

Infantry

A PROFESSIONAL JOURNAL FOR THE COMBINED ARMS TEAM



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A PROFESSIONAL JOURNAL FOR THE COMBINED ARMS TEAM

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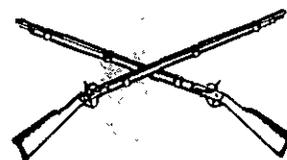
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Commandant's NOTE



MAJOR GENERAL SAM WETZEL

INFANTRY PLANNING FOR THE '80s AND '90s

Have you ever stopped and thought of the number of systems we are about to field over the next 20 years? It is impossible to list them here, but suffice it to say that we are talking about more than 35 systems. They range from the Bradley Fighting Vehicle System to the Close Combat Laser Assault Weapon (CCLAW), and every one will have a direct and profound effect on the Army in general and on the Infantry in particular. In every case, the introduction of these systems will require your personal attention to insure their successful fielding.

Those of you in the field, however, should not be expected to anticipate all that will be necessary to meet the challenge. That task properly rests with the Infantry School, and we have tackled the problem head on with the recent formation of the Strategic Planning Task Force (SPTF). Its charter is simple — to identify and define the issues that the Infantry will face through the year 2000 and beyond.

You will agree that this is a significant undertaking, for the task force's mission will be to serve as the "AWACS" for the Infantry. As new systems and concepts are developed, for instance, the SPTF will provide our community with early warning of the effects those systems and concepts will have on the people who must make them work — the soldiers. Too, our procedures for developing the doctrine, organization, training, and equipment must be properly identified and then orchestrated so that our infantry soldiers will be prepared

to use them when needed.

The task force's purpose, therefore, is to anticipate problems and provide solutions or alternatives to ease the introduction of the new equipment into our inventory. We intend to turn every stone in our effort to examine every aspect and exploit every available source, ranging from personal experience and gut feelings to white papers published by the Army Staff and elements of the Executive Branch. It is a major undertaking that must be done and done right the first time. We can ill afford not to be prepared for the future — whether it is 1984 or 1998.

These are actions that require people with keen minds and good solid "muddy boot time" to look at important matters and then recognize and articulate the effect of those matters on the Infantry community. The Infantry School is squarely in the middle of this effort and welcomes all comers who have keen minds and a wealth of experience. You owe it to the Army and yourself to share your knowledge as we strive to pull it all together.

The professional development and experience of "telling others how it is" provides untold job satisfaction. If you have finished the Advanced Course and believe that your experience will help the Infantry School get the Infantry ready for the 80s and 90s, contact us. Every job is geared to the task.

Think combined arms!

INFANTRY NEWS



THE INFANTRY SCHOOL has reprinted *The Defence of Duffer's Drift* and will distribute it to IOAC and IOBC students and to officer candidates. It will not be sold.

Duffer's Drift was written by then-Captain Ernest D. Swinton, British Army, in the early 1900s shortly after the Boer War ended. It has since become a military classic on minor tactics and has been reproduced in many countries.

The Infantry School feels that the lessons of *Duffer's Drift* are most applicable to today's professional soldier.

Courtesy copies of the publication have been sent to all Active Army and Reserve Component division commanders.

MANY READERS HAVE ASKED US about article reprints. Our staff is too small to permit us to reproduce articles that have appeared in our magazine, so we have made arrangements with the following organization to furnish reprints, at a cost, of our articles.

Reprints may be ordered from: University Microfilms International, Article Reprint Service, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

Our foreign readers may order reprints either from the above address or from University Microfilms International, 30-32 Mortimer Street, Department P.R., London WIN 7RA, England.

THE BRADLEY INFANTRY FIGHTING VEHICLE (BIFV) is now entering the Active Army's inventory. Highly mobile and highly sophisticated, the Bradley can roar along at speeds of up to 42 miles per

hour, deliver unprecedented firepower, and even swim rivers. It has proved in 18 months of tests to be the most formidable fighting machine of its type ever built. It will be joining the new Abrams main battle tank to form the backbone of the Army's combined arms team. (See Captain Robert P. Sedar's article, "Employing the IFV," *INFANTRY*, September-October 1981, pages 33-37.)

One hundred Bradleys will be coming off the assembly line under a \$206 million one-year contract that will help the Army begin to close a critical combat vehicle gap.



The Bradley carries a driver, commander, gunner, and six additional infantrymen. The Bradley Cavalry Fighting Vehicle (BCFV), designed for use as a scout vehicle, has a driver, commander, gunner, and two cavalrymen, and it carries extra ammunition.

When the BIFV is fielded, there will be a one-for-one exchange for the armored personnel carriers now

found in the Army's mechanized infantry units. This means that a mechanized infantry rifle company will receive 13 BIFVs in exchange for 13 of its APCs. Since each battalion commander and each S3 will also receive a BIFV, each mechanized infantry battalion will be able to field a total of 41 of these vehicles. (The scout platoon in the combat support company will receive six BCFVs, and the FAC will also be equipped with a BCFV.)

Under the Division 86 concept, a fourth rifle company will be added to each battalion. This will bring the total number of Bradleys in a mechanized infantry battalion to 54.

The Infantry School is actively involved in developing the total Bradley training support package. Tests and evaluations are scheduled throughout 1982 to measure the effectiveness of this training package. Manuals and courses of instruction must be refined and validated. Clearly, this training support package will be as good as the equipment for which it is being developed.

The infantryman of the 1980s will fight from a vehicle that is "second to none." The Bradley is an integral part of tomorrow's combined arms team.

BAYONET TRAINING HAS BEEN reinstated in the Army with the construction of a 400-meter bayonet assault course at Fort Benning, Georgia. The course, built by Company C, 43d Engineer Battalion, will be used to train the soldiers who go through Infantry One Station Unit Training (OSUT).

The OSUT soldiers will receive nine hours of bayonet training. They will spend six hours learning and practicing the basic movements, parries and

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The 1981 index to *INFANTRY* has been prepared separately and is available to anyone who requests a copy. Please address your request to Editor, *INFANTRY* Magazine, Box 2005, Fort Benning, Georgia 31905.

thrusts, and the other three going through the course

Ten soldiers at a time can go through the course. They leap over trenches filled with barbed wire, run up embankments, cross narrow foot



bridges, and crawl under barbed wire. There are 18 obstacles in all, and interspersed among them are bayonet targets, which are essentially automobile tires mounted on stands to simulate human forms.

To save wear and tear on their M16 rifles, the soldiers use mock M16s made of synthetic rubber.

If the course proves successful, others will be built.

A NEW, TEMPORARY PERSONNEL MANAGEMENT tool, the Project Development Identification (PDI) code, has been introduced by the Army's Military Personnel Center.

The PDI code will be used to identify commissioned and warrant officers as well as enlisted personnel who have had experience with a specific project or item of equipment during its developmental and testing stages and for whom no other appropriate occupational identification has been implemented.

A new Army Regulation governing PDI codes and their associated sub-codes has been drafted and should be available soon.

THE FOLLOWING NEWS ITEMS were submitted by the U.S. Army Infantry Board

• **TOW-2.** In August 1979, a

Department of the Army in-process review came up with a requirement that looked toward improving the TOW system.

The first step the Army took was to develop an improved five-inch warhead for the TOW missile then in use.

The second step was to develop a full caliber (six-inch) warhead and a hardened electro-optical link. This second development is referred to as the TOW-2.

The Infantry Board conducted an operational test of the TOW-2 system during May and June of 1981. Its purpose was to provide data on the operational suitability of the TOW-2.



TOW system mounted on an M151 vehicle.

Manned firing tests were conducted at Redstone Arsenal, Alabama, and the test soldiers fired both the current TOW system and the TOW-2 system at moving and stationary targets at short, medium, and long ranges. Six test gunners from the Infantry Center and from the U.S. Marine Corps fired the systems from the ground, from the ITV, from the M113, and from the M151. Battlefield conditions were simulated to the greatest possible extent.

The operational test manager was Captain Heinz J. Roye, and his assistants were Sergeant First Class Sherman Jordan and Sergeant First Class Ronald E. Bristow.

• **XM30.** Between June and August of 1981, the Infantry Board conducted an operational test of the XM30 series of protective masks. This series of masks is intended to



Soldier firing M16 rifle while wearing M30 protective mask.

replace the protective masks now being used in the Army. The Infantry Board's test was designed to provide data and associated analyses on the operational suitability of the XM30 as a replacement for the M17A1, the XM30 SPM for the M9A1, and the XM34 as a replacement for the M25A1.

The test soldiers were drawn from infantry, artillery, armor, engineer, and ordnance units. Each was issued a test mask and a control mask, and they alternated the use of the two masks during the operational exercises.

The testing program consisted of live fire exercises with the weapons assigned to infantry, armor, and artillery units; exercises in a simulated combat and NBC environment; engineer and explosive ordnance disposal tasks; airborne exercises, and an obstacle course. Throughout the testing, contamination was simulated by the use of smoke and training agents.

The operational test manager was Major Richard Sorrell, and his assistants were Sergeant First Class Sammie Brown and Staff Sergeants Robert L. Brown and William D. Kaylor.

• **VIPER.** The Infantry Board conducted an operational test of the Viper during June and July of 1981. The Viper tactical system is intended to satisfy an operational requirement for a more accurate, more lethal weapon than the present LAW. The Board's test was designed to provide

a and observations on the operational effectiveness and suitability of the Viper to the Army Systems Review Council for its consideration in making a production decision

The operational test addressed such issues as mission performance (hit percentage and engagement times), reliability, safety, training programs, training equipment, doctrine, and human factors. A side-by-side comparison of the Viper and the LAW was conducted using typical troops.

During live fire exercises, four tactical missions were completed. Both systems were fired at manned, evasive-target tanks. Single, pair, sequence, and volley techniques were used with both systems.

The operational test manager was Captain Noble T. Johnson, and his assistant was Sergeant First Class Kenneth W. Harbin.

RANGER STUDENTS are still reporting to the Ranger School at Fort Benning without the proper items of clothing and equipment. The following is a list of the required and highly recommended items that each Ranger student should have in his possession when he reports for his class:

REQUIRED

- 6 sets fatigue uniforms (8 are recommended). One set must have all authorized insignia attached. The rest must be stripped except for the OD name tape and the U.S. Army tape.
- 3 pairs of combat boots. Boots should be broken in before the course begins. (No jungle boots are authorized during the mountain phase between 15 October and 15 April; they are not a substitute for combat boots at any time of year.) Insulated boots are not authorized for the course.
- 12 pairs (at least) cushion sole socks.
- 6 sets underwear (only OD T-shirts are authorized).
- 2 pairs long wool underwear (winter only).
- Identification card and identification tags.

- 1 baseball cap
- 2 black web waist belts with buckles.
- 3 pairs boot blousing garters.
- 1 pair black leather shell gloves.
- 2 pairs glove inserts.
- Pocket size notebook, pens, pencils.
- Shaving brush and toothbrush for cleaning weapons.
- 5 pairs extra nylon bootlaces.
- Duffel bag with lock.
- 3 Padlocks (combination type recommended).
- 2 pairs military issue eyeglasses for students who wear them (contact lenses are not allowed). Two sets of retainer bands are recommended.
- Pile cap.
- Wristwatch (inexpensive but durable).
- 2 field jackets for winter, 1 for summer.

HIGHLY RECOMMENDED

- Hunting knife (or large pocket knife) and whetstone.
- Plastic waterproof bags.
- Map case.
- Sewing kit.
- Black friction tape.
- 2 plastic protractors.

No Class A uniforms are required for students in the Ranger Course, but all personnel, including those of other U.S. services and other nations, must have the equivalent service uniform for travel status to be worn in accordance with the regulations of the service concerned.

All other required clothing and equipment will be issued by the Ranger training companies. The students need not buy any other equipment on their own.

The normal dates for change of uniform seasons at Fort Benning are 1 April and 1 November. Students who are attending a class that extends from one season into the other must have uniforms that are appropriate for both seasons.

In addition to the above requirements, incoming Ranger

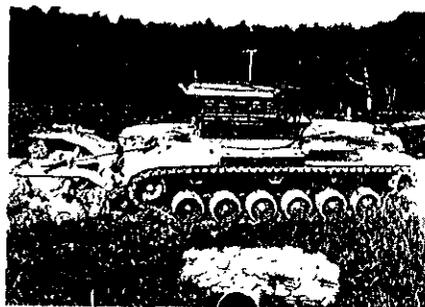
students must have in their possession their health and dental records (including a medical examination dated within the last year from the reporting date), their 201 files, their pay records, ten copies of their orders and a certification of their entry skills.

All incoming students must report to the 3d Ranger Company in the Harmony Church area of Fort Benning before 1600 hours on the reporting date for their class.

For additional information concerning the Ranger School, interested individuals are referred to ST 21-75-1, The Ranger Course Pamphlet.

THE COUNTER-OBSTACLE VEHICLE shown in the accompanying photograph was developed and equipped with mine clearing equipment by the Army and Marine Corps. It has demonstrated the feasibility of breaching an antitank minefield with an unmanned, remote controlled system.

For this demonstration, a modified



M60A3 tank chassis was fitted with a mine clearing roller, a Marine Corps M58A1 mine clearing line charge, and a clear lane marking system (CLAMS). The vehicle was operated by personnel who were a mile from the minefield.

The counter-obstacle vehicle found the boundary of a minefield by using its mine clearing roller to set off one of the mines. It then backed up and breached the minefield by projecting the rocket-propelled mine clearing line charge. As it cleared a path through the minefield, the vehicle marked the safe lane as it moved through.

FORUM & FEATURES



INTEROPERABILITY WORKS



LIEUTENANT GENERAL EUGENE P. FORRESTER

The Combined Field Army (ROK/US) (CFA) is known as the "Shield of Seoul." It is composed of three Republic of Korea Army (ROKA) corps and 13 divisions, including the 2d U.S. Infantry Division. The CFA's mission is to defend the important western sector of the demilitarized zone (DMZ), which includes the three historic invasion routes into the Republic of Korea.

Because of its combined nature, the CFA has a "C" staff instead of a "G" or an "S" staff. The commanding general, chief of staff, the Inspector General, and the Staff Judge Advocate are members of the U.S. Army, while the deputy commanding general, deputy chief of staff, and C3 are ROKA officers. All other primary and special staff members are senior ROKA officers with senior U.S. Army officers as deputies (Figure 1). This is not an advisor or counterpart relationship such as that used in Vietnam; both the ROK and U.S. members are fully integrated into a combined organization.

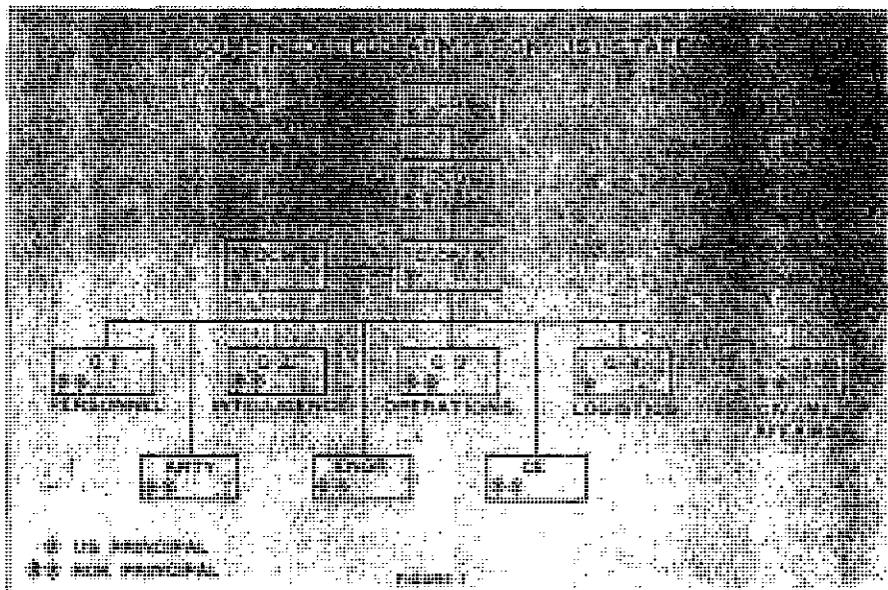
How does CFA train, in a real world situation, to defend against an implacable enemy who has twice as much artillery, three times the number of tanks, twice as many aircraft, and four times as many ships?

Part of the answer to that question lies in the concept of *interoperability*. Interoperability is essentially a self-image that includes a total reliance upon and belief in a true combined command and the ability of diverse national components to operate as one cohesive, well-disciplined military element.

Interoperability is the end result of *rationalization* and *standardization*. Rationalization is a thought process that identifies and evaluates the methods through which different armies perform combat, combat sup-

port, and combat service support functions. The process identifies similarities and differences and searches for ways of capitalizing on the similarities and compensating for the differences.

Standardization involves the development of like ways of doing things, such as organizing tasks, conducting military operations, producing and reporting intelligence information, and requesting and providing logistical support. It also involves using the same operating procedures and the same language as much as possible.



In pursuit of interoperability and of readiness to accomplish its assigned mission, the CFA periodically conducts three different no-notice exercises: FOG RAIN, FOG RAIN ALPHA, and CROSS BUCK.

The CFA headquarters conducts a FOG RAIN practice alert exercise quarterly. It begins with a no-notice communications check made by radio to conduct an immediate 100 percent muster. A confirmation message is sent concurrently by teletype in both English and Hangul (the language of the Korean people). This message designates selected units through regiment or brigade levels to move with their basic combat loads to specified assembly areas.

During a FOG RAIN exercise, observers travel to various locations throughout the field army area and check to see that the standards are maintained in personnel and material readiness. They also report on the preparations for and movement to the assembly areas and on their occupation and defense. The observers also check on road or cross-country marches, on communications, light and camouflage discipline, and on troop health, welfare, and morale. Thus, FOG RAIN exercises give commanders and staffs at all levels good insight into the readiness of their units.

FOG RAIN ALPHA is a live fire, time-on-target (TOT) exercise for CFA's field artillery units. It involves all available artillery units within the range of the exercise target, including units from adjacent corps and from the 2d U.S. Infantry Division Artillery. The exercise requires all participating units to fire simultaneously at a target designated by the CFA commander. This greatly improves the combat readiness of all CFA artillery units, because it allows them to practice artillery procedures at corps level and below and at the same time to check their responsiveness and their ability to mass fires across corps and division boundaries.

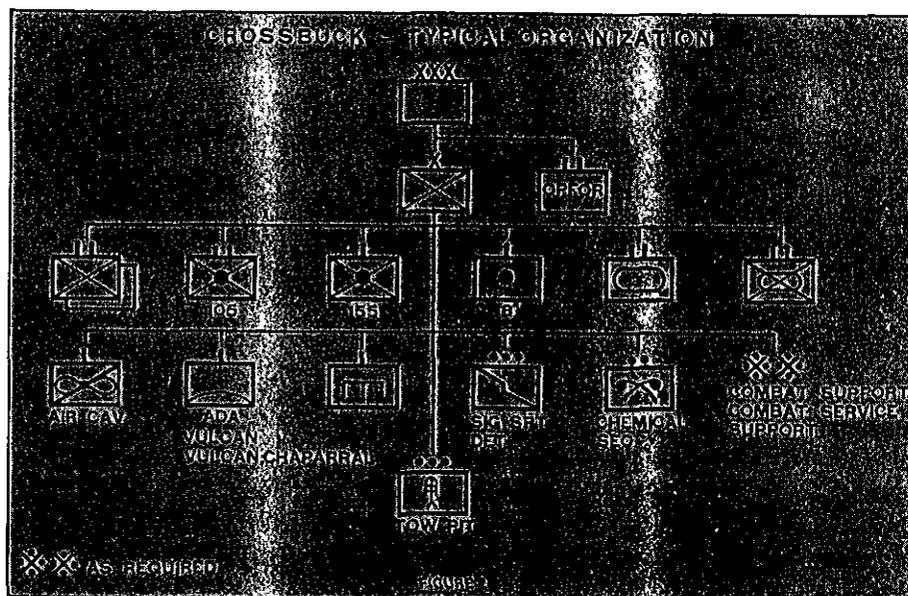
To succeed in combat, units must be able to move, shoot, and communicate in a tactical environment,

and they also must be able to sustain themselves. FOG RAIN and FOG RAIN ALPHA clearly test a unit's ability to shoot, move, and communicate, but they do not validate a unit's ability to do these things in a field environment for a sustained period of time. The CROSS BUCK exercise does.

CROSS BUCK is a field training exercise (FTX) for sustained inter-corps and combined military operations. (A typical combined ROK/US regiment or brigade combat team is shown in Figure 2.) It can be conducted either concurrently with a FOG RAIN alert or as a separate exercise at a different time. It takes selected elements from throughout

preparing for and moving from an assembly area, occupying defensive positions, conducting a hasty defense, carrying out local counterattacks, crossing a water obstacle, and conducting battalion-sized airmobile operations.

In addition to controller personnel for such a mission, CFA and the corps that is participating in the exercise provide evaluation teams to the headquarters of each brigade, battalion, and company, troop or battery that is taking part. Primary and special staff evaluators are also dispatched to the various field locations to observe, assist, and occasionally instruct in their functional areas. Particular emphasis is placed



the Combined Field Army through defense condition (DEFCON) checklists to their designated assembly areas, and then continues with a combined-joint FTX for four days and three nights.

Only four headquarters elements (CFA, the selected corps, the regiment or brigade, and the opposing force) know in advance that they are going to take part in a CROSS BUCK exercise. In addition, one of the corps will provide the terrain and the tactical scenario.

During the exercise, a number of typical combat operations are held during daylight hours as well as during the night. These may include

on the fire support elements, including tactical air, intelligence, operations, resupply, and communications.

Differences in the frequency spectrum and international agreements, combined with CEOI's in different languages, create interesting challenges to combined operations. Similarly, since each nation provides its own logistic support, composite maintenance and supply contact and support teams have to be formed. Other challenges include bilingual maps, messing and medical support, traffic control, and realistic training with minimal maneuver damage.

A CROSS BUCK exercise can be called any time, any day, anywhere.

The CFA commander selects the time and day. For example, at 1600 on a Sunday, the sirens and other alert notification methods may be implemented throughout CFA. Concurrently, the CG reviews a list of units and locations and their activities. At this time, he selects sub-elements from throughout the three corps and 13 divisions to participate in the exercise, and these elements are notified to proceed to designated assembly areas.

At the same time, the commanders of those units with some staff representatives (normally logistics, artillery, and communications) and some bilingual personnel, travel to the regiment or brigade headquarters field locations to receive their intelligence briefing, maps, and movement and operations orders.

In addition, the commanders are prepared to exchange CEOs and bilingual liaison officers and other personnel. The U.S. Army elements also use personnel from the Korean Augmentation To the U.S. Army (KATUSA) to act as translators and radio operators during the FTX.

The composite, combined ROK/US regiment or brigade is organized into teams or task forces to accomplish the assigned mission. The artillery and tactical air control party (TACP) personnel check to make sure the CFA's glossary of terms for fire support, close air support (CAS), and emergency close air support (ECAS) has been provided down to company level.

The sub-elements then move from their locations. Depending on the mission, enemy, terrain, weather, troops available, and the "real world situation," most of them cross divisional and corps boundaries to get to the FTX area. Some are provided with air cavalry support from the U.S. Army to provide protection during their movement. Similarly, military police man traffic control points at critical choke points to assist and expedite the movement.

During CROSS BUCK, the safety, health, welfare, and morale of the troops are continuously monitored by

the players, controllers, observers, and evaluators. The efficiency of a unit's cold and hot weather training, as well as its field sanitation techniques, can be readily determined.

Participants in the exercise receive periodic, timely comments from controllers regarding their performance and their ability to shoot, move, and communicate. Controllers note whether all elements remain fully operational throughout the exercise and whether the leaders and troops are aware of the mission. Controllers also look to see whether the troops are properly clothed and fed, whether the plan is likely to work, whether the commanders at all levels know what is good, mediocre, and sometimes bad, and whether the commanders clearly know their units' deficiencies and what needs their attention.

Immediately upon completion of the CROSS BUCK exercise, all commanders and staff personnel participate in a critique in which an overview and specific comments are provided. The participants then prepare an afteraction report consisting of a short narrative and separate observations from each, including the strong and weak points of the exercise with recommendations as to which level needs to take what corrective action. The report is collated at each headquarters and formalized at the corps and CFA levels for action, guidance, or submission to the ROK/US Combined Forces Command for assistance at that level.

Through the use of FOG RAIN,

FOG RAIN ALPHA, and CROSS BUCK exercises, leaders and commanders from platoon through corps are making interoperability work. Because of the Republic of Korea's real world situation, interoperability is an absolute necessity if two or more countries are to make the most of their military capabilities as an integrated and cohesive fighting force.

In my frequent visits with the new commanders and troops in the front line divisions, I have been impressed with what I saw. The leadership and the quality of the ROK Armed Forces is superlative. Their commanders are educated, well-trained, and experienced professionals, especially at the battalion and regiment level where most of the commanders have combat experience from Vietnam.

Similarly, the 2d U.S. Infantry Division is an outstanding, highly motivated, well-trained, and mission-oriented fighting force. A soldier who is assigned to the division for a year can expect to do strenuous physical exercise, conduct realistic training near a potential enemy, work closely with an ally, and depart a better professional soldier. Morale is high, as reflected by the record-setting reenlistment rates the division has enjoyed during the past several years. A senior NCO of the 2d Infantry Division has been quoted as saying, "This is the last, best place to soldier."

If you're looking for challenges and professionally rewarding work where the action is, "We'll see you in Korea."



LIEUTENANT GENERAL
EUGENE P. FORRESTER,
formerly commander of the
Combined Field Army (Republic
of Korea / U.S.), is now the
commanding general of the
U.S. Army Western Command
in Hawaii.

Growing A Leader

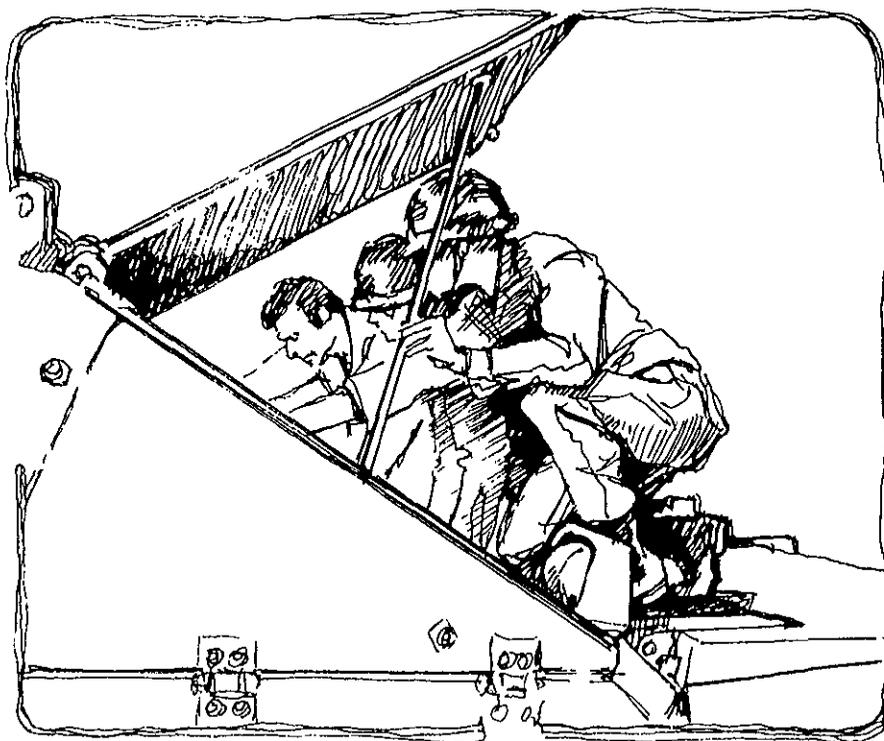
DANDRIDGE M. MALONE



Here's how to grow a leader. Find a bright-orange grease pencil. At 1300 hours, after you've marched your squad or platoon down to the motor pool and got them going on the vehicles in preparation for next week's AGI, then go find a jeep, parked in such a way that there isn't any glare on the windshield. With the grease pencil, write four words on the windshield, one under the other, in letters about an inch high: ANALYZE, ORGANIZE, DEPUTIZE, SUPERVISE.

Now, go out among your young soldiers and find an "able and willing" PFC or SP4. Pick one who seems to be pretty much the "main man" in one of those worthwhile little buddy groups that always seem to hang around together. Walk him back toward the jeep. If it's winter, and the jeep's been running, he'll just naturally gravitate toward the hood. Point to those four words. And right there, at that moment, that man begins to change from an "able and willing" soldier to a "willing but unable" leader.

In no more than 30 minutes, there on the hood of the jeep, tell him what each of those words means, and what you know, from experience, about how to *do* each one. Tell him in terms of "task, conditions, and standards." Then, don't just ask him if he understands. That never works very well. Get him to tell you how he would *do* each one. Take 30 minutes. Then take him back to his crew or



team and put him "in charge." Go about your business, but keep your eye on him — and on his men.

After you've marched your unit back to the company, and as you release them, fall out your young man. In no more than 15 minutes, tell him how well he met your standards for each of those four words. What he did right and did wrong. Don't give him a lot of words about how to correct the wrongs. Instead, use the most powerful leadership tool you've got: set the example. Tell him to watch you for two or three days, and to be prepared then to explain how

you do it — how you ANALYZE, ORGANIZE, DEPUTIZE, AND SUPERVISE.

Next time down in the motor pool, or wherever, go ahead and get the unit to work, then fall out the young man again and take him back to the jeep. In no more than 10 minutes this time have him tell you, now that he's watched you do it right, how he's going to do it. Then, put him back "in charge" again. Finally, at the end of the day, take another five minutes for another critique.

And that, my friend, is how to plant a leadership seed. It'll take you

a total of an hour, one good soldier, and a bright-orange grease pencil. And you can do it, right along with everything else you've got to do.

All it takes is an hour's worth of time to take an able and willing soldier and get him started toward becoming an able and willing leader. The next week, he'll be closer to your standards. It'll be time then to start him reading in that new NCO Guide, and watching other good NCOs, and talking with you about all that. And then you can begin delegating to him some of the easy tasks at the bottom of your list of "100 things to do." That will save you hours of your time. You'll get your time investment back, with interest.

And what do you do with the interest? Plow it right back in again. More teaching and more coaching for the one you just got started, or, plant some more seeds. Pretty soon, your young sprouts will become saplings,

and then you'll have a performance-based reason for deciding who to promote, or who to get started up into the NCO educational system — up into the "pro" ranks.

The simple motor pool example is the essence of unit-level leadership development across the board. Every "able and willing" soldier in your unit is a potential leader. And the example works, not just with a young soldier starting to become a leader, but with any leader who is able and willing — private, sergeant, or lieutenant.

As his leader, part of your job is to keep him moving up toward the next higher level. Coaching and critiquing will take your time. So will sending him to school. So will standing up for him when he screws up. But that time isn't just time "spent." It's invested, and it will come back to the leadership of your unit with compound interest.

Now go scrounge up a bright-orange grease pencil!

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A Cottonbaler



MAJOR DANIEL A. RAYMOND JR.

Nestled in the foothills of the Spessart Rhon Mountains in West Germany is a small kaserne that belongs to the soldiers of the 1st Battalion (Mechanized), 7th Infantry. This is no average unit and it contains no average soldiers. They are all "Cottonbalers," descendants of the soldiers who proudly won their nickname at the Battle of New Orleans in the War of 1812.

I have been assigned to five Army divisions and served with many fine soldiers but never have I met a group of young men who believed so much in their heritage and did so much to live up to the history of the most decorated infantry regiment in the United States Army. Over the course of time I, too, began to feel this unit had its own manifest destiny and became a believer in "Cottonbaler

magic." The story of these soldiers should not be left untold.

I am indebted to Theodore Roosevelt and the author of the epic poem "I Am The Infantry," both of whom inspired my thoughts. To the men of the 7th Infantry Regiment, past, present, and future, I dedicate this poem.

I AM A COTTONBALER

Before you stands a damn fine soldier . . . a Cottonbaler, by God! I can be counted on to accomplish any task — any job. I have been in the arena — my face is marred with dust, sweat and blood. I have

known the sweet fragrance of freedom for I have paid the price. I am a damn fine soldier . . . a Cottonbaler, by God!

I earned my nickname at Chalmette in the War of

1812 . . . we stacked cottonbales on the levee with Andrew Jackson and took the fury of the British square. With spent musket and cannon the British retired from the field that day. They had met some damn fine soldiers . . . Cottonbalers, by God!

I remembered the Alamo . . . traveled south and left my mark and my blood at Monterey, Vera Cruz and Cerro Gordo. I marched triumphantly into Mexico City . . . proudly proclaiming . . . Cottonbalers, by God!

The sound of fury from Fredericksburg, Chancellorsville, Chickamauga, and Chattanooga still rings in my ears, and I witnessed the closing acts of this internal strife at Gettysburg. I had fought my brother, but done my job . . . a Cottonbaler, by God!

I helped win the West . . . met a proud adversary after Little Big Horn and can count my fallen comrades against the Creeks, Seminoles, and Utes. I stormed the slopes of San Juan Hill and Santiago and met triumph in the Philippines. I am a Cottonbaler, by God!

My rest was short . . . I crossed over the sea and marched into France. I fought and died at Chateau Thierry . . . stood like a rock on the Marne . . . and smashed onward into St. Mihiel and Meuse Argonne . . . I left behind a lot of damn fine soldiers . . . all Cottonbalers, by God!

Peace at last . . . and rest . . . but not for long. I assaulted the beaches of Morocco and bloodied my tired feet in Tunisia, Sicily, Naples, Anzio, and Rome. I crossed the Channel and returned to France, beat through the hedgerows and fought into the Rhineland, Ardennes, and Central Europe. I saw the horror of war near Dachau, pushed into Nurenburg and saw a dying Third Reich in Berchtesgaden. We led the way . . . Cottonbalers, by God!

I was one of the first to see action in Korea. I

unslung my rifle and hitched up my belt once again. I stopped the Communist Chinese, relieved battered Marines, and kept the corridor open with my blood. I spilled my guts at the Iron Triangle and showed my courage with eight Medals of Honor. They were all damn fine soldiers . . . Cottonbalers, by God!

I fought the tenacious Vietcong through rice paddy, steaming jungle, and forest. I met the determined NVA and rose to every challenge in this country far away. I fought and spilled my blood when others chose to run. I did my duty . . . I honored my country . . . I am a damn fine soldier . . . a Cottonbaler, by God!

Today, I stand on freedom's frontier . . . a fighting team . . . willing and able. When you speak of the Infantry, I am the Infantry . . . my brothers before me, present and those to come . . . all proud soldiers . . . all damn fine soldiers . . . all Cottonbalers, by God!

MAJOR DANIEL A. RAYMOND, JR., an ROTC graduate of The Citadel, is now assigned to the Training Developments Institute at Fort Monroe. Also a graduate of the Command and General Staff College, he has served with the 7th Infantry Division in Korea, with the 3d Infantry Division in Germany, and with the 101st and 82d Airborne Divisions. In addition, he was a battalion senior advisor in Vietnam and served with the G3 for operations, VII Corps.

A BILATERAL STAFF



MAJOR WALTER E. MATHER

Although its exact organization is not prescribed in an Army field manual, the mechanized infantry battalion staff traditionally has used the same organizational structure that is used by brigade and higher level staffs (Figure 1). In a mechanized in-

fantry battalion, the battalion motor officer (BMO) is considered a principal staff officer, and this only reflects his overall importance to the unit's successful operation.

This conventional staff organization appears logical and functional.

But it does not reflect reality, and it certainly does not encourage efficient staff action. The main problem revolves around the actual relationship between the commander and his principal staff officer for training and operations, the S3.

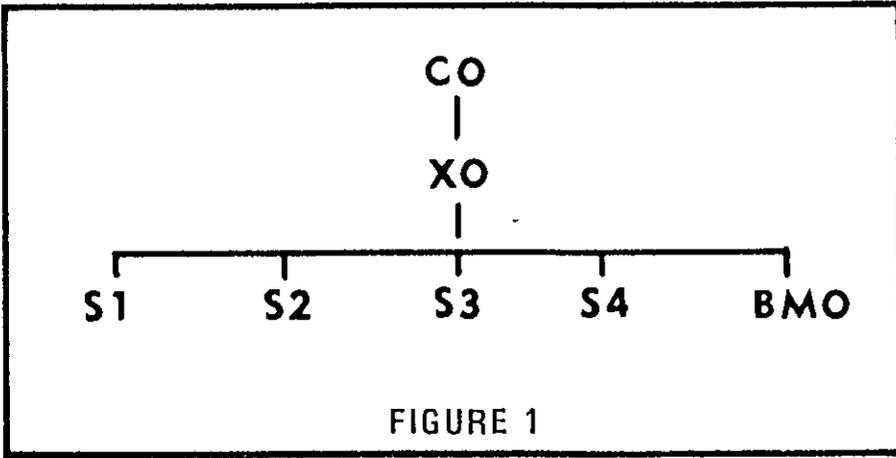


FIGURE 1

The S3 operates closely with his commander in both an operational and a training environment, and there should be no barrier, artificial or otherwise, between them. Unfortunately, in the conventional staff organization there is such a barrier — the Executive Officer — although

Figure 2 should be adopted. I call it a "bilateral staff."

There would be many advantages to this organization. The "dotted line" that now runs between the S3 and the commander would be done away with; the intelligence-operations tie would be firmly knotted; and the

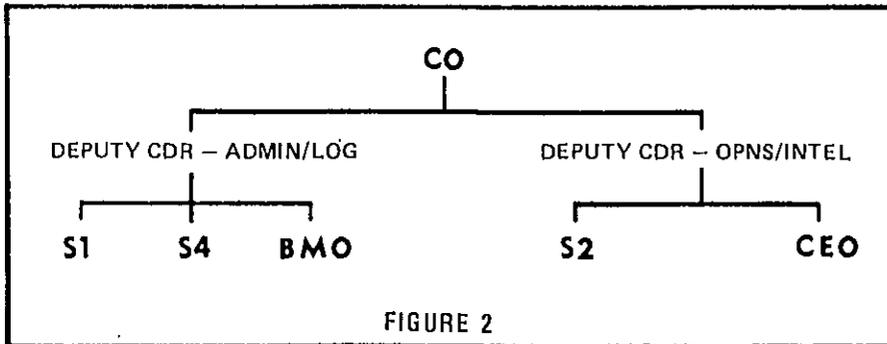


FIGURE 2

those who favor this organization deny that the Executive Officer's position is a barrier. They suggest, rather, that there is actually a "dotted line" that runs between the S3 and the commander and that the S3 can use that "line" to bypass the Executive Officer when he needs to.

In practice, though, that "dotted line" is virtually a solid one because of the realities of training and actual operations, with the S3 and the commander usually working closely together in such places as jump TOCs while the Executive Officer oversees the field and combat trains and, occasionally, the main command post.

To reflect the true situation and, more important, to give the staff badly needed balance, I believe the present mechanized infantry battalion staff organization should be done away with and that the one shown in

internal staff shuffling that now goes on between the S3 and Executive Officer positions based on dates of rank would be eliminated and the battalion

commander would be able to place his most experienced major, regardless of seniority, in charge of the area that most needed supervision. A deputy commander for administration, logistics, and maintenance is also sorely needed in a mechanized infantry battalion, with its more than 150 vehicles and attendant maintenance and personnel problems.

There is one possible disadvantage to a bilateral staff: The deputy commanders would have to coordinate their responsibilities to prevent staff isolation, but that should not be an insurmountable problem. That coordination could be effected by the two majors themselves, or by the commander, if necessary.

All a battalion commander would need to do to implement the bilateral staff concept would be to change the existing battalion rating schemes. No approval would be needed from above, and no existing regulations would have to be modified.

A bilateral staff would not only make for a more responsive staff, it would more accurately reflect the kind of organization many of our mechanized infantry units are now using. I don't know whether this concept could be fitted to light infantry battalions, but there is no question in my mind that it would benefit mechanized infantry battalions in both their garrison and field environments.



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Stop Shuffling S4s



MAJOR JOHN L. MORRIS, JR.

Most battalion commanders will tell you that a knowledgeable S4 is worth his weight in gold because he knows the importance of logistics to the success of any mission. Many of those same commanders, though, will not hesitate to change his S4 on the slightest pretext, leaving the S4 sergeant to work for yet another in a long series of officers with whom he has served during the past few years.

This confusing practice of switching S4 officers, no matter how valid the reason may seem at the time, has been the downfall of a number of good battalions. I am sure that in most cases the commanders of those battalions would have been far better off if they had kept the same officer in the S4 position for at least a year.

There are two good reasons why the S4 officer should retain his job for a year: property accountability, and financial planning and budget execution.

A number of recent changes in the Army's property accountability procedures requires the S4 to be personally familiar with the new automated supply procedures so that he can properly manage the unit's relief-from-responsibility system. It is not enough for the S4 to merely understand the printed regulations; he must make certain that his battalion and company commanders are also aware of their property responsibilities.

As a report of survey officer, I watched a battalion commander, the best tactician in our brigade, count mattresses late one night. He had assumed that his new S4 had control of the battalion property situation.

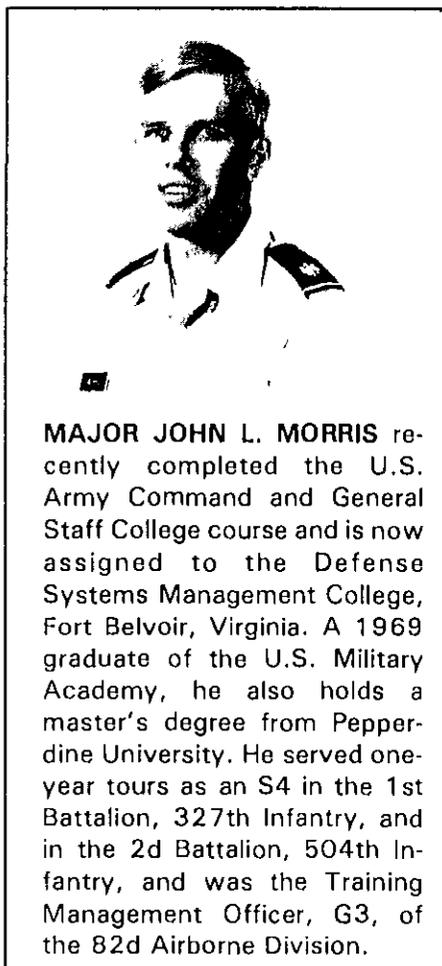
When I talked with each of his previous three S4 officers, they said they had known a problem existed, but had left the staff before they could do anything about it. Each had become a company commander before he had learned enough to control the battalion's property and, thereby, to avert disaster for the battalion commander. The average tour of an S4 officer in that battalion had been four months. Unfortunately for that commander, understanding and managing a battalion property system takes time, and he hadn't given his S4s the necessary time.

The recent trend toward decentralized budget planning and control of funds has made S4 officers even more responsible for their units' financial status and annual budgets. Even if he has little or no formal training, the S4 must now plan for and spend a substantial annual budget. He must make decisions and recommendations every day on the expenditure of organizational funds, but he has limited tools with which to analyze and define his requirements. The development of automated systems to help him, such as the training management control system (TMCS) and similar devices, simply have not kept up with the S4's needs in this area.

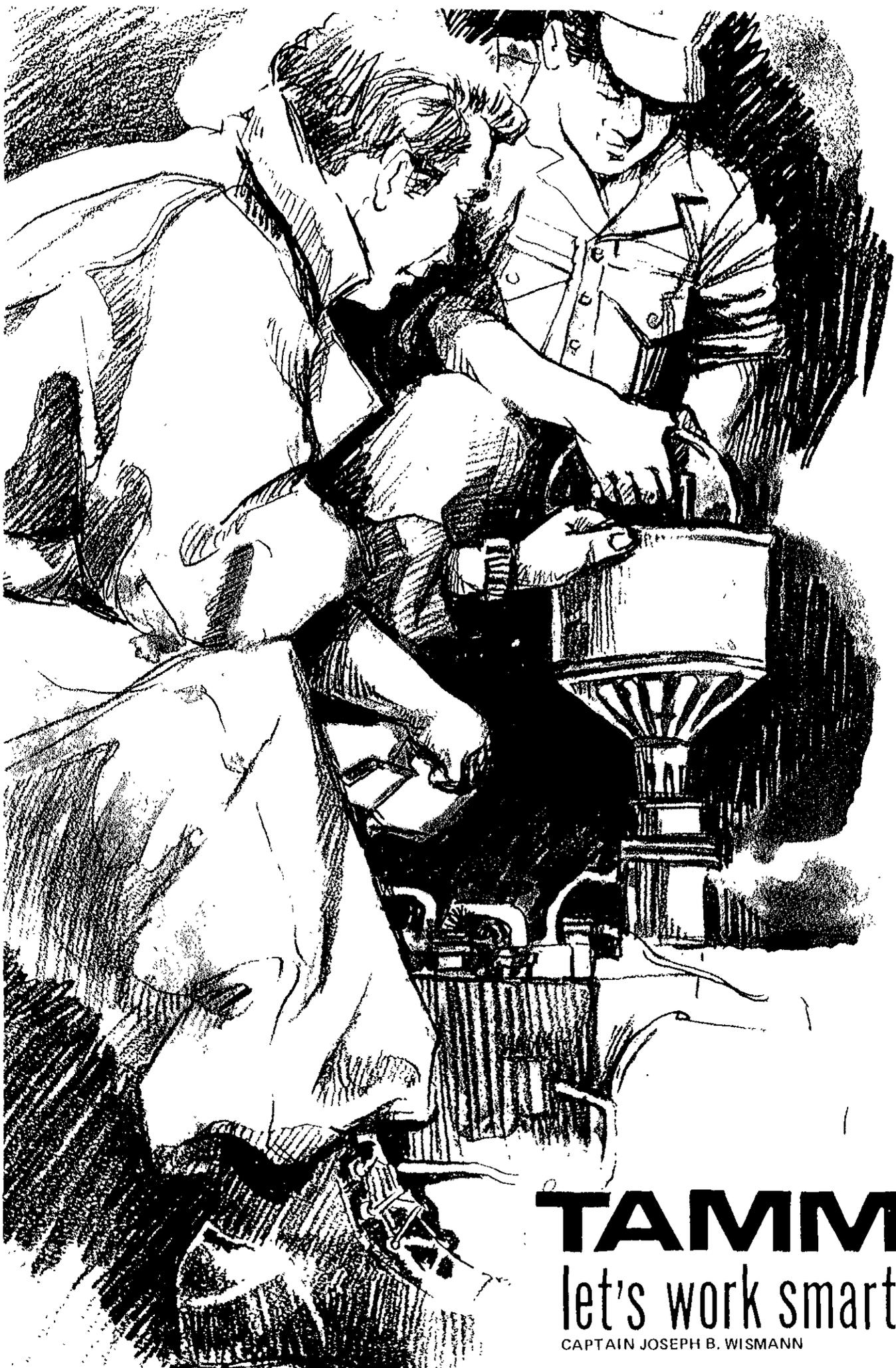
At least two important aspects of unit logistics, then — property accountability and funds management — require a degree of continuity in the S4 position. An officer assigned as a battalion S4 should be retained in his position for at least 12 months. Other aspects of battalion logistics, such as supporting tactical operations

and staff coordination, would also benefit from this continuity.

An effective logistics operation is often the difference between success and failure in training and in combat. It is imperative, therefore, that an S4 stay in his job long enough to learn it well and perform it effectively. This is a fact that many battalion commanders do not seem to be able to grasp. The ones who do not will probably end up counting mattresses in the middle of the night.



MAJOR JOHN L. MORRIS recently completed the U.S. Army Command and General Staff College course and is now assigned to the Defense Systems Management College, Fort Belvoir, Virginia. A 1969 graduate of the U.S. Military Academy, he also holds a master's degree from Pepperdine University. He served one-year tours as an S4 in the 1st Battalion, 327th Infantry, and in the 2d Battalion, 504th Infantry, and was the Training Management Officer, G3, of the 82d Airborne Division.



TAMMS

let's work smarter

CAPTAIN JOSEPH B. WISMANN

Do you remember the last time your unit stood its Annual General Inspection (AGI)? Did your once proud unit degenerate into a mob of panic-stricken soldiers preparing to defend themselves against a seemingly unbeatable foe? Were there sleepless nights, tensions in the air, and feelings of utter and complete relief when it was over?

If so, these hectic preparations and the degeneration of your organizational structure were indicators that your systems were not working as well as they should have been. And in all probability, these indicators were associated with your maintenance and maintenance management efforts.

Most of us would agree that the AGI is a fair indicator of a unit's status regarding maintenance management. Opinions may differ regarding the usefulness of roadside spot checks, roll out inspections, maintenance assistance and instruction team (MAIT) visits, and the numerous other maintenance inspection techniques used in the Army. But such inspections do indicate how well The Army's Maintenance Management System (TAMMS) is working — or more correctly, has been working — in a unit during a particular period of time.

It seems safe to say that since most units successfully complete these inspections, visits, and checks, TAMMS does work at company level. But as any company or battalion commander will tell you, there are more than enough counseling sessions, "bloodlettings," and reply-by-indorsement letters to indicate that the system is not working as well as it could.

Some people have suggested that the combat arms should be relieved of their maintenance and maintenance management responsibilities. They propose that the Army do away with the organizational maintenance structure as we now know it and turn the job over to service teams from the direct support units. Maintenance in the unit would be limited essentially to operator maintenance. At the organizational level, the combat arms units would no longer need their mechanics, tools, and diagnostic equipment. The commanders would be free to concentrate on their combat and mission-oriented training. During war time, the mobility of a combat unit would not be hindered by a need to transport maintenance shops and unserviceable vehicles.

As attractive as this concept may sound, I don't think it is feasible. For example, who would sign for and control a unit's vehicles? Who would insure that the support teams were always responsive to the combat unit's requirements as dictated by its operational and training schedules?

Even if these problems could be solved, a company commander could still expect to have certain maintenance management responsibilities. In fact, barring any revolutionary change in Army policy, maintenance and maintenance management will continue to be a command responsibility right down to the company level.

Accordingly, one of the first things we can do to make TAMMS work better in our companies is to take advantage of every learning opportunity. The opportunities

vary from post to post, but the soldiers can learn about TAMMS from courtesy Inspector General visits, diagnostic evaluations, and maintenance evaluation team visits. An overwhelming majority of units sincerely appreciate visits of a courtesy or instructional nature. Unfortunately, too many companies do not make a real effort to learn from such visits.

A company commander might also consider his interpretation of the 11th Commandment in an infantry unit — "Training is top priority." Too often, commanders interpret this to mean field training involving only the tactical maneuver elements. If they think about maintenance at all, it usually means that their maintenance sections will get a workout at performing in the rain, mud, snow, or sleet. While this is important, there is a lot more to it than meets the eye, especially the eye of a company commander whose only contact with his maintenance section in the field may be to check on the status of his jeep. His maintenance section may be letting the TAMMS paperwork slide until the field training period is over; it may be stockpiling unserviceable equipment instead of evacuating it quickly. Although the section may shine in the commander's eyes for the support it renders on a particular field exercise, it may not be building the right kind of working habits that would let it support the company over the long haul. And he should also look at the maintenance work being done by his arms people, his communications people, and his CBR people in the field.

OTHER CONSIDERATIONS

In garrison, certain other considerations have to be taken into account. Does the unit's training schedule allow time for any maintenance training? If it does, is the training actually conducted, or are the maintenance people too busy doing their jobs to learn how to do them correctly? Virtually everyone in a company needs to know something about maintenance, because nearly all of them have some responsibilities under TAMMS. The vehicle driver and the rifleman, for instance, must report any problems with their vehicles, weapons, communication gear, and CBR equipment. They must know whom to report to and which forms to use. The people who receive this information must know how to record it, assign priorities for its maintenance work and any needed repair parts, and, most important, they must know how to follow up on the needed actions. And the company commander must understand TAMMS so that he can make certain the system is working from bottom to top.

There are some things the Army can do better that would help out in the area of TAMMS training. All of the TAMMS "implementors" — the E-3s and E-4s who do the stubby pencil work and the actual nut tightening or oil changing — must know that, in the Army, maintenance management is a system. PLL clerks, for example, often do not know when they should use a high priority designator or a lower one on their requisitions. They have never really learned the reasons for the various

priorities. And they often do not realize that this one simple entry can affect all of the support channels and eventually determine the mode of transportation used to ship the repair parts they have requisitioned.

It is probably too much to expect our training centers to make system managers out of new recruits. But it is true that the U.S. soldier does his job better if he understands why he is doing it.

This need to understand TAMMS as a system should not be limited solely to the PLL clerk and the dispatcher, because it also applies to our 11Bs and 11Cs; they are the ones who have to do the required organizational maintenance on their weapons and other equipment. And in spite of the authorizations on most modified tables of organization and equipment (MTOE), the job of unit armorer usually goes to an 11B or an 11C. When this happens, that soldier's introduction to TAMMS is likely to be a confusing stack of forms left behind by the previous armorer, which is not the way to convince him that we have a good system of maintenance.

TAMMS supervisors within the unit should also be well educated about the system. The company executive officer, for example, should be an expert on it.

HELP

In recent years, the Army has provided a considerable amount of help on TAMMS to personnel at the company level. Some log book forms have been eliminated, and many of the administrative recording and reporting requirements have been shifted from the operator level. But it is still difficult for many people to grasp the idea that maintenance management is a system. They are often intimidated by the number and complexity of the forms still being used. To these people, unfortunately, learning TAMMS is comparable to learning a foreign language.

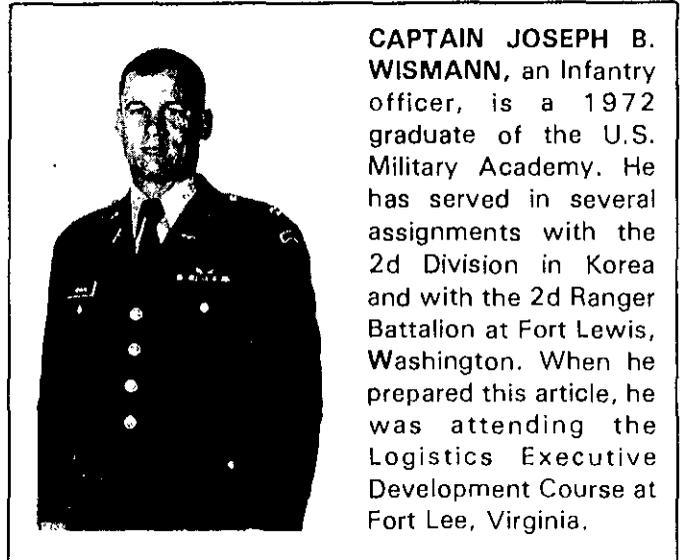
We may have to wait a while for the Army to come up with some training programs that will help our TAMMS implementors interpret that language. We may also have to wait for an updated version of TM 38-750, which explains the forms and how to fill them out. But while we are waiting, commanders can help their units overcome these difficulties, at least partially, by using the programs that are available more efficiently. Most installations have established short courses to instruct TAMMS implementors and supervisors in the system, in the PLL, and in a number of other skills. Some even have courses for the unit armorer and the CBR NCO. A company commander should send as many soldiers as he can to these courses; doing without a few of his soldiers in the unit for a week or two can pay off in the long run.

Personnel turbulence, of course, is also hazardous to the health of TAMMS at the company level. The Army is well aware of this problem and is actively seeking ways to stabilize its personnel.

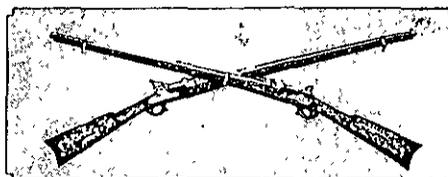
In the meantime, a company commander can ease the problem by forecasting his needs for a new armorer, or a new CBR NCO, or a new PLL clerk, or for a new communications chief and get the new people into the available courses of instruction as early as he can. He must also provide as much overlap as possible in the various jobs.

But leadership is probably the most complex problem any company commander faces in dealing with TAMMS. He should first review the technical capabilities and the quality of his company's leaders. If the leaders are not up to par in TAMMS, the commander must correct this problem before going on. Then he and his leaders need to apply their knowledge to instructing and supervising the TAMMS implementors and to establishing a system of reward and punishment. His one goal should be to motivate his people to excel in TAMMS.

Making TAMMS work well at the company level is not an easy task. It requires the careful attention of everyone in the unit, from the company commander to the newly arrived private. Everyone must accept the fact that maintenance management is the unit's responsibility, and they must realize that that responsibility will remain at the company level for a while. The unit is going to have to put up with less than enough people, with a high turnover among those it does have, and with conflicting training and other priorities. But if everyone keeps TAMMS in mind when they address these problems, the improved readiness of their equipment and a sterling performance on their next AGI will be well worth the effort.



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LIEUTENANT PAUL H. VIVIAN

FIGHTING
IN

afghanistan



Since the Soviet invasion of Afghanistan in late December 1979, Western military observers have speculated on the nature of the tactics the Soviets have employed in that campaign. Most Western observers argue that the fighting in Afghanistan presents the Soviet forces with a special challenge. Since virtually the entire Soviet army is equipped and trained for conflict on the plains of Europe, combat in the mountains of Afghanistan is bound to test strenuously Soviet equipment, tactical doctrine, and men.

While it is difficult to piece together what is happening in Afghanistan without being on the scene or without access to photo or signal intelligence, it is still possible to glean some hints from open sources. One such source is the Soviet magazine, *Voennyi vestnik* (Military Herald), a monthly journal concerned primarily with company and platoon tactics, which is published by the Soviet General Staff.

It was an incident of some note, then, when in February and March 1980, just two and three months respectively after the Soviet invasion of Afghanistan, *Voennyi vestnik* published two articles on the tactics used by Soviet airborne units in mountainous terrain. This is especially significant because among the key units involved in the invasion of Afghanistan was the Soviet 105th Airborne Division together with units of the 103d and 104th Airborne Divisions.

Several other articles appeared in *Voennyi vestnik* during 1980 that, while not concerned exclusively with the tactics of airborne units, were devoted nonetheless to tactics in mountainous regions. To the casual Western eye, these articles do not appear to be concerned with Afghanistan. Indeed, they ostensibly refer to World War II or to training exercises. But such is typical Soviet practice; they often try to obscure an issue by talking indirectly about it.

No doubt all the articles that appear in *Voennyi vestnik* are carefully chosen. Not too surprisingly, they describe victories and not defeats, and they emphasize the positive over the negative. Even so, a close study of them can be of value to a Western observer; at least he can get some idea of what aspects of Soviet tactical doctrine are most successful. Such articles also give the reader an idea of some of the capabilities of the Soviet army as well as the problems it faces. (Most of these observations may be considered valid provided the reader is also aware of the use of the "disinformation" process by many Soviet authors.)

Of the several articles that have appeared in *Voennyi vestnik* since 1979 on fighting in mountainous terrain, one in particular warrants close analysis. Written by Guards Captain B. Koziulin and officially entitled "A Company Seizes a Command Point," the article describes a classic encounter between an airborne company and what was quite likely only a guerrilla outpost.

The protagonist of the article is Guards Senior Lieutenant Iu. Podkovanov, who is identified as the commander of the 2d Airborne Company of an unidentified battalion, regiment, and division. The major characteristic of the operation described was that it took

place at an altitude of 506 meters, in what the Soviets classify as a low mountainous region.

The operation properly began the evening before the company was to be deployed when Lieutenant Podkovanov received his operations order. He was instructed to seize and destroy a command point and aircraft early warning center located approximately 20 kilometers southeast of the city of Grigor'evka (a pseudonym?). Once he accomplished that task, he was to rendezvous with the main body of his parent battalion at an undisclosed location. According to the available intelligence reports, the objective was defended by a reinforced motorized rifle platoon. Moreover, the enemy was deemed capable of reinforcing his positions within 50 to 60 minutes after becoming aware of an enemy's presence. To help him accomplish his mission, Lieutenant Podkovanov's company of three platoons was to be reinforced with a detachment of sappers. Finally, he was told that his unit must jump and be on its drop zone (DZ) by 0700 the next morning.

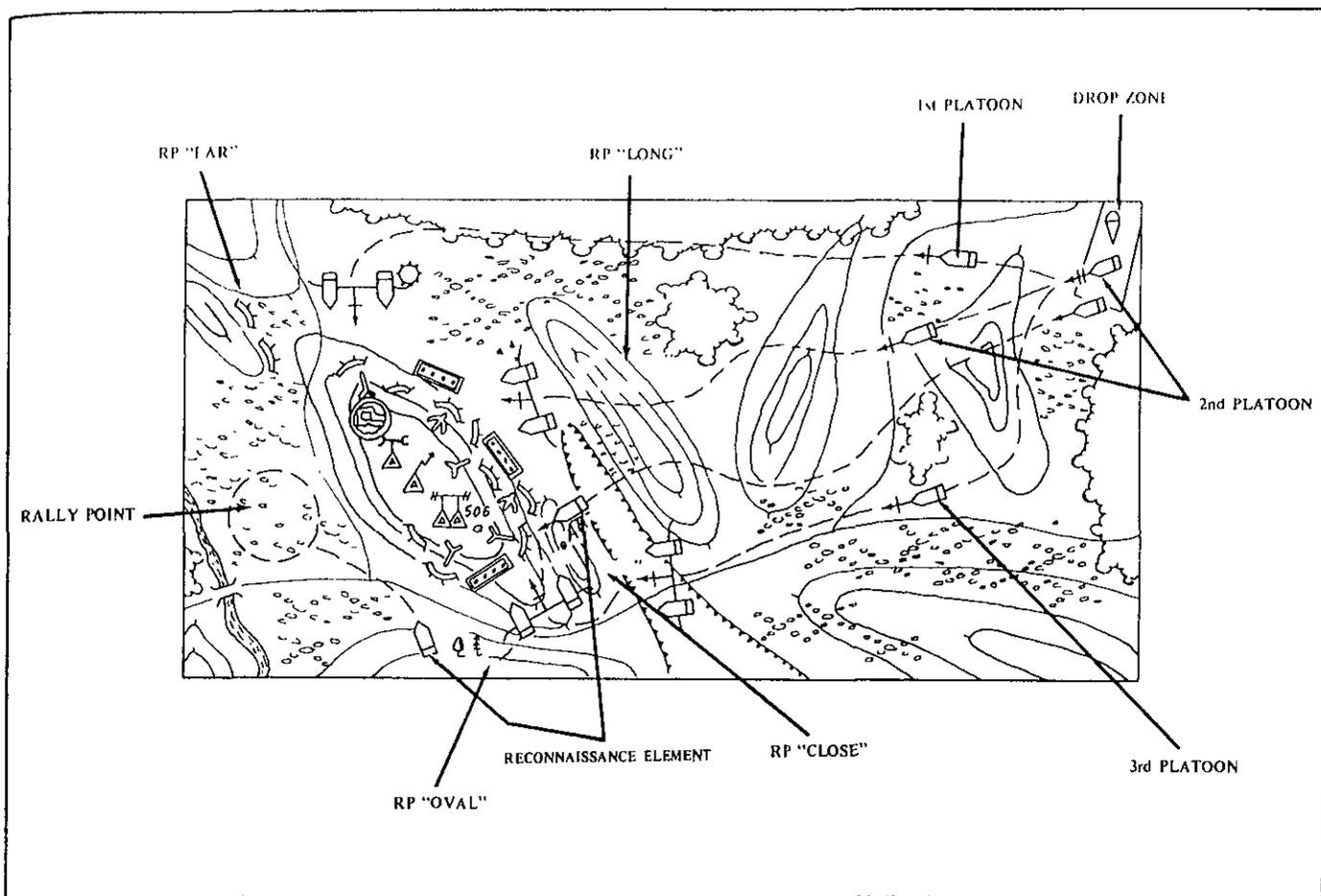
ANALYSIS

Lieutenant Podkovanov's first step was to study aerial photographs of the enemy's command point and to conduct a map analysis of the terrain around the objective. Apparently, judging from the aerial photographs, Lieutenant Podkovanov determined that all avenues of approach were covered by at least some defending fires and seemed to be mined as well. The eastern slope of the command point was the best defended with machineguns and light antiarmor weapons. Bearing in mind the principle of surprise and the fact that the objective could be quickly reinforced, Lieutenant Podkovanov determined that it was essential for his unit's drop zone to be close to its objective. Consequently, he selected an area northeast of the command point as the DZ. The terrain between the objective and the DZ was hilly and would help to conceal his unit's approach to the objective.

After selecting his drop zone, Podkovanov then worked out the details of his attack. He decided to attack simultaneously from the north, east, and south. He also selected as his rally point a clump of trees to the west of the objective. Once the company regrouped, it was to proceed to its rendezvous with the rest of the battalion.

An intriguing question arises at this point in the article. BMDs, armored fighting vehicles specially designed for airborne units, were used in the operation. The article is explicit on this point. But when was the decision made to employ BMDs in the operation? Was the decision in the original operations order, or did the company commander, Lieutenant Podkovanov, make the decision? Perhaps the use of BMDs is such a standard part of the Soviet's operation doctrine that their use was assumed. Unfortunately, this question must be left unanswered.

When his operations planning was completed, Lieutenant Podkovanov summoned his platoon leaders. He gave them his operations order, maps, and aerial photographs



and showed them a sand table of the enemy's command point.

According to Podkovanov's operations order, the 1st Platoon, after landing and regrouping, was to serve as the company's right flank and move westward to the burial mound north of the objective (see map). At this point, the 1st Platoon was to deploy from its march column and attack up the northwest slope of the objective. Once on the objective, the platoon was to position itself so as to prevent the approach of enemy reserves from Grigor'evka.

The 2d Platoon, with its attached section of sappers, was to serve as the center of the company and after landing and regrouping was to move directly westward using the hollow as best it could for cover and concealment. Upon reaching the northern extremity of the hollow, the 2d Platoon was to deploy from its march column and attack up the eastern slope of the command point.

The 3d Platoon, minus one squad, after landing and regrouping, was to serve as the left flank of the company. It was to travel westward up to the point code-named "Close," from which it was to swing northward and attack up the southern slope of the command point. The 3d Platoon, like the 1st and 2d Platoons, received instructions not only to seize the objective but to destroy all objects and equipment on it.

A key role in the operation was given to the detached squad of the 3d Platoon. This squad, together with two attached engineer elements, was to carry out a reconnaissance from the drop zone to "Close" and then along the southwestern slope of the command point. After the

command point had been seized and destroyed, this squad was to be prepared to move out to the bridge that crossed the river "Fast." The squad's primary responsibility, however, was to watch for the approach of any enemy reinforcements.

Lieutenant Podkovanov emphasized to every platoon leader that it was vital for the company to conduct its approach, reconnaissance, and attack within 30 minutes.

Finally, before dismissing his platoon leaders, Lieutenant Podkovanov issued signal information. The signals for the attack would be the word "Thunder" on the radio and a green flare; when the objective was prepared for destruction the signals would be "Lightning" and a red flare; the destruction of the objective would be "River" with a white flare; and the latter would also be the signal to evacuate the objective.

Presumably the rest of the evening was spent briefing the airborne troopers, checking equipment, and tying up any remaining loose ends.

THE ATTACK

The next morning at the appointed time, 0700, Lieutenant Podkovanov's 2d Airborne Company carried out its planned jump. Immediately upon landing, the reconnaissance element under the command of Guard Sergeant V. Leonov left the drop zone and proceeded to "Close" to conduct a reconnaissance of the objective.

Upon receiving a report from all his platoons, Lieuten-



ant Podkovanov ordered his company to move out to the objective. As the company approached the height "Long," he received a report from the reconnaissance element. Sergeant Leonov reported seeing radio antennas on the objective. He also passed on additional details on the emplacement of machineguns on the objective.

After evaluating Leonov's report, Podkovanov concluded that the approach from the east offered his soldiers the best cover. He then refined his orders to his platoons. In particular, the 3d Platoon received instructions to travel through the hollow and attack from the southern slopes of "Close" from the direction of the house.

On the signal "Thunder," the attack began. Shortly thereafter, though, the reconnaissance element located near the position "Oval" reported seeing three enemy APCs on the road from Petrovsk. Lieutenant Podkovanov did not give any thought to breaking off the attack. Rather, he ordered the reconnaissance element to cover the left flank of the 3d Platoon and to destroy any approaching enemy vehicles. This the reconnaissance element did, using light infantry weapons and machineguns. Unfortunately, at this point in the narrative the details of the battle become sketchy. But we do know that the 1st Platoon reached its objective first, followed by the 2d and 3d Platoons. The company suffered only one loss, a BMD from the 1st Platoon.

Immediately after destroying all the objects and equipment on the objective, Lieutenant Podkovanov's three

platoons met at the predesignated rally point. It is unclear whether any attempt was made at this time to redistribute ammunition, to take care of the wounded, or to communicate with battalion headquarters. Presumably some steps along these lines were taken. Yet, it is clear that at the rally point, Lieutenant Podkovanov relieved the detached squad from the 3d Platoon of its reconnaissance and screening duties and sent a squad from the 2d Platoon to take its place. After completing this task, the company left the rally point for its rendezvous with the main body of the battalion.

At this point in the article, the Soviet author — Captain Koziulin — announces that the entire article has been a deception. It does not really describe a training exercise employing BMDs, Captain Koziulin declares. Rather, it describes a real battle that took place in the Carpathian Mountains during World War II involving the 615th Rifle Regiment of the 167th Rifle Division. In the place of BMDs, he tells us, we should read tanks.

Despite this last-minute attempt to deflect attention from what is almost certainly a description of a battle in Afghanistan between Soviet airborne troops and Afghan guerrillas, Captain Koziulin focuses his attention on the lessons that can be learned from this skirmish.

First, he argues that this battle teaches that an airborne commander must choose a drop zone that allows attacking troops to move quickly and secretly to their objective. Secondly, he stresses that in moving to the objective it is necessary to keep the enemy guessing as to where the at-

tack will be made, and that the attacking forces should hit the enemy where he least expects it. Finally, a reconnaissance of the terrain and the objective should be conducted from high ground, if at all possible.

Captain Koziulin's observations are not especially profound. Indeed, the entire conduct of the operation described in the article, on the surface, seems rather ordinary. Yet, looking at it more closely, there is much that the Western military observer can learn from it about Soviet military operations in mountainous terrain:

- Most significantly, the Soviets do not hesitate to employ BMDs in mountainous terrain, an area where many American commanders would be reluctant to commit mechanized forces. The vulnerability of armored vehicles increases in mountainous areas because their maneuverability is limited by rocks, sharp drop-offs, and forest vegetation. Yet the Soviets seem prepared to forfeit maneuverability as long as the armored vehicles can provide mobility. The Soviet commanders apparently reason that any increase in casualties caused by limited maneuverability can be compensated for by a decrease in the number of casualties that a mobile force can achieve through speed and surprise.

- While the Soviet analysis of the operation stresses the importance of choosing a drop zone close to the objective, in reality Lieutenant Podkovanov's choice of a drop zone would be considered distant by U.S. standards. Since U.S. airborne troops do not have air-droppable armored vehicles, U.S. commanders must choose drop zones either on the objective or immediately adjacent to it. Soviet airborne troops with their BMDs have the option of landing some distance from the objective and launching a coordinated attack from several directions.

- Rather surprisingly, Lieutenant Podkovanov did not employ any artillery preparation on the objective before attacking. While the objective may have been out of range of the usual 122mm, 130mm, and 152mm weapons, the lieutenant chose not to use any of the 120mm mortars usually found in Soviet units. Apparently, he felt the element of surprise would be lost with an artillery preparation.

- Lieutenant Podkovanov and his superiors apparently believed that a three-to-one ratio in favor of the attackers was enough to defeat a dug-in enemy in mountainous ter-

rain, provided the attacking forces achieved surprise. This is a risky assumption, especially given the nature of the terrain. Most U.S. commanders would probably prefer a more favorable ratio when attacking a dug-in enemy, especially if the enemy were well trained and armed.

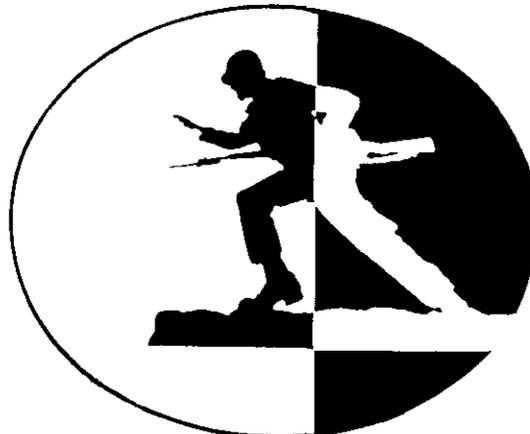
- Judging from the responsibility given to the reconnaissance-screening unit commanded by Sergeant Leonov, Soviet NCOs seem to have much more responsibility and freedom of action than we in the West commonly believe.

- It is generally believed in the West also that Soviet officers are set-piece commanders. But if even a small portion of the Soviet officer corps is like Lieutenant Podkovanov, our picture of the Soviet commander as a man thrown into a fit of confusion at even a slight deviation from the plan is a dangerous and misleading simplification.

Finally, the study of articles of this sort from the open Soviet press is of value to U.S. combat leaders, NCOs as well as officers. While such articles might not contain any great revelations, they do show general operational methods, self-perceptions, national attitudes, and thought patterns found in today's Soviet Army.



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CORREGIDOR

an airborne assault



MAJOR CHARLES E. HELLER

During World War II a significant number of the airborne assaults that were attempted either failed entirely or did not justify the high percentage of casualties that resulted from them. A few of them, however, did achieve varying degrees of success. The most successful, and perhaps the most spectacular airborne combat assault of the global conflict, occurred during the latter stages of the war in the Pacific on the island of Corregidor.

The success of that operation offers some lessons that may be valuable in the future employment of airborne forces.

SITUATION

On 9 January 1945, elements of the Sixth U.S. Army landed at the Lingayen Gulf in the north of Luzon, the major island in the Philippine chain. These landings were followed by secondary amphibious assaults on the east coast of Luzon, above the Bataan Peninsula at San Antonio, and south of the entrance to Manila Bay, at Nasugbu. By the end of January the capture of Manila had become crucial because the engineers could not construct enough port facilities at the Lingayen Gulf.

The Japanese forces in the city had received orders from General Tomoyuki Yamashita to abandon it, but Admiral Sanji Iwabuchi, commander of the Manila Defense Force, had disobeyed. As a consequence, Sixth Army units encountered stiff resistance in the city and found Japanese garrisons still manning the harbor fortifications.

Corregidor, known since pre-war days as the Rock, held no value for the Japanese in their defense plans, but until it could be neutralized it posed a threat to any Allied shipping that might try to enter Manila Bay. Well before the invasion of Luzon, the Sixth Army commander, General Walter Krueger, and his G3 section had considered the possibility of capturing the island. As a result, when General Douglas MacArthur informed General Krueger of his desire to take Corregidor by amphibious or airborne assault or by a combination of the two, it took General Krueger's G3 section only two days to come up with a plan. It was to be conducted by elements of the Sixth Army, code named Rock Force.

ROCK FORCE

The 503d Regimental Combat Team (Parachute), supported by elements from the 462d Parachute Field Artillery Battalion and a company from the 161st Airborne Engineer Battalion, would make a parachute assault. An amphibious assault would be conducted by the 3d Battalion, 34th Infantry, and by the 151st Regimental Combat Team (RCT). Aircraft of the 317th Troop Carrier Command would transport the airborne forces while the 592d Engineer Boat and Shore Regiment would be responsible for landing the infantry.

This force, the planners believed, would be adequate to deal with the Japanese garrison on Corregidor, which they estimated at no more than 850 to 1,000 men. This turned out to be a significant intelligence error; there were in fact more than 5,000 Japanese on the island under the command of Naval Captain Akira Itagaki.

To the planners, the island of Corregidor resembled a tadpole with an oversized head facing east out of the bay. The widest point measured one and a half miles. The end abruptly narrowed to a softly curving tail. The total length of the island was about three and a half miles. The head — except for three steep ravines which led to the sea — had cliffs that plunged to the narrow beaches from heights of 400 to 500 feet. This part of the island, known as Topside, had a relatively flat surface.

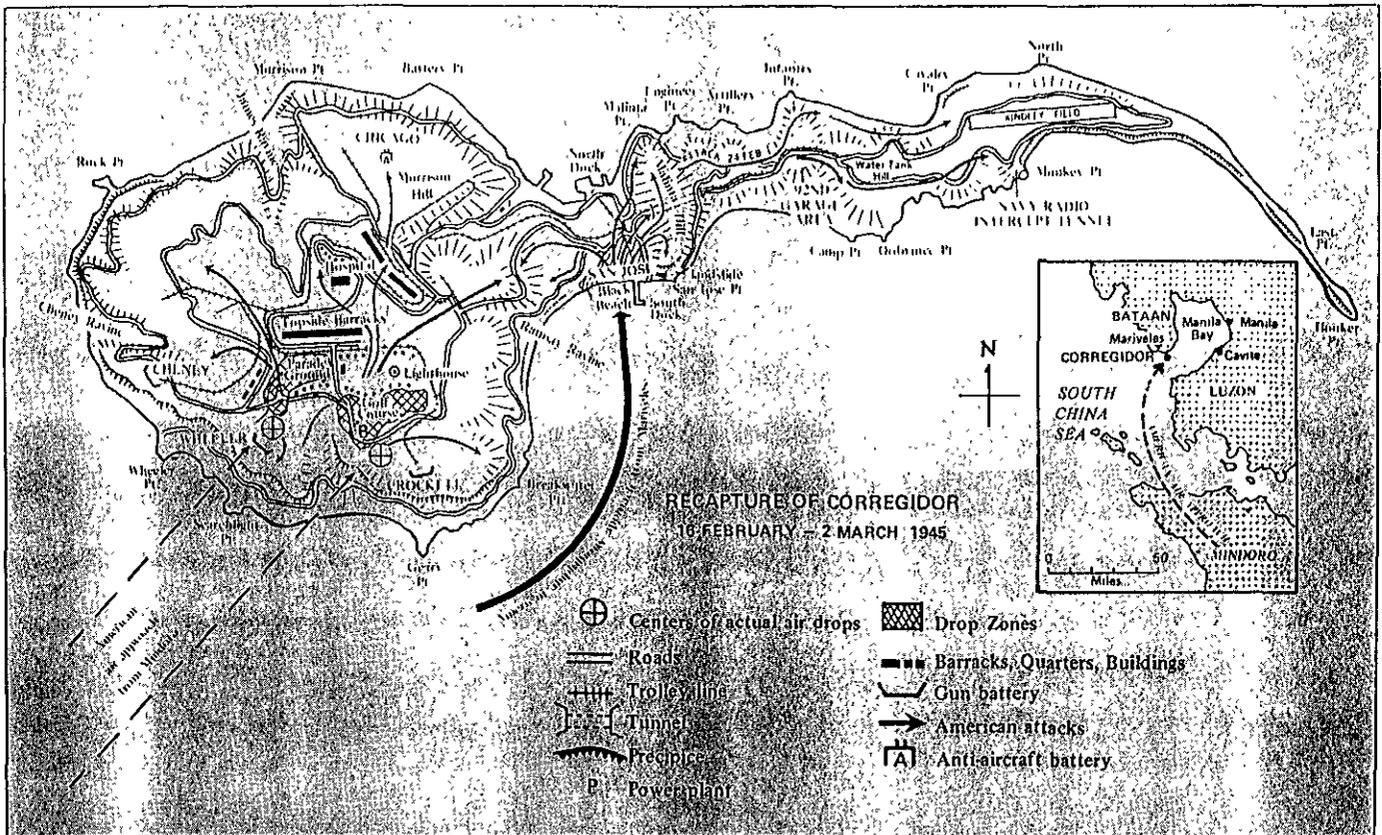
The bombed-out shells of the buildings and gun emplacements that had been built and occupied by U.S. forces before the war marred the island's surface, and amid the rubble were splintered trees and bomb craters. The only areas that were moderately clear of debris were an old parade ground and a golf course. The parade ground was only 325 yards long and 250 yards wide, while the golf course was 350 yards long and 185 yards at its widest.

At the neck of the tadpole, called Middleside, steep slopes led to a saddle, some 500 yards wide and about 100 yards above sea level. This area, Bottomside, contained the ruins of a small village, San Jose, as well as docking facilities on the nearby beaches. Black Beach, on which the amphibious landing would be made, was to the south. Malinta Hill with its pre-war tunnels was west of the saddle. Then, from Malinta, the terrain gradually sloped to the tip of the island not more than 150 yards above the sea. A single-strip airfield occupied a portion of the wooded terrain at the tip.

The planners wanted to use airborne forces to obtain surprise, so they made two assumptions: The Japanese, having taken the Rock themselves by an amphibious assault in 1942, would not expect an airborne invasion; and the enemy, scanning the sea approaches from underground bunkers, probably would be distracted by the approach of the amphibious assault forces and would not see the paratroopers in time to react to them.

The selection of drop zones (DZs) thus became of primary importance. Colonel George M. Jones, who commanded the 503d RCT, after making an aerial reconnaissance, recommended Kindley Field, a small landing strip at the tail of the tadpole. Because of the rugged terrain and the debris and ruins on the rest of the Rock, he believed a jump anywhere else would cause a high percentage of injuries, enough to render his force ineffective. General Krueger, however, vetoed the suggestion, explaining that a drop on Kindley Field would not secure key terrain. Besides, troops dropping there would draw as much fire as if they had come from the sea. (In 1942, when the Japanese had landed by sea in this area they had suffered many casualties.)

The only other way to achieve surprise, therefore, was to land the troops on Topside. But steep cliffs to the



south and west bordered the area, and a strong or shifting wind could bring the paratroopers onto the cliffs or into the sea below. The advantages of a landing on Topside outweighed the disadvantages, though, and the parade ground was designated DZ "A" and the golf course, DZ "B."

The troops of the first serial were to secure and hold both DZs in preparation for the second lift. With the additional troops they would then clear Topside, provide covering fire for the amphibious assault, and then establish contact with the 3d Battalion, 34th Infantry. The entire force would then conduct mopping up operations.

MAIN AIRBORNE ASSAULT

At 0700 on 16 February the C47s of the 317th Troop Carrier Command rose from airfields on Mindoro, circled, and then headed in a wide westerly sweep north to Corregidor. A half-hour later a second flight followed bringing the total to 51 aircraft. At 0830 the first wave of aircraft was ordered to proceed with the drop.

Two columns of C47s, one for each DZ, flew on a course from southwest to northeast, and the "V" formation used in the flight from Mindoro broke into an "in trail" formation. Aircraft trailed 600 feet apart at a speed of 100 miles per hour, flying 650 feet above Topside. Given that speed, each aircraft had only ten seconds over its designated DZ, a time that did not allow all of the troopers to exit in one pass. This meant that each plane had to make three passes, releasing a stick of six to eight men each time.

Because of the prevailing winds over the bay the jumpers could not use a prearranged "go" count when the green light flashed on. Instead, the pilots counted seconds after passing the "go" point. This became especially necessary when the wind speed increased. Also, since the approach headed into the wind, an increased count allowed the troopers to drift back onto the DZs instead of falling short onto the cliffs or into the bay. Accordingly, the jumpmasters paid attention to the green "go" light and not to the DZ below. A verbal warning indicated ten minutes from the objective, and when the aircraft was three minutes out the red light went on.

As the first stick of chutes blossomed from the doors, the command aircraft noted that the twelve-knot wind from the north-northeast was causing the troopers to drift short of the "go" points and onto the cliffs. As planned, the pilots increased the count, first to six and then to ten seconds after the "go" point. As a consequence, troopers left the aircraft past the DZ. The pilots, concerned about getting their troopers within the DZ, cut their airspeed from 100 miles per hour to 85 and dropped from a height of 650 to 500 feet above Topside. According to the pilots, jump discipline, except in one or two cases, was excellent. As it turned out, 90 percent of the men who landed outside the two DZs fell short either on the cliffs or into the sea, where PT boats braved Japanese fire to pick them up.

The airborne assault came as a complete surprise to the Japanese. The first troopers drew no fire as they floated down at 0833, three minutes late, and only sporadic rifle and machinegun fire met those who followed. The first lift consisted of the 3d Battalion, 503d Infantry; Battery C and a platoon of Battery D, 462d Parachute Field Ar-

illery; Company C, 161st Airborne Engineer Battalion; and a portion of the regimental headquarters and headquarters company.

By 0945 Colonel Jones had assembled the men of the first serial. They had three missions: Secure the DZs, prepare to secure Topside after being reinforced by the second serial, and establish positions to provide supporting fire for the infantry landing on Black Beach. All of these missions had been accomplished by 1028 when the first of 25 landing craft, carrying the 3d Battalion, 34th Infantry, lowered their ramps on Black Beach. Distracted by the parachute assault, the Japanese ignored the first four waves. By the time they reacted, tanks of the 603d Tank Company were already ashore, and at 1100 several companies of the 34th Infantry stood on top of the key terrain feature, Malinta Hill.

At 1240, 25 minutes late, the second aerial serial, made up of the 2d Battalion, 503d Infantry; Battery B, 462d Parachute Field Artillery Battalion; Service Company of the 503d; and the balance of the headquarters floated to the ground, meeting only scattered sniper fire. By nightfall the united airborne elements had enlarged the existing perimeter while several companies moved down Middleside to within 250 yards of the 34th Infantry.

SECURING THE ROCK

The clearing of Corregidor consisted of numerous small-unit actions against disorganized and scattered Japanese defenders. When a jump on 17 February was cancelled, the 1st Battalion, 503d Infantry, reached Bottomside by landing craft to aid in clearing out the remaining bunkers, pill boxes, and tunnels.

The most serious challenge to the U.S. occupation of the island came on the 24th when more than 600 Japanese launched a counterattack, but more than half of them succumbed to the artillery and small arms fire of the infantry and dispersed.

On 26 February at 1100 a tremendous explosion, a suicidal *tour de force*, marked the end of the organized resistance. On 2 March Colonel Jones reported the island secure.

Jump casualties had been amazingly light. As it turned out, only 25 percent of the men in the first drop had jump-related injuries. Even with the increasing wind, the second drop had even fewer injuries as the pilots became more adept at dropping their sticks. Out of the 2,019 paratroopers who jumped, 279 suffered jump-related casualties, or 13.8 percent. Twelve died; one man's chute failed to deploy and the remaining eleven were shot while descending or while still in their harnesses after reaching the ground.

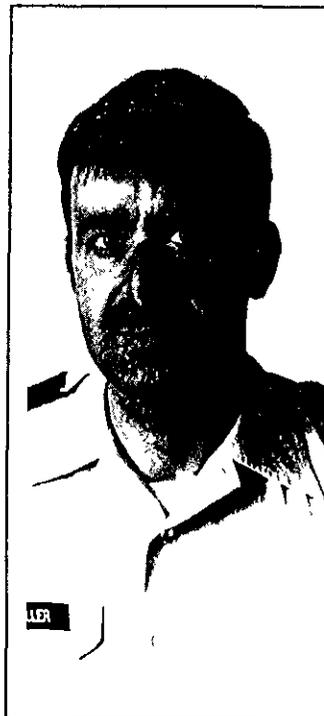
The success of this airborne operation can be credited

to a number of factors. The first was the element of surprise. The Japanese, as a result of their experience in 1942, had surmised that the only way the island could be taken would be by amphibious assault. The terrain as it appeared in 1945 was certainly not conducive to parachute landings, especially not on Topside, and the Japanese did not believe anyone would attempt such a maneuver. As a result, the airborne forces were able to trap the large garrison below ground in caves and tunnels or in positions that had been situated to repel an amphibious assault in the ravines leading to Topside and on the tail of the island. Captain Itagaki had even stationed his reserves, as the Americans had in 1942, in the tunnels of Malinta Hill.

Meticulous planning also contributed to the victory. The close working relationship of the men of the troop carrier group and the paratroopers, along with the fact they had trained and previously gone into combat together, were essential ingredients in the success of the operation.

Another reason for success was the use of a command ship that circled the objective; it alerted pilots if they deviated from the approach path and gave instructions for the jumpmasters to increase the count before releasing the troopers. This control measure certainly helped keep the number of jump casualties relatively small.

The human factor must also be mentioned. The officers and men of the 503d Regimental Combat Team (Parachute) exhibited a great deal of spirit and courage. Because they did, their operation stands as an excellent example of the successful use of airborne troops.



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TRAINING NOTES



AIR DEFENSE TRAINING

CAPTAIN ROBERT KILMER, JR.

The United States infantryman in the twentieth century has rarely had to fight a battle in which his side did not enjoy almost complete aerial superiority. There were times in North Africa in late 1942 and early 1943 when his supporting air forces did not control the air — and he paid a price because of it. The same situation existed at times during 1942 in the Pacific Ocean areas as well.

But since the end of World War II, with rare exceptions, whenever he went to war the U.S. infantryman could count on fighting under a protective aerial umbrella. Unfortunately, because he could count on that umbrella, he did not practice how to defend himself against an enemy aerial attack as much as he should have. Today's infantryman doesn't practice it much more.

Using an infantry unit's organic weapons in an air defense role is not

as unrealistic as it may sound. During the Korean War, for instance, the U.S. Air Force lost five times as many aircraft to ground fire as it did to aerial combat. In the fighting in Southeast Asia in the 1960s and 1970s, the U.S. military and naval forces lost more than 400 fixed wing aircraft and 2,000 helicopters to small arms fire alone.

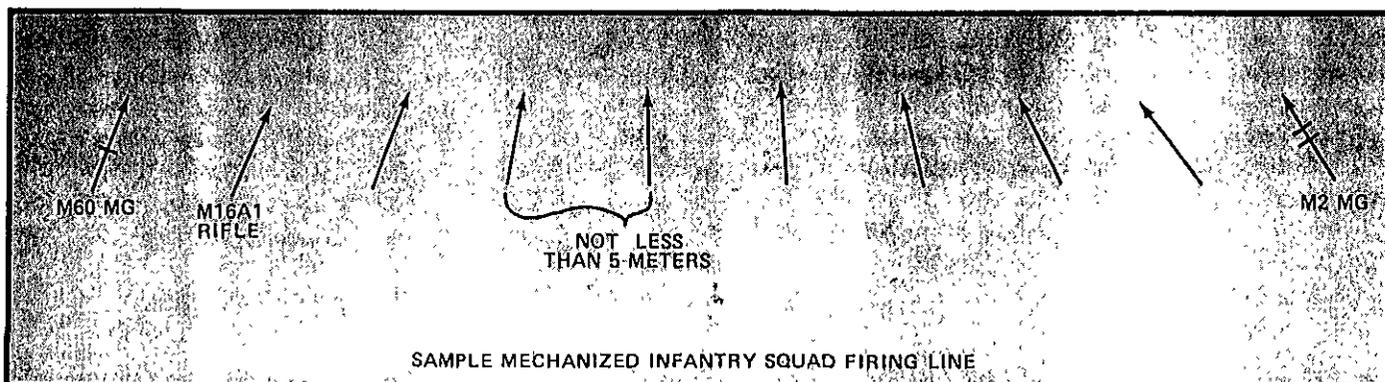
Infantry units using their organic weapons can defend themselves against an air attack, provided their soldiers are properly trained. And this training can be easier than it sounds, if a unit's leaders will only make the necessary effort.

The best training, of course, should consist of both dry fire and live fire exercises against a suitable aerial target. It goes without saying, therefore, that a range is the first prerequisite, followed by ammunition and then a suitable target.

Ranges and ammunition supplies are generally available for this kind of training, but the unit will have to do a certain amount of preliminary planning and coordination before it can actually begin firing.

For example, the unit must forecast its range and ammunition needs well ahead of time, allowing at least eight weeks for its ammunition request to be filled. The ammunition load itself should consist of all tracer rounds so that the soldiers will be able to track their bullets more easily and make any needed adjustments quickly.

The range control office should understand that the unit will be firing at a moving aerial target, and they will also need to know the kinds and calibers of the ammunition the unit will be using. The range itself may have to be surveyed because of the extreme elevations (greater than 35 degrees, usually) at which the unit's



weapons will be fired.

Because an actual aircraft will not be available for the live fire portion of the training program, the unit can count on having a most suitable substitute — the FQM-117A radio-controlled, miniature, aerial target (RCMAT). Most training and audiovisual support centers (TASCs) have RCMATs and may also be able to furnish trained operators. (The July-September 1981 issue of AIR DEFENSE Magazine has an excellent article on the RCMAT.) If they cannot, then the unit will have to train its own operators, and it can expect to have to spend five to seven weeks doing so. This need, like those for a range and for a supply of ammunition, should be forecast by the unit well ahead of time.

The unit should also be developing a good training program. The basic document for this kind of training is the September 1979 version of Training Circular 23-44, Small Arms Against Air Attack. It does more than list training objectives; it also contains a great deal of information that the soldiers should absorb before they start shooting live bullets. One thing they should definitely know is the difference between the football field and the reference point methods of engagement. These methods are clearly spelled out in the circular.

When the unit's soldiers are considered trained and ready, they

should be taken to the range and spread out along the appropriate firing lines. Only the size of the range should limit the number of firers at any one time, although for safety reasons there should always be at least a five-meter distance between each firer. A suggested arrangement of a firing line is shown in the accompanying drawing.

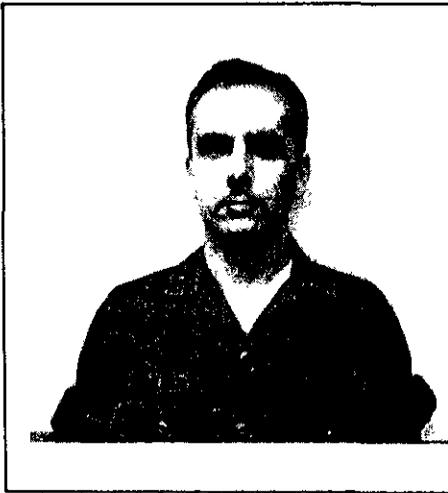
All of the unit's organic small arms should be on the firing line and should be used. The machineguns can be either on the ground or mounted on vehicles. The main point should be to show the soldiers how much fire they can put in the path of an aircraft.

The RCMAT should make a number of passes from each direction — left to right, right to left, and head on. This will give the soldiers a good

opportunity to practice the two methods of engagement.

After an exercise has been completed, the RCMAT should be landed and brought before the soldiers so they can see how many hits they scored. Then a critique should be held so that the unit's leaders can point out what went right and what went wrong, and what the soldiers should do to correct their mistakes.

This training is too important to be addressed lightly, as it has often been in the past. The benefits to the unit from this kind of training far outweigh any efforts that have to be made to make it successful. Before an infantry unit can consider itself ready for combat, it must be able to defend itself against an enemy air attack. With this training, we'll be ready to do just that.



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Flex-HOC

SPECIALIST-4 ERIC P. JORVE

Army Reserve infantry battalions that are severely understrength but faced with growing requirements often find it difficult to cope with their training problems. One such battalion, though, has found a way to

do it — and to double the percentage of its soldiers who pass the skills qualification test (SQT) in the process.

The 3d Battalion, 3d Infantry, a part of the 205th Infantry Brigade (Separate), 88th U.S. Army Reserve

Command at Fort Snelling, Minnesota, developed what it called "Flex-HOC" (flexible hands-on component), a new system of administering the hands-on component of the SQT.

In 1978, about 45 percent of the unit's soldiers either qualified or verified in MOSs 11B (Infantryman) and 11C (Indirect Fire Infantryman). The following year, however, after the new system had been used for the first time, this percentage increased to 93 percent, and the 1980 results were similar.

The Flex-HOC offers commanders greater flexibility in conducting the HOC portion of the test by fitting pieces of the test into their scheduled training and reducing the amount of equipment and the number of personnel needed to administer the test.

The other two parts of the new system involves an individual training exercise (ITX), which integrates the SQT into the unit's ARTEP (Army Training and Evaluation Program) mission, and a skill qualification improvement plan (SQIP), which uses mandatory, self-paced study halls geared toward preparing the individual soldier to take the written component of the SQT.

How did this come about?

In 1978, the 3d Battalion, 3d Infantry, ran the HOC portion of the SQT in a round-robin style on a football field during a regular drill in accordance with the standard method then prescribed by the Army. The unit's leaders were not satisfied with the performance of their soldiers and did not relish the prospect of running the HOC portion again the following year, especially when the number of stations were to be increased from six to twelve and the unit had only slightly more than 30 percent of its authorized strength.

The leaders wondered what would happen if the HOC stations were split up and tested at different times during the unit's annual training period at Fort McCoy, Wisconsin. They reasoned that this would permit the testing of all the soldiers with only one team of scorers. They then decided to move the HOC portion of the SQT into the field and to conduct the testing when the unit was at the peak of its training year. In effect, it meant taking the test to the soldier, not the soldier to the test.

The unit leaders developed the concept of a mobile testing team and put in a request for Active Army NCOs who were already qualified as scorers to help. They reasoned that by using the outside scorers, the unit's own senior NCOs would be freed to train and test with the unit; they also felt it would help dispel any questions of favoritism should the unit perform unusually well under the new system.

ADVANTAGES

The mobile testing team concept had several advantages. First, the team could set up its testing station as close as possible to the spot where the unit would be going through its regular training. This would reduce the time the unit's training had to be interfered with and would do away with the need for additional troop transportation.

The HOC testing, in effect, would also amount to concurrent training and would help fill in some of the gaps that inevitably occur in a unit's training. For example, a soldier or squad that had just completed range firing with the M16 rifle could move to the nearby HOC station to perform the M16 portion of the test instead of waiting for the remainder of the unit to complete its range firing. Or if a check fire should be called by the range OIC, the soldiers could be sent over for testing.

The third advantage of the concept was that, if the unit's training plans should change abruptly, the mobile team would be flexible enough to change along with the unit. (When this situation did occur later, testing plans were adjusted accordingly and without difficulty.)

The leaders soon found that they would have to depend heavily on the squads and squad leaders to make the system work. Since the squad leaders would be moving with their soldiers to and from the testing area while training was in progress, they were made responsible for seeing that all of the soldiers in their squads were properly prepared and tested.

They were expected to keep track of the weak points in each individual soldier's skills and to provide the necessary refresher training when they could. They would report the progress of their squads to their platoon leaders. In this way the squad leaders themselves would be tested on how well they could control the minute-to-minute tactical and administrative operations of their squads.

In preparing for the HOC portion of the test, the unit leaders began to see that the SQT had to be emphasized more during the unit's day-to-day training activities. They also felt that some type of brief, daily emphasis should be placed on the written component of the test — traditionally the stickiest part of the exercise. With these considerations in mind, they devised the ITX and the SQIP.

THE ITX

The ITX was nothing more than an individual soldier's tasks practiced in logical groupings that combined individual and collective training. For example, there were certain tasks within each of the six phases that the soldiers had to perform. Emphasis was placed on making sure that each task was done correctly; if the mission was accomplished at the same time, so much the better.

Each soldier going through the training program practiced the HOC stations without regard to time constraints. Any soldier who made a mistake was corrected on the spot by his squad leader. If a soldier needed additional training, it was done at the squad leader's or the unit's discretion. Squad leaders kept notes on their soldiers' progress and communicated that progress up the chain of command.

The six phases of the ITX were:

- **Preparation phase.** Squad order, camouflage, rifle maintenance, operation of the squad radio, and transmission and receipt of messages.

- **Movement phase.** Movement as a fire team member; moving around obstacles.

- **First aid phase.** The four life-saving techniques, call for MEDEVAC, and transmission and receipt of messages.

- **Land navigation phase.** Movement as a fire team member, determination of magnetic azimuth, and measuring distance on a map.

- **Contact phase.** Movement as a fire team member, movement under direct fire in buddy teams, and reorganization after contact.

- **Adjust artillery phase.** Movement as a fire team member, estimation of range, transmission and receipt of messages, and call for fire.

Different phases of the ITX were also used when a squad moved to a HOC station for testing. For example, in one case the battalion moved out into the field in a defensive posture; the ARTEP mission of the unit at this point was the "squad in defense."

As each squad prepared its own defensive position, members of a squad or the entire squad went back to an area behind their lines to perform the HOC station using the movement phase of the ITX. Thus the squads left the area tactically,

while the other squads in the area covered for the missing squad as required by the ARTEP mission. In this respect, there was little loss of training time.

THE SQIP

The SQIP was aimed directly at improving the individual soldier's performance on the written component of the SQT. It involved a series of study halls geared toward refreshing a soldier's military knowledge, not starting him off from scratch. The study halls were designed to make each soldier aware of his own strengths and weaknesses with respect to the written component of the SQT.

Multiple-choice questions were extracted from the Soldier's Manual on the basis of questions that could be asked of soldiers at Skill Levels 2, 3, and 4. Senior NCOs at Skill Level 5 were expected to study at their level on their own.

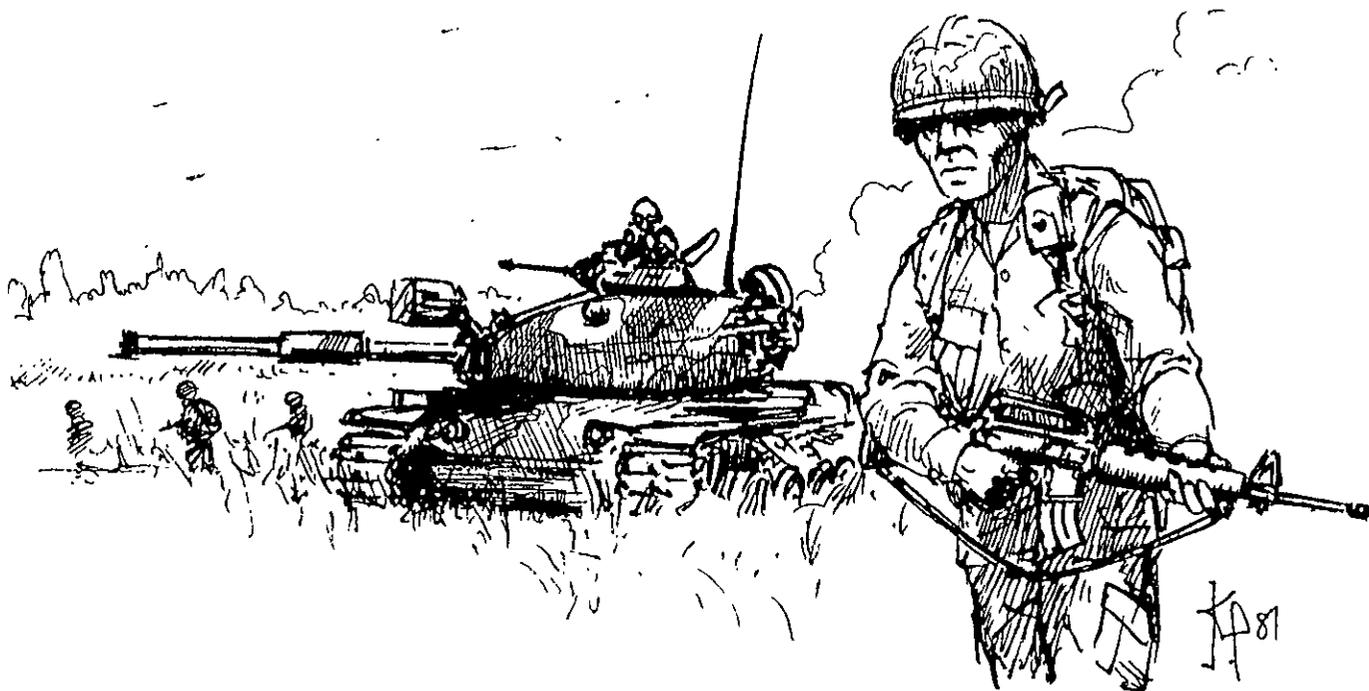
Pre-tests were made up on each subject area, such as NBC or the M16 rifle. The soldiers at Skill Level 2 were expected to answer six questions

correctly while the Skill Level 3 personnel were expected to answer eight correctly. The questions that were drawn up turned out to be surprisingly close to the actual questions on the SQT.

The pre-tests were broken down into six study periods, which ultimately were scheduled for Days 1, 2, 3, 4, 5, 9, and 12 of the annual training cycle. The study halls, held in a barracks rearranged for the purpose, began after the evening meal and ran about an hour and a half.

The study halls were self-paced. Each soldier first took the pre-test at one of the various stations dealing with one portion of the SQT notice. If the soldier passed the pre-test, he was given a "go" and advanced to the next station. If a soldier passed all of the pre-tests, he was finished.

If he failed to pass a pre-test at any of the stations, however, he was directed to do additional study on the particular subject. Immediately behind the station was a variety of resource materials — the Soldier's Manual was opened to the appropriate page, a Bessler Cue-See projector with the appropriate tapes was ready





to use, and other resource materials were there for the soldier to work with.

In addition, someone who was knowledgeable about the subject was present at that station to answer questions and provide personal instruction. This person was either a platoon sergeant, platoon leader, or Active Army NCO.

If the soldier could not pass a post-study test, his squad leader was notified so that he could conduct remedial training.

After the plans for the HOC portion of the test, the ITX, and the SQIP had been developed, the equipment and personnel needed to conduct the test were assembled. The necessary field tables, training aids, and other supplies were drawn from the battalion's S4 section. The Training Aids Support Center at Fort McCoy was the main point of issue for such training devices as Claymore mines, M72 LAWs, hand grenades, and moulage wounds. Medical supplies were obtained from the battalion medical section.

Other units were tasked to provide some of the sensitive items for HOC

testing, such as M60 machineguns, M16 rifles, and M203 grenade launchers. Mortar units provided .45 caliber pistols, compasses, and M16 plotting boards.

Test booklets and mark-sense forms were filled out at the home station by the soldiers themselves. On the first day of the annual training period, the soldiers checked their forms for accuracy. Then the forms were filed by unit and MOS and put on board the mobile testing team's van. When the soldiers arrived for testing, the scoring booklets were removed from the filing cabinet and issued to the soldiers. The individual soldiers were then briefed and tested, and the scoring team marked the booklets and refiled them.

When the testing was completed each day, the results were recorded and provided to the unit commanders. To save time, the mark-sense forms for the written test were included in each soldier's booklet. The forms for the HOC portion of the test were also maintained by unit and MOS; once completed, they were placed in the individual's scoring booklet for a quality control check at

his home station.

The battalion S1 and S3 sections assisted in completing the mark-sense forms, and the S1 section also provided the testing team with an accurate personnel roster and the status of each individual soldier. The S3 section helped with integrating the HOC stations into the training schedule, requisitioning training devices, forecasting ammunition needs, and coordinating various aspects of the operation. It was left to the test site manager to determine the exact times for testing and the sequence of units to be tested.

The battalion's leaders believed that this plan helped make their unit's testing and training more realistic and challenging. Their soldiers were more enthusiastic about studying for the SQT and often did more than they were required to do. The Active Army scorers who helped with the system also felt it was effective.

In 1980 two other Army Reserve infantry battalions adopted the flex-HOC system and had equally impressive results. In all three battalions, the ratio of soldiers who qualified (scoring 80 percent or better on the SQT) as compared to those who verified their MOSs (scoring 60 to 70 percent) was significantly higher.

Flex-HOC has caught the eye of Army trainers everywhere. Additional information on the program can be obtained from the 88th U.S. Army Reserve Command, Building 57, Fort Snelling, Saint Paul, Minnesota 55111.

SPECIALIST 4 ERIC P. JORVE

is an information specialist with the 88th U.S. Army Reserve Command at Fort Snelling, Minnesota. He served on active duty as a photojournalist with the *SETAF Outlook* in Vicenza, Italy, among other Army publications, and has worked for several civilian publications since his release from active duty in 1977.

Map Reading Basics

MAJOR STANLEY H. HOLGATE
STAFF SERGEANT THOMAS A. SCRAPANSKY

It's high noon. Do you know where your troops are? More to the point, do *they* know where they are? The evidence suggests that many soldiers are deficient in the basic map reading skills.

These deficiencies were confirmed by the results of a mini-test the Army conducted several years ago. In it the use of natural map references was compared with the use of combinations of manmade and natural references.

The results of the test did not conclusively support the notion that soldiers who use manmade references have less trouble than those who use only natural references. It did, however, provide some insights into the basics of map reading that should prove useful to company commanders, platoon leaders, and their NCOs in their map reading training and exercises.

The first thing any trainer needs to do is to get to know the soldiers he plans to teach. He can learn their weak points and their strong points through diagnostic tests; then he should select those instructional techniques that use the strong points to improve on the weak ones.

The tests may show that some of the soldiers are fairly proficient in map reading and need little or no more training. They can be used to tutor those who do need it. This technique improves the performance and motivation of the better soldiers and also frees the trainer to devote more time to monitoring the progress of all the soldiers.

In developing a training schedule,

trainers should spread their map reading classes across at least a week with an hour each morning devoted to classroom instruction and the afternoon period to field exercises. At the end of each morning session a diagnostic test should be used to evaluate any deficiencies. This information can then be used in the afternoon class to correct bad habits quickly before they become set.

Because map reading has its own language, the students must first be taught its vocabulary. They also have to learn to relate the symbols on the map to objects on the ground and to variations in the earth's surface. Training materials that combine seeing, hearing, and feeling should be used to help those soldiers who fail to learn from standard classroom teaching methods. Much of this specialized training will probably have to be done on a one-to-one basis and the trainer will have to modify his methods of instruction to meet the special needs and the motivation level of each soldier. Some will need to be led by the hand through every step.

After the soldiers reach an acceptable level of performance, frequent and recurrent training exercises should be used to maintain that level. Map reading is a skill that seems to be lost quickly if it is not continually practiced.

Two basic rules must be drilled into the soldiers during their map reading training: Be precise, and check results.

The instructor should also spend time describing the most common errors so each soldier can work to avoid

them. Some of these are:

- Errors in compass readings.
- Poor terrain association.
- Incorrect positioning of the protractor.
- Rushing to completion without checking the work carefully.
- Using reference points that are too far away.
- Marking the wrong reference on the map.
- Arithmetic errors.
- Reading coordinates wrong.

The following general rules will help a soldier prevent such mistakes:

- When orienting the map, he should place a pencil on it with one end on his approximate location and the other end pointing to or lying on a prominent terrain feature.
- He should select references that are far enough apart to form a well-defined intersection but close enough to him so that he can make an accurate estimate of range.
- After determining his location, he should use terrain association to check it more carefully.
- After determining the azimuth to a target, he should walk the observer-to-target line, analyzing the terrain in the process.

After the basic map reading skills have been taught in the classroom, they should be employed in the field at every opportunity. Map reading should be incorporated into as many unit activities as possible, so long as the exercises are meaningful and bear a natural relationship to the other training that is going on.

During some of these exercises, a simulated loss of leaders should be

used to force the younger, less experienced soldiers of the unit to take command and use their map reading skills in performing selected tasks such as these:

- Members of the unit can be called on to make a terrain analysis (using a map) of the route over which the unit is supposed to travel during a movement to contact.
- The soldiers can evaluate the terrain in terms of observation and fields of fire when bounding overwatch maneuvers are planned.
- Members of the unit can determine possible locations for fire support teams (FIST) if artillery fires are to be used to suppress the enemy.
- The soldiers can analyze the terrain from the map for purposes of selecting likely launch points for anti-armor missiles. (A good launch point must have a clear field of fire without dead spots where potential targets can hide.)

During some of the unit's other training periods and exercises, some

soldiers can be selected to determine the unit's location by grid coordinates while others are used to evaluate their performance. The soldiers can perform these tasks while waiting for transportation or during rest periods.

Such hip-pocket training methods tend to keep the soldiers on their toes with regard to their map reading skills and their knowledge of terrain analysis. By practicing their basic skills in a number of different situations, they should eventually reach the level of permanent learning.

To achieve this goal, each commander and trainer needs to stick to the basics of map reading — he should use the soldiers' strong points to correct their weak ones; promote frequent practice; emphasize the importance of accuracy rather than speed; and incorporate map reading into other training as well. This method may not guarantee that he will always know where his troops are, but it *will* help them to know where they are.

MAJOR STANLEY H. HOLGATE, a Medical Service Corps officer, was commissioned through the ROTC program at Texas Tech University in 1966. He holds a PhD degree in psychology from Texas Tech and has written numerous technical papers and reports. He is presently assigned as the Chief of the Human Factors Branch at the U.S. Army Combat Developments Experimentation Command (CDEC) at Fort Ord, California.

STAFF SERGEANT THOMAS A. SCRAPANSKY, now assigned as a Drug, Alcohol, and Mental Hygiene Counselor in Korea, formerly served as a research assistant at USACDEC. He is a 1973 graduate of St. Edward's University in Austin, Texas, and holds a master's degree from Boston University.

THE FIVE-DEGREE METHOD

LIEUTENANT MITCHELL E. TORYANSKI

AUTHOR'S NOTE: I wish to acknowledge the assistance of Sergeant First Class Stephen Gamble in developing the subject of this article.

As the effective ranges of our weapons have increased, so have our soldiers' difficulties in trying to estimate those ranges. A soldier may be able to guess with a fair degree of accuracy where the end of two, three, or even four football fields would be, if he uses this method of judging distance. But even a soldier who is a former gridiron champ cannot judge

where the end of 30 football fields set end to end would lie.

Using the size-of-objects method of judging distance, who can tell with

any degree of accuracy whether a Soviet T-62 tank is either 800 or 1,100 meters away? A soldier would need a calibrated, telescopic eye to discern

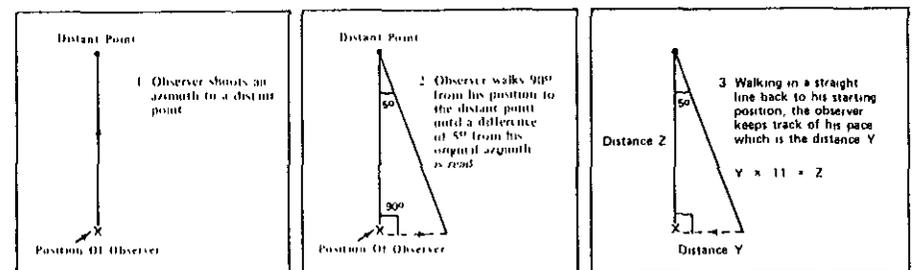


FIGURE 1

distance paced
(units)

distance to point
(units)

20	30	40	50	60	70	80	90	100
230	343	457	572	686	800	914	1030	1143

FIGURE 2

the difference and even today's modern soldier does not come equipped with one. Yet unless he can determine that distance with some degree of accuracy, he might well forfeit surprise and prematurely give away his position.

Certainly maps of areas with recognizable terrain features can help a combat leader judge distance when he sets up his key weapons. The laser rangefinder is also a quick and accurate aid in determining range, but just like any other piece of equipment, it has to be in the hands of the soldier to be of any use. It is doubtful that every soldier will have one of these in the future.

What the Infantry and Armor soldier and the Field Artillery forward observer really need, then, is an accurate method of determining distance on the battlefield with no more than their basic combat equipment. With a compass and a short pace count, a soldier has such a method, and it is much faster than pacing the range to a distant point and far more accurate. It is called the Five-Degree Method.

METHOD

As shown in Figure 1, the observer chooses a target point and with a lensatic compass shoots an azimuth to

that point. Adding 90 degrees to this reading, he then walks at a right angle to the line between his chosen point and the target point, periodically stopping to take an azimuth reading to that same point. When the compass shows a difference of five degrees from his initial azimuth he stops. He then walks back in a straight line to his starting point, keeping count of his pace. Once back at the starting point, he converts the number of paces he took on his return trip to whatever unit he wants to use with his individual pace count. He then multiplies this distance by 11, which will give him the approximate range to his target point. (The factor of 11 was obtained by simple geometry, using the known angle of 5 degrees and the distance Y. The exact figure is 11.43.)

If taking a pace count to the right is impractical or impossible, the soldier can walk to his left instead, following the same procedure, but subtracting 90 degrees from his initial azimuth in-

stead of adding it.

A graphic aid such as the slide viewer pictured in Figure 2 can assist the soldier in converting his pace distance (Y) to down-range distance (Z). The viewer shown uses the factor of 11.43 for the greatest accuracy.

The Five-Degree Method will not always be the best one for determining range, just as the other methods cannot be used in every case. Whenever possible, though, this method should be used because of its simplicity and its accuracy. It is especially useful in sparsely wooded areas and in the barren type of terrain found in a good part of the Middle East.

By instructing his troops in this method, a leader can provide them with a simple way of determining range that is also reasonably fast and highly accurate. With this additional skill, the soldiers will be better able to accomplish their missions and increase the effectiveness of their unit.



LIEUTENANT MITCHELL E. TORYANSKI, a 1980 graduate of the U.S. Military Academy, has completed the Infantry Officer Basic Course and is now assigned as a platoon leader in the 3d Battalion, 60th Infantry, at Fort Lewis, Washington.

Battalion Officer School

CAPTAIN WALTER A. SCHREPEL

The Army needs to find ways to promote the professional development of its junior officers, and a battalion officer school could be one of the most important ways. Such a school, if organized properly, would bridge the gap between the formal instruction offered by the service schools and the training provided by the unit itself. It could also be the key to developing and maintaining a high degree of professionalism in the battalion's officers.

A battalion school would give the commander a chance to present specific subjects in detail to refine the knowledge and skill of his junior officers. He could also use it to accelerate their professional development process as well as to raise the quality of all of the officers in the battalion.

To achieve these objectives, the school's program should have both immediate and long range goals. First, it should concentrate on helping to improve an officer's technical proficiency so that he can be more effective within his unit, in garrison or in the field. As a long range goal, each officer should be groomed to assume positions of greater responsibility on short notice.

The battalion school should include three main subject areas — professional reading, oral and written communications, and meeting performance standards.

Each officer in the Army should be well-read in his profession and should be able to express himself both in writing and in his oral communications, especially when giving instructions to his subordinates. And he should be fully capable of meeting the

performance standards for his grade and mission.

READING

In the first phase of the program, the battalion's S3 could develop a comprehensive reading list for all of the battalion's officers. As a starting point, the U.S. Army Infantry School's recommended reading list of titles could be used. Reading in the history of the profession of arms is always useful in understanding the past as a foundation for the present and the future. And through such reading young officers can also gain an understanding of the dynamics of battlefield leadership, of the tactics used in a given piece of terrain, or of the key links in the development of a unit's esprit and heritage.

At the same time, the relevant regulations, training techniques, and command information items, which can be provided by the Command Sergeant Major, would certainly help the new officer become better acquainted with garrison procedures.

An officer might be required to select up to three titles from the recommended list of publications — perhaps a historical work, a chapter from a how-to-fight manual, and a regulation. He should be given a specified time limit, such as 30 days, in which to complete reading them.

WRITTEN AND ORAL EXPRESSION

In the writing phase of the course, the officer should be required to

prepare a brief on each of his readings, similar to a book report. It would be presented to the officer's rater, who would be responsible for checking its quality and adherence to the program before forwarding the brief to the battalion commander.

In addition, the battalion commander might designate certain subject areas to be presented orally. At an informal officer's call, the designated officer would brief his contemporaries on his assigned subject. In this way, the briefing officer would learn the dynamics of a military briefing and develop confidence and poise in the process. He would also learn the value of being well prepared.

As a side benefit, the battalion commander would be able to develop a group of subject matter experts who could then disseminate their knowledge throughout the battalion. The result should be a gradual improvement in the quality of training that would benefit the entire battalion.

PERFORMANCE TESTING

In the final phase of the program, all the officers involved in it should be tested on the depth of their professional knowledge. This knowledge should include both tactics and administration; the well-rounded officer should excel in both.

The tactics test might be organized according to the individual officer's duty position. A rifle platoon leader, for example, might be tested on platoon procedures in a defensive scheme of maneuver, and also on

what he would do if he were selected "on-the-spot" to be a company executive officer or a weapons platoon leader. He might be required to run a reaction course or to run a certain distance in a specified time.

A similar process could be used to test his knowledge of garrison and administrative procedures. He might be required to check on troop financial or promotion policies, to prepare elimination procedures, to perform as a survey officer, to supervise a supply room, or to inspect weapons, NBC equipment, and vehicles.

A battalion officer school organized in this fashion could be used to improve and sustain the quality of the battalion's officers and its effects should eventually be transmitted to

the battalion's NCOs as well. At the very least, the qualitative rating of the junior officers could be assured by comparing the individual against specific measurable goals. What is

more important, the school could provide the basis for a universal framework for developing leaders of high quality for an effective volunteer Army.



CAPTAIN WALTER A. SCHREPEL is a 1976 graduate of the U.S. Military Academy. He has completed the Infantry Officer Advanced Course and is now an instructor in light infantry tactics in the Command, Tactics, and Doctrine Department of the U.S. Army Infantry School at Fort Benning, Georgia.

Platoon Inventory

MAJOR CURTIS R. ROGERS

After meeting his commander and receiving a briefing on the unit, a newly assigned lieutenant faces his first real challenge — conducting a 100 percent inventory of his platoon's equipment. His signature on that inventory will mark the final step in his full assumption of responsibility for his platoon, and he should take care to do it right.

His first step in the inventory process should be to get together with the experts — the battalion S4 or the property book officer, the company executive officer, and the company supply sergeant. Thirty minutes with an expert can unravel what at first may look like an insurmountable problem. During the discussion, he should ask them about any recent change or problem that could affect the inventory.

At the same time, he should obtain from them the current technical manuals, supply bulletins, supply catalogs, and any other publications he will need to conduct the inventory. In addition, he must make certain that the appropriate TM for each piece of equipment, along with its publication date, appears on the master hand receipt.

These publications are essential; without them an inventory is a waste of time, because they describe the equipment through photographs and equipment listings. The major components of the equipment must be reviewed with reference to both the descriptive pictures and the BII (basic issue items) list.

This advice cannot be stressed too strongly. Failure to use the current publications in the inventory process

is probably the most common mistake a new platoon leader makes, and the most costly. He should therefore follow the rule: "If you ain't got the book, don't look."

Once he is satisfied that he is sufficiently educated and equipped, the lieutenant can begin the formal inventory process.

A change of command inventory is a joint mission. It should be done with both the outgoing and the incoming officers present; it should not be conducted if one or the other is absent. A sufficient amount of time should be set aside for the inventory, and the entire process should be well organized. Unrelated tasks must be set aside until the inventory has been finished.

All items that are to be inventoried — that must be counted — should be

put out in the open where both parties can see them. The front of the company's area is probably as good a place as any. All of the platoon's equipment must be made available; otherwise, those taking the inventory will spend a lot of time trying to chase down the missing items.

When physically counting equipment, both platoon leaders must be certain of the actual accountable quantity. For example, a unit may have been issued or may have turned in items since its last master hand receipt was made. (If the unit is using the division logistics systems (DLOGS), a computerized list will be provided.) Normally, the master hand receipt is updated before the inventory, and this should eliminate any need to review "sub-hand receipts." But a platoon may have equipment signed out to its members; if so, it must be turned in before — not during — the inventory and then re-issued. This simple formula can be used to insure a correct balance sheet: Hand receipt count, plus issues and minus turn-ins, minus equipment in maintenance, equals the accountable quantity.

One critical aspect of accounting for the equipment that is in maintenance is to make sure the complete item is turned in. Although this is normally required, sometimes components are turned in but not some of the other end items.

The identification of equipment may be difficult, too, but the new platoon leader must stick with it. He may even have to measure, weigh, and compare certain items carefully. Above all, he must be certain of the presence and composition of every item of his equipment.

During the inventory, equipment should also be checked for its serviceability. If it is badly worn and a replacement can be ordered, it should be done at that time. Any missing

CHECKLIST FOR PLATOON INVENTORY

- Check with the experts.
- Without the book, don't look.
- Inventory together or not at all.
- See it all; touch, measure, be certain
- Organize, and follow the schedule.
- Inspect and order as you go
- Excess items belong to Uncle Sam.
- If it has no purpose, turn it in.
- Problems? Go back to the experts.
- Correct administrative errors now.

items should be reported immediately to the commander and to the S4 or property book officer, and supply actions should be started to remedy the shortages. This equipment should not appear on the hand receipt.

At the same time, any excess equipment must be turned in to the supply people; this is as much a moral problem as it is a physical and monetary one. It may be found, also, that certain items no longer serve a purpose within a unit, and with the commander's approval, they should be turned in as well.

If any problem arises during the inventory that seems impossible to resolve, the platoon leader should go back to the experts and insist on a detailed explanation. Often the prob-

lem will turn out to be simple administrative errors on hand receipts — even experts can make mistakes!

Finally, the new platoon leader should be sure that the master hand receipt he signs reflects things as they really are. To discover otherwise later can be professionally and financially devastating.

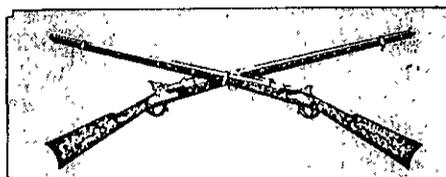
After the new platoon leader has signed for his platoon's equipment, he should make it a point to continue to inventory and inspect that equipment throughout his tenure in that unit. In fact, the semi-annual inventory is as important as the initial one. He must pay special attention to any items that might be added to the BII after his initial inventory and see that they are put on the hand receipt.

At the end of his tour, he must conduct a final 100 percent inventory with his successor.

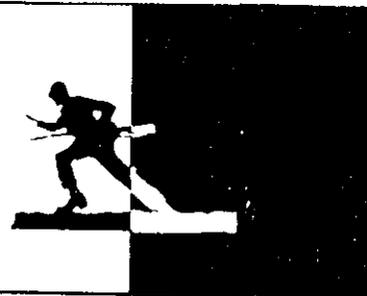
Supply discipline and equipment accountability are high priorities for today's unit leader. A 100 percent inventory may not be as exciting as a combat patrol or a platoon raid, but it is at least as important. And any platoon leader — either a new one or an old one — owes it to himself to do it right.



MAJOR CURTIS R. ROGERS was commissioned through the Officer Candidate School in 1969 and served as a rifle company commander and a battalion S4 with the 193d Infantry Brigade in Panama. He is a 1977 graduate of the University of Tampa and recently completed the Foreign Area Officer Course. He is now assigned to the Rapid Deployment Joint Task Force at McDill Air Force Base, Florida.



ENLISTED CAREER NOTES



BRANCH CHIEF COMMENTS

The Army is overstrength in many combat support and combat service support MOSs while the combat arms are critically short at the ranks of SGT/SP5 through MSG/ISG. To implement a force alignment plan, DA is soliciting volunteers from MOSs that are overstrength.

MILPERCEN is advertising MOSs in which vacancies exist, canvassing overstrength career fields, and pointing out the advantages of reclassifying into the combat arms for those NCOs who qualify. Among the proposed advantages are MOS training and increased promotion opportunity. The chain of command at all levels will play a decisive role in force alignment through the manner in which they present it to the troops under their command. Commanders must lay a foundation of support for force alignment if NCOs in overstrength MOSs are to make the best decision for the Army and themselves.

LTC TOMMY F. GRIER JR.

PDI CODES

MILPERCEN has introduced a new, temporary management tool called the Project Development Identification (PDI) code. A two-character, alphanumeric designator, the code is used to identify personnel who have gained a high degree of knowledge and experience in a specific project, system, concept, or item of equipment, and for whom no other appropriate occupational identification has been implemented.

The PDI code is not a substitute for an MOS; it is designed to identify qualified personnel at a critical period — during the establishment of a

training base in the development and early deployment of new military technology.

The code will fill a real gap in the personnel management system. For example, a soldier who has trained with a system such as the Abrams tank or the Bradley IFV/CFV during its development and testing has valuable experience. But that experience may not be enough to warrant his reclassification into a new MOS even if an appropriate one exists, and in many cases there is none. Without some way of identifying skills acquired outside the formal MOS structure, these valuable personnel might never be assigned to the units that are scheduled to get that particular vehicle.

Requests for the award of a PDI code to individual soldiers are initiated by DARCOM (the project manager), TRADOC (either the system manager or the commandant of the proponent school), or the commander of the unit responsible for field testing the weapon or equipment.

MILPERCEN (DAPC-POC) reviews the requests and assures that the proper code is entered on the soldier's record in the Enlisted Master File. At the same time, MILPERCEN (DAPC-EPS-D) receives deployment schedules for the new equipment or system and determines which TOE units will need PDI-coded personnel, how many, and when. This information is then passed on to the appropriate MILPERCEN career branch (in this case, DAPC-EPK-1), which identifies qualified soldiers from the Master File, assigns them against the PDI requirement, and notifies the gaining unit (or equipment training team).

Once the MOS structure has been adjusted to accommodate the new

system or equipment — for example, with the introduction of MOS 19K for the Abrams tank — PDI-coded personnel may be reclassified accordingly and the PDI deleted entirely from the Enlisted Master File.

A new Army regulation governing PDI codes and their associated subcodes has been drafted and should be available soon. In the meantime, everyone involved should be aware of the following points:

- MILPERCEN is committed to making the PDI system work, especially in regard to the Abrams tank and the Bradley IFV. Infantry/Armor Branch will continue to devote special attention to managing the PDIs associated with these systems.

- It is important that only the personnel actually involved in the operation, maintenance, or application of the equipment be nominated for the PDI code. (This would normally exclude cooks, clerks, and other support personnel in field test units.)

- It is even more important to see that soldiers who do have the experience are nominated for the PDI. This requires the cooperation of the activities and individuals indicated in assuring that complete rosters of nominated personnel are submitted to MILPERCEN in a timely manner. Certificates of training or some other indication of the PDI award should also be posted to the soldier's field 201 file.

- The individual soldier needs to know what a PDI code is, how it is awarded, and what it means to his career. At the same time, he should know that the PDI will not unfairly jeopardize his CONUS stabilization and will not make him ineligible for deletion or deferment from overseas assignment.

- A PDI code should be awarded

to soldiers who hold an appropriate DS/GS maintenance MOS (CMF 63) as well as combat arms MOSs (CMFs 11 and 19). It is important that experienced maintenance personnel be identified early.

- The commanders of the units or activities that get PDI-coded personnel are encouraged to report on the actual performance level of soldiers so identified. Their comments should be forwarded directly to the appropriate career branches.

Again, the PDI code is a temporary management tool. As new systems and equipment come on line, the skills reflected in the PDI code will be integrated into the formal MOS structure. Existing PDIs will be rescinded and new ones established as needed.

PATHFINDER VACANCIES

There is a critical need for 11B1P and 11B2P soldiers to fill Pathfinder requirements at Fort Campbell, Kentucky, and at Fort Rucker, Alabama.

Qualified applicants, within 10 months of return from overseas, may submit DA Form 4187 for temporary duty en route to Pathfinder School in accordance with DA Pamphlet 351-4, through command channels, to MILPERCEN, ATTN: DAPC-EPK-I, 2461 Eisenhower Avenue, Alexandria, VA 22331.

PERSONNEL MANAGEMENT

To ensure that there is a balanced force consistent with the manpower ceilings established by the Congress, Army planners project enlisted personnel strength figures into the future. By projecting the number of soldiers scheduled to leave the Army after their commitment and those who will retire, the planners determine the number of soldiers who must enter the Army each year in order to maintain the desired overall strength. The recruiting objective in the Active Army is translated into annual training requirements by mili-

tary occupational specialty (MOS).

The annual accession and training requirements for an MOS are published in the Army Program for Individual Training by ODCSOPS. Training spaces, or "quotas" as they are commonly called, are entered by MOS, option, and Advanced Individual Training (AIT) start date into the Recruit Quota System (REQUEST).

Within the life cycle management of enlisted personnel, the career divisions of the Enlisted Personnel Management Directorate are responsible for managing an average of 20 to 23 years of a soldier's career.

Although the career branches vary in structure, each branch is composed of a professional development (PD) section and an assignment section. The PD section is responsible for monitoring the professional development of its career soldiers, while the assignment section is responsible for assignment and reassignment functions and related actions.

Professional development can be defined as the developmental and educational function involving ascending levels of military education, civil, or technical training coupled with a predetermined pattern of assignments and duties within a given MOS which prepares the individual soldier through experience for service at the highest enlisted grade.

The PD sections, instituted in 1975 with the inception of EPMS, are staffed by a team composed of civilians, military personnel management specialists, and branch oriented NCOs who have a broad background in the applicable career fields. Within the Infantry/Armor Career Branch, Combat Arms Career Division, for example, the Infantry PD team consists of an Infantry master sergeant (MOS 11B5) and four sergeants first class, Infantry Career Advisors (MOS 11B/C). Among the tasks of the career advisors is a detailed and continuing review of the Career Management Information Files (CMIF) of each 11B/C NCO at each NCO grade level (from the rank of SSG). Their duties are to:

- Recommend career development assignments and schooling.
 - Monitor soldiers' assignments and utilization.
 - Recommend reclassification or retraining actions.
 - Send personalized counseling letters to soldiers who are showing a downward trend and who need to improve in certain areas or who may possibly face Qualitative Management Program (QMP) action.
 - Conduct both personal and telephonic interviews with the soldier on a wide range of subjects.
 - Answer personal inquiries ranging from assignment actions to EPMS changes and exception to policy requests.
 - Select nominated NCOs for special assignments such as ROTC, drill sergeant, or recruiting duty.
 - Select soldiers for the DA-directed Reclassification Program.
 - Participate as voting members of the EER/SEER Appeals Board and the QMP Appeals Board.
 - Evaluate requests for branch clearance, stabilization, overseas assignment, or voluntary reclassification.
 - Review DA selection board results, such as for USASMA, ANCOES, or promotion, and QMP lists for the purpose of preparing congratulatory letters, TDY and PCS instructions, and making annotations in the soldier's CMIF.
- The management of all sergeants major is centralized within the Command Sergeants Major/Sergeants Major Office of EPMD. This office works directly under the Office of the Director of Enlisted Personnel.
- A decision was made in 1975 to consolidate all SGM career management in this office and to implement centralized assignment procedures. The objective was to ensure the efficient and intensified management of SGMs by providing utilization within the individual's area of expertise. The management procedures take full advantage of personal interests, aptitudes, and experience and provide for a pattern of assignments in a variety of duty positions in the

soldier's career management field.

The management of CSMs and SGMs is based on the concept of progressive assignments through positions of increasing responsibility on the basis of background, demonstrated performance, and availability for assignment.

The assignment of CSM to the staff of a commander in the rank of Major General or higher requires the nominative process. CSMs who have the desired qualifications for such a position are evaluated and considered for nomination. Normally, three individuals will be nominated and the comments of the first general officer in each soldier's chain of command will be solicited. If they are recommended, they are included in the slate of nominees submitted to the commander. The individual selected by the general officer is placed on orders to that assignment.

ROTC SCHOLARSHIPS

The Army has reserved 100 ROTC scholarships for active duty enlisted soldiers. These scholarships cover tuition, textbooks, laboratory fees, and certain other educational expenses. For example, if a calculator or a slide rule is required in a certain major academic field, the Army will buy one or the other of them.

The Army will also pay scholarship winners \$100 a month, up to \$1,000 for each academic year, in tax-free subsistence allowance. Cadets are also paid for the six-week Advanced Camp, which they must attend during the summer between their junior and senior years.

In addition, scholarship winners can use any G.I. Bill or Veterans' Educational Assistance Program (VEAP) benefits they may have earned

while on active duty. The nearest Veterans' Administrative Regional Officer can determine their eligibility.

Last year the Army expanded the active duty scholarship program to give more soldiers a chance to apply and also extended the age limit by giving soldiers credit for active service. There is now a three-year scholarship along with the two-year award, and under the new rule soldiers must be younger than 29 on June 30 of the commissioning year. Previously, they had to be younger than 25.

This means that soldiers can now count up to four years of active duty: three years of active duty extends the age limit to under 28; two years extends it to under 27, and so on. This gives soldiers more time to earn credits so they can apply for the scholarships.

To apply for an ROTC Active Duty Scholarship, a soldier must:

- Be a U.S. citizen.
- Be at least 17 years old before the scholarship becomes effective.
- Have served at least one year on active duty.
- Have been accepted for enrollment by a college or university that offers ROTC, or be able to make arrangements to attend ROTC classes at a nearby school that does.
- Have a score of at least 115 on the General Technical (GT) Aptitude Test.
- Have a satisfactory National Agency Check.
- Have maintained a "C" average in college work.
- Have two years of college credit for a two-year scholarship, or one year of college credit for a three-year scholarship.
- Be recommended for the scholarship by his commander.

These soldiers will be discharged from active duty to enter college. Once their scholarships are in effect,

they will be Army ROTC cadets.

The scholarship cadets can major in any area that leads to a bachelor's degree except theology. They can take part in any extracurricular activity that does not interfere with their military science requirements. They will receive commissions as Regular Army or Army Reserve second lieutenants after completing all requirements and graduating, and they must then serve on active duty for four years.

For applications or more information, anyone who is interested should write to Army ROTC, HQ TRADOC, ATTN: ATRO-CS, Fort Monroe, VA 23651.

Soldiers must request scholarship applications for the 1982-83 school year between 15 January and 15 April 1982. If a request is not received by 15 April, it cannot be processed for this year's cycle. Completed applications must be postmarked no later than 1 May 1982.

ENLISTED CIVIL SCHOOLING

The Fellowships, Scholarships, or Grants Program authorizes qualified soldiers to apply for and accept fellowships, scholarships, or grants offered by corporations, foundations, funds, or educational institutions organized primarily for scientific, literary, or educational purposes. Application procedures for this program are explained in AR 621-7.

The Enlisted Education Program, which authorized qualified soldiers to study for up to two calendar years to satisfy Army skill requirements that could not be acquired from the Army's school system, was terminated in 1976. There is no degree completion program for enlisted personnel at this time.



OFFICERS CAREER NOTES



BRANCH CHIEF'S NOTES

We recently returned from several trips during which we interviewed more than 1,500 Infantry officers. We visited USAREUR and traveled throughout V Corps, VII Corps, and the 21st Support Command; we visited Fort Leavenworth and the CGSC Class of 1982, Carlisle Barracks and the AWC Class of 1982, and the Home of the Infantry, Fort Benning, where we briefed and interviewed the IOAC and IOBC classes in session.

We sincerely appreciate the cooperation you gave us and your understanding of our tasks and our joint mission of providing the Army field commanders with both the quantity and quality of Infantry officers they need.

Most of you are concerned with the accuracy of your Officer Record Briefs. I can only say that we need to be patient and persistent in this matter, although the ORBs are getting better. Each time you review an ORB you should get with your serving MILPO and annotate any changes. I realize that many of you may do this several times without positive results, but don't let up. Your ORB and P-fiche are especially important in that they are the two documents that appear before promotion and selection boards.

We at Infantry Branch, along with the Infantry Center, have prepared a letter to be sent to each Infantry officer. In essence, that letter will tell you what we expect to happen in 1982 as far as assignments are concerned. In it, each assignment officer presents a summary of his area of responsibility. We hope that it will be helpful to each of you in understanding our tasks.

A review of the Command and

Staff selection process appears in a note that follows. I recommend strongly that those of you who have not been selected to attend one of the resident colleges enroll in one of the nonresident courses. The successful completion of these courses will certainly improve your qualifications for assignment to key positions in the future. Two specific courses are the Command and Staff Nonresident Instruction Program and the Army War College Corresponding Studies Program.

COL. JAMES A. SULLIVAN

OCS GRADUATES

An important source of officers for the Active Army is the Officer Candidate School (OCS). Annually, this program provides 900 officers to the active Army, each with a three-year service obligation.

Under an approved policy to be implemented in Fiscal Year 1983, the graduates who finish in the top third of their class will be offered early integration to the Regular Army provided they are otherwise qualified and after they successfully complete an officer basic course. This will enable the chain of command to recommend for or against integration, depending on the officer's performance in his basic course or in his first duty assignment. The details are being announced in a forthcoming change to AR 601-100.

OCS is 14 weeks long and is open to qualified soldiers, both men and women. Roughly half the candidates come from the Active Army; the remainder enter through the OCS enlistment option offered by the Recruiting Command. Active duty entrants must have completed two

years of college while enlistees must have completed a baccalaureate degree.

USMA GRADUATES

Beginning with those who belonged to the Class of 1975, U.S. Military Academy graduates are appointed in the Regular Army and predominantly assigned to Armor, Air Defense Artillery, Field Artillery, Infantry, Engineer, Military Intelligence, Military Police, or Signal branches, with a five-year obligation. At least 80 percent must serve in the combat arms (IN, AR, FA, AD, AV and EN). The remaining 20 percent may compete for combat service and combat support arms branches.

All graduates of USMA who are physically qualified for commissioning normally will be commissioned in the U.S. Army. Approval by the Secretary of the Army for a graduate to be commissioned in another service is granted only under the most unusual circumstances.

Those who have been physically disqualified from the combat arms at the time of graduation may select assignment to Military Intelligence, Military Police, Ordnance, Quartermaster, or Transportation.

Graduates will attend their respective officer basic courses before their first assignments.

Ranger training will be made available for officers who are scheduled for Ranger assignments and on a competitive basis for all male combat arms and combat support arms volunteers. Quotas are allocated to eligible branches on the basis of the previous year's utilization. The majority of the quotas are allocated to the combat arms officers, with Infantry officers receiving the

highest percentage.

Airborne training will be made available for officers whose assignments are to airborne units and as voluntary precommissioning training for USMA cadets. Others may attend training after commissioning on a competitive basis. Enough quotas have been available to allow all physically qualified volunteers to attend.

ROTC GRADUATES

The primary purpose of maintaining the ROTC program is to procure commissioned officers to meet the needs of the Active Army and the Reserve Components, and to meet mobilization requirements. Officers who are commissioned through the ROTC program are required to perform an initial period of active duty, plus Reserve duty, for a total combined obligation of six years or, if not needed on active duty, to perform three to six months of active duty, plus Reserve duty, for a total combined obligation of eight years.

Under certain circumstances an ROTC graduate may obtain a delay in his call to active duty to pursue a postgraduate degree. Delays are granted in increments of one year and must be renewed each year until the individual obtains his degree.

Graduates from the ROTC program are normally scheduled to enter an initial period of active duty during the fiscal year following their graduation and appointment. The specific month they will begin active duty is primarily based upon service school course quotas.

There are several categories of ROTC graduates and different procedures for their assignment:

Scholarship cadets. Cadets who are attending a college or university under the Army's financial assistance program for one to four years and are enrolled in ROTC are required to serve on active duty for a period of four years.

A Department of the Army board, normally held during the cadets'

senior year, selects the branches for the scholarship cadets. The cadets themselves may apply for all branches; selections and assignments are based on criteria established by DCSPER.

Distinguished Military Students (DMSs). The Professor of Military Science in each Army Senior ROTC unit is authorized to designate certain qualified cadets in his unit as Distinguished Military Students (DMSs). This is normally done in the cadet's senior year after he attends a summer camp.

The final selection of DMS cadets for the Regular Army and their assignment to various branches are accomplished by the same DA board that considers scholarship cadets for RA appointments. A DMS may also apply for any branch. Branch quotas for DMSs and scholarship cadets are established by DCSPER. Because consideration for appointment of a DMS in the Regular Army is voluntary, DMSs must apply for such appointments if they want to be considered.

After graduation, a DMS who has been previously selected for appointment in the Regular Army by the DA Board and who has maintained his eligibility is designated a Distinguished Military Graduate (DMG) and, upon his acceptance of a regular commission, is appointed in the Regular Army.

Other than Regular Army (OTRA). OTRA officers are given branches by a MILPERCEN panel made up of serving Professors of Military Science representing the four ROTC regions. Newly commissioned officers are called to active duty over a twelve-month period and attend their officer basic branch courses before their first duty assignments.

OTRA officers from both ROTC and OCS are encouraged to apply for Competitive Voluntary Indefinite (CVI) status before they complete their three-year obligated tours. Upon beginning their CVI tours (third or fourth year), they are encouraged to apply for Regular Army commissions. If selected, they may be

offered RA commissions at the end of their third or fourth year of commissioned service.

Graduate Degree Delay. ROTC graduates who have been on a delay status for the purpose of graduate study are given utilization tours commensurate with their advanced education if at all possible.

Initial branch assignments for all ROTC graduates are based upon the needs of the Army (branch quotas), the desirability of balancing the worldwide distribution of RA lieutenants, an officer's academic background, an officer's preference, and the order of merit of all the officers.

The DMGs who do not apply, or who apply but are not selected, for the Regular Army are normally given their preference in branch selections over the non-DMG OTRA officers.

A DMS who is selected to the Regular Army and becomes a DMG but elects not to accept his appointment will normally be appointed in the USAR branch he originally selected.

All lieutenants will attend their officer basic courses. Ranger training will be made available for combat arms, Engineer, and Signal Corps officers, and as voluntary precommissioning training for all ROTC cadets. Airborne training will also be made available to officers who volunteer for it, and ROTC cadets who are now in their junior or senior years will continue to be eligible for airborne and ranger training after commissioning regardless of their anticipated assignments or OPMS specialties.

The top five percent of those scholarship and non-scholarship cadets selected for RA commissions may elect to attend advanced civil schooling any time within the first five years of active commissioned service (effective until the Class of 1978).

Officers who are attending advanced civil schooling under this program incur an active duty obligation equal to three times the length of the schooling, computed in days. The obligations resulting from ROTC and

civilian schooling will be served in succession, and the time spent attending civilian school will not be credited toward fulfilling an ROTC obligation.

REVISED CGSC SELECTION

A new procedure for selecting officers to attend command and staff college level schooling was approved in 1980 and will be phased in beginning with the classes scheduled for the 1982-83 academic year.

The need to devise a new selection system stemmed from stability criteria that precluded the early movement of officers to attend intermediate level schools. Under the new procedure, an officer will have four chances to be selected for resident attendance; selection will occur earlier in his career; he will compete only against other officers in his own year group for available seats; captains will be allowed to attend; and once selected, each officer will attend on the basis of his availability.

The general details of the selection system are as follows:

- Each year group will be assigned one year's supply of seats (about 950).
- An officer will be considered during his eighth to eleventh year of Active Federal Commissioned Service (AFCS).
- He will attend some time during his ninth to fourteenth year of AFCS.
- Of the available seats, 15 percent will be filled with officers in their eighth year of AFCS, 15 percent with officers in their ninth year, 35 percent with officers in their tenth year, and 35 percent with those in their eleventh year.

It is expected that it will take two years to fully implement the new selection system.

COMBINED ARMS AND SERVICES STAFF SCHOOL

The Review of Education and Training for Officers (RETO) Study

determined that there was a need for all officers to be trained as staff officers, but there was no course in the officer training system that was primarily designed to teach staff skills. As a result the Army established the Combined Arms and Services Staff School (CAS³) at Fort Leavenworth, Kansas. The school began operations in Fiscal Year 1981 with full implementation expected in Fiscal Year 1985. It is also expected that CAS³ will be taught in Europe when it has been fully implemented.

During the graduated implementation, officers will be selected to attend by their career management divisions on the basis of the number of seats available and the specialty composition of each class. Officers selected will be in their seventh to ninth year of Active Federal Commissioned Service (AFCS) and will attend in a temporary duty (TDY) status.

Class loads during the graduated implementation period will be:

- Fiscal year 1982: three classes of 240 officers, or a total of 720.
- Fiscal Year 1983: four classes of 240 officers, or a total of 960.
- Fiscal Year 1984: four classes of 240 officers, 960 total.

When the course has been fully implemented, all OPMD-managed officers will attend sometime during their seventh to ninth year of AFCS. Selected officers from the Reserve Components, JAG, AMEDD, and Chaplain Corps will also attend. Once developed and validated, CAS³ will have a required 120-hour nonresident instruction (NRI) phase with a locally administered six-hour examination. The successful completion of the NRI portion will be a prerequisite for resident attendance.

The initial classes are 12 weeks long, but they will be reduced to nine weeks on full implementation.

SPECIALTY DESIGNATION PROCESS

In the Army's concept of dual specialty development for its officers, the objective is for each officer to

gain and maintain proficiency in two specialties. These specialties are designated on the basis of Army requirements and the officer's education and experience, his demonstrated performance and potential, and his preferences.

Specialties are designated by the following processes:

Initial Specialty Designation. All officers are designated an accession specialty upon entry on active duty. Accessions of active duty officers are distributed to the career management divisions by the Procurement and Accessions Branch, Personnel and Training Division, after the branch of each officer has been determined. Officers taken into a branch with which multiple specialties are associated will be apportioned among those specialties by the career management divisions on the basis of the objectives outlined in the Officer Accession Plan.

Event Oriented Specialty Designation. Officers who attend graduate school under the partially or fully funded programs or who attend flight training will be given the specialty associated with that event.

Permissive Specialty Designation. An officer may be given another specialty on the basis of his request to his assignment division at any time. If the officer is qualified in the judgment of the assignment division (through experience, military training, or civilian education) his request may be approved.

Eighth Year Specialty Designation. Each officer will be designated two specialties before he completes eight years of commissioned service. The Eighth Year Process is used to designate another specialty for any officer who has not been given one through either the Event or the Permissive Designation Process.

The requirements for each specialty are determined by the requirements at the ranks of colonel, lieutenant colonel, and major and by the average attrition rates and the desired utilization rates. These requirements are then adjusted on the basis of the size of the year group being con-

sidered, and priorities are established by the Director of Officer Personnel Management to determine the designation objective for each specialty. The objective is then proportionally distributed to the career management divisions where the decisions are made on specialty designations.

Each officer receives an information packet and a specialty preference form through his military personnel officer (MILPO). He indicates his desire on the form for four specialties in the order of preference and returns it to the MILPO, who forwards it to MILPERCEN. The career management division conducts a file review of each officer in the year group to determine educational background and experience and to decide which specialties, if any, most closely align with them.

When the process is completed, all officers are notified of their specialties through their MILPOs.

Tentative Specialty Designation. Officers who have degrees in academic disciplines that support certain specialties will be tentatively designated in those specialties early in

their careers.

This program began in 1980 with Year Group 1979 officers who were notified while at their officer basic courses of the specialties that their backgrounds supported. An officer is not "locked in" a specialty by this process, but it does provide a basis for planning and opens a dialogue between him and his assignment manager on matters of training development.

Current specialties open to this process are:

- SC 21 Engineer
- SC 27 Communication-Electronic Engineering
- SC 37 Electronic Warfare/Cryptology
- SC 44 Finance
- SC 45 Comptroller
- SC 49 Operations Research Systems Analysis
- SC 52 Atomic Energy
- SC 53 Automated Data Systems Management

CAS³ FOR USAR OFFICERS

The Army's new Combined Arms and Services Staff College, called CAS-cubed or CAS³, will have only

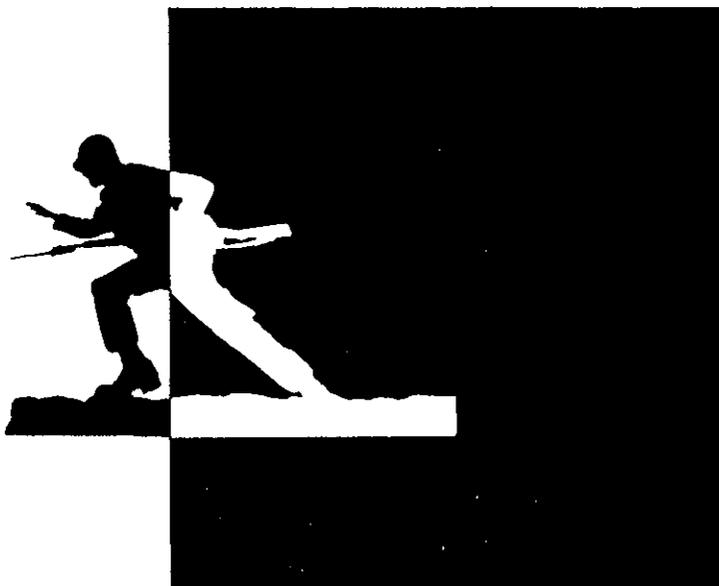
minor effect in the near future on Army Reserve officers.

For officers in the active component, CAS³ is meant to fit between an officer's advanced course and the Command and General Staff College. For Army Reservists, however, it is the full equivalent to the CGSC.

Although the Army has no immediate plans to introduce CAS³ into the USAR education system as an additional officer education requirement, Reserve officers may apply to attend the resident course. This nine-week course at Fort Leavenworth, Kansas, is preceded by a 15-part correspondence course phase. The completion of CAS³ will satisfy USAR requirements for promotion to lieutenant colonel.

Prerequisites and application procedures for the course as well as for other USAR officer education courses are listed in HQDA letter 140-81-1, dated 17 March 1981.

Any officer who is interested may obtain more information by calling the Operations and Training Division of the Office of the Chief, U.S. Army Reserve, at (202) 325-8480 or AUTOVON 221-8480.



BOOK REVIEWS



In our September-October 1981 issue we gave you the names and addresses of five dealers in used and out-of-print military books. Here are two more names you can add to that list:

- RUTGERS BOOK CENTER, 127 Raritan Avenue, Highland Park, New Jersey 08904.

- Q.M. DABNEY AND COMPANY, INCORPORATED, PO Box 42026, Washington, D.C. 20015.

We believe you will find them responsive to your requests.

We also call your attention to four magazines that we think you will find interesting as well as informative. The first is *BUFFALO* (APA Communications, PO Box 879, Manchaca, Texas 78652), which is published "for the Black American Military Professional." Another is *MILITARY IMAGES* (published by Harry Roach, 706 Mickley Road, Whitehall, Pennsylvania 18052), a magazine that aims at "preserving the visual history of the American fighting man, 1839-1939."

The other two magazines are published in Israel by Eshel-Dramit Limited, PO Box 115, Hod Hasharon, Israel. They are *BORN IN BATTLE*, which carries accounts of both past and present military campaigns, and *MILITARY ENTHUSIAST*, which covers mainly military equipment and organization.

All four of the magazines will send you information on their subscription terms and prices.

We also mentioned in our November-December 1981 issue some of the books we received in recent months that we thought you should know about. Many of them should be in your local library. Here are more titles.

In the reference field, we received these excellent publications:

- *SOVIET ARMED FORCES ANNUAL, VOLUME 4*. Edited by David R. Jones (Academic International Press, 1980. 416 Pages. \$45.00). This fourth issue in this most important series contains almost 70 more pages of material than its predecessor volumes, several new sections, and many more tables and figures. Various experts in the field discuss Soviet ground forces, strategic rocket forces, airborne troops, and air force and naval efforts. This series has become an indispensable reference tool.

- *THE MILITARY BALANCE, 1981-1982* (Published by the International Institute for Strategic Studies, London. 136 Pages. \$14.00, Paperbound). This is the twenty-second issue of this very fine reference publication, one that has gained a worldwide reputation for its factual presentations. In addition to presenting its usual country-by-country statistics, the Institute spells out three troubling problems the world faces in the military area: the economic strain on many countries maintaining large standing military forces; the Soviet Union's modernization of its theater nuclear forces; and the possibility of increasing military confrontations in the so-called Third World.

- *HISTORICAL JOURNALS: A HANDBOOK FOR WRITERS AND REVIEWERS*. By Dale R. Steiner (ABC-CLIO, Santa Barbara, California, 1981. 213 Pages.) Many professional military people like to write for historical journals. The author lists information about more than 350 such journals and offers some cogent advice on writing articles and book reviews.

We also received these three outstanding publications from the Army's Center of Military History: *INTEGRATION OF THE ARMED FORCES, 1940-1965*. By Morris J.

MacGregor, Jr. (Defense Studies Series, 1981. 647 Pages. \$17.00); *THE ARMY MEDICAL DEPARTMENT, 1775-1818*. By Mary C. Gillett (Army Historical Series, 1981. 299 Pages. \$11.00); and *VIETNAM FROM CEASE-FIRE TO CAPITULATION*. By Colonel William E. LeGro (1981. 180 Pages, Paperbound). These publications are available from the U.S. Superintendent of Documents. The Center has been putting out many fine publications over the years and you should make an effort to become familiar with its works.

On the Civil War era, we found these three books most interesting:

- *REFLECTIONS ON THE CIVIL WAR*. By Bruce Catton. Edited by John Leekley (Doubleday, 1981. 246 Pages. \$15.95). One "listens" to this book rather than "reads" it. A form of oral history, the book was prepared from tape recordings originally made by Catton some years ago for distribution to educational institutions. Catton's thoughts "listen" well, although he offers little that is new.

- *THE IMAGE OF WAR, 1861-1865: VOLUME I, SHADOWS OF THE STORM*. Edited by William C. Davis. A Project of The National Historical Society (Doubleday, 1981. 464 Pages. \$35.00). Outstanding in every respect, this book is the first of a planned five volumes. It contains more than 600 photographs, and the text is limited to what has to be said. The bulk of photographs have never before been published. Every phase of the war is covered, including the home fronts. Don't miss it.

- *THE HARDTACK REGIMENT: AN ILLUSTRATED HISTORY OF THE 154th REGIMENT, NEW YORK STATE INFANTRY VOLUNTEERS*. By Ma-

ii. Dunkelman and Michael J. Winey (Fairleigh Dickinson University Press, 1981. 211 Pages. \$19.50). An interesting account of a Northern infantry regiment from its organization in September 1862 to its mustering out in June 1865. It fought in both the eastern and western theaters of operations and was with Sherman's army on the famous march to the sea.

World War II happenings have also been the subject of a number of recently published books:

- **NORMANDY: THE BRITISH BREAKOUT.** By Major J.T. How (London: William Kimber and Company Limited, 1981. 238 Pages), and **PATTON'S GAP: AN ACCOUNT OF THE BATTLE OF NORMANDY, 1944.** By Major General Richard Rohmer (Beaufort Books, 1981. 240 Pages. \$14.95). In these books, a Canadian author (Rohmer) and a British author (How) criticize the overall Allied commander in Normandy in August 1944, General Bernard Law Montgomery, for his failure to trap more of the German forces in the Argentan-Falaise area. Rohmer saw the unfolding events from the cockpit of a fighter-reconnaissance aircraft, How as a member of the British 11th Armored Division. How's narrative is particularly good for its description of numerous small unit actions, Rohmer's for presenting the problems of air-ground coordination that plagued the Allied high command at this most crucial time.

- **ROMMEL'S WAR IN AFRICA.** By Wolf Heckmann. Translated from the German by Stephen Seago (Doubleday, 1981. 366 Pages. \$14.95). A former journalist and World War II veteran, the author is quite critical of Rommel the man and of Rommel the leader. Although he wrote the book for German readers, Heckmann's narrative is useful to military professionals of all countries, because from it they can gain much from his study of one of World War II's most interesting (and perhaps over-rated) battlefield commanders.

- **THE BATTLE FOR CASSINO.**

By Janusz Piekalkiewicz (Bobbs-Merrill, 1980. 192 Pages. \$16.95). A day-to-day account of the events that made up one of World War II's greatest infantry battles. The author follows the movements on both sides, although some may not like the way the narrative runs its daily course. He does give the Polish units their due credit.

- **THE FRENCH RIVIERA CAMPAIGN OF AUGUST 1944.** By Alan F. Wilt (Southern Illinois University Press, 1981. 208 Pages. \$15.00). The author, an associate professor of history at Iowa State University, details in this book the events that led up to DRAGOON, the Allied landing in southern France in mid-August 1944, and the results of it. He feels that "while Dragoon may not have been decisive in winning the war, it was a highly significant operation," but admits that not all U.S. and British military historians agree with him. But Wilt presents a number of strong arguments to support his findings, and they just might be too strong to overcome.

- **VICTORY AT GUADALCANAL.** By Robert Edward Lee (Presidio Press, 1981. 260 Pages. \$15.95). Written in a light, almost breezy style, with many conversational bits thrown in for good measure, the author — who served with an Army unit on the island — recalls the highlights of the fighting for Guadalcanal, the first step on the long road to Tokyo.

Now, here are several of our longer reviews:

- **MOUNTED COMBAT IN VIETNAM.** By Donn A. Starry (Superintendent of Documents, U.S. Government Printing Office, 1977. 250 Pages). Reviewed by Lieutenant Colonel Samuel B. Jones, United States Army Reserve.

This monograph provides an account of the operations of armored units of the U.S. Army and also describes mounted combat of the French, South Vietnamese and North Vietnamese armies in Vietnam. The term "armored" is used to refer to those units whose primary method of

fighting was mounted, and it includes tank and mechanized infantry companies and battalions, and armored cavalry and air cavalry troops and squadrons.

It was prepared between 1973 and 1976 by a task force at Fort Knox directed by then-Major General Donn A. Starry. Fresh from the Vietnam battlefields and ably qualified for the task at hand, Starry had been a member of the 1966 study group, "Mechanized and Armored Combat Operations, Vietnam," which had evaluated armored operations in Vietnam. In 1969, Starry had assumed command of the distinguished 11th Armored Cavalry Regiment and had actively engaged in mounted combat operations in Vietnam.

Basically, Starry's monograph provides a chronology of mounted combat in Vietnam beginning with the operations of the French Army and the South Vietnamese Army followed by a description of the build-up of U.S. armored forces in Vietnam. It examines and explains how armor operations were conducted until the close of the conflict. These descriptions are followed by Starry's personal reflections.

General Starry's thesis is clear: mounted combat is possible in tropical, underdeveloped countries even when the front lines are not clearly defined. He passionately believes in the capability of well-trained and well-led armor units. In fact, the major criticism of the monograph is that he sometimes overstates his case. This may stem from his natural enthusiasm for armored cavalry and for other armor units, but it does obscure the broad perspective.

The U.S. Army must prepare for future challenges, and any study of previous experiences can help. For this reason I recommend this monograph not only to combat arms officers but to logisticians as well.

THE VIETNAM WAR: THE ILLUSTRATED HISTORY OF THE CONFLICT IN SOUTHEAST ASIA. Edited by Ray Bonds. A

Salamander Book (Crown Publishers, 1979. 248 Pages. \$17.95).

Fourteen knowledgeable and highly qualified historians join Ray Bonds to produce what must rank as one of the better histories to date of the war in Vietnam. Among those historians are Bernard C. Nalty and Charles B. MacDonald, both formerly with the Army's Center of Military History; William Lee Hammond, now with the Center; and Ray L. Bowers, from the Office of Air Force History.

The book has 24 separate essays, an index, a chronology of the war's main events, a list of the key individuals, and a foreword by General William Westmoreland. Its large size lends itself admirably to the accompanying graphics — hundreds of photographs, numerous drawings, and a multitude of maps, tables, and charts.

This is an excellent publication, and it should be regarded as a standard reference work on the Vietnam War.

ON A FIELD OF RED: THE COMMUNIST INTERNATIONAL AND THE COMING OF WORLD WAR II. By Anthony Cave Brown and Charles B. MacDonald (Putnam's, 1981. 718 Pages. \$19.95). Reviewed by Colonel James B. Motley, United States Army.

The authors contend that those who believe the Cold War began with the end of World War II make a "serious inaccurate historical assumption." They believe the Cold War began in January 1919 in the aftermath of the Bolshevik Revolution when Lenin proclaimed the formation of the Communist International (Comintern), whose task was to fight a secret war against the capitalist states using highly trained subversives to overthrow those governments and to establish the "dictatorship of the proletariat."

The authors have drawn heavily on a mass of material that has recently been made available; they also discuss a host of actors. They divide their

book into three main parts and include a six-page bibliography and extensive endnotes.

Unfortunately, the book is marred by two obvious deficiencies: There are many typographical errors, and the authors apparently accept their new material in an uncritical and unquestioning fashion.

Regardless of these shortcomings, the book does provide additional insights into the relationship between the United States, other Western powers, and the Soviet Union. It is a most relevant book for the serious student of Soviet politics.

BENEATH THE EAGLE'S WINGS. By John Curtis Perry (Dodd, Mead, 1980. 253 Pages. \$12.95). Reviewed by Major C.T. Guthrie, United States Army.

Serious military historians and casual readers of history as well will find this book enjoyable and informative. The author is associated with Harvard University's Japan Institute and is eminently qualified to discuss the subject of the occupation of Japan by United States forces.

He believes the success the U.S. enjoyed in its occupation policies was gained despite its ethno-centrism, racism, and general ignorance of the Japanese culture; he also believes that the U.S. and Japanese interactions during the occupation period, which ultimately led to an almost total change of direction for the Japanese nation, represent a high point of U.S. history.

The author was exceptionally thorough in his preparatory efforts, and he includes extensive footnotes and a comprehensive bibliography for the serious history student. He also presents a pleasing, highly enjoyable writing style that belies the wealth of factual historical information he includes in his book.

His book represents a significant contribution to academic literature on the Japanese occupation. It demands your utmost consideration. That the book is so pleasurable to read merely adds to its value.

THE UNKNOWN BATTLE: METZ, 1944. By Anthony Kemp (Stein and Day, 1980. 250 Pages. \$10.95). Reviewed by William M. Brooks, Wrightsville Beach, North Carolina.

Anthony Kemp is a distinguished expert in the field of military architecture and fortifications. He is also the founder and chairman of the International Fortress Study Group.

Here, he presents us with a very good book that deals with three controversial but related subjects: the strategy and tactics of the Metz campaign; the argument between Generals Montgomery and Patton over the priority of supplies; and the military value of stationary fortifications.

In the late summer of 1944, General Patton's Third U.S. Army was before the Moselle and Lorraine plateaus; it was poised to pursue the retreating Germans into the Saar and back to the Rhine River. But its tanks were out of fuel and its lines of supply were stretched to their utmost across the plains of central France.

Patton hinted to his subordinates that there was a conspiracy to rob him of his chance to "end the war in '44." But, as the author explains, it was Montgomery's abortive effort to take the Rhine bridges in the north that received priority and, therefore, condemned Patton's army to sit on the sidelines and to wage a war for which its commander had neither the talent nor the inclination.

Securing a bridgehead over the Moselle River, though, and occupying the city of Metz, which Patton was determined to do, meant capturing a series of fortresses that were impervious to even the heaviest air and artillery bombardments. In fact, it was these fortresses, built nearly 50 years before, that enabled a weak but determined German force to resist and, for a time, to stop the Third Army. The battle for Metz, then, became the last time in the history of modern warfare when supposedly outdated fortresses played a decisive role against a mechanized army.

The Metz campaign was fought

chiefly by infantrymen, artillerymen, and engineers. Both sides struggled with inadequate supplies, a lack of reserves, and appalling weather. Whether the battle should have been fought is a matter of opinion, and the reader is left to make up his own mind. The author concentrates his efforts on criticizing the tactical direction of the fighting. He believes, for example, that many lives were wasted in futile attacks on fortified positions.

If there was any glory in the battle, it belonged to the junior officers and enlisted men on both sides. It was a classic example of the horrible face of war.

Colorfully written and loaded with first-hand accounts, Kemp's work lacks only in photographs. He has written a fine account of a campaign too long forgotten.

GRANT: A BIOGRAPHY. By William S. McFeely (Norton and Company, 1981. 592 Pages. \$19.95). Reviewed by Colonel Robert G. Clarke, Office of the Joint Chiefs of Staff.

This is an outstanding volume, lucidly written, thoroughly researched, well-documented, and finely drawn. The author is a professor of history at Holyoke College and his narrative is a splendid account of a man whose career dashed back and forth between anonymous failure and vast public acclaim. Grant was one of our nation's most improbable heroes — a common man, but one who possessed uncommon qualities that could be called forth at critical times.

Grant's career is generally well known — his service during the war with Mexico, his problems after the war, his leaving the Army in 1854, and his failure at business from then to the outbreak of war in 1861. A little more than three years later, though, Grant was a Lieutenant General commanding the Northern armies. He saw clearly that the war required a total effort on the part of the Northern people, and he had a clear appreciation for the geography,

demographics, and logistics involved.

He carried out his final plans for the destruction of the Confederacy with consummate energy and skill and was eventually hailed by the men he led and the people of the country as their greatest military hero. After eight years as President of the United States, he retired to write his memoirs.

The author concludes that Grant "had no organic, artistic, or intellectual specialness. He did have limited though by no means inconsequential talents to apply to whatever truly engaged his attention. The only problem was that until he was forty, no job he liked had come his way — and so he became a general and president because he could find nothing better to do."

This is a special book and it belongs in your library if you are at all serious about history.

FLYING BOMB: THE STORY OF HITLER'S V-WEAPONS IN WORLD WAR II. By Peter Cooksley (Scribner's, 1979. 208 Pages. \$12.50). Reviewed by Captain Don Rightmyer, USAF, Directorate of Soviet Affairs, Washington, D.C.

The story of the V-1 and V-2 (Hitler's "revenge" weapons) during World War II is an interesting look at advanced weaponry and a prelude to the space efforts of the thirty years that followed the end of the war. Even though both machines were primitive in design and suffered high failure rates, they were quickly snatched up by the Soviet Union and by the United States after the war because of the wealth of technical information.

The author promises to tell that story in his book, but he fails miserably. What actually appears in the 150 pages of narrative is a collection of newspaper and personal accounts of life in England under the shadows of Hitler's "flying bomb." The author promises a non-technical account in his preface but then devotes twelve pages to a detailed discussion of the innermost workings

of the V-1. This detail is necessary only if you plan to build one.

Finally, the book is poorly written and organized, although its appendices might be of interest to modelers and museum curators. In sum, the dust jacket calls the story of the V-weapons a largely untold one; this book does little to change that.

MERC: AMERICAN SOLDIERS OF FORTUNE. By Jay Mallin and Robert K. Brown (Macmillan, 1979. 216 Pages. \$14.95). Reviewed by Leroy Thompson.

Few authors could treat this subject with as much knowledge and experience as these two men. Robert K. Brown, who publishes *Soldier of Fortune* magazine, has probably done more with his publication to foster public interest in and awareness of contemporary soldier-adventurers than all the other media combined. Jay Mallin, who is affiliated with Brown's magazine, is an expert on Latin America and terrorism.

Their book, therefore, is an apologia but not an apology for modern mercenaries. They obviously admire the courage and fighting ability of the men they write about but they do not gloss over the character flaws and psychological quirks that explain why some men choose to be warriors outside of the conventional military system.

By treating individually a few of the more prominent modern American professional adventurers, the authors manage to give the reader an insight into the breed. One of the most obvious misconceptions that the book clears up is the myth that men become mercenaries for money. Virtually every individual mentioned in this book had some incentive other than pay; in many cases, belief in a cause was the only motivation.

I recommend this book for students of modern brushfire wars or wars of liberation, because it contains many never before published narratives of the fighting in Angola, Rhodesia, and Nicaragua. Lovers of adventure who happen to be profes-

sional soldiers should also find this an interesting work.

THE REVOLUTIONARY ARMIES: THE HISTORICAL DEVELOPMENT OF THE SOVIET AND THE CHINESE PEOPLE'S LIBERATION ARMIES. By Jonathan R. Adelman (Greenwood Press, 1980. 230 Pages). Reviewed by Dr. Joe P. Dunn, Converse College.

Jonathan Adelman of the Graduate School of International Studies at the University of Denver contends that Soviet and Chinese civil-military relations have not been adequately explored. A survey of his excellent selective bibliography, including works in both English and Russian, calls this proposition into question. Nevertheless, Adelman has written a significant study that places him in the company of those — John Erickson, Raymond Garthoff, Samuel Griffith, and the like — who have written on the subjects in question.

The author focuses on the civil war experience that followed the revolution in each country. Therein, he believes, lies the difference between the Red Army and the PLA. The Soviet Army has been apolitical and has played only a small role in the policymaking process. It has never been invoked as a role model for society. Few Soviet generals have achieved significant political power.

Conversely, the PLA has been at the center of Chinese politics. The Chinese Politburo has always contained several high ranking military men, and the political leadership must cultivate the military to remain in power. Not even Mao was exempt. During and following the Cultural Revolution, the military services were the decisive political force in China, and they remain formidable today.

This is a fine study in comparative communism and civil-military relations. It is packed with details about the two armed forces and includes valuable tables. It is well documented and tightly written. In sum, it is a first-rate contribution.

NAM: THE VIETNAM WAR IN THE WORDS OF THE MEN AND WOMEN WHO FOUGHT THERE. By Mark Baker (William Morrow, 1981. 324 Pages. \$12.95). Reviewed by Lieutenant Colonel Richard J. Rinaldo, Armed Forces Staff College.

When the tocsin sounds, the job of soldiers is to hurt people and break things. There was plenty of both in Vietnam. But to believe Mark Baker, that's all there was.

Few of the oral histories in this book go further than to rehash the worst of the war and its aftermath for the Vietnam veteran. For the most part, the book is a dirge of the lost and the forlorn — doped-up crazy losers doing war crimes and atrocities. It joins a genre — up to now mostly made up of novels — that depicts the war and its warriors as sad, sick, and sickening.

Unlike *Everything We Had* by Al Santoli, published about the same time, the first person accounts in this compilation are not identified. This leads to a lack of credibility for the book as a whole.

There are a few good stories and the author seems sincere in his efforts to tell what it was like for the soldier in Vietnam. Unfortunately, Baker is not a veteran. So his internal caliper for truth does not measure well. In any event, the result is, to use one of his favorite words, "wasted."

RECENT AND RECOMMENDED

DEFENCE BY MINISTRY: THE BRITISH MINISTRY OF DEFENCE, 1944-1974. By Franklyn A. Johnson. Holmes and Meier, 1980. 234 Pages. \$42.50.

THE POLITICAL ECONOMY OF FOREIGN POLICY BEHAVIOR. Edited by Charles W. Kegley, Jr., and Pat McGowan. Sage International Yearbook of Foreign Policy Studies, Volume 6. Sage Publications, 1981. 300 Pages. \$9.95. Paperback.

VICTORY WITHOUT WAR. By Lieutenant Colonel Charles McGinn, United States Air Force, Retired. Hwong Publishing Company, 1980. 149 Pages.

Fritz: THE WORLD WAR I MEMOIRS OF A GERMAN LIEUTENANT. By Fritz Nagel. Edited by Richard A. Baumgartner. Hunting-

ton, West Virginia: Der Angriff Publications, 1981. 160 Pages. \$6.95. Softbound.

OUR WAR: AUSTRALIA DURING WORLD WAR I. By Brian Lewis. Melbourne University Press, 1980. 328 Pages. \$26.00.

WAR IN THE OUTPOSTS. By Simon Rigge and the Editors of Time-Life Books. Little, Brown and Company, 1981. 208 Pages. \$12.95.

THE ON-YOUR-OWN GUIDE TO ASIA. Revised Fifth Edition. Edited by John Doll and Terry George. Charles E. Tuttle Company, 1981. 383 Pages. \$4.95. Paperback.

ALL-ASIA GUIDE. Completely Revised 11th Edition, 1980. Distributed by Charles E. Tuttle Company. 682 Pages. \$7.95. Paperback.

HOW LITTLE IS ENOUGH? SALT AND SECURITY IN THE LONG RUN. By Francis B. Heober. National Strategy Information Center, Inc., 1981. 58 Pages. \$5.95. Paperback.

P-47 THUNDERBOLT AT WAR. By William N. Hess. Charles Scribner's Sons, 1980. 160 Pages. \$17.50.

MISSILES OF THE WORLD, 3d Edition. Michael J. H. Taylor. Charles Scribner's Sons, 1980. 152 Pages. \$14.95.

THE LUFTWAFFE IN THE BATTLE OF BRITAIN. By Armand van Ishoven. Scribner's, 1981. \$29.95.

ALPINE ELITE: GERMAN MOUNTAIN TROOPS OF WORLD WAR II. By James Lucas. Jane's Publishing Incorporated, 1980. 226 Pages. \$19.95.

DOUGLAS MacARTHUR: THE PHILIPPINE YEARS. By Carol Morris Petillo. Indiana University Press, 1981. 301 Pages. \$17.50.

SOVIET BLOC MERCHANT SHIPS. By Bruno Bock and Klaus Bock. U.S. Naval Institute Press, 1981. 269 Pages. \$29.95.

INSIDE AND OUT: HOSTAGE TO IRAN, HOSTAGE TO MYSELF. By Richard Queen. G.P. Putnam's Sons, 1981. 286 Pages. \$13.95.

AN AUSTRALIAN ARMY CADET UNIT, 1945-1977. By K.G. Mortenson. Victoria, Australia: Gerald Griffin Press, 1979. 415 Pages. \$21.00.

THE 4TH MARINES AND SOOCHOW CREEK. By F.C. Brown, et al. The Military Journal Special Number 3. International Graphics Corporation, 1981. 27 Pages. \$2.50. Paperbound.

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.

INFANTRY LETTERS



SEPARATE QUESTIONS

Dear Sir,

I have followed the recent articles on the possible change in military sidearms and now see the article on the M16 rifle (INFANTRY, September-October 1981, Page 22), which will probably reopen the M16 controversy. I feel compelled to point out that most if not all of the noise being generated on these subjects results from mixing two separate questions without identifying that they are separate. This confuses an already difficult issue.

Are we discussing weapons or ammunition? Many people object to the 5.56mm round used by the M16. Would they be happy with an AR10? Many others feel the M16 is an "inaccurate, unreliable piece of junk." Would they be happier with an FN-FAL? A mini-14? A Galil? The question of 5.56mm versus 7.62mm is separate from the question of accuracy and reliability.

Regarding ammunition, the point usually addressed is "knock-down power" (called "stopping power" in handgun discussions) and "lethality," when comparing the 5.56mm to the 7.62mm, or the 9mm parabellum to the .45.

It is unfortunate that these terms are never defined. Lethality is a measure of the seriousness of the likely injury, while stopping power is a measure of the probability that an antagonist will be immediately put out of action, regardless of the final result. Whether he dies or is up again in ten minutes does not matter to this measure. (A club has good stopping power.)

Most INFANTRY readers are probably aware that the .45 is accepted as having significantly greater stopping power than the 9mm, while

lethality studies show that the 9mm is equal or superior. (*Defensive Handgun Effectiveness*, by C.E. Peters, c1977, is probably the best book available on the subject.)

Obviously, we would like a round with both good stopping power and high lethality. But in the real world, trade-offs are usually necessary.

Without going into great detail, I believe it has been shown (both analytically and in actual experience) that the 5.56mm round has excellent lethality but leaves something to be desired in stopping power, and that the 7.62mm has slightly inferior lethality (although not enough less to worry about) but far superior stopping power. Similarly, the 9mm has lethality equal or superior to that of the .45, but much less stopping power.

We can argue about the best mix of lethality, stopping power, long range ballistic accuracy, penetration, and light weight, but let us at least understand what we are arguing about.

By the way, in all of the articles and letters I've seen on this subject recently, a discussion of penetration was lacking. With modern materials, it is realistic to expect body armor to become common on the future battlefield. Even now, a three- or four-pound Kevlar vest will stop both a 9mm and a .45 round. As armor gets better, even rifles may need penetrator rounds by the end of this decade.

Regarding the question of the M16 rifle, while it is not my favorite (I prefer the mini-14) the advantages Mister Osborne discussed in his arti-

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.

cle are real. The M16 has proved adequate over many years in many parts of the world. While we should look for a better light assault rifle, it does not serve the Army to keep repeating like a litany that "the M16 is a piece of junk." It can only decrease the confidence of the troops in their equipment and of the public in the Army. In the long run, it's counter-productive.

ABRAM MARK RATNER
CPT, USAR
Orange, New Jersey

APCs OF THE PAST

Dear Sir,

Even though I am retired, I have followed your articles on the IFV and especially enjoyed the one in the July-August 1981 issue ("The Future IFV," by Clifford D. Bradley, page 21), because it really came to grips with some points.

I must, however, take exception to some statements about the vehicles, because I had extensive training with the M75 and the M59 in Germany and with the M59 at Fort Hood, Texas.

The author states that the M75 had a top speed of 43 mph, but it was not uncommon in Germany for the 75 to hit 60 mph or more. That 360-horsepower aircraft motor and accompanying transmission were something. The M75 had a lot of power. There was no way the M59 could keep up with it. The M75 could keep up with the M48 easily, and we trained a lot with M48s at Wildflecken. When the snow flew, off came the track pads, and with grouzers only, even the M48s couldn't stay with us.

The main problem with the M75 was that it was nose-heavy. A tail-

heavy tank could "float" over a small obstacle, where we would have to slow down and head into it if we did not want to stand on our nose. I have a scar on my head from bouncing off the overhead.

The article says that the M59 would top out at 32 mph. It might if it was new, if its motors were perfectly tuned, and if it had a tail wind. That monster was underpowered and should have had an automotive engineer for each vehicle to maintain it.

As for keeping up with tanks, forget it, especially cross country and uphill. But there was a trick that both the M59 and the M75 could do, but the M75 did it better: If the grade got a little too steep, they could back up a hill.

The article also forgets the experiments in Korea in which they took the turrets off and all the ammunition racks out of old M4 Shermans. I didn't ride in them but had many friends who did. They told me that with all that weight removed those old Shermans were really fast. They could carry a squad plus supplies and were used mainly to supply OPLRs and outposts. They attracted artillery fire, of course, but with their speed and with the soldiers wearing flak jackets and steel helmets they weren't too dangerous.

I like the idea of the stretched M113, because it is too small as it is. The M59 was fairly big inside but when it was combat loaded it could still get awfully crowded. We needed clips on the roof to hold the machinegun, its tripod, and the rocket launcher, as well as racks under the seats to hold the rifle ammunition and the .50 caliber ammunition boxes.

I agree we need firing ports, but there must be adequate vision. Might we not be starting a Maginot Line complex where a rifleman will be reluctant to dismount and just want to fire from the inside? To adequately support armor and his own vehicle, the infantryman must dismount, especially in close terrain. Those tanks are dead ducks without enough

infantry support from close-in attack, and dismounted is the only way the infantry can supply it.

APCs also need a quick, reliable refueling system. Refueling with Jerry cans with at most two or three men is hell, because the fuel is seldom close to the road. When the men get through, they're all soaked with fuel and completely whipped and ready to torch that metal monster.

I notice in your Infantry News section that the Soviets' new 5.45mm rifle uses hollow point ammunition. That constitutes a dum-dum as defined by the Geneva Convention. Are we the only Army that tries to abide by those outmoded rules, rules that we never sanctioned by formally signing the treaty?

One last thing — the *Panzerfaust* made one helluva antivehicular booby trap.

LEO A. APPLING JR.
MSG (Ret)
Odem, Texas

NBC CONTAMINATION

Dear Sir,

In the July-August 1981 issue of *INFANTRY* (page 2), Major General David Grange addressed the need for breakout operations training. In particular, he stated that "a unit may become isolated and encircled because ... the enemy's use of NBC weapons either destroys or contaminates areas, thereby denying or blocking the unit's planned routes of displacement and communication."

An area that is contaminated by the use of NBC weapons is not necessarily denied to us by that contamination, but particular care must be taken in crossing that area. This is the reason one of the current ARTEP tasks for the Mechanized Infantry Tank Task Force is to cross or bypass a contaminated area. FM 21-40, NBC Defense, states on page 7-5: "In an exploitation, units are likely to be forced to cross a chemically contaminated area." FM 71-1, The Tank

and Mechanized Infantry Company Team, on page 1-13 states: "The force that can live in this environment (NBC) and still move, use terrain and overwatch, suppress and concentrate superior force, will defeat the side that cannot."

The U.S. Army will not always have the luxury of bypassing NBC contamination, and we must recognize that fact. There may well be times when the tactical advantages obtained by attacking an enemy's flank or rear through a contaminated area far outweighs the risk. Indeed, the unexpected use of such an area can create surprise, which is a decided advantage. Only the tactical commander can decide this. But we must train to cross these areas routinely to provide our commanders an opportunity to use all of the battlefield.

TIMOTHY B. SAVAGE
CPT, Chemical Corps
Fort Rucker, Alabama

MASTER GUNNER PROGRAM

Dear Sir,

I would like to offer a few ideas for infantrymen to consider and discuss.

I strongly believe the Infantry needs a master gunner program just as we have in the Armor branch. The Infantry master gunner would be a school trained antitank weapons trainer and would be assigned to TOE positions at all levels — company, battalion, brigade, and division.

Suggesting a master gunner program does not imply that the Infantry can't train its people. It is just the most effective and efficient way to stay on top of the mission of tank killing.

The master gunner would not take away any responsibility for training from the squad or platoon leaders, or the responsibility for setting guidelines and standards away from the commander. He would be the commander's trained advisor, just as the maintenance NCO or warrant officer is the advisor on maintenance.

The master gunner would manage

training resources — ammunition, training devices, ranges, time, and people. He would supervise the training of the unit's trainers and supervise the turret mechanics and armorers. With guidance from the commander, he would formulate the plans for gunnery — qualification, monthly sustainment, or integration into field training.

In the mechanized infantry company and battalion, the master gunner would be the commander's track commander or gunner on the APC or IFV. The master gunner should also be on the TOEs of non-mechanized infantry units with a combat position of operations sergeant.

A thought on unit armorers is that the job should be a special skill position, not the position of a 76Y. My experience has been that the best armorers are not 76Ys but 11Bs. I recommend we establish an armorer's school in which an ASI would be awarded. Normally, the armorer's MOS would be that of the predominant MOS of the company and, therefore, the individual would be familiar with the unit's weapons and their importance to the unit's ability to perform its mission.

I have not worked with the IFV and I know a lot of smart guys have, but I can't believe the firing port weapon can suppress out to ranges of 250 to

300 meters. I see that the task is in the draft field manual for IFV gunnery, and I see ranges being built at Grafenwohr for that task. I hope we aren't wasting time and money. I do have one idea for an additional use for these firing port weapons: When my battalion went through training at the German Infantry School, I felt we could have used the short automatic rifle with the assault teams clearing houses in "Bonmland" or clearing trenches in the forest-fighting phase.

Finally, I believe we need to put more emphasis on CP and TOC training. The subject may not be as exciting as maneuver, but command and control won't happen if we don't conduct training on how to do it.

SCOTT ADAMS
CPT, Infantry
8th Infantry Division

BOOTS AND HANDGUNS

Dear Sir,

I would like to join the discussion that has been in progress for the past several issues in your Letters section on the new boots and on the selection of a handgun.

For the past 12 years, I have worn a boot with a Vibram sole that is identical to that on the Army's new boot.

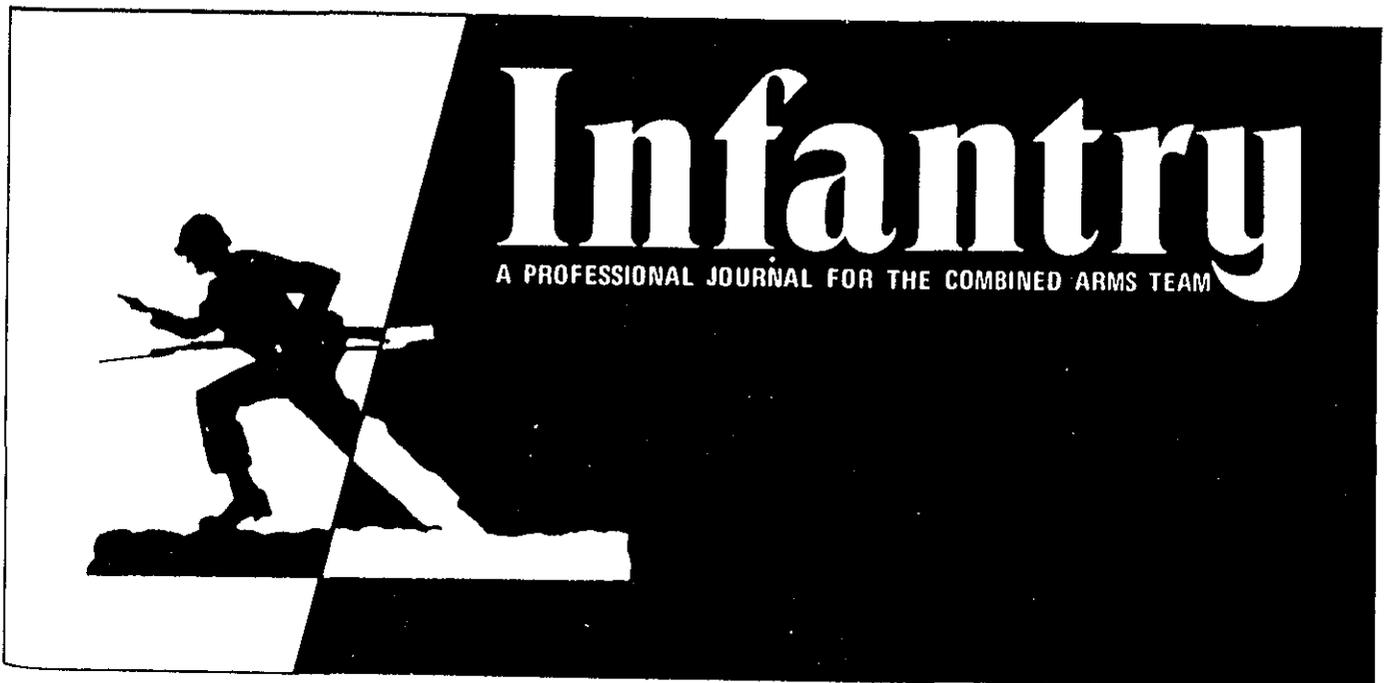
When it is clean the sole gives good traction on a variety of surfaces, but it picks up everything, and when it is clogged it is no better than a plain smooth sole.

This Vibram sole was never intended to be an all-purpose sole; it was intended to replace leather or hobnail soles on climbing boots. The problem with the standard Vibram sole is that the lugs are too small and too closely spaced. Thus, anything that gets in between the lugs tends to stay there. The U.S. manufacturer of Vibram soles has a slightly different version, called the *Securite*, which eliminates most of the clogging problems.

And just because a boot has a leather lining does not mean it will not need breaking in; leather that is so soft that it conforms to the shape of the foot upon first wearing is so soft that it will rapidly stretch out of shape. I've found that in such boots, the soles tend to outlast the uppers.

I agree that a steel-shanked boot is preferable to one without a shank, and in a well-designed boot the weight increases should be negligible.

My final comment on the new boot is that it is not very new. Civilian boot manufacturers have been making identical boots for years. The designers at Natick have maintained their record of being about twenty years behind the times. They have ig-



nored the revolution in boot design that has followed the great expansion in backpacking and mountaineering. The boots being offered by the more progressive makers are a far cry from the "new" G.I. boot.

As for the other controversy, I am totally opposed to the adoption of a 9mm service pistol, chiefly because it has been shown to be less effective than the .45.

Those who point to the FN-Browning M1935 "High Power" as John Browning's endorsement of the 9mm Parabellum might be interested in knowing that Browning originally designed the High Power for a 9.8mm/.40 caliber cartridge. He was no fool, though. He eventually settled for the 9mm round because the European military "experts" wanted it.

In 1910, Colt's salesmen had gone around Europe with a 9.8mm version of the pistol that was to become the M1911. They found that the "experts" were not interested; they wanted to go with such powerhouses

as the .30 Luger and the .32 ACP. But just because our friends screw up is no reason for us to do so.

I would have hated to be Sergeant Alvin York if he had had to stop those seven Germans with a 9mm instead of a .45. Most people don't know it, but York was charged at close range by the Germans who had waited until he had to reload his rifle. Seven men, seven shots. That's good enough for me.

ROY L. WILSON, JR.
Harlem, Georgia

MPs ARE SOLDIERS FIRST

Dear Sir,

I am writing in hopes of informing all infantry soldiers that Military Policemen are soldiers first and MPs second.

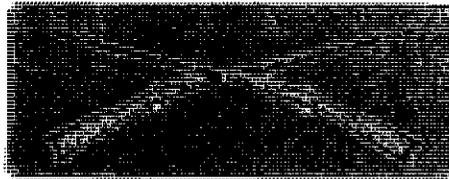
At the U.S. Army Military Police School we realize the importance of the combat support role of the MP.

The trend in recruiting is changing from law enforcement to the combat role. We know that "when push comes to shove" our role in rear area protection, battlefield movement control, and prisoner of war handling will be increased. Our skill qualification testing has shifted from "ticket writing" to perimeter security, patrolling, fire and maneuver, squad and platoon tactics and a lot of other "grunt" subjects.

We are proud to see this change. NCOs are enrolling in 11B correspondence courses to improve their soldierly skills. And this 33-year-old soldier-MP recently completed basic airborne training.

We, the soldiers serving as military policemen, want you infantrymen to know we are of the troops and for the troops and that we appreciate the job you are doing.

RICK DUNLAP
SFC, USA
Fort McClellan, Alabama



Infantry

\$12.00 2 YEARS
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 BILL ME
 NEW
 RENEWAL
 CHANGE OF ADDRESS

YOUR PERMANENT ADDRESS: _____
 STATE OR COUNTRY: _____

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From The Editor

The New Year brings with it a budget cut for INFANTRY as a result of a Department of the Army review of periodicals. The minor changes will not distract from the content; they merely require a slight adjustment of the "windage and elevation knobs" at our location. We feel we are still "on target" and will maintain a tight "shot group."

The number of departments remains the same although we must absorb a reduction of eight pages per issue. Generally, we will simply cut down by a page or two the space devoted to a particular department. Those affected are Letters to the Editor, Career Notes, Book Reviews, and Past Times. The most important aspect of our publication — your articles and features — will continue at their usual length.

We feel that INFANTRY Magazine is a vital vertebra in the backbone of today's Army. Although actions may speak louder than words, what is said and read is crucial to the dialogue that produces any successful action. Our efforts and your continued readership will sustain that dialogue.

DRK

