ask to be "slipped into the course" or to be given a "back door" quota to attend. But the only Infantry soldiers who are eligible to attend the ANCOC are those who have been selected by an annual selection board, which is convened at Fort Benjamin Harrison, Indiana. We cannot make exceptions.

The ANCOC experience is designed to improve the competence of staff sergeants to assume the duties and responsibilities appropriate to sergeants first class and platoon sergeants within their CMF-MOS. The objectives of the selection board are to identify the soldiers who are best qualified to attend ANCOC on the basis of their demonstrated potential, their past performance of duty, and their ability to absorb and profit from the NCOES educational experience.

Highly motivated Infantry soldiers are urged to participate in the ANCOC nonresident course by correspondence. Applications should be submitted on DA Form 145 and forwarded to Commander, The Army Institute for Professional Development, U.S. Army Training Support Center, Newport News, VA 23628.

AIRBORNE TRAINING

Because of the unique missions and capabilities of the airborne community, a very tight screening process is used to see that only the highest quality volunteers are accepted into it.

An airborne assignment can help advance a soldier's career, and it can also be a rewarding experience. The completion of airborne training also makes a Ranger or Special Forces assignment possible if a soldier chooses to pursue a career in one of these specialty fields.

Specific selection and eligibility criteria for airborne training and assignment are contained in Chapter 6, AR 614-200. Applications should be processed through command channels in accordance with Procedure 3-19, DA Pamphlet 600-8.

DRILL SERGEANT CHANGES

Some changes have been made recently in the Drill Sergeant program.

In the past, a soldier who was selected, or who volunteered, for Drill Sergeant duty was reassigned to an Army Training Center (ATC) and then scheduled for a drill sergeant class when a training seat became available.

Now, anyone who enters the program and is currently stationed in the continental United States will be sent on TDY to attend Drill Sergeant School (DSS). Upon completion of the course he will return to his home station and be reassigned immediately to an ATC to serve as a drill sergeant for two years.

If an NCO is overseas he will receive regular PCS orders assigning him to an ATC. Once he arrives he will be attached to the DSS to attend a specific class. Once he has graduated he will be placed on drill sergeant status.

Another recent change is the option to extend for six to twelve additional months as a drill sergeant. A soldier who does extend for an additional twelve months and completes the extension can request and receive the assignment of his choice, provided it is available at that time.

A soldier who requests drill sergeant duty while overseas should submit his application between eight and eleven months before his DEROS.

More information concerning the Drill Sergeant Program can be found in AR 614-200 and DA Pamphlet 600-8.

POWER PLANT OPERATORS

The Army is looking for soldiers who are interested in operating, maintaining, and rebuilding large electrical power plants. These plants include 16-cylinder, diesel-driven engines, 4160-volt generators, gas turbine-driven units, and steam turbine generators of similar output.

The U.S. Army Facilities Engineering Support Agency is offering a one-year training course at Fort Belvoir, Virginia, for all qualified soldiers. Soldiers who complete the Prime Power Production Course will be awarded PMOS 52E with an additional skill identifier (ASI) in either mechanical (S2), electrical (S3), or instrumentation (S4).

The course has been evaluated by the American Council on Education, which recommends accreditation toward college credit for from 41 to 59 semester hours, depending on the ASI. Graduates of the course will also have a chance to take the examination for the third-class license offered by the National Institute for the Uniform Licensing of Power Engineers.

The next class begins in June 1983 with another schedule to begin about six months later.

To be eligible, soldiers must meet the following requirements:

• Be in the rank of sergeant/specialist-5 or below.

• Agree to serve at least three years after completion of the course.

• Have GT/ST and EL minimum scores of 110 or a waiver of that scoring.

• Must have passed the basic math and science proficiency test administered through the local post education center.

More information on the course and how to apply is available from the U.S. Army Facilities Engineering Support Agency, ATTN: Chief, Training Branch (FESA-NT), Fort Belvoir, VA 22060; telephone (703) 664-5241/5235 or AUTOVON 354-5235/5241, WATTS (800) 336-3095, Extension 5235 or 5241.

RESERVE COMPONENT NOTES

FIRST SERGEANT COURSE

Beginning last October, the USAR is now allocated spaces in the eight-week First Sergeant Course at the U.S. Army Sergeants Major Academy at Fort Bliss. Army Reserve unit first sergeants are urged to apply.

The course is designed to prepare senior NCOs to be first sergeants in companies, batteries, and troops, or units of similar size.

The instruction includes such subjects as unit administration, personnel actions, field operations, communications skills, and leadership.

USAR sergeants first class/platoon sergeants and master sergeants/first sergeants who are serving or expect to serve as troop program unit (TPU) first sergeants are eligible to apply. Applicants should be aware that if they are 39 years old or younger they can expect to take the Army Physical Readiness Test (APRT) during the course.

Applications must be submitted through command channels to the appropriate continental U.S. Armies (CONUSAs). DA Circular 351-82-2, dated 15 July 1982, has more information.

A point of contact at the Office of the Chief, Army Reserve is SGM Tom T. Toskin, telephone (202) 325-8480 or AUTOVON 221-8480.

SGM John J. Terranova is the USAR contact at the Sergeants Major Academy, telephone (915) 568-8123 or AUTOVON 879-8123.

RESERVE INCENTIVE PROGRAM

The Army has approved new criteria for the Selected Reserve Incentive Program, which pays bonuses for soldiers who enlist or reenlist in certain Reserve units or specialties.

Army Reserve reenlistment bonuses are now authorized by Military Occupation Specialty (MOS) instead of by Career Management Field (CMF). Unit eligibility for these bonuses has also changed to correspond to the Reserve Component Resource Priority List instead of to European deployment dates under full mobilization.

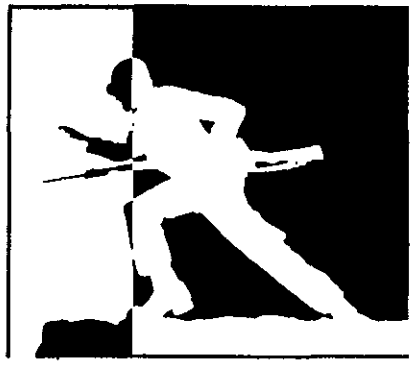
Designed to improve the enlisted strength and readiness of Reserve Component units, the incentive program awards enlistment bonuses of up to $2,000 or educational assistance of up to $4,000 for a six-year enlistment in high-priority units or in selected skills. Reservists in these units or skills can earn up to $1,800 in reenlistment bonuses too.

CORRECTION ON SQT CHANGES

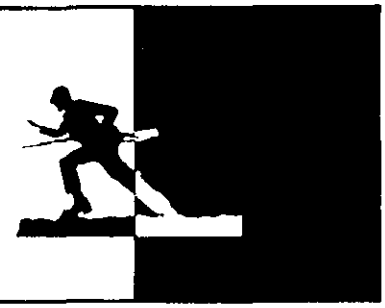
A note in the January-February 1983 issue of INFANTRY (page 42) stated that USAR unit members in skill levels 1 through 4 now have to take written SQTs annually during a three-month period. This is incorrect. Unit members are required to take written SQTs only once every two years and will have about six months in which to complete them.

In addition, that note stated that hands-on Common Task SQTs have to be given yearly to soldiers in the ranks of private through sergeant first class/platoon sergeant. These tests, too, will be required only every two years.

Commanders do have the option of requiring written SQTs and Common Task SQTs more frequently if they consider it appropriate.



OFFICERS CAREER NOTES



BRANCH CHIEF'S NOTES

Much concern has been expressed about the effect of the senior rater profile on the overall officer evaluation report (OER), and about the mechanics of the profile and how it should be interpreted.

Senior raters throughout the Army are shouldering their responsibilities very well. The vast majority of them appear to be spreading their effective, successful officers over at least the top four boxes on the form. Some appear to be using three boxes and some five or more. The worth of the senior rater evaluation is not based on how all senior raters Army-wide are doing. It is determined rather by comparing the box checked with the individual senior rater's overall profile as amplified and explained by his narrative comments.

Boards are cautioned that all three aspects (block check, profile, and narrative) must be considered jointly. Undue focus on any one aspect may well result in a misinterpretation of what the senior rater is really saying.

Each senior rater's profile is separately tracked by the number of officers he rates in each pay grade and by where he places each officer on an evaluation. This information is entered on DA Form 67-8-2 and placed on the officer's OMPF annually and is included with all the other pertinent performance information in his file.

Since the senior rater's profile is not placed on the OER until it arrives at MILPERCEN, each officer is encouraged to request a copy of his OMPF periodically by writing to Department of the Army, USA MILPERCEN, ATTN: DAPC-MSR-S, 200 Stovall Street, Alexandria, VA 22332.

Another subject of interest is the designation of additional specialties for an Infantry officer. Let me say first, though, that officers too often start to focus on graduate schooling and specialty training before they establish their credentials as troop leaders. Branch qualification consists of graduation from an advanced course and of successful command at company level. An Infantry officer should therefore seek repetitive troop assignments and learn all he can about soldiers before he undertakes specialty training.

After he has done all that, normally he will have an additional specialty designated in his eighth year of service. Earlier designation can be attained in two ways:

Event Oriented Specialty Designation: An officer who attends graduate school under the partially or fully funded programs or who attends flight training will be designated in the specialty associated with that event.

Permissive Specialty Designation: An officer may be designated in another specialty at any time on the basis of his request to his assignment branch. If the officer is qualified, in the judgment of the assignment branch (based on one year of experience and a favorable OER), and if the specialty is not overaligned, his request will be supported.

Around March 1984, officers in Year Group 1977 will have their additional specialties designated. These officers will receive an information packet and a specialty preference form through their local MILPOs. Each officer should indicate his desire for four specialties in the order of preference and return it to the MILPO, who in turn will forward it to MILPERCEN. By failing to complete and return the form, an officer forfeits his right to help determine what kind of jobs he is going to have in the future.

DA Pamphlet 600-3 (Commissioned Professional Development and Utilization), 1 November 1981, is the reference for additional specialties. Each officer may submit any additional information he wants to include along with his individual preference form.

These preference forms are considered on an individual basis with the officer's education, past duty assignments, and career development all affecting the final decision. An officer may not change his specialty for two years after it is designated unless an exceptional case can be established.

Looking to the future, an officer could be promoted to lieutenant colonel or colonel in his additional specialty as a result of the promotion by specialty program that was implemented in 1981. As rank increases, selection rates decrease and the field is highly competitive. By planning early, each officer can improve his advancement in the future.

Any officer who has not been given an additional specialty and who already knows which one he wants should not procrastinate. He should take the necessary steps to develop that specialty by volunteering for assignments in it.

Branch qualification comes first. But once an officer is branch qualified, he may be considered for assignment in his additional specialty, with appropriate schooling enroute to qualify him for the job.

Official Photographs

Finally, the importance of the photograph in an officer's Official Military Personnel File must be stressed again.

This photo is reviewed by a board when an officer is being considered for selection for promotion, schools, or command. Before having an official DA photograph taken, an officer must check the regulation (AR 670-1) to be sure he is wearing the correct uniform with only the authorized awards.

The correct uniform is the Army green uniform with basic branch insignia, all *permanently* authorized ribbons, badges, and tabs correctly displayed. Shoulder sleeve insignia (patch) and distinctive unit insignia (crests) are the only authorized deviations from this rule. Low-quarter shoes must be worn.

An officer should ask his local photographic facility to hold his photo for his review before forwarding it to DA. If the photo is not a good one, he can always have it retaken.

The most frequent errors Infantry officers make in the photos are:

- Poorly fitting uniform.
- Uniform not pressed properly.
- Wear of the blue Infantry cord and other cords.
- Unit designated basic branch insignia.
- Boots worn instead of low-quarters.
- Leadership tabs.
- Lack of good military haircut.

A new photo should be taken at least every four years or when an officer is promoted, whichever comes first. Each officer should see that his photo shows the best possible image to a board.

LTC JOHN F. CONNOLLY

FLIGHT TRAINING PROGRAM

There are about 80 openings for active duty officers to attend the Army Flight Training Program this fiscal year. Active duty officers who have less than 48 months of active federal commissioned service are eligible.

The standards for the program are high. Candidates must pass a Class 1A flight physical and score at least 80 on the flight aptitude selection test (FAST).

Once selected, officers are sent to Fort Rucker, Alabama, for nine months of flight training, followed by an assignment to an operational flying position.

Applications must be made to the Aviation Flight Training Selection Board, which will meet in April, July, and November 1983. Officers who want to attend the course should first read AR 611-110 and then submit their applications early through command channels to: Commander, U.S. Army MILPERCEN, ATTN: DAPC-OPK-V (for SC 15) or DAPC-OPG-T (for SC 71), 200 Stovall Street, Alexandria, VA 22332.

RESERVE COMPONENT NOTES

RESERVISTS SELECTED FOR SERVICE COLLEGES

Almost 150 Army Reserve officers have been selected to attend intermediate and senior staff college courses in 1983. Ninety of these will attend senior staff college courses while 52 will be ordered to active duty to attend intermediate staff courses.

Seventy-eight of those selected for the senior staff college course will take the non-resident Army War College Corresponding Studies Course. Ten will attend the resident Army War College course, one the Industrial College of the Armed Forces, and one the National War College.

Twelve Reservists will join their Regular Army counterparts in the 39-week Command and General Staff Officer Course, and 31 Reserve majors and captains are slated for the 19-week Reserve Component Command and General Staff Officer Course. One officer will attend the Marine Corps Command and Staff College Course and two the Armed Forces Staff College Course.

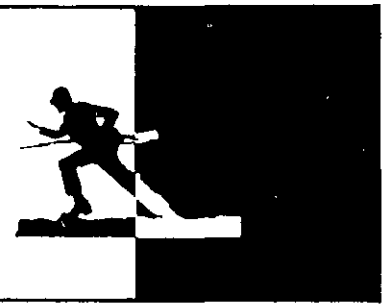
One area of concern was the lack of qualified applicants for the 131-day Logistics Executive Development Course. Although more than 250 officers applied for the nine senior staff college courses, only 18 applied for this one and as a result not all the seats were filled. This course, which qualifies officers as logisticians, is intended for captains, majors, and lieutenant colonels.

The completion of the regular or Reserve Component Command and General Staff Officer Course qualifies Reservists for promotion to colonel. The Logistics Executive Development Course is equivalent to half the CGSOC for promotion purposes and qualifies Reserve officers for promotion to lieutenant colonel.

Reservists selected for the senior service school courses and the resident intermediate courses incur an obligation to serve in the Ready Reserve for two years upon graduation.

Officers of the Active Guard Reserve (AGR) program are eligible to apply for these courses, but course dates must be compatible with the termination of an AGR officer's present active duty tour. One AGR officer was selected for the 1983 resident senior service school courses, and 13 will attend one of the two CGSOC options. Three AGR officers were selected for the Army War College Corresponding Studies Course.

BOOK REVIEWS



During the past several months we have received a number of excellent books we want you to know about. Here are just a few of them; we will mention more in our future issues:

• FORWARD INTO BATTLE: FIGHTING TACTICS FROM WATERLOO TO VIETNAM, by Paddy Griffith (Hippocrene Books, 1982. 156 Pages. $20.00). The author is a senior lecturer in the Department of War Studies at the Royal Military Academy, Sandhurst. His thesis is a simple one — despite all of the technological advances that have been made in the art of warfare, the fundamental realities of combat have not changed that much and, with only minor exceptions, the willingness of infantry units to close with their enemy has always determined the outcome of battles and will continue to do so. Griffith does not deny the importance of material resources; he believes the tank will continue to play an important role on the battlefield, but only when it is used in concert with the infantry; and he pays proper homage to the artillerymen and the aviators. His evaluation of the infantry war in Vietnam is particularly enlightening. This is one of those books all infantrymen should read and study.

• THE QUEST FOR VICTORY: THE HISTORY OF THE PRINCIPLES OF WAR, by John I. Alger (Greenwood Press, 1982. 319 Pages. $29.95). A serving U.S. Army officer, the author gives us a detailed look at the development of the principles of war — where they started, how they have been modified over the years, and what they are today. Along the way he names those individuals who were most responsible for advancing the principles, and briefly discusses the in-house conflict in our Army in the mid-1970s when, for two years, the principles were dropped from FM 100-5. Of utmost importance is the book's "chronological compendium," 68 lists from Sun Tzu's "considerations" to the U.S. Army's 1978 list of principles. As Alger explains it, these lists "provide the lengthy substantive matter contained in lists of guides intended to facilitate either the conduct or the study of war." This is another book that should be read and studied by infantrymen everywhere.

• GREAT BATTLES OF THE EASTERN FRONT: THE SOVIET-GERMAN WAR, 1941-1945, by Colonel T.N. Dupuy and Paul Martell (Bobbs-Merrill, 1982. 249 Pages. $14.95). This is a straightforward, bare-bones account of 18 major battles that were fought on World War II's Eastern Front. The authors, both well-known U.S. writers on military matters, present, in addition to an account and analysis of each battle, tables of organization, statistical data, and maps. Overall, the book constitutes an excellent reference source, one that should appeal to both history buff and war-gamer.

• FIGHTING POWER: GERMAN AND U.S. ARMY PERFORMANCE, 1939-1945, by Martin van Creveld (Greenwood Press, 1982. 198 Pages. $27.50). To the author, a senior lecturer in the History Department of the Hebrew University in Jerusalem, "an army's worth as a military instrument equals the quality and quantity of its equipment multiplied by ... its 'Fighting Power.' The latter rests on mental, intellectual, and organizational foundations; its manifestations, in one combination or another, are discipline and cohesion, morale and initiative, courage and toughness, the willingness to fight and the readiness, if necessary, to die." He compares the U.S. and German armies of World War II in such areas as command principles, organization, doctrine, personnel administration, leadership, and rewards and punishments to arrive at each army's "fighting power." He concludes that "the German Army was a superb fighting organization," one that in its "morale, elan, unit cohesion, and resilience ... probably had no equal among twentieth-century armies." He feels that the U.S. Army was not anywhere near as good a military instrument because of its "cruel replacement system," its "less than mediocre" officer corps, its large number of "pen pushers," and the "dearth of attention paid to the most elementary psychological needs of the soldier ..." He does admit that "when all is said and done, the fact remains that the American GI did win World War II." His comparisons are certainly open to question, and his conclusions can and should be debated. But van Creveld has produced a book that infantrymen should take the time to read.

• UNIFORMS OF THE ELITE FORCES, by Leroy Thompson. Illustrated by Michael Chappell (Sterling Publishing Company, 1982. 130 Pages. $12.95). This is another excellent reference book. In it the author, a former U.S. Air Force officer, joins a former soldier in the British Army to picture and to describe the functions of the uniforms, weapons, and fighting gear worn by members of more than 40 elite military units around the world. In addition to its 32 full-color plates,

NOTE TO READERS: All of the books mentioned in this review section may be purchased directly from the publisher or from your nearest book dealer. We will furnish a publisher's address on request.

the book also contains eight black-and-white photographs.

• SOVIET ARMED FORCES REVIEW ANNUAL, VOLUME 6, 1982, edited by David R. Jones (Academic International Press, 1982. 433 Pages. $47.00). Once again David Jones has brought forth an excellent and authoritative volume in this most important series of publications on the Soviet armed forces. He has made one addition that we hope will become standard in the succeeding annuals: a chapter entitled the "Soviet Military Year in Review." Also of particular interest in this book is Allen Chew's piece on the evolution of the Soviet motorized rifle division and James T. Reitz's essay, "The Soviet Security Troops — The Kremlin's Other Armies." All in all, this series continues to be an indispensable reference work on the Soviet armed forces.

Here are some of our longer reviews:

CRISES IN CENTRAL AMERICA: FACTS, ARGUMENTS, IMPORTANCE, DANGERS, RAMIFICATIONS, by Cleto Di Giovanni, Jr., and Mose L. Harvey (Advanced International Studies Institute in association with the University of Miami, 1982. 116 Pages.) Reviewed by Dr. Joe P. Dunn, Converse College.

The Advanced International Studies Institute, in association with the University of Miami, publishes special reports, occasional papers, and monographs on timely national security subjects. This brief treatise addresses an important issue: the Soviet threat in the Caribbean Basin.

The authors' point of view is clear: American economic and strategic interests in Central America are in dire jeopardy. The Soviets and their Cuban surrogates have concerted designs on the area, and Nicaragua and El Salvador are two components of the plan. While the United States appears apathetic and impotent, the Soviets are building a military challenge from the south that will constitute a threat unprecedented in our history.

The authors devote the bulk of their book to the background and evolution of the present situation. Yet, despite their apocalyptic warning, they are rather vague about what the U.S. should or can do concerning the present situation.

The study is well written and impeccably clear. But the argument is oversimplified and the alarmist tone is a bit heavy. Nevertheless, the issue is worthy of serious public concern, and this succinct volume offers the beginning of a needed dialogue on the topic.

SENTIMENTAL IMPERIALISTS, by James C. Thompson, Jr., Peter W. Stanley, and John Curtis Perry (Harper and Row, 1981. 323 Pages.) Reviewed by Major C.T. Guthrie, United States Army.

This book is clearly one of the most accurate and interesting surveys to be published recently concerning United States and East Asian relations. Unlike many such books that tend toward over-detailed rhetoric, this one blends fact into easily read prose. The result is an informative, enjoyable, if somewhat superficial, account of U.S. relations with Japan, China, Korea, the Philippines, and Vietnam during the past 200 years.

Best classified as a survey, for no book of 300 pages can adequately examine all the complexities of U.S.-Asian relations during two centuries, the book's narrative flows easily and logically. The authors characterize their volume as "a subject in search of three authors." That statement is quite correct. There has long been a void in objective scholarly writing concerning U.S. relations with the East Asian states. And this book fills that void quite adequately.

Clearly, it is one that the general reader should pick up and peruse, although a bibliography would have strengthened it. Still, in a period of history when drastic changes are occurring throughout East Asia, this book must be considered required reading for the professional solider.

MILITARY LEADERSHIP, by James H. Buck and Lawrence J. Korb (Sage Publications, 1981. 288 Pages. $22.50). Reviewed by Colonel George G. Eddy, United States Army, Retired.

Is there anything left to be said about leadership? Can it be sustained as an intriguing and beguiling phenomenon, as one writer has called it? Many people have probably concluded that we have reached our limit of both patience and endurance.

But, wait. Here is yet another treatment of leadership, just one more portion of a seemingly endless parade of opinion and conjecture.

It is divided into three sections — Leadership Theory, Contemporary Leadership Issues, and Leadership in the Field — and attempts to maintain interest in the subject even for those who believe that they have been surfeited by the avalanche of books, articles, pamphlets, reports, studies, symposiums, demonstrations, and lectures about it. (Although the book deals primarily with the U.S. Army, one of the eleven different authors addresses leadership problems in the Navy. And he concludes that the Navy's program is more facade than substance, and that it requires a complete restructuring and a clear and central definition of purpose.)

Should they really attract our attention, these eleven? Have they anything worthwhile to offer, anything especially pertinent in today's environment, anything new or substantially different from what already has bombarded our senses?

I believe they do offer something useful and pertinent to today's Army. While there may not be anything especially new in the book, it does reiterate certain basic leadership needs. For example, the authors generally agree that there is a need for more stability in leadership positions, for stronger efforts to promote unit cohesiveness, for more sensible relationships between resource allocations and task priorities, for greater technical competence coupled with the highest degree of integrity, and for more appropriate links between the systems and the humans who must use them. In addition, the

authors believe the lower levels should be given sufficient latitude to display their initiative and resourcefulness when these systems do not work because of the confusion and disruption that characterizes the battlefield.

One author is also concerned that military leadership tasks are becoming segmented into three categories: the direct combat role of the heroic leader, the various organizational and administrative functions, and the specialized skills of the military technologist. But who does what, and when, and in what sequence? Is it possible for one man to function effectively in all three roles, or do we need to nurture three different types of leaders?

It is quite apparent after all has been said that the eleven authors believe that achieving the status of an effective leader must be regarded as inordinately difficult.

CAMERA AT SEA, 1939-1945 (United States Naval Institute Press, 1978. 192 Pages.) Reviewed by Rear Admiral George L. Phillips, United States Navy, Retired.

This is a masterpiece of the naval cameraman's art, one of the finest photographic histories yet published of the combat navies of World War II. Produced and edited by the staff of the British journal *Warship,* it is made up of contributions from nine naval historians and analysts, who provide the comments and captions for the spectacular pictures, which have been winnowed from official files. It is a remarkable presentation of wartime life at sea, with battle scenes, ship sinkings, mighty fleets at anchor, huge convoys in passage, suicide planes, and shipboard life. Its scope is all-inclusive: ship types, weapons, living conditions, men at battle stations and in moments of relaxation.

With the battleships all but gone from the sea, and with the cruisers modified in function, the navies shown here will never be seen again, now gone the way of the Gatling gun of 1898, the monitor of 1862, and the observation balloon. Their places in the battle line have been taken by rocketry, missile ships, nuclear weaponry, atomic-powered and armed submarines, frigates, and destroyers, and, with these, a more remote and frightful sort of ungallant combat.

This is a book to cherish. For the veteran of a bygone age, it will reawaken old memories of friendships shared, of long days of tired vigilance, and of dangers passed.

AMERICA ARMS FOR A NEW CENTURY: THE MAKING OF A GREAT MILITARY POWER, by James L. Abrahamson (The Free Press, 1981. 253 Pages. $17.95).

During the last 20 years of the 19th century and the first 20 years of the 20th, the United States military estab-

lishment underwent far-reaching changes. Some were caused by outside influences — world politics, in particular. Others were generated by internal pressures brought about by such visionaries as Alfred Thayer Mahan, Tasker H. Bliss, William H. Carter, Stephen B. Luce, Emory Upton, J. Franklin Bell, Arthur L. Wagner, John McAuley Palmer, and Bradley A. Fiske.

The author, an associate professor of history at the U.S. Military Academy when he wrote this book, concentrates his attention on the various philosophical arguments that were used to support the reformers in the services and on the outside events that gave impetus to the reform movement.

He admits the results were not always good, but he feels that the reformers did "set American military policy upon the proper path during the decisive period when the nation and its armed forces came of age."

THE BOER WAR, by Thomas Pakenham (Random House, 1979. 718 Pages. $20.00). Reviewed by Captain Harold Raugh, 2d Infantry Division.

This is a compelling narrative of the last British imperial war, which was fought at the turn of the 20th century. The author spent eight years researching this monumental study, which is probably the most objective and the best-researched account of the Boer War ever written; it is definitely the most complete and enlightened since the eight-volume official history was completed in 1910.

The author discovered a veritable treasure trove of unpublished, primary sources. These included the lost archives of the British commander-in-chief in 1899, Sir Redvers Buller; his battle letters, for example, were found under a billiard table in his home. Pakenham also used the private papers of the War Minister and other cabinet members, as well as a hitherto lost million-word secret journal written by the War Office Intelligence Department. Additionally, he recorded and then used the war memories of 52 veterans of the Boer War, including three South Africans.

The book is highly recommended to all readers, even to the most casual. Undoubtedly it will prove to be the definitive account of this last British imperial war.

ANTITANK: AN AIRMECHANIZED RESPONSE TO ARMORED THREATS IN THE 90s, by Richard E. Simpkin (Pergamon, 1982. 320 Pages. $45.50).

The author, a retired British general officer who spent most of his military career in the Royal Tank Regiment, almost, but only almost, leaves his beloved tanks behind and takes to the air to seek the ideal military formation for the future.

After devoting his first 20 chapters to possible weapon and weapon system developments, he advances the view that the future battlefield will be dominated by independent helicopter operations, both in the offense and in the defense. He outlines a concept of operations and develops an organizational model. He even advances the theory that, because of the world situation, the major military powers might need two armies, or "two types of combat force, backed by common supporting arms and logistic services." He also strongly favors the creation of "composite battalions" and "airmech divisions," each of the latter containing 22,500 men, 1,216 armored vehicles, 470 helicopters, and a host of other goodies.

Simpkin advances some interesting arguments, although his love for the tank is undiminished. It would do infantry officers a world of good to read what he has to say in this book and in his two previous books on tank and mechanized infantry warfare, and then to ponder a few moments on what the future might hold.

SUPPLYING WASHINGTON'S ARMY, by Erna Risch (Center of Military History, Department of the Army, 1981. 470 Pages. $13.50).

Erna Risch, who for many years was a historian for the Quartermaster Corps, has done a splendid job with this volume, one in the Center of Military History's special studies series. She concludes that the Revolutionary Army's supply offices have been maligned unfairly and that they did perform "an essential role in the war." Yes, she says, there were abuses and waste and corruption. But not one battle was lost by the American armies because of a failure of supply, even though some military operations had certain restrictions imposed on them by supply deficiencies.

In some ways, Risch's story is a fascinating one, because it tells today's military professional a good deal about his beginnings. Too, logistics has always been important to the conduct of war, and Risch shows us just how important it was to our Army's founding fathers.

RECENT AND RECOMMENDED

THE NAPOLEONIC WARS: AN ILLUSTRATED HISTORY. By Michael Glover. First published in 1978. Hippocrene Books, 1983. 240 Pages. $14.95, Softbound.

THE MEMOIRS OF FIELD MARSHALL THE VISCOUNT OF ALAMEIN, K.G. A Reprint. A DaCapo Paperback. DaCapo Press, 1982. 508 Pages. $9.95.

RETURN TO FREEDOM. By Samuel C. Grashio and Bernard Nulting. MCN Press, 1982. 178 Pages. $14.95.

SKYRAIDER: THE DOUGLAS A-1 "FLYING DUMP TRUCK." By Rosario Rausa. The Nautical and Aviation Publishing Company of America, 1982. 224 Pages. $17.95.

PANZER BATTLES: A STUDY OF THE DEVELOPMENT OF ARMOR IN THE SECOND WORLD WAR. By Major General F.W. von Mellenthin. Seventh Printing. University of Oklahoma Press, 1982. 393 Pages. $12.95, Softbound.

BRICKBATS FROM F COMPANY. By Milo L. Green. Edited by Paul S. Gauthier. Gauthier Publishing Company, 1982. 407 Pages. $20.00.

G.I. JIVE: AN ARMY BANDSMAN IN WORLD WAR II. By Frank E. Mathias. University Press of Kentucky, 1982. 227 Pages. $17.50.

MESSERSCHMITT ACES. By Walter A. Musciano. ARCO Publishing, 1982. 224 Pages. $17.95.

WORLD WAR II ALMANAC, 1931-1945: A POLITICAL AND MILITARY RECORD. By Robert Goralski. A Perigree Book. Putnam's, 1982. 486 Pages. $10.95, Trade Paper.

INFANTRY LETTERS

SNOW-FIRING DRAGONS

Dear Sir,

I would like to offer some tips that Dragon gunners should find useful during winter operations. These ideas developed while I was assigned as a Dragon (antitank) platoon commander and battalion anti-mech officer with the First Marine Division.

It is important for Dragon gunners on skis or on snowshoes to know how to prepare a good quick Dragon position. First, each Dragon A-gunner should carry with him an extra snowshoe to use under the forward bipod of the Dragon. This snowshoe distributes the weight that is normally placed on the forward bipod and keeps it from sinking into the snow.

When a Dragon gunner on skis is preparing to fire, he should kneel on his skis, placing the forward bipod on the extra snowshoe (Figure 1). If the

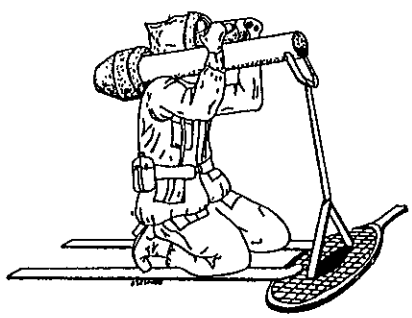


Figure 1

gunner must align himself downhill, he should slow to a stop by using the snowplow maneuver. Then, with the skis at a straight V, he should kneel in the position shown. The snowshoe in front should also help retard forward movement. On especially steep slopes, however, this position is impractical if the gunner is directly aligned downhill.

Gunners on snowshoes should get into position in the same way, except that steep slopes should not affect them as much. Bear-paw snowshoes are the most comfortable for Dragon gunners (Figure 2).

Figure 2

U.S. doctrine does not cover these ski and snowshoe firing positions and neither do the Dragon schools. All Dragon schools should at least show them to new gunners.

With increased NATO interest in winter operations, such positions should increase unit efficiency in anti-armor operations in the snow.

DAVID W. SZELOWSKI
1st Lt, USMCR
Oceanside, California

AGGRESSIVE PATROLS

Dear Sir,

This letter is a plea for commanders at all levels to reassess their use of combat patrols and raids.

It has come to my attention during nine rotations as commander of the First Motorized Rifle Battalion at the National Training Center that aggressive reconnaissance patrols, combat patrols, and raids are not used enough by the mechanized and armored battalions that rotate through the NTC.

First of all, reconnaissance patrols must be used as an intrinsic part of the intelligence system within the battalion. The quality of decisions and plans is directly proportional to the quality and quantity of the information used to formulate the decision or plan.

Therefore, each unit must make the most of its intelligence system by using all of its assets. These include, among others, ground surveillance radars, PSIDs (patrol seismic intrusion detectors), Air Force reconnaissance units, scout helicopters, POW interrogations, LPs/OPs, and ground reconnaissance patrols.

Once information has been gathered, it must be analyzed to determine whether the unit's scheme of maneuver needs to be changed. It is a basic theorem in the offense to attack known enemy weaknesses. If the situation dictates that a commander attack an enemy's strength instead, then he must create a weakness by neutralizing that strength. He can do that with artillery, smoke, by-passing, or even a combat reconnaissance patrol or raid.

The opposing forces (OPFOR) motorized rifle regiment at the NTC frequently uses night raids during its operations against the Blue Force — the battalions being trained. These combat patrols are designed as special operations to seize critical terrain and destroy key Blue Force anti-tank assets before the regiment's main attack. The results have been remarkably successful.

With as few as 20 well trained

soldiers armed with RPG-7s, man-packed suitcase Saggers, and small arms, the OPFOR has destroyed entire tank-heavy teams. These raids are based on detailed reconnaissance and stealth and on the Blue Force's confusion and lack of security during the wee hours of the morning.

These combat patrols organize themselves into tank hunter-killer teams of three or four men each. These teams strike several different tanks and TOWs simultaneously. After killing the vehicles, they withdraw to an objective rally point to consolidate and reorganize for further missions with the main body.

It is not uncommon for these patrols to clear wire and minefield obstacles during limited visibility so that the regiment's main attack at dawn can be unimpeded. Other missions for these offensive patrols have ranged from attacking battalion command posts and trains to placing smoke pots at key choke points or engagement areas to neutralize the Blue Force's fields of fire.

Commanders at all levels must multiply their combat power by using offensive patrols before large scale offensive operations. This is an excellent opportunity to build teamwork within the squads, and the patrols will ultimately save lives and weapon systems when the main force attacks.

MIKE FURLONG
CPT, Infantry
Fort Irwin, California

CHOOSING NEW RIFLE

Dear Sir,

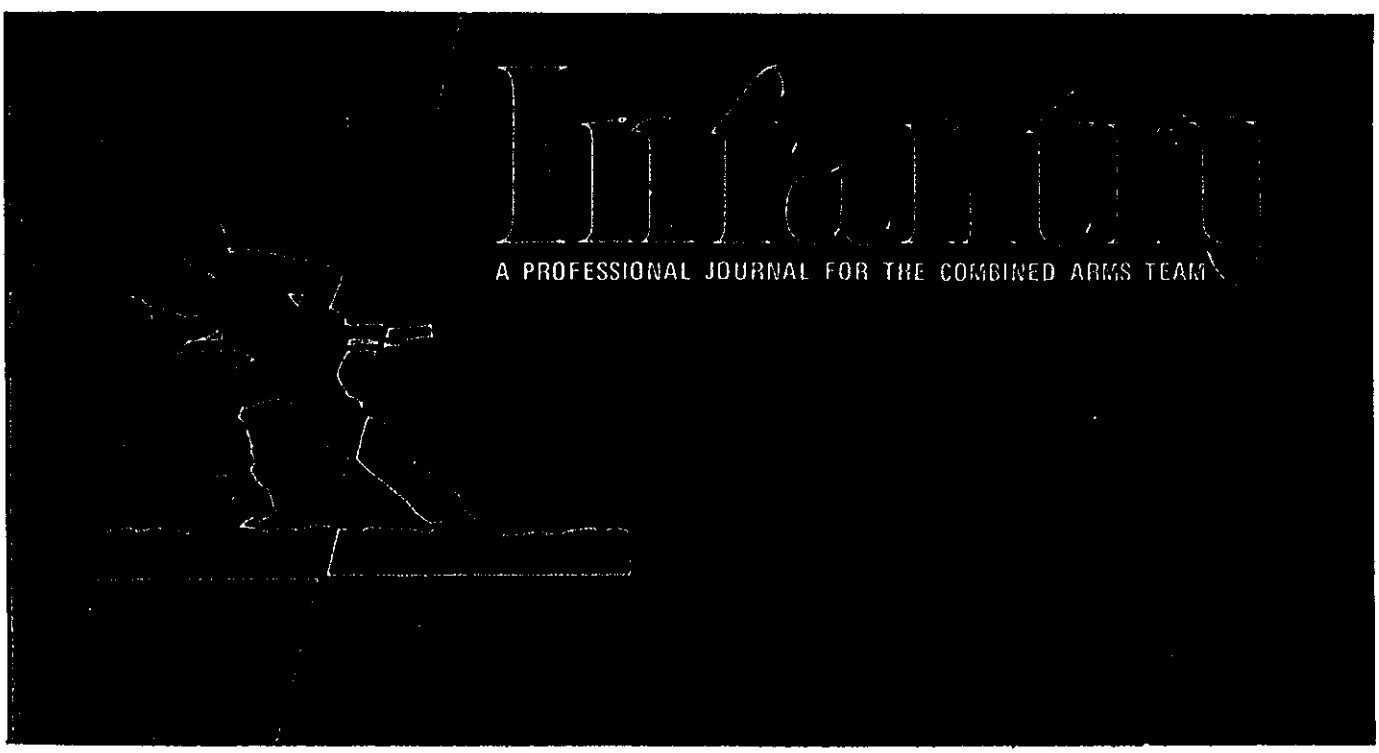
I read Captain Noyes B. Livingston's article, "Tomorrow's Rifle," in INFANTRY's November-December 1982 issue (page 13). Although I applaud his analysis, I would suggest some additional factors to be considered in choosing a new rifle: The environment in which it will be used and the training that will be involved.

The infantryman's "elbow room" is shrinking and will continue to do so. Fighting vehicles, helicopters, trenches, and urban terrain require the use of shorter weapons.

As to training, M16 ammunition is almost 25 cents a round, range space is shrinking, and time schedules are crowded. The mobilization program of instruction allows only 39 hours for marksmanship. The future rifle, therefore, needs an intensive human engineering effort so that additional training is kept to a minimum. And such an effort can save money because even if a new rifle costs twice as much as the M16, if it cuts training by 50 percent it could save 50 million dollars in the next ten years.

The Army is now spending millions on rifle training and plans to spend additional tens of millions on new ranges and devices. Yet in all that effort no one has established what the target performance should be — what the rifleman is supposed to do with the weapon. Until that objective is defined, we simply lack an effective criterion performance test, and we will have no idea what all those millions will provide. Once that has been defined, we can effectively design training courses, devices, and ranges whose overall effect will give us the combat "winability" we want.

Actually, the only point I disagree with the author on is the desirability of a burst control. Burst control is a band-aid attempt to compensate for poor weapon design and poor marksmanship training. The arms folks continue to believe that if they can somehow turn a rifle into a shotgun (sorry, a close assault weapon, or CAW) with burst devices, multiple projectiles, or darts, Private Johnny



will magically become a better shot. But as the Marine Corps' tests on the M16A2 showed, the burst control device caused a 40 percent weapon failure rate in one test. And, as some tests by Heckler and Koch showed, the weapon would have to cycle 2,000 rounds per minute for a burst control to be effective.

In short, the rifle of the future may be here now in the form of the new British Enfield. It and similar designs, it is claimed, reduce training, raise accuracy, and "fit" the modern mobile and urban environment. These claims may or may not be true, but don't you agree that we should test them?

JAMES E. LARSEN
Hampton, Virginia

DIFFERENT READING

Dear Sir,

I read Mr. Robert P. Kingsbury's letter in INFANTRY (September-October 1982, page 48), and it is amazing that you can read from a book whatever you want to. (Just look at the number of churches preaching from the same Bible.)

In my copy of The Surgeon General's book *Wound Ballistics*, I read the following:

- "The 9mm Parabellum was probably the most efficient military pistol cartridge in the world." (Page 56.)

- On the .45 pistol: "Not as efficient under all conditions as could be desired in a self-defense weapon..." (Page 139.)
- "The Japanese and German sidearms with muzzle velocities of plus or minus 1100 f/s were much more effective as antipersonnel weapons than the .45 cal weapon." (Page 140.)

J.J.P. ERASMUS
Colonel, South African Artillery
South African Defence College
Voortrekkerhoogte, SA

We welcome letters to the Editor on any subject that has been treated in our magazine as well as on issues of general interest to our readers. All letters are subject to editing and possible abridgment.

PIVOTAL ROLE

Dear Sir,

The article "Squad Training" by Major David J. Ozolek (November-December 1982, page 16) is dead on target in stressing the importance of squad training and the pivotal role of the squad leader.

The key to making squad training work is to make sure the young squad leaders are technically proficient in the subject matter at hand. The commander must set aside leader training time to make sure that high standards are maintained. The benefits of this approach in terms of improved leadership, improved leader proficiency, and improved unit cohesion are tremendous. And don't be surprised if the company ends up with an improved and more effective chain of command as an added bonus.

It is then up to the commander and the first sergeant to reinforce squad integrity at every opportunity, from range firing schedules to police call, and to hold the squad leader responsible for his unit's performance.

LOUIS J. SPERL III
CPT, Infantry
Nowenich AB, Germany

From The Editor

Some of you are already aware that the Infantry Association has been formed here at Fort Benning. This past December, a group of senior officers and noncommissioned officers headed by General W.B. Rosson, USA (Retired), met during the Infantry Association Conference and drew up an Association charter. It is reprinted below.

If you would like further information about the Association, please write to the Editor, INFANTRY Magazine, ATTN: Infantry Association, P.O. Box 2005, Fort Benning, Georgia 31905.

CHARTER OF THE INFANTRY ASSOCIATION

1. NAME.

The name of this association is the Infantry Association.

2. HEADQUARTERS.

The headquarters of the association is located at Fort Benning, Georgia.

3. PURPOSE.

The aims and purposes of this association are (1) to acknowledge, recognize, and promote the camaraderie of the Infantry; (2) to provide information concerning the Infantry and associated matters through INFANTRY Magazine; (3) to foster and transmit ideas aimed at maintaining the U.S. Infantry as the best in the world.

4. ORGANIZATION.

a. The association has a President, a Vice President, a Secretary, and an Advisory Council.

b. The President is the Commandant of the Infantry School, serving in his capacity as Chief of Infantry.

c. The Vice President is appointed by the President.

d. The Secretary is the editor of INFANTRY Magazine.

e. The Advisory Council is selected by the President to advise him on matters of concern to the Infantry and the Infantryman. Members are selected from the U.S. membership. The number of members is as determined by the President.

5. MEMBERSHIP AND QUALIFICATION FOR MEMBERSHIP.

a. Members of the Infantry Association are classified as follows:

(1) Active members.

(2) Honorary members.

b. The qualifications for membership are as follows:

(1) Active members: The individual subscribers to INFANTRY Magazine who are members of any of the armed forces of the United States or an Allied nation, or who are civilian citizens of the United States or an Allied nation.

(2) Honorary members: Individuals who are outstanding military and civilian leaders in the United States or an Allied nation; members are selected by the President or the Advisory Council in recognition of their interest in and services to the U.S. Infantryman.

MDB

OUTSIDE BACK COVER:
War Machines, Vietnam, 1966,
by PFC Alexander A. Bogdanovich.
(United States Army Art Collection)