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Infantry

A PROFESSIONAL JOURNAL FOR THE COMBINED ARMS TEAM

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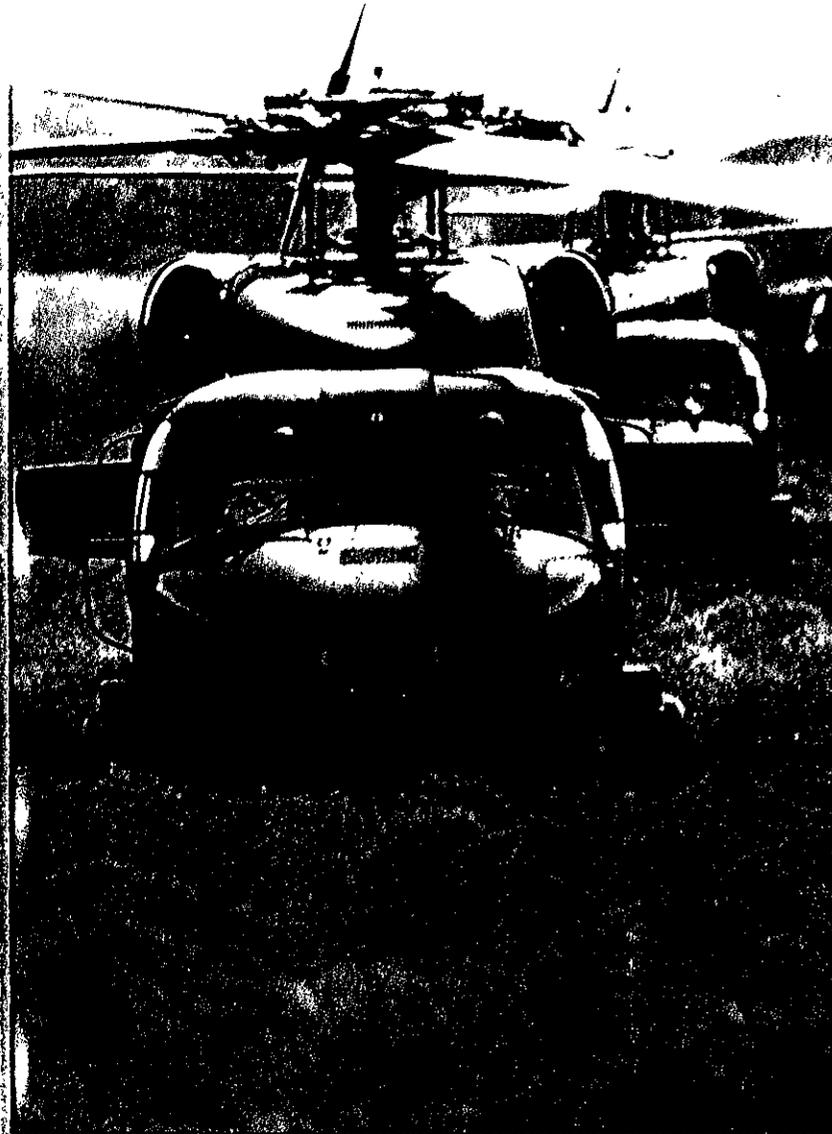
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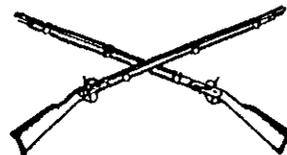
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Commandant's NOTE



MAJOR GENERAL SAM WETZEL

BLACK HAWK IMPROVEMENTS

The Infantry School, in concert with the U.S. Army Aviation Center, is currently in the process of developing a "block improvement program" for the Black Hawk helicopter. This improvement program was begun as an infantry initiative by the combat developer in coordination with the materiel development community to improve the helicopter's deployability and survivability and concomitantly to keep pace with the combined arms requirements of the 1990s.

The first UH-60A Black Hawk was delivered to the Army in 1978. Since then, more than 200 have been delivered to various CONUS divisions and installations, and this fleet has accumulated more than 58,000 operational flying hours. The Army's experience with Black Hawks includes operations in the Egyptian desert, the Panamanian jungles, and the Alaskan arctic environment. By this summer, units in USAREUR will be using it as well.

As a result of this experience, the Army is now able to forecast the improvements that are needed in the Black Hawk to provide the Army with a capability for worldwide operations on the battlefield of the future. Some of these improvements include how to increase its lift so that it can move the High Mobility Multipurpose Wheeled Vehicle (HMMWV) anywhere in the world. Additionally, the Black Hawk's ability to survive against more advanced threat weapons must be updated; at the same time, its avionics package must also be updated with a new generation of equipment. This package includes improving the accuracy of the helicopter's naviga-

tion capability, since we are now required to operate in very remote areas of the world.

The interior space of the airframe must also be reconfigured to give the infantry an ability to carry its future weapon systems and equipment. Additionally, the redesign of the interior should give medical personnel more space for treating patients during medical evacuation missions.

Finally, externally carried fuel tanks must be included in the improvements so the Black Hawk can self-deploy across the longest route of the Atlantic Ocean to Europe.

In addition to these considerations, the Army is looking for innovations such as a two-hook suspension system for external loads. This would permit a vehicle such as a TOW-mounted jeep to be "snugged-up" close to the belly of the Black Hawk, which would allow the vehicle to be flown at very low levels and at high speeds without the oscillation that normally prohibits operational flight at these altitudes.

The Army plans to involve the Navy, Marines, and Air Force in this development program, because each has expressed an interest in the improved version.

Under the Army's proposal, one-half of the future fleet will be produced in the improved version, with plans to retrofit the earlier models later. The projected delivery date for the first improved Black Hawk is some time in 1984 or 1985.

These improvements will help make the 1980s the decade of progress for the combined arms team!

INFANTRY NEWS



THE ENLISTED TRAINING program that is being developed for Bradley infantry fighting vehicle (BIFV) soldiers provides for both progressive and crossover training.

Progression training refers to the transfer of hardware (system-oriented) and software (leadership-oriented) skills that must be mastered at successive skill levels.

Crossover training is needed to provide a transfer of skills in which 11B20 through 11B40 soldiers can be trained and qualified in the 11M MOS at their skill levels.

Once they are qualified in MOS 11M, noncommissioned officers will continue to be assigned to BIFV units through Skill Level 4. Modified NCOES courses will continue to emphasize leadership training, and specific BIFV courses will not replace the courses now provided under the NCOES program.

Entry level soldiers will receive common skills training during the first 12 weeks of one station unit training (OSUT), and will graduate as 11B infantrymen. Certain selected soldiers will then be given an additional three weeks of training in a special fighting vehicle infantryman course. These additional weeks of training are needed because of the number of critical tasks in which MOS 11M soldiers must be trained. These soldiers will also be trained in BIFV maintenance and driving as well as in the basic operation of the turret and its weapon systems.

Of every nine soldiers who will be trained in MOS 11M, one will also be trained during his OSUT as a gunner for a medium antitank weapon, and will be awarded the C2 ASI when he successfully completes the training.

Since all Skill Level 2 BIFV soldiers will be trained to be qualified gunners, and to insure that all BIFV gun-

ners training is standardized, the Infantry School has proposed that this training be held at only two locations — at Fort Benning and at the Seventh Army Training Command (7ATC) in Europe. Thus, mechanized infantry units in the United States would send their soldiers to Fort Benning to receive this Skill Level 2 training, while units in Europe would send their soldiers to 7ATC.

The gunner's course will not duplicate the training now being given in the Primary Noncommissioned Officer Course (PNCOC). Because the latter is primarily a leadership course, 11M20 soldiers will have to attend both courses. The BIFV gunner's course will be four weeks in length.

At Skill Level 3, progression training will be taken care of through the NCOES program, although certain specific training will be needed for the 11M30 soldiers who will be assigned to BIFV units. These soldiers will have to attend the BIFV commander's course — six weeks in length — at Fort Benning to qualify in the skills they will need to perform effectively as BIFV commanders and trainers. The first such course is scheduled to begin in February 1983. All 11M30 soldiers will also attend the Basic Noncommissioned Officer Course (BNCOC).

Those 11M40 soldiers who will go to BIFV units will receive their crossover training through the BIFV commander's course and their progression training through the Advanced Noncommissioned Officer Course (ANCOC). BIFV training will eventually replace M113 training in the ANCOCs.

Skill Level 5 infantry soldiers whose backgrounds have been in MOSs other than 11M will also attend the BIFV commander's course at Fort Benning. There is no course within

the NCOES program into which specific training at this skill level can be incorporated.

Officers (lieutenant through lieutenant colonels) assigned to BIFV battalions will also attend the BIFV commander's course. Their periods of instruction will be tailored to fit their skill levels, duty positions, and specific needs. Certain common subjects will be given to all the officers. Eventually, BIFV training will become part of the core curriculum for the officer basic and advanced courses. BIFV training in the Infantry Pre-Command Course will be made a course elective at the appropriate time.

In December 1981, IOAC students received a two-hour course on BIFV doctrine and tactics. During July 1982, an additional 16 hours of instruction on Abrams/Bradley offensive and defensive tactics will become part of the IOAC curriculum. Beginning in March 1983, BIFV doctrine and tactics will be taught in the BIFV commander's course.

UNITED STATES ARMY RESERVE units that have training affiliations with Active Army units now may wear the shoulder sleeve insignia of the Active Army units, but local approval for wear of the insignia is subject to a mutual agreement between the Reserve unit's major U.S. Army Reserve Command and the Active Army unit commander.

The new policy is included in an interim change to AR 670-1, which was published in the Fall of 1981.

Before this action was taken, only Army National Guard units were permitted to wear the patches of their affiliated Active Army units.

THE RATTLER ANTIARMOR SYSTEM, which is being considered as a replacement for the Dragon, is the subject of a study now being conducted at the Infantry School.

The Rattler can be deployed and manned by a single soldier. It is expected to be highly effective against all known armor systems in both day and night engagements and against low-flying helicopters and fortified point targets under almost any battlefield condition. Its low launch smoke and noise levels will improve an infantryman's effectiveness when he has to fight from an enclosure or a built-up urban area position.

The weapon system will consist of a round (a missile or projectile in a launch tube) and a reusable target acquisition and control device, which can be disconnected from a spent round and attached quickly to a new round to engage successive targets.

Several new developments are available for use with the Rattler:

The **Laser Beamrider** uses a projected laser beam to guide the missile either to attack a target head on or, using sensors to detect the target, to cause the warhead to fire downward onto it to kill it from the top.

The **Tank Breaker** uses a shaped trajectory to attack a target from the top. A fire-and-forget system, it uses a seeker on the missile to home in on an armored target. In a somewhat similar system, fiber optic links could be used as a guidance system to relay an image of the target from the seeker on the missile to a ground-based guidance computer and display unit where a gunner, viewing the target image, could make any needed corrections.

The **STAFF** system (Smart Target Actuate Fire-and-Forget) is similar to the old 90mm recoilless rifle, but the projectile flies over a tank and fires down through the tank's thinner top armor, using sensors to detect the tank's presence.

The Rattler study is to be completed some time in April 1982.

ON THE NEW battle dress uniform (BDU), a "pea green" look results when the sleeves of the jacket are rolled up, because the wrong side of the fabric shows.

Here is a solution:

Step 1. Pull the cuff of the sleeve all the way up to the armpit so that the sleeve is folded over on itself with the inside showing.



Step 2. Make two folds upward toward the armpit.



Step 3. Fold the cuff down over the folds you just made. The buttons and cuff flap should be showing.

This presents a neat cuff with the camouflage pattern covering the rolled-up sleeve.



There are two advantages to this system (in addition to appearance). It allows you to unroll the sleeve quickly by simply pulling down on the cuff — a distinct advantage in a MOPP situation, for example. This method also keeps the camouflage pattern exposed at all times. (*Idea and note prepared by Captain Gregory J. Premo, Command, Tactics, and Doctrine Department, U.S. Army Infantry School.*)

THE PROTOTYPE High Mobility/Multipurpose Wheeled Vehicles (HMMWV) that are being built by three contractors will be tested during the five-month period between 1 May 1982 and 12 September 1982. (See *INFANTRY*, November-December 1981, page 5.) The program calls for both Developmental Testing (DT II) and Operational Testing (OT II) to be conducted concurrently.

The purpose of the test program is to provide data and an associated analysis of the data concerning the operational effectiveness and the suitability of the HMMWV to the Department of the Army In Process Review and the Marine Corps System Acquisition Review Council. The analysis of the collected data will assist in the selection of a prime contractor for the system and will also be used to support the production decision.

The tests will be done using 33 HM-

MWVs, 11 provided by each contractor. The 11 vehicles from each contractor will be configured as six TOW and five utility vehicles.

The OT II program will be conducted by the Army's Operational Test and Evaluation Agency at Fort Campbell, Kentucky, using soldiers from the 101st Airborne Division (Air Assault), and by the Marine Corps' Operational Test and Evaluation Agency at Little Creek, Virginia, using Marines from various units.

The DT II program will be conducted by the Army's Test and Evaluation Command at Aberdeen Proving Ground, Maryland, and at Yuma Proving Ground, Arizona.

A Physical Teardown and Logistics Demonstration will be conducted by the Army's Tank-Automotive Command, Detroit.

Further testing of the HMMWV will be necessary later, because only two configuration kits (TOW and utility) will be tested during DT/OT II. The Infantry School has been tasked by TRADOC to be the proponent agency for this additional testing, which will start during Fiscal Year 1983.

THE INFANTRY OFFICER ADVANCED COURSE writing program has been revised. Group research projects have been added. This change highlights the importance of individual written expression, which is so vital to solid staff work.

During the second week of the course, each IOAC student takes a diagnostic test to measure his basic writing ability. The test results are then used to identify officers who need remedial training. For those who do, a 10-week remedial program has been established; it combines three classroom and two homework hours per week.

The first writing requirement, a 1,000-word philosophy of leadership paper, is graded for composition but is not recorded as part of a student's overall grade. This is followed by a history research project of 100 to 3,500 words in length; this paper

must be completed by the tenth week of the course.

The final project is a staff study that must be presented both orally and in written form.

All projects are graded and carry academic weight. A student who receives a "No Go" on any written requirement will not be eligible for the Commandant's List.

THE INFANTRY SCHOOL's Director of Combat Developments has established a battle simulation center at the School. An integral part of the center is the BATTLE model, which is a time-preserving, Monte Carlo, computer-assisted manual war game.

The center's goal is to provide training in the tactics that are outlined in Field Manual 100-5. The center also analyzes the adequacy of both ammunition supplies and battle positions, and teaches or reinforces an appreciation for the effective use of terrain, weapon capabilities, smoke effects, and other battlefield considerations.

The materials required for the program include terrain boards that depict specific geographic areas. Currently, the center is using a European setting laid out on a board that is 16 feet square. The board's plywood sections are layered with polystyrene for contour purposes. The horizontal scale is 1 inch to 50 meters, and the vertical plane is 1 inch to 40 meters of elevation.

The weapon miniatures, scaled to 1:300, have distinctive blue and red colorings and are numbered with a four-digit code that enables the computer to monitor their employment during the simulated engagements.

Colored pins are used to identify squads, teams, and indirect fire aim points, while minefields are represented in a uniform density with a total of twelve 50-meter crossing columns possible. Four crossing modes are also provided — fast, slow, open, or buttoned up.

Finally, a WANG 2200 mini-computer system is used with the

BATTLE model. Its features include a central processing unit, a dual disk drive, a CRT console/keyboard, and a printer. A mark-sense card reader can be incorporated to speed up the play of a game. The computer can be used to store or retrieve information and to analyze the effects of the weapons.

The terrain board provides environmental data and possible tactical deployment information to the players; who make all of the tactical decisions. Play begins when information describing a tactical decision is given to the computer. The WANG system then schedules, executes, and evaluates the resultant events.

The model allows for the mounting and dismounting of elements to include ammunition resupply from supply points. It also monitors each force's status of weapon effectiveness and damage assessment. An after action readout gives casualty and logistical information.

The principal value of the model is its ability to "see" the battlefield as the action unfolds. It allows for the introduction of new tactics with reliable feedback as to their probable success. The system can "freeze" a battle at a particular point to focus on smaller tactical actions and on the effects those actions might have on the actions of the larger units.

Thus far, some of the lessons that have been learned have reinforced previous observations battlefield analysts have made. Thus, smoke can drastically influence the course of combat actions. Key weapon systems such as the TOW are wasted if they are not positioned properly and if they cannot shift to other positions quickly. Prepositioned supplies of ammunition at the company level are necessary and a continuous resupply of ammunition must be planned for at all levels. Finally, enemy counterfire can demand the immediate relocation of friendly weapons.

Several features, such as close air support, attack helicopters, counterbattery fires, and nuclear and chemical weapons, that are not now in the model may be added in the future.

FORUM & FEATURES



THE COMPANY



DANDRIDGE M. MALONE

What is this thing we soldiers call *The Company*? It is often called a unit. And if you'll look that word up, you'll find that a unit is a one, a whole composed of parts put together, a single thing.

Now picture this "thing" on the battlefield. It is there to fight. Its sole purpose in life is to destroy enemy soldiers and to take and hold ground. It was designed that way.

It is the result of countless centuries of adjusting and adapting to the demands of thousands of battles in each of which only the fittest survived. And that thing there on the battlefield is the result of all those lessons learned, back across all those centuries. It is there on the battlefield to fight. Its standard is simple: SURVIVE. And on the battlefield, that means only one thing — WIN.

This thing can move across country, by itself, at three miles an hour. When it moves, it stretches out, like a snake, in a line a quarter of a mile long. When it rests, it curls up, facing outward, ready to fight, in a circle about 350 meters across. If it rests for very long, it begins to disappear into the earth. On the battlefield, when it's fighting, it eats about 2,000 cans

of C-rations and drinks about 500 gallons of water in a day. And it never sleeps.

When this thing attacks, its destructive power is awesome. It can come from any direction, day or night. It can hit head-on, but, usually, it won't do that. It will, instead,



send out pieces of itself in the night to sense out the weak and unprotected places, and then, just at the edge of dawn, it will strike.

It kills mostly by firing steel projectiles into the vital organs and critical

parts of its opponents. In a day of sustained combat, it can deliver almost 30,000 of these projectiles, of all shapes and sizes. Many of these projectiles explode and shatter on contact, each creating a thousand more fragments of steel that search for those vital organs.

Very seldom does this thing fight by itself. In battle, it calls its kin — other "things" that look just like it, and others that move at high speeds in steel machines, and some that fly, and some that just stand back and shoot. All of them can deliver steel into vital organs. This thing is, for certain, bad.

This thing, like you, is alive. Like you, it has muscles, called soldiers. Like you, it has a brain, called the company command post. And like you, it has, linked to that brain, a nervous system that carries the information that controls and coordinates the muscles; this is called the leadership of the unit — the captain, the lieutenant, the sergeants — linked together into a chain. How well this thing fights, and how well it can deliver steel, depends on its muscles and its nerves — and on whether both function as they are supposed to.

and, finally and mostly, it depends on how well and how much the muscles and nerves have practiced together.

In the least complex and most humble of all the kinds of fighting companies in our Army today, there are 169 men. For each of these men, there are 66 items of clothing and equipment that belong to him. There are 20 more items of clothing and equipment that the company gives to each man. And the company itself has 866 more major items of equipment and weapons that the 169 men use when the whole thing fights. That's a hell of a lot of items. And most of these items that belong to the company serve one purpose — delivering steel.

Now, if the thing is to do what it's

supposed to do on the battlefield — fight and win — then it needs to know how to use all of those weapons and items of equipment efficiently and effectively. How well it does this depends greatly on how much skill the unit has. If the unit is fully trained and ready to fight, it knows about 1,500 different kinds of individual skills. And it can combine these individual skills into 500 more packages of skill that are used by the company's squads and platoons, and by the company itself. That's 2,000 different skills. Soldiers and teams use all these skills to put all those weapons and equipment to work, to fight, to win.

All these numbers tell you how complicated that thing is on the in-

side, and why it is so deadly. And it is you, the leaders of the unit, who organize and coordinate the whole, complex, deadly thing that we soldiers call *The Company*.

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

Lessons in Leadership



CAPTAIN HAROLD E. RAUGH, JR.

The greatest challenge that faces today's company grade Infantry officers is that of molding their platoons and companies into cohesive, combat-ready organizations. The leadership training they receive in their pre-commissioning programs, as well as in their basic and advanced courses, does offer them a significant amount of guidance, but when they get out of the classroom they are solely responsible for putting that training into practice and improving on it.

One of the best ways an infantryman can develop his own leadership abilities and attributes is to read about and study the experiences other junior officers had in past wars.

Toward that end, I wrote to several retired senior Army officers who had served as junior officers during World War I and asked them about their leadership experiences. I believe their answers are worthy of serious consideration. Even though the techniques and weapons of warfare have changed greatly since 1918, the points these men make demonstrate clearly that the basic military element of our Army — the individual soldier — remains the same. He will be successful, but only if he is well led.

For example, Major General William O. Reeder, United States Military Academy, 1917, served in France during World War I, but by

the time his regiment was equipped for battle, the Armistice had been signed. He writes:

I venture to say that the key to success is to have the men you lead confident of you. Of course, you must know your stuff but there is something else that wiser men than I have attempted to describe and have failed. One thing I'm certain of is that you mustn't look over your shoulder to see how you are doing.

Also a 1917 graduate of West Point, Colonel Clyde H. Morgan was promoted to first lieutenant soon after graduation and within a year

was acting commander of an artillery battalion. Colonel Morgan believes that the fundamentals of good leadership are best spelled out in the West Point motto of DUTY, HONOR, COUNTRY:

Supplementing that is the doctrine we received upon graduation to devote first care for your animals, followed by attention to your men and finally your personal comfort. Now that equitation is removed from the Army I would suggest replacing the animals with care of the weapons ... As you climb the ladder of promotion and success you will encounter many problems, and as they occur never sell yourself short. Have confidence in your own ability knowing the solid groundwork from which you started.

Colonel Morgan also says:

Upon landing (in France, in May 1918) we had to march four miles to the so-called rest camp. With a classmate captaining another battery, we commandeered a truck and with our mess sergeant and a cook each we hastened to the camp, secured rations, and had a warm meal awaiting our men when they arrived.

This simple example, Colonel Morgan believes, earned him the confidence and support of his men.

Colonel Thomas H. Monroe, who served as a major in the 6th Infantry Division in World War I, offers these basic tenets of leadership:

- *Know your subject better than those you are teaching or commanding.*
- *Remember, you can learn from those you command.*
- *Don't play favorites; be consistent in dealing with troops.*
- *Never vacillate: that is, strict one day, easy the next. (Be tough but fair).*
- *Be loyal, both up and down. Remember, the men look to you for support and protection.*

- *Don't ask someone to do something you are not willing to do yourself.*

- *Don't use a court-martial as an instrument of command. A good commander rarely need resort to a court-martial.*

- *Keep a sense of humor.*

Colonel A. M. Weyand, as a captain, commanded the 2d Battalion, 34th Infantry Regiment, 7th Infantry in combat in World War I. He was one of many young officers who were promoted rapidly to meet the Army's wartime needs. Of those advanced promotions, he says:

Considering my class, 1916, we were second lieutenants only two weeks and were permanent captains in under a year. As I recall, we were all majors, except a few who were temporary lieutenant colonels, in under two and a half years.

An important facet of leadership, according to Colonel Weyand, is physical courage and the effect a leader's demonstrated physical courage has on his soldiers:

No commander, no matter how small the force, should forget the 'grandstand,' as no actor or professional athlete has as critical an audience as the commander has with him. When it was noised about that the Lieutenant-Colonel was on a ridge and had been fired upon at close range, the effect on the men was apparent.

Brigadier General Willis R. Slaughter, who commanded Company B, 23d Infantry in World War I, believes in the importance of morale:

From the smallest unit to the largest, it is essential to have esprit de corps, or good morale. It is emphasized in a Division or the (USMA) Corps of Cadets, but it is just as essential in the squad and platoon. For the leader, I think it boils down for him to do what he thinks is correct and hope for the best.

General Mark W. Clark served in World War I with the 11th Infantry Regiment, 5th Infantry Division, in France where he was wounded in action. He has written extensively on leadership and believes that the following characteristics are the fundamentals of leadership:

- *Confidence. If a leader does not believe in himself, no one else will.*

- *Energy. A leader must be willing to do everything he asks of his followers — and more. He must be able to work harder, concentrate longer, face the extra danger, carry the extra burden, go the extra mile.*

- *Timing. This is a combination of alertness, imagination, and foresight.*

- *Clarity. A leader must be able to reason logically, weigh alternatives, make decisions — and convey his thoughts lucidly.*

- *Tenacity. Courage, it has been said, is the capacity to hang on five minutes longer. The leader not only must have this ability himself, he must also inspire it in others.*

- *Boldness. This strong and virile characteristic is akin to courage, but more dynamic. It reveals itself in a willingness to take chances, a readiness to experiment, a soaring optimism that rejects and despises the thought of failure.*

- *Concern. Experience has taught me that men will never follow anyone unless they feel that he really cares about them and their problems.*

- *Morality. A stern code of ethics, a strong sense of personal morality, "obedience to the unenforceable" — these are qualities a leader must have at the core of his being.*

- *Faith. Above and beyond all, a leader must believe in his people as well as in the goal toward which he is leading them.*

General Clark emphasizes the need for a leader to take care of his men. He remembers telling his son, when the latter graduated from West Point in 1945, "that when he became a platoon or company commander, to take a deep interest in the personal problems of his men. Many of them have

little problems that worry them sick, having to do with families back home, etc., and the commander can usually relieve his mind."

It is apparent from these various comments that there is no set equation or magic formula that can turn a soldier into a successful leader. But an infantry officer who wants to be a leader has an obligation to learn as much as he can about the many qualities that are a part of leadership; he will be entrusted with the welfare of an invaluable and irreplaceable resource — the American soldier. And studying the leadership experiences of others, both good and bad, is one way for him to learn how to succeed at it.

In 1918, Major C. A. Bach, a member of the 7th Cavalry, addressing a group of officers at Fort Sheridan, said:

When you join your organization you will find there a willing body of men who ask from you nothing more than the qualities that will command their respect, their loyalty, and their obedience.

They are perfectly ready and eager to follow you so long as you can convince them that you have those

qualities. When the time comes that they are satisfied you do not possess them you might as well kiss yourself good-bye. Your usefulness in that organization is at an end.

That's what leadership is all about. No one has ever said it any better.



CAPTAIN HAROLD E. RAUGH, JR., a 1979 ROTC graduate of the University of Wisconsin, Oshkosh, is now attending the Infantry Officer Advanced Course. He has held several positions with the Berlin Brigade and, while in Germany, attended the German Ranger School, which he described in an earlier article in *INFANTRY* (January-February 1981).

Sustaining Battle



LIEUTENANT COLONEL BENNET S. JONES

In recent years, the United States Army has developed new tactical doctrine to meet the challenges of the 1980s, particularly in a European environment. At first, such concepts as "come as you are," "first battle," and the "ten-day war" were in vogue. Some of these new concepts arose not because they were tactically sound but because the Army did not have the forces and material to fight a major war using its past battlefield doctrine.

In fact, it has only been in the past

year or so that the Army has become comfortable with its new doctrine because many of the questions that doctrine raised have been answered by units on the ground while they were undergoing opposing forces exercises. Today, therefore, sustainability has become one of the foremost subjects for conjecture, since most U.S. military professionals now feel that they can fight and win the next battle if the necessary resources are made available in the right amount and at the right time.

Unfortunately, while the Army may have discovered the effectiveness of rapid offensive actions directed at critical locations and decision points on a battlefield, it does not seem to have done as well with such sustainment concepts as forward area maintenance, resupply, and battlefield evacuation. Sustainment on a modern battlefield simply cannot be tied to the Army's present complex administrative and logistics systems, because it takes an inordinate amount of a commander's time to purge,

reconcile, and fine tune these systems.

It is easy enough, for example, to find a logistician who will gladly expound on such subjects as CONUS-based support concepts and the need for supply management information. It is not as easy to find one who can teach a support platoon leader in a mechanized infantry battalion how to get a tanker and pump unit (driven by a private first class who is without a radio and map) from a field trains location to an improved TOW vehicle on a forward battle position.

Somehow, then, the Army must find a way to lift the burden of peacetime administrative and logistics demands from the backs of its company and battalion commanders so that they can focus their energies instead on molding combat ready fighting units. It must also find the answers to its sustainment problems so that it can put beans, bullets, and petroleum products into the mouths, weapons, and vehicles of its soldiers when they need them. The Army will not be able to sustain a battle in a fluid environment such as it expects in the next major war if it does not identify its sustainment problems and develop practical solutions to them.

REALITY

Several of the Army's how-to-fight manuals — notably FM 71-100, Armored and Mechanized Division Operations, and FM 100-5, Operations — do discuss the organization for service support operations and identify the principal participants. But the charts and diagrams in them are simplistic. They include a lot of graphics with sweeping arrows that are supposed to explain how to arm, fuel, fix, and man battlefield weapon systems. The catch-words, phrases, and italicized statements that fill the text of these manuals may appear profound at first, but when they are looked at more closely they merely announce the obvious. For example, this is one of the more astute observations: "The quicker a unit can load

up, the faster it can deploy."

The Army's sustainability doctrine, therefore, appears to be focused more on "who should" rather than on "how to," and it does not seem to be based on reality. Today's mechanized infantry and armor battalions, for example, have only limited cargo carrying capabilities. And there are not enough authorized front-line ambulances to evacuate casualties to battalion aid stations, which are located much farther to the rear than they were when the Army's evacuation procedures were established in World War II. In addition, the manuals fail to address such important real-world questions as these:

- How can ammunition and repair parts resupply procedures be established to adjust to changes in a brigade's task organization?

- When a unit tows a damaged vehicle to the rear and determines that it cannot be repaired at the unit level, how does the unit's executive officer or the battalion's S4 tell a forward support element that additional maintenance teams are needed? And whose recovery vehicle should be used to tow the damaged vehicle farther to the rear when necessary for repair by "technical experts," as specified in FM 100-5?

- How can other damaged vehicles be recovered if a unit's recovery vehicle is involved in towing operations?

Despite the burdensome nature of peacetime regulations and constraints, units in Europe are trying to find ways to solve the problems associated with unit sustainability. One battalion started with its leaders questioning the adequacy of their task force's support when that support was organized into the traditional field and combat trains.

In a series of opposing force field exercises, the battalion trains were found to be less than responsive to the rapidly changing tactical situations. While the combat trains were busy being captured, for example, the field trains were busy trying to find out where the company trains had gone. Eventually, the field trains, normally located near the brigade

trains, were pared down to the absolutely essential elements and these were dispersed throughout the battalion's area. They were also placed under the control of a battalion logistics operations center (LOC). The LOC itself was located well forward, while a network of logistical release points (LRPs) was established near the initial and subsequent battle positions designated in the battalion's operations plan. An emergency resupply package (Class III and V) tailored specifically for the units occupying the battle positions was placed at each LRP.

As the tactical situation developed, the LOC directed recovery vehicles, additional ammunition and petroleum supplies, ambulances, and other needed support to the appropriate LRP. Company executive officers, supply sergeants, and first sergeants never had to go farther to the rear than the supporting LRP. Battlefield casualties and damaged vehicles were evacuated by the companies to the LRPs, where either a battalion or a forward support element took over.

The LRP approach is but one way battalions in the field are trying to find answers to sustainability questions. It shows what can be done by commanders and, hopefully, it will be noticed by those charged with developing doctrine and publishing how-to-fight manuals. It might also cause those in the Army's higher echelons to consider publishing "how-to-sustain" manuals, for if the Army is to win the next battle, it will have to be able to sustain the units and soldiers who will be fighting that battle.

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Indirect Fire in MOUT



STAFF SERGEANT PATRICK J. COYLE

A unit that must fight in urban terrain can expect to encounter certain operational problems it will meet nowhere else. Among them are several that have to do with indirect fire support.

The close spacing of the buildings, for example, usually makes it most difficult to select, camouflage, and defend firing positions. Communications are difficult to put in and maintain. There are also magnetic influences in urban terrain that will affect compasses and aiming circles. But the basic ballistic problems involved in the employment of indirect fire may be the most serious ones.

The first and most basic of these ballistic problems is the inability of indirect fire weapons to reach a large number of targets in a city. This is caused by a combination of the angle of fall of a projectile from an indirect fire weapon and the height of the buildings. This combination leaves indirect fire deadspaces of varying size that no reasonable amount of ammunition can overcome.

Determining the size of a particular deadspace requires a simple trigonometric calculation that is based on the cotangent of the angle of fall (cot F) for a particular firing elevation and charge. Thus, the extent of the deadspace is obtained by multiplying the cot F by the height of the obstacle near the target in the line of flight. (The cot F is found in the supplementary data section of the applicable firing table.)

The firing elevations for the 81mm

and 107mm mortars and for the 155mm howitzer at various values of cot F are shown in Figure 1. The deadspaces for buildings of various heights are shown in Figure 2, with the calculations based on the assumption that each story is five meters tall. But simply determining the extent of a deadspace is not enough for fire planning purposes. Some targets have to be engaged regardless, and since a building cannot be moved, other methods must be used.

One way to solve this problem is either to move the firing piece or to

while the three weapons listed in Figure 1 can fire with a cot F equal to .5, both the howitzer and the 81mm mortar can fire at .3 and .1 respectively. (Even the 107mm mortar could fire with a cot F of .3 if data were developed for firing it at an elevation of 1,100 mils, which is within the physical capabilities of the weapon.) But because the 55mm howitzer normally does not fire at this high an elevation, its firing tables are sketchy, but this could be easily remedied.

Although this method of dealing with the problem comes into direct

cot F	FIRING ELEVATION IN MILS		
	81mm	107mm	155mm
.1	1405		
.3	1147		1156
.5	0937	1065	1017
.7	0800	0900	0746
.9		0800	0665
1.0			0615
3.0			0226
5.0			0145
10.0			0082
15.0			0057

Figure 1. Cot F of Various Weapons.

employ another weapon at a different location. This method is best when a single tall building is on one side of a target; it is not feasible when a target is surrounded by tall buildings.

The other fairly obvious method of firing into a deadspace is to reduce the cot F. As Figure 2 shows, when indirect fire weapons are fired at a cot F of .5 or less, large areas of deadspace fall within the effective bursting radius of their rounds. Too,

conflict with the Army's current doctrine of firing at the lowest elevation to avoid counterbattery radar, it becomes an acceptable risk in a MOUT environment for two reasons. First, the ground clutter of the city interferes with the accuracy of counterbattery radar. Secondly, the increased firing elevation allows the weapons to be moved closer to high-rise buildings and thus into the deadspace of the enemy's indirect fire weapons. This is

especially true of the Threat's most effective counterbattery weapons, the BM-21 multiple rocket system, which has a maximum firing elevation of

height of the structure away; and when fired at more than 535 mils it needs to be at least twice the height of the building from the structure.

concept of the probable error — one range probable error is defined as that distance added to or subtracted from the expected point of impact that will enclose 50 percent of the rounds fired at that data (Figure 3).

Given the combination of indirect fire deadspace, the lack of sizable open spaces in a city, and range probable error, the difficulty is clear. As the size of the deadspace increases, it quickly reduces the open space available for targeting. As the targeting area decreases, it rapidly approaches the size of the range probable error. When it decreases to just twice one probable error, a crew can expect that only 50 percent of the rounds it fires will land in a target area. And as a target area decreases in size, the percentage of rounds they can expect to land within it decreases to zero; that is, the deadspace then equals the size of the open space. This means that if they are to put the required number of rounds on a target, they must fire more rounds.

HEIGHT OF BUILDING IN STORIES

Cot F	3	5	10
.1	1.5	2.5	5.0
.3	4.5	7.5	15.0
.5	7.5	12.5	25.0
.7	10.5	17.5	35.0
.9	13.5	22.5	45.0
1.0	15.0	25.0	50.0
3.0	45.0	75.0	150.0
5.0	75.0	125.0	250.0
10.0	150.0	250.0	500.0
15.0	225.0	375.0	750.0

Figure 2. Deadspace in meters of various cot F.

about 885 mils. Also, because it is a rocket, this weapon should have a correspondingly greater cot F, which means more deadspace.

This belying-up to a building for protection against counterbattery fire does bring up another problem: the need for a quick way of determining mask, or ground clearance (called *site in the field artillery*), for the flight of a round. But this problem is solved

(These rules are based on the properties of the 30-60-90 triangle.)

Admittedly, sometimes large deadspaces cannot be avoided, and the size of open areas in a city is fairly restricted. As deadspaces increase in size they take up a significant amount of the already limited open space and thus the target areas decrease even further.

But indirect fire weapons are called

SUPPLY

Even if the Army had a perfect supply system with an unlimited number of rounds, this would cause some problems because the rounds that do not hit in the target area will still hit somewhere — half will fall long, half will fall short. Assuming that there are no friendly troops to the enemy's rear, the long rounds will do no harm and might have a detrimental effect on the enemy's plans. Unfortunately, though, the rounds that fall short of the target area will fall on or near friendly troops.

Another problem that needs to be considered is the effectiveness of indirect fire ammunition in MOUT operations, because the fuzes and the effects of the various types of munitions have been designed for conventional combat in open terrain. While no experimental data is available, certain effects can be expected when these munitions are used among buildings:

- High explosive ammunition will

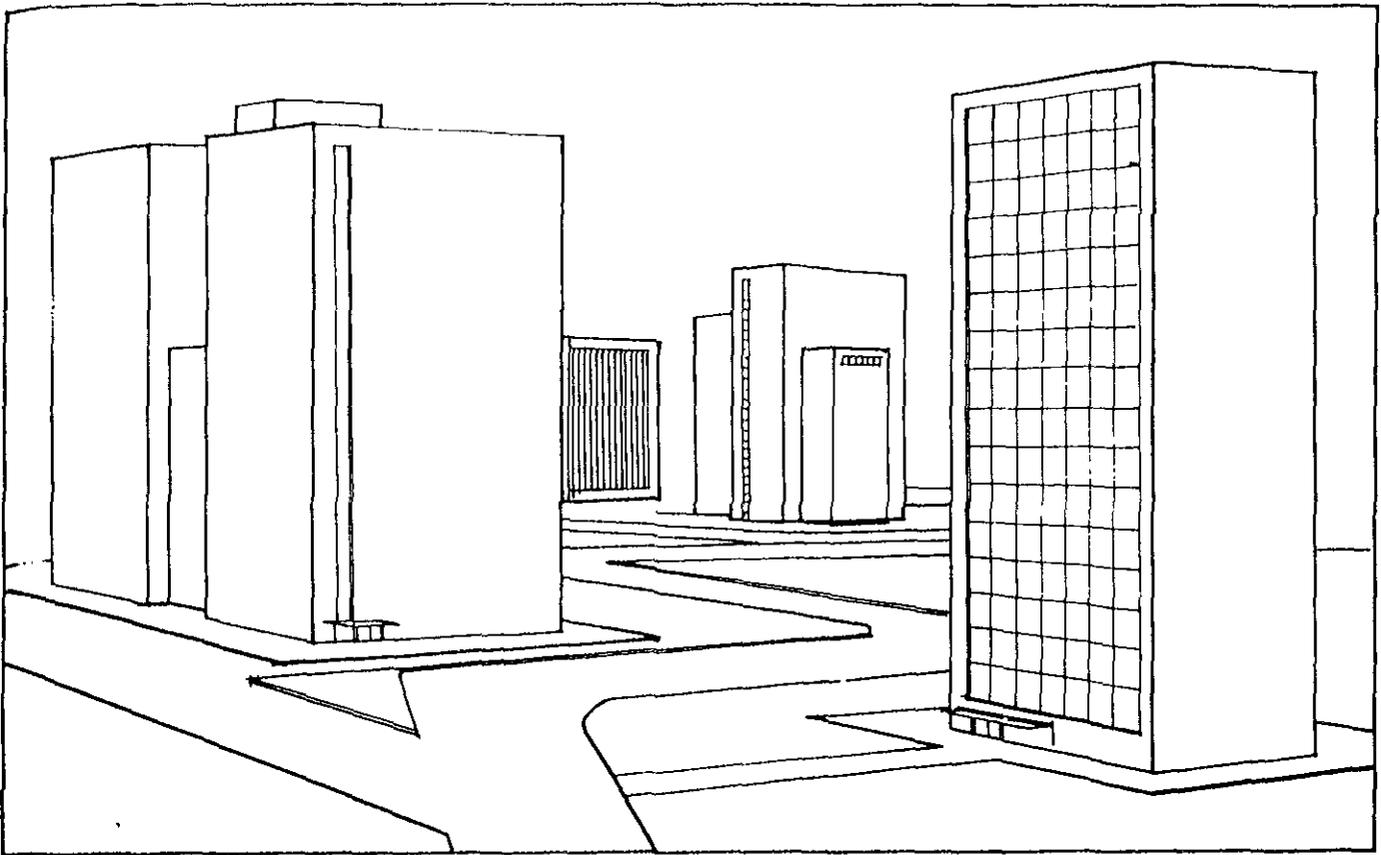
ONE RANGE PROBABLE ERROR IN METERS

RANGE	81mm	107mm	155mm
1000	7m	9m	7m
1500	9m	12m	7m
2000	11m	17m	7m
2500	13m	19m	7m
3000	15m	23m	8m
4000	19m	25m	8m
5000		30m	9m
7500			12m

Figure 3. One Range Probable Error at Selected Firing Data

quite easily. Instead of waiting until their weapon is set up and then measuring the minimum firing elevation that will clear a mask, indirect fire crews should remember three simple rules of thumb: When the gun is being fired at 1,070 mils or more it must be at a distance of at least half the height of the structure away from the building; when fired at more than 800 mils it should be at least the

“area weapons” in the first place because there is no way to pinpoint exactly where each of their rounds will land. Because of the many variables in the ballistic equation (such as wind speed and direction, air density and temperatures, and variations in weight of projectile and weapon wear), the best a crew can do is to define an area in which a round will probably land. This then is the



produce a certain amount of secondary shrapnel when it hits on buildings, but this shrapnel will have a limited effect on even lightly armored vehicles. Also, the blast and shrapnel effect of HE ammunition that hits in rubble will be limited.

- White phosphorus and other types of smoke will be of little use. Because of the combination of unpredictable winds at street level and the total ineffectiveness of the rounds that hit on the tops of the buildings, a large number of rounds would have to be expended to establish and maintain conventional smoke screens. White phosphorus rounds could be used in an incendiary role against flammable chemical storage areas in the enemy rear area.

- Illumination rounds will be of limited use because of the canyon nature of the terrain. Direct illumination would be difficult to maintain because of the vagaries of the wind current and the shadows cast by the buildings. Illumination rounds could also be used effectively as incendiary rounds. In this respect, the 155mm canister would be better suited, because it has a greater chance of

penetrating roofs and fuel tanks.

- All improved conventional munitions (ICMs) that depend on proximity fuzing suffer the same defect: premature detonation while passing over a building when the target is on the street below. Terminally guided munitions (Copperheads) will remain effective as long as they can "see" the laser signature. When this signature is hidden behind some building, these projectiles become nothing more than very expensive HE rounds. One way to decrease this problem is to fire the shell at an extremely high elevation so that it can "see" more of a street.

These various effects that restrict

the performance of indirect fire ammunition only add to the other ballistic problems encountered in urban terrain — the combination of angle of fall and height of buildings, which creates deadspace, and the combination of the limited amount of clear terrain and the range probable error of the weapons, which leads to an excessive expenditure of ammunition and to increased danger to friendly troops.

For all of these reasons, the Army must devote time and attention to the employment of its indirect fire weapons if they are to offer effective support in urban areas.



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Regimental System

CAPTAIN GUSTAV PERSON

There has been a great deal of discussion recently about the need to restore a sense of cohesiveness and esprit de corps to the Infantry. One proposed method of achieving this is the adoption of a modified British regimental system.

The regimental structure of the British Army is unique among the armies of the world. Begun in the 17th century, it has survived, with relatively few changes, to the present day.

Despite the changes, each regiment continues to preserve its identity within the army, even though recent amalgamations have drastically changed the individuality of certain units. Continuity, though, has been preserved at all costs, and each recruit is still offered the opportunity to serve in his county regiment alongside his friends and neighbors.

The soldier is imbued with his regiment's history and traditions, and he receives formal training in them. He knows he will serve exclusively with his own regiment and will not be arbitrarily posted to some other unit without his consent. In effect, the regiment is a family with successive generations of officers and enlisted men serving in its ranks. Strong efforts are made to maintain active veterans' associations and to foster affiliations with the cities, towns, and communities in the regiment's recruiting area.

The feeling of the regiment as a family is present at all ranks from the colonel of the regiment to the lowest private. Such comradeship and continuity are the basic ingredients of the British regimental system.

This system can be adapted for use by the U.S. Army and I believe it might offer a number of benefits.

- A primary recruiting region (regimental area) within the country could be designated for each infantry regiment in the Army. A regimental headquarters could be located at an Army post or a convenient National Guard armory, or an Army Reserve Center. At the headquarters, a regimental secretary and a small staff could handle such matters as recruiting, public relations, and other regimental business. A regimental museum there might attract recruits and favorable public attention.

- Recruiters would be encouraged to enlist soldiers into their own regiments.

- Training depots could be established at specified posts for the regiments recruiting in their vicinity. For example, all of the regiments recruiting in the northeastern United States would send their recruits to the training center at Fort Dix, New Jersey. Drill sergeants and instructors would be drawn from the parent regiments. This would instill in the new soldier a sense of belonging from

his first day of service.

- Affiliations would be established with the National Guard regiments in the regimental area. The British Army has now incorporated all its reserve battalions into its regular army order of battle. Since many of our National Guard regiments pre-date our Regular Army regiments, this may not be a wise idea here. But regimental ties would strengthen a Regular Army regiment's position in a community, especially if its soldiers were encouraged to enlist in the affiliated National Guard regiment when they were discharged.

- An Honorary Colonel for each regiment in the Army could be designated, and he would be responsible for welfare, recruiting, veterans' affairs, unit administration, and traditions. The colonel would normally be a distinguished officer or civilian who had served in the regiment at one time. In the British Army, these officers have been quite successful in promoting their regiments.

- A system of regimental veterans' associations could be formed. The British have tied their veterans and active members together by regularly published newsletters and journals that provide information to all members of the regimental family.

- Finally, once a regiment had established its regimental area, the

Army would make certain that the battalions of that regiment would be kept in being for long periods of time. The battalions would rotate throughout the world as complete units.

The above suggestions might cost money and a regimental system would require extra effort to organize and administer. In the long run, however, it would result in a more efficient and professional army with better morale. Each soldier would

feel that he had a stake in the success of his own battalion, a feeling that he

might never find as a member of a more impersonal organization.



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THIRD JOB



LIEUTENANT COLONEL RANDOLPH T. POORE

The battalion S4's job is one that few officers will stand in line to get. And yet his job is an important one, probably as important as any other. Unfortunately, though, the S4 is the one most likely to be criticized when something is not where it is supposed to be when it is supposed to be there.

There is no standard description that fits every battalion S4. He may be brand new or he may have some experience. He may be overseas with a well-defined readiness mission, or he may be stateside with a deployment mission. Although he may be a former company commander, he is more likely to be in a holding pattern waiting for a command to open up.

Not many people fully understand his position and its difficulties — and that sometimes includes his battalion commander, who in most cases has never served as an S4 himself. The chief problem with this lack of

understanding is that, in most battalions, when it comes to the tactical training cycle, the S4 has to take his place in line behind the S2 and the S3. In addition, because his performance can be more easily measured than that of the other key officers in a combat battalion, he is especially vulnerable to failure and criticism.

My purpose is not to try to get sympathy for the battalion S4; neither is it to ask for relief on his behalf. My purpose is to remind everyone concerned that the S4 has what amounts to three jobs, not just the two that usually come to mind.

First, he has to see that the battalion and company commanders get the equipment they need when they need it. His second job is to see that the logistics regulations are followed and that the appropriate reports are prepared. His third job is to be ready to handle the battalion's logistics

needs in combat. And it is dangerous for him and for others to assume that doing the first two jobs will automatically prepare him to do the third. But an S4 may have trouble coming to grips with this aspect of his job for two reasons.

First, too many battalion commanders change their S4s too frequently, which does not allow an S4 time to get comfortable in the job. Secondly, an S4 is usually so tied up with his first two jobs, which are probably more pressing at the time, that the third one is usually shunted aside. But what the S4 and the other people on the battalion staff must realize is that when combat comes, those first two jobs will seem like small potatoes.

This means, of course, that the S4 must always be ready to shift suddenly from the routine of his first and second jobs into the pressing demands

of his third one. If he is not properly prepared, he will be unable to push aside his other tasks. He will be confused, and his confusion will be harmful to all those around him.

The following list of questions is offered as a starting point for the S4 in establishing a plan for executing his combat readiness responsibility. The questions are directed at the S4, and although they are not exhaustive, they should serve to stimulate his thinking. The questions assume that the battalion already has and practices a basic alert sequence that includes such items as marshalling procedures, CTA 50 shortages, advance party makeup, a method of hand-receiving property that is left behind, the preparation of hazardous cargo forms, a method of checking the serviceability of equipment, and some comprehensive loading plans.

QUESTIONS ON RESUPPLY

C Rations

- How much does a case of rations weigh?
- How many rations will each man carry?
- How many will go on organic transportation?
- When was the last time the concept was verified?

Water

- How many water purifications units (WPU) are in your parent organization's engineer battalion (company)?
- How many can your battalion count on in combat?
- What is one WPU's capacity for purifying water? Storing water?
- What is your battalion's capacity for storing water?
- Do you have any collapsible drums for water storage, or can you get some?
 - Are they serviceable?
 - When was the last time you checked them?
 - How many five-gallon cans does

your battalion have on hand or on order for water storage?

- When was the last time they were inventoried?
- How much water will your men require each day? In an arid climate? In the cold?

Aviation, MOGAS, and Diesel Fuel

- What, if any, is your battalion's capacity to store aviation, MOGAS, and diesel fuels?
- What does each type of fuel weigh per gallon?
- How many five-gallon fuel cans does the battalion have on hand or on order?
- How much MOGAS or diesel fuel is required for each type of vehicle per day in combat? Based on how

many hours of use per day?

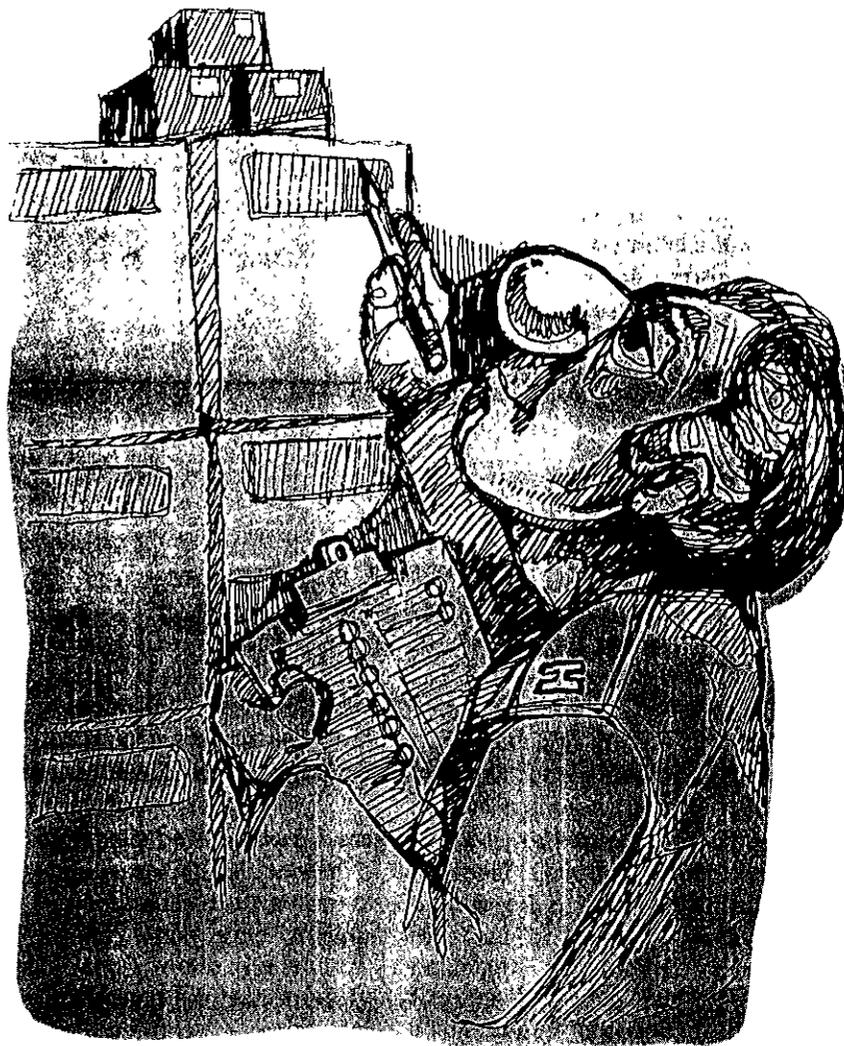
- Are there any aviation missions your battalion would be likely to support?
- Do you know how to support the operation of a Forward Area Rearm/Refuel Point?

Packaged POL

- What is your plan for packaged POL deployment (including oil and bore cleaner for weapons)?
- How will you move it?

Antifreeze

- Do you have an extra load of antifreeze?
- How much will your battalion need?



- Where is it?
- How much does it weigh?

Barrier Material

- How much of what kind of barrier material will you need?
- Where can you get some quickly?
- How much can you get?
- Where can you place it in you loading plans?
- How much does it weigh?

Ammunition

- When was the battalion's basic load of ammunition last computed and justified?
- Have you included the ammunition for the new weapon systems you have received or are about to receive?
- How will you move the basic load?
- Can you even move the basic load?
- What does it weigh?
- How many vehicles will it take to move it?
- How many aircraft?
- When was the last time you moved it (without cutting corners)?

PLL

- How many vehicles and trailers will it take to move your battalion's prescribed load list?
- What augmentation of PLL will you request when alerted?
- How much of your PLL must be moved for you?

Batteries

- What is your plan for battery resupply?
- Does your parent unit have a battery package set aside for rapid deployment?

QUESTIONS ON CONTINGENCIES

- How can you obtain any or all of the following when they are needed?
- Cold weather gear.

- Extra and larger canteens.
- Goggles.
- Transformers for power conversion.
- Insect bars and repellent.
- Sunburn cream and lip balm.
- Sunglasses.
- Provisions for shade.
- Extra rope and snap links.
- Pallets for storage.
- Bolt cutters.
- Airfield matting for aircraft repair.
- Cement.
- NBC equipment, including extra filters.

GENERAL QUESTIONS

- Are the brake systems for your trailers compatible with your prime movers?
- If you will stage at an intermediate staging base (ISB), does the S3 have a training plan for the time spent at the ISB and if so, have you thought about the supplies needed to support such a training effort? How long do you think you will be at the ISB?
- Suppose your battalion receives an attachment of engineers, armor, air defense artillery — do you know how many men and what type of equipment to expect?
- How much of what type of ammunition do they require?
- Can you answer all of the above questions as they apply to each type of potential attachment?
- How many vehicles in excess of organic transportation do you truthfully require to move your battalion?

- What will you sacrifice first if you cannot get all the transportation you need? What next?
- What new weapon systems will your battalion be receiving in the next year?
- What will it take to support them?
- Will you need extra PLL? Extra personnel? Different ammunition?

FINAL QUESTION

In addition to all of these, there is a final question, one of the most important: Does the battalion commander require the battalion to train with the constraints prompted by the other questions?

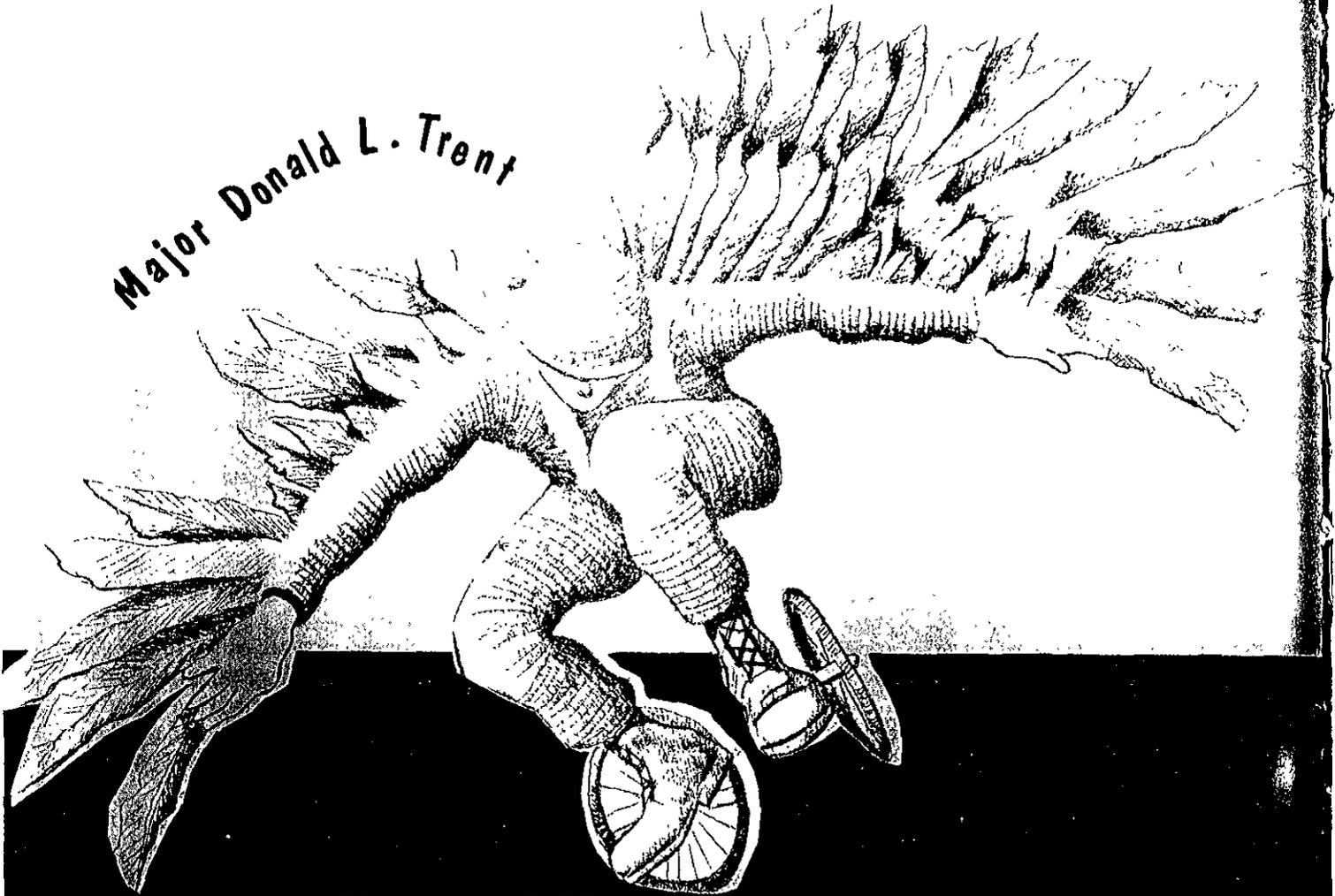
Obviously, not all of these questions will apply to every unit. Those that do apply will depend on a battalion's contingency plans, and the S4 should read these plans and then reread them periodically.

Once an S4 really begins to understand this third aspect of his job, he will also begin to realize that he is a logistics tactical planner — a logistics technician — as well as a logistics coordinator. At this point his toughest challenge will lie just ahead: He must share what he has learned with other members of the battalion, in particular the commander and the S3, and in the process help them to appreciate the role of logistics in tactical planning. For unless they have an understanding of the constraints imposed by logistics, the battalion will not be able to perform at its best in the critical early stages of deployment and later in combat.



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Major Donald L. Trent



ARMY AVIATION: the combat multiplier

Past military conflicts provide many examples of what the United States Army's evolving AirLand battle doctrine really means. The U.S. Third Army's attack across France, the Soviets' advance into Manchuria in 1945, the U.N.'s counteroffensive in Korea in 1951, and the Israelis' Sinai campaign of 1967 are particularly good examples. With one exception, all of these pitted numerically inferior against numerically superior forces. All were combined arms operations. The Third Army blitz is also a superb example of air and land forces working in concert. In fact, because of the Third Army's successes, the German high command characterized its commander, General George Patton, as "the most feared general of World War II . . . a master of doing the unexpected . . . completely unpredictable."

If U.S. commanders are to succeed on the integrated battlefield using the new AirLand battle doctrine, their enemy must perceive them, too, as "completely unpredictable." With its inherent risks, the integrated battlefield will give commanders an opportunity to recall and use

historical examples, and also to establish precedents for future action. This is the time for them to be innovative, to synchronize their efforts, to prepare. The AirLand battle doctrine gives them the impetus, the common goal, the charter for doing what they have to do. The Aviation Center has readily embraced the new doctrine and concepts, and feels that Army Aviation is ideally suited to play a major role on the integrated battlefield as a "combat multiplier."

But first, the commanders involved must have a clear understanding of the concept of the AirLand battle with its perceived battlefield, beginning with some definition of terms:

The Integrated Battlefield. This is a generic description of the battlefield on which either combatant has employed or could employ nuclear, chemical, conventional, electronic, or directed energy weapon systems, either singly or in combination.

The Extended Battlefield. This term describes the need to use the full range of friendly capabilities, including

deep-ranging sensors and weapons, with the goal of destroying the enemy's will to fight. Enemy units not yet in contact are brought under deep attack so that they can be destroyed, disrupted, or delayed. The concept recognizes that the deep and close-in battles are inseparable and that both must be prosecuted within the commander's overall objectives.

The AirLand Battle. This term ties together the integrated and extended battlefield concepts and applies them to the battlefield envisioned in the 1980s and beyond. Its main theme is to win by early offensive actions conducted by joint air and land forces. The key to modernization as set forth in the AirLand battle concept is based on Army 86 materiel and force structure requirements.

To fight the AirLand battle, commanders must employ their ground and air forces to seize the initiative before they take on the first enemy echelons. A commander's greatest concern will be to commit his forces at the critical point at which they can influence the battle. This is presently referred to in measurements of time or distance from the "forward line of own troops" (FLOT). Once a commander has determined that critical point, he must plan in detail, coordinate precisely, execute violently, and finish rapidly.

To prepare for its role, the Army Aviation community is continuing its development and procurement of new systems, its progressive training, and its development and testing of new organizations. The Army Aviation organizations scheduled for fielding under Army 86 are the Air Cavalry Attack Brigade (ACAB) and the Corps Aviation Brigade. These units are ideally suited to the offensive nature of the evolving battle doctrine.

The ACAB, for example, is a highly potent maneuver force. It can defeat the enemy's first and second echelon forces during offensive and defensive operations; attack in any direction; conduct reconnaissance, surveillance, attack, and airmobile operations simultaneously; conduct continuous operations; and offer unity of command for all of a division's aviation assets.

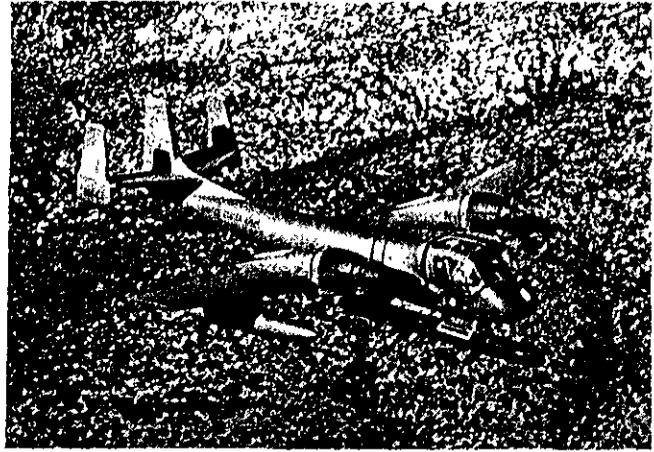
NEW SYSTEMS

In addition, the following aviation systems will further improve the combined arms effort within those units.

SEMA

Special electronics mission aircraft (SEMA) will allow the commander to see the battlefield far beyond the FLOT. The better he sees the battlefield, the better he can concentrate his forces or employ economy of forces at the right time and place. The improved GUARDRAIL system (RC-12D) provides communications intercept, exploitation, and emitter locating capabilities at corps level.

The QUICK FIX IIB (EH-60) is the first true division level electronic warfare system. It can disrupt the integri-



ty of an enemy's communications networks and also provide protection against hostile radar emitters.

The QUICK LOOK (RV-1) currently provides a corps level system that conducts visual reconnaissance and monitors an enemy's radar emitters while simultaneously retransmitting that data to ground facilities for quick processing and dissemination.

The Side Looking Airborne Radar (SLAR) (OV-1D) complements QUICK LOOK at corps level with near real time radar imagery of both fixed and moving targets and infrared (IR) imagery photo reconnaissance functions.

The heliborne Standoff Target Acquisition System (SOTAS) will be mounted on an EH-60 to further round out the commander's ability to see far beyond the FLOT.

AHIP

The Army Helicopter Improvement Program (AHIP) is developing an improved scout helicopter that will be better able to fight when it works with the attack helicopter. It will provide improved battlefield reconnaissance, timely information, security, aerial observation, and target acquisition and designation systems during both day and night operations and during periods of reduced visibility.

The improvements that are now being made will include electronic countermeasures, an air-to-air missile system, and better vision equipment. A mast-mounted



sight (MMS) will provide standoff target acquisition, while laser designation systems will permit them to remain masked during reconnaissance, surveillance, artillery observation, and target acquisition missions. The MMS will also give the helicopter visual and optical equipment that is more compatible with that of the AH-1S and AH-64 helicopters.

AH-1S

The AH-1S, a fully modernized Cobra helicopter, which is now being fielded, will be an integral part of the Army's attack helicopter force through the year 2000.



The AH-1S can carry eight tube-launched, optically tracked, wire-guided (TOW) missiles, 320 rounds of 20mm ammunition, and 14 70mm (2.75-inch FFAR) rockets. In an alternate mission configuration, the aircraft can carry up to 76 70mm rockets.

When it is fielded, the Forward Looking Infrared Augmented Cobra TOW Sight (FACTS) will give the AH-1S attack fleet an improved target engagement capability during night and reduced visibility operations.

AH-64

The AH-64 advanced attack helicopter will improve the Army's ability to influence the battle on a broad front. It can be armed with as many as 16 Hellfire missiles in addition to its rapid-firing, armor-piercing 30mm cannon, which has a maximum effective range of three kilometers. Alternate mission configurations for the AH-64 include armament loads of up to 76 70mm rockets or a combination of Hellfire, 70mm rockets, and 30mm rounds.

Reliability, availability, and maintainability have been built into the AH-64, and it has been designed so that it is nearly invulnerable to 12.7mm rounds. The Pilot's Night Vision System (PNVS) improves the crew's ability to spot an enemy force during periods of limited visibility. In concert with the Target Acquisition and Designation Systems (TADS), the PNVS will enable the AH-64 to



fight in conjunction with the Abrams tank and the Bradley fighting vehicle around the clock.

UH-60

The UH-60 Blackhawk, the Army's new firstline utility assault helicopter, will be used chiefly in the main battle area as a troop-carrying and logistics aircraft. A com-



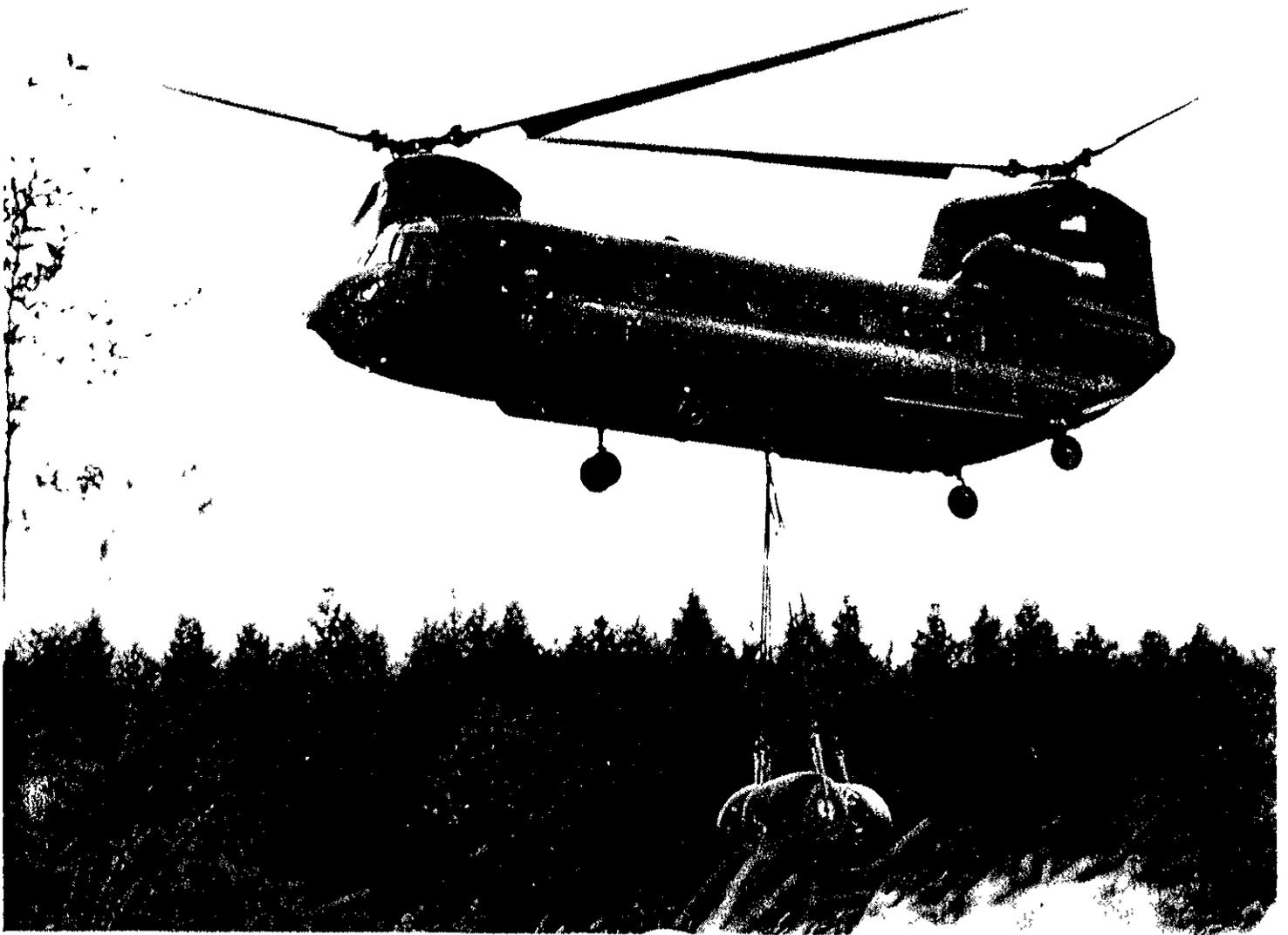
mander can use the UH-60 to conduct air assaults and raids. He can also use it to move antiarmor teams through the battle area, to deploy rear area security forces to counter enemy airborne and airmobile operations, and to resupply his units.

CH-47D

The CH-47D Chinook modernization program provides a helicopter that will meet the Army's medium lift transport needs of the 1980s and 1990s. It will play a vital role on the modern battlefield, particularly in airlifting maneuver forces to widely dispersed positions to prevent them from becoming potential nuclear or chemical targets.

TRAINING EFFORT

As for training, the Aviation School is working on the



premise that our forces must be prepared to perform 24 hours a day on the integrated battlefield. The School is conducting realistic training with our current systems while awaiting the new and improved systems that are on the way.

The training at Fort Rucker is now focused more than ever on stressing the combined arms effort as well as on producing technically sound aviators. The basic manuals on employment are being updated to conform to the emerging AirLand battle doctrine; to insure a smooth transition into the future, all systems, concepts, and organizations are being tested against all kinds of scenarios.

Finally, the Aviation Center continues to work closely with the other TRADOC schools and centers to insure that everyone fully understands the role of Army Aviation as a full-fledged member of the combined arms team.

Army Aviation gives a combined arms commander a highly flexible and potent combat multiplier. As an authentic combined arms element, Army Aviation sup-

ports the eight TRADOC mission areas set forth in TRADOC Pamphlet 525-5. The Aviation School is writing new doctrine and testing new concepts. The proof of its success, though, will eventually come from the field. Now is the time for the field to prepare for and use Army Aviation as the combat multiplier it is intended to be.



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AIRLAND BATTLE



Implications for the Infantry

LIEUTENANT COLONEL JERRY M. SOLLINGER

Any review of the military literature of the past two decades or so reveals not only that the Army constantly finds itself standing at the threshold of one thing or another, but that these thresholds always seem to portend major change. Many of these changes, fortunately, are stillborn. Thus, the announcement of reaching another threshold that heralds still more ominous change tends to provoke skepticism, if not downright cynicism. Yet the publication of TRADOC Pamphlet 525-5, *The AirLand Battle and Corps 86*, and the approval of the final draft of a new Field Manual 100-5 justify such an announcement, for the doctrinal shifts the two publications embody have major implications for those who will fight the next war.

To be sure, the publication of the previous version of FM 100-5 (July 1976) created a considerable stir, and the pangs attendant to its birth have not totally subsided. But that excitement stemmed as much as anything else from the startling and lethal lessons of the Israeli experience and the personal magnetism of the author. The Army really did not have to do anything different; it just had to do things better and faster.

The new doctrine, though, demands some significant changes. And these changes fall on no one more heavily than on the infantry commanders and operations officers at the brigade and battalion levels. To enact this doctrine, they will need to reconsider how we fight.

The basic principles of the AirLand battle are few and simply stated:

- Deep attack is essential.
- Deep attack and the close-in fight are inseparable.
- Planning for nuclear and chemical fires must be continuous.

Both of the new publications offer compelling logic for each principle. The main criticisms of the previous doctrine held that it sought, at best, a draw, and called for engaging an enemy's strengths rather than his weaknesses. Numerous studies and wargames showed that regardless of how the attrition ratios fared, the end result remained the same — the United States Army lost.

The new doctrine tries to avoid those problems by attacking an enemy force at each level (at least for first echelon armies). Such attacks offer numerous benefits: They slow the arrival of follow-on echelons, exact casualties on combat and support forces, and create the opportunity for offensive action at the forward line of own troops (FLOT). Thus, the deep and the close-in battle cannot be separated. The allocation of resources, the assignment of missions, the logistical support — in short, everything connected with fighting battles — must all take place with an eye to the total battle. They cannot be viewed as separate fights. This point is an important one. It fundamentally shifts the focus of the battle and dramatically affects the manner of fighting it at each level.

The third principle of the AirLand battle attempts to address a problem that has confronted the Army since President Kennedy enshrined unconventional warfare as the wave of the future and caused a precipitous drop in

interest in the nuclear battlefield. Although the old FM 100-5 contained a chapter on tactical nuclear war and a segment on tactical weapons, they remained largely undigested lumps. The new doctrine, while not doing much better in terms of detail, clearly states the requirement for nuclear and chemical planning. Given the Threat's doctrine and capabilities, anything less would qualify as foolishness.

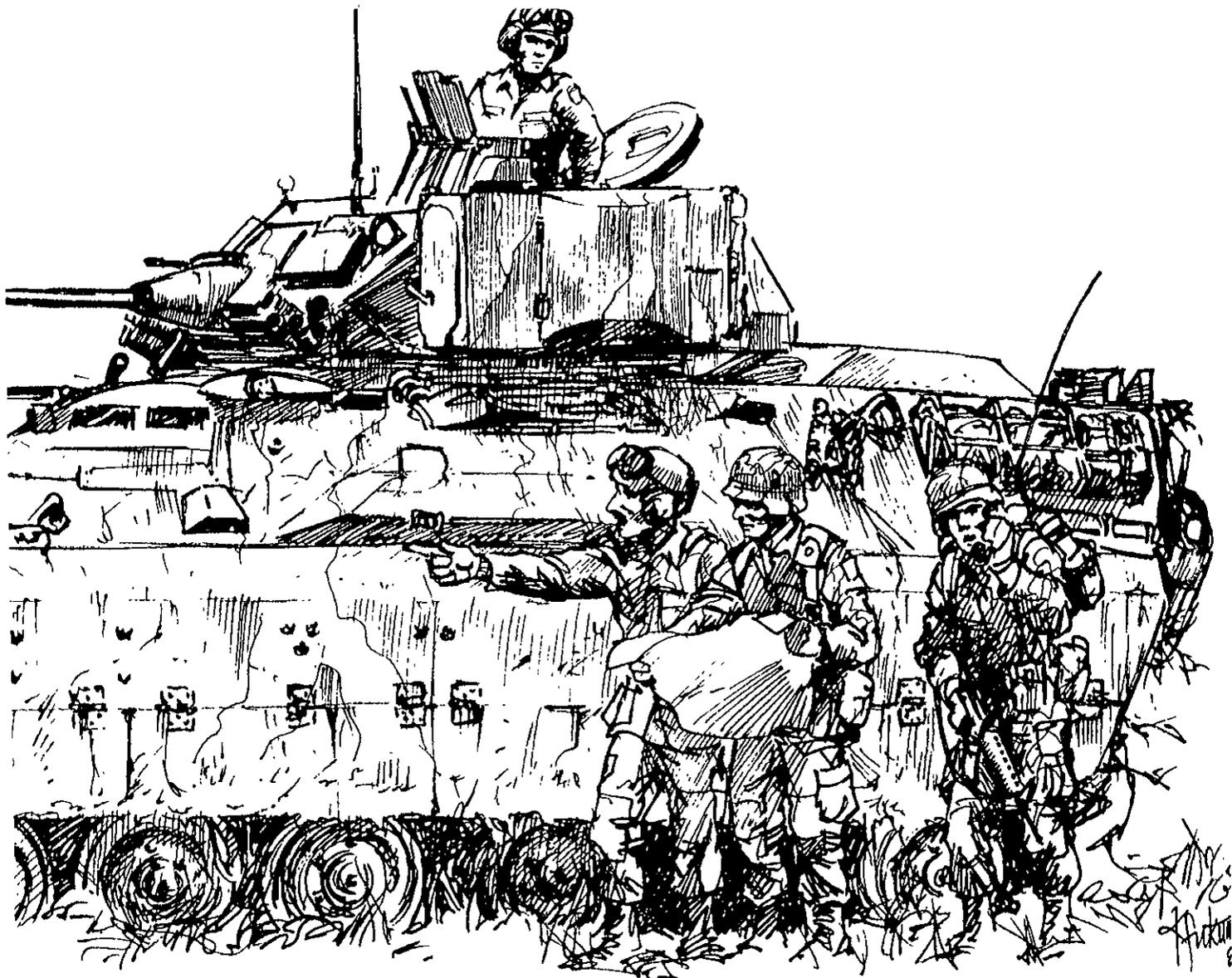
COROLLARIES

Nothing said thus far should provoke surprise or disagreement. But if the three principles can stand as propositions, then their corollaries should prove of intense interest and concern to the infantry officer. Stated simply, the requirement for deep attack leaves the infantry brigades and battalions with far less support in terms of aircraft and artillery than most infantrymen ever dreamed. It follows, then, that they must find ways to compensate.

The new doctrine charges the corps commander with the deepest battle and frankly acknowledges that air interdiction provides the primary weapon. Depending upon the situation — specifically, the amount of flexibility the corps commander has in positioning — some artillery units may find themselves allocated against this mission. Unquestionably, air assets will be scarce, particularly early in the battle. By doctrine, the Air Force concentrates first on air superiority. The assignment of deep interdiction missions will absorb some of the aircraft capable of performing both interdiction and close air support (F-4s now, but F-16s later). Furthermore, because they will operate beyond artillery range in most cases, some aircraft will have to be used to suppress an enemy's air defenses. Thus, fewer air assets will operate at the FLOT.

But the paring away of assets does not stop at the corps. The division commander must interdict units in his area of influence (15 to 70 kilometers from the FLOT in distance, 24 hours in time). Again, aircraft and artillery assets will have to carry the burden. The aircraft will most likely include armed helicopters, thus further depleting the assets infantry commanders have routinely counted on. Additionally, under both the old and the new doctrine, the division commander is responsible for counterfire and will have to allocate additional artillery against this requirement. Simple arithmetic, therefore, dictates that not much support remains.

Of course, the division commander does have the responsibility for providing close-in fire support. But the Field Artillery School, which trains the fire support coordinators, has clearly signaled its view of the situation: "Faced with the requirement to attack three distinct target sets concurrently, the division commander simply can't afford to farm away up to two-thirds of his field artillery for a single purpose." Recognizing that most divisions have only four organic artillery battalions, it becomes readily apparent that no brigade commander can assume he will have a direct support artillery bat-



talion committed totally to him. He may find that "his" artillery has been given higher priority targets elsewhere.

The infantry commander, of course, should not view this state of affairs with unalloyed horror. The premise underlying these requirements is that it improves rather than aggravates his problem at the FLOT. Numerous studies and simulations show that successful interdiction does reduce or delay the enemy forces that arrive at the FLOT. Similarly, counterfire increases the effectiveness of our own direct fire systems.

The deep battle and counterfire, though, really treat the cause (echeloned forces) rather than the symptom (the number of enemy soldiers arriving at the FLOT). The challenge is to keep the friendly units at the FLOT from perishing from the symptom. This is the challenge that confronts the brigade and battalion commanders and the operations officers most directly. They must find ways to compensate for the reduced support, because their task remains formidable; they must deal with the assault echelon regiments, which will prove the most difficult to counter, for they will arrive in combat formation, one-half to two-thirds of the force, augmented by most of the supporting artillery.

Under the old doctrine, the infantry commander could have expected to begin engaging the enemy's lead elements several kilometers from his position with a combination of close air support, armed helicopters, and artillery. While he may still have these available, there will be far fewer of them. Accordingly, three options come to mind: electronic warfare support, engineer support, and maneuver.

OPTIONS

For several years electronic warfare has been recognized as a form of combat power. Jamming assets available to U.S. forces tend to favor their use in the close-in battle. This, coupled with the decline in other support means, argues that our front-line commanders should have priority on the use of these assets. But commanders must carefully plan and time their use. If jamming is employed too early, an enemy can overcome it by switching frequencies or locating the sources and eliminating them. If used too late, jamming will also be ineffective. Properly used, jamming can destroy an

enemy's ability to coordinate his fire and maneuver elements, essential for any successful assault.

Similarly, engineer support favors close employment, and the infantry commander would do well to fight for his share of that support — it can aid his own mobility and survivability and hinder an enemy's movement. Skillfully placed obstacles such as tank traps or minefields will improve the effectiveness of all weapon systems. Bunkers and other defensive positions protect our own weapon systems and make them more effective by shielding the gunners from small arms fire and from shrapnel. Engineers can also improve a unit's mobility by clearing paths and filling ditches. Such support may prove crucial if the maneuver scheme calls for a rapid disengagement.

Every commander, needless to say, should have a maneuver scheme, and an infantry commander must focus on maneuver as a way of avoiding an enemy's strengths while attacking his weaknesses. The specifics will vary from one situation to another, but the need for a maneuver plan will remain constant. No longer can commanders think in terms of occupying a piece of terrain and holding it to the death, for that is exactly what will happen. They must use terrain, but as a means rather than an end.

CONTINUOUS PLANNING

Not all of the demands imposed by the new doctrine manifest themselves as requirements to offset reduced support. Some appear in the planning and fire coordination process. Most obviously, the requirement for continuous planning for nuclear and chemical fires will demand considerable attention. As the new doctrine suggests, these weapons have their greatest effectiveness when they are used against deep targets where an enemy's formations are most vulnerable and the effects on friendly forces are least. But the range of the present artillery-delivered weapons (under 30 kilometers) will limit the use of many of the tactical and chemical systems to within a reasonable distance of the FLOT.

Unfortunately, most U.S. officers are singularly ill-equipped either by mental preparation or tactical practice to get the most out of such weapons. The first task for all concerned, therefore, is to learn in detail the effects of nuclear weapons, as much for what they will not do as for what they will. Artillery-fired atomic projectiles have relatively small yields, and they require precise target information. Secondly, the infantry commander must thoroughly understand the release system and delivery constraints. If he simply leaves this issue to his artillery liaison officer, he may find himself without nuclear weapons when he most wants them.

A third point pertains to both conventional and unconventional weapons. Many artillerymen and even more (approaching most) infantrymen do not thoroughly understand the fire support process, although it probably

receives more lip service than any other aspect of the complex task posed by tomorrow's combat — that of orchestrating or synchronizing the battle. That the process is not well understood should surprise no one. All too often, the infantry and artillery train separately. When they do train together they plan separately. That is, the S-3 plans a maneuver and delivers it to the FSO, who then plans the support.

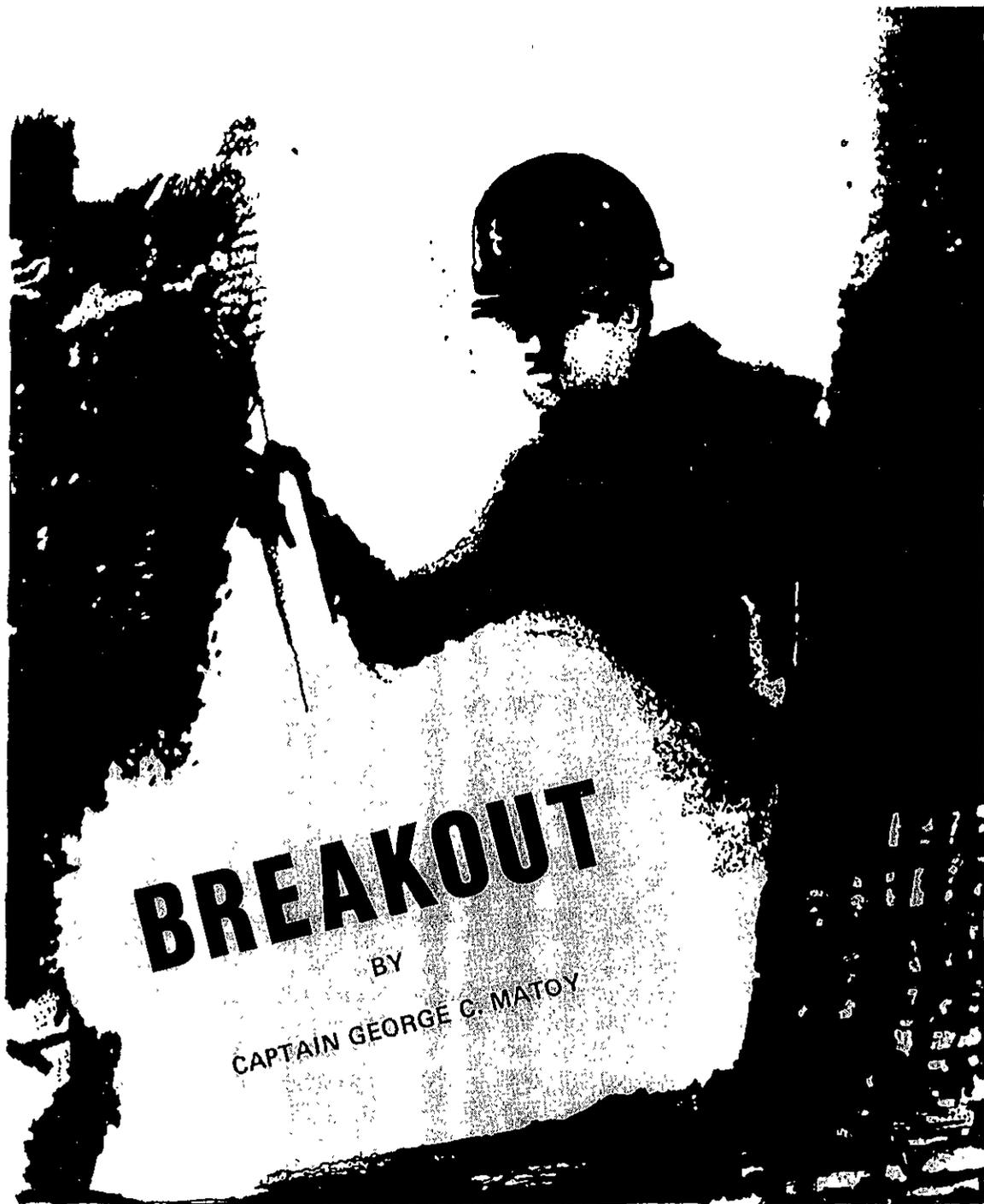
The system is also complex. In fact, the process of winnowing targets from masses of intelligence, comparing them against established priorities, and allocating them to delivery systems and munitions has outstripped the manual capability of the division artillery and fire support element. But the commander who would win must thoroughly understand the capabilities and limitations of the system.

PRIORITIES

Target priorities will weigh heavily in any future conflict. We will face more targets than we can kill, so we must shoot at the right ones. To comprehend the problem, one simply has to know that it is possible for a direct support artillery battalion to receive requests for fire from 36 sources. Granted, the company FIST and battalion fire support officer are responsible for directing traffic, but the commander's priorities of targets provide a critical element in effective fire distribution. In the absence of intelligent guidance from the maneuver commander, targets tend to be fired on a first-come basis, a process that will certainly waste scarce resources and jeopardize the firing unit for little or no real gain. The only solution to this problem is close and continuous practice between the commander's staff and his supporting elements. Command post exercises provide an ideal vehicle, but they must be frequent, well-planned, and fast-paced.

The new FM 100-5 and the TRADOC pamphlet do indeed herald significant changes for the infantryman. Under this doctrine, and contrary to our historical practice, he will have less with which to do his job. If all goes as planned, he will also have less to do, but still he must prepare to offset the loss in fire support assets by using creative maneuver, electronic warfare, and engineer support. He must also thoroughly acquaint himself with the procedures and effects of nuclear and chemical weapons. And he must study intensively the fire support system so that he can get the most out of his remaining assets. If he does all these things, he will have created the opportunity for victory.

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On 31 January 1942, after his soldiers had endured a siege that lasted 73 days, German Field Marshal Friedrich von Paulus surrendered to Soviet forces near Stalingrad the remnants of his encircled Sixth Army plus half of the Fourth Panzer Army, a total of some 91,000 men. In the more recent 1973 Arab-Israeli war, the Egyptian Third Army was virtually encircled by Israeli units and only narrowly escaped destruction.

Since 1945, the development of large mobile forces has given an offensive commander the wherewithal to maintain a special sort of freedom of operations and to carry out rapid advances, deep penetrations and swift turning movements. Conversely, a commander defending against such forces must now take swift action and make very sound tactical decisions to turn them away before his own can be encircled and destroyed.

The commander of the German 1st Panzer Division faced this kind of problem in late 1941 on the Eastern Front.

When the German offensive against Moscow came to a halt on 6 December, the 1st Panzer Division was some 15 miles north of the Soviet capital. It was immediately ordered back to Klin and instructed to keep the route through that town open for other withdrawing German forces (see accompanying map). Because deep snow prevented cross-country movement, the highway that ran through Klin was the only route over which mechanized and motorized columns could withdraw.

After fighting the enemy as well as the weather, the division reached Klin where it succeeded in holding that important junction against persistent Soviet attacks until the other German units had passed through. At that point, though, as the division prepared to break contact and withdraw to Nekrasino, it found itself completely surrounded by strong Soviet forces. Its higher headquarters ordered the division to abandon its vehicles, if necessary, and to break through to Nekrasino where it could link up with other German forces.

Unfortunately, on several previous occasions the Soviets had cut the road to Nekrasino, during which times other German units had lost numerous vehicles in

breaking through. These wrecks had piled up on either side of the road with little more than a narrow lane between them.

After ordering a reconnaissance in force, the division commander felt that Soviet resistance was weakest in the area southeast of Klin and that a breakout in that direction would most likely succeed. The terrain, however, was such that practically all of the division's vehicles would have to be left behind, and there were about 1,000 wounded German soldiers in Klin who could not be evacuated without transportation. In addition, despite having lost a lot of equipment, the division still had a large number of vehicles, and the commander was loath to give them up if he could possibly avoid it.

After a short meeting with his staff and senior officers, the division commander decided to keep his vehicles and to break out along the road to Nekrasino, although he knew his units would probably meet strong Soviet resistance. He was also determined to evacuate as many of the wounded soldiers as possible.

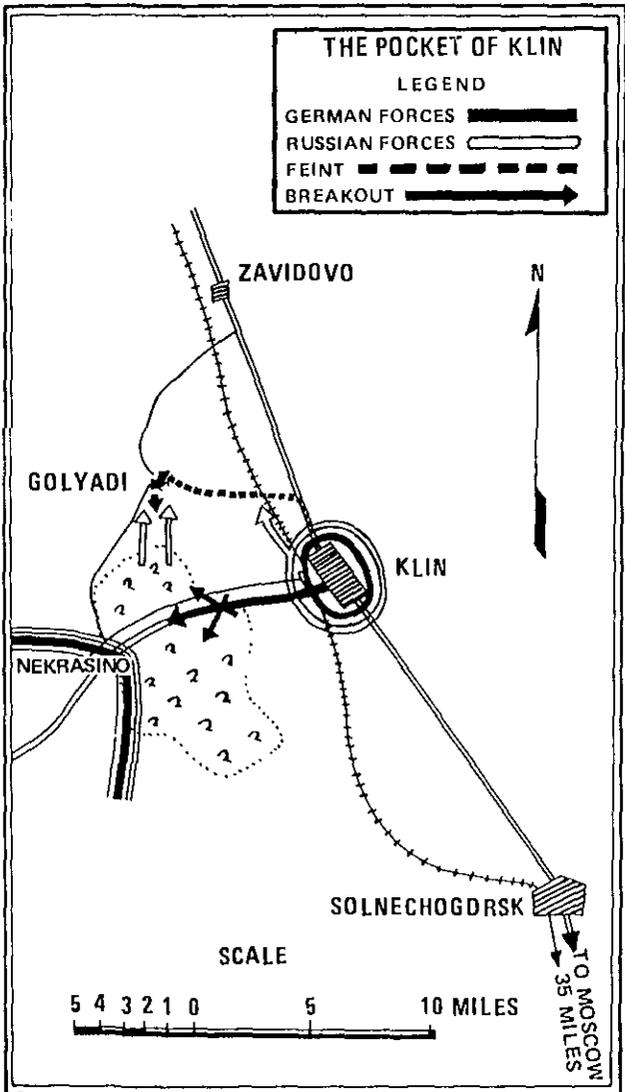
In preparing to break out, the division made good use of its experiences during a previous encirclement at Kalinin. There, after carrying out a feint in one direction that had diverted some of the encircling Soviet forces, the division had succeeded in making a surprise breakout, losing no equipment and suffering few casualties. The great flexibility of its artillery had been decisive. By shifting its fires rapidly from target to target, the artillery had been able to support both the diversionary and the main attacks. Equally important, the division had used in its main effort those tanks that had survived the diversionary maneuver.

DIVERSION

After carefully surveying the situation around Klin, the division commander decided that all the available tanks, one company of armored infantry, and one rifle battalion would conduct a diversionary breakthrough north of Klin, after which the force would pivot toward the west and the town of Golyadi. There, it would turn sharply to the south and attack toward the Nekrasino road.

The main breakout along that road would be launched as soon as the Soviets had reacted to the threat near Golyadi and had begun to pull their forces away from the main road to counter the Germans' turning movement. Initially, the entire division artillery from positions around the railroad station in Klin and all of the available antiaircraft weapons would support the diversionary attack.

The intended deception was completely successful. The German diversionary force fell on the Soviets at Golyadi and caught them by surprise. The Soviets began to shift their forces to meet this German attack, which they assumed to be the main breakout effort. (Incidentally, the attacking German troops had not been told that their effort at Golyadi was no more than a feint. The division commander felt that the soldiers who were carrying out



the feint would not fight with quite the same zeal if they knew that they were being used merely to deceive the Soviets.)

As the Soviets began to shift units from the Nekrasino road, the commander of the 1st Panzer Division decided that this was the appropriate time — about noon of the same day — to launch the main breakout. On a prearranged signal, most of the artillery and antiaircraft weapons shifted their fires. Only one artillery battalion continued to fire on the old targets to cover the withdrawal of the diversionary force.

The division's armored infantry battalion drove a gap through the Soviet lines, and the units that followed widened it. A number of the tanks that had taken part in the diversionary maneuver had made their way to Klin by this time and were committed on both sides of the road. Under their protection, the wounded soldiers, on trucks and sleds and accompanied by armored personnel carriers, were moved out of the town.

By now, too, the artillery was covering the flanks of the breakthrough column, while in the eastern part of the city combat engineers held off a Soviet attempt to disrupt the breakout. The entire force eventually fought its way through to Nekrasino, where it linked up with other German units.

While the division undoubtedly owed much of its success to the proper employment of its combat elements, strict traffic control permitted it to evacuate a large number of its vehicles, and this really determined the final outcome of the operation. Vehicles that broke down were immediately pushed off the road to keep the column moving without interruption, while a large number of slightly wounded officers and noncommissioned officers were added to the military police to help enforce traffic discipline.

Substantially intact, the 1st Panzer Division emerged from the pocket of Klin taking along its casualties and much of its equipment. Twenty-four hours later, on a different sector of the front, it was again in action.

TACTICAL CONSIDERATIONS

As can be seen from the above example, the commander of an encircled force has a lot to think about in planning and executing a successful breakout. He should determine the proper time and direction of his breakout only after he considers the following questions:

- What is the earliest possible moment we can launch our attack?
- Where is the enemy weakest?
- What is the shortest route to friendly lines?
- What direction involves the fewest terrain difficulties?
- What hour and what weather conditions favor the attack?
- Should we select more than one direction?

Usually, unless the breakout attempt is coordinated with the approach of a relief column, the unit attempting

the breakout should use the shortest route to other friendly forces. Accordingly, the choice of route is crucial, and the direction that favors the terrain and the weakest enemy resistance should not be chosen unless that route favors a rapid link-up with friendly troops.

The commander must also consider the physical fitness of his troops. If they are in good fighting condition, he might consider a night attack. If the troops are battle-weary, though, the breakout may be best conducted in



the daylight hours to permit better command and control.

A breakout in multiple directions offers only a small chance of success. In fact, it is usually a last ditch effort primarily to disperse the total force so that the smaller units can reach the friendly lines. Such an act of desperation should be considered only in those occasions when a relief force is not expected and the distance to friendly lines is so great that a breakout can no longer be attempted by the entrapped force.

If a breakout attempt is to succeed, an effort must be made to strengthen the combat power of the fighting units at the expense of the support units. The selection of personnel for transfer from support units to combat units may be a slow process, but it is important if the breakout attempt is to stand any chance of success.

In encirclements, for example, the support units usually outnumber the combat forces, and while they may be superfluous to the actual battle, their presence places an additional burden on the commander. Support units can serve as a manpower reserve that can be used to assist the combat units. Care must be taken, though, not to assign too many support troops to a combat unit. The whole

procedure can be counter-productive if these men become a burden to the combat units to which they are assigned. An alternate method might be to form units composed of support troops and to hold them in reserve under tight control.

Engineer activities that are designed to prevent or slow the pursuit by enemy forces over abandoned terrain must be ordered and executed on time. It is advisable to limit such operations to a few key areas. Troops usually have neither the time nor the desire to carry out extensive or time-consuming destruction of material or equipment. On the other hand, the commander must make sure there is no senseless mass destruction of material or equipment, which is characteristic of trapped soldiers.

DECEPTION

Because the success of a breakout also depends on deception and secrecy, as few subordinate commanders as possible should know about the actual breakout plan, and telephone and radio communications must be closely monitored. Radios, though, do offer the best means of deceiving the enemy. Such deception may be accomplished by transmitting false messages about the unit's intentions, SOSs sent to imaginary relief forces, reports intended to confuse the enemy about actual unit strength, misleading requisitions for resupply, and false information regarding drop zones and landing areas.

Feints and false maneuvers go hand-in-hand with the deception plan. Making movements in different directions each night, launching attacks with limited objectives from various points on the perimeter, and stubbornly defending important terrain features can help the trapped unit camouflage its intentions.

Apart from the diversionary plans, the most important tactical consideration is the gradual change from the defense to the attack. As the situation permits, soldiers who can be spared from defensive missions should be transferred to the area selected for the breakout attempt, but some may need a rest before they are again committed. This transfer involves some risk, of course, because it does require the shortening of the defensive lines. Confusion can be lessened if the entire pocket moves in the direction of the attempted breakout. This allows the shifting of forces to be accomplished more easily and reduces the seriousness of minor terrain losses. Additionally, it lessens the feeling of entrapment that many soldiers suffer from if they believe there is no escape and a "last stand" seems imminent.

Of course, the commander and his staff must always be ready to take countermeasures against serious emergencies. It may become difficult for the commander, as the pressure increases, to distinguish between important and unimportant developments. He must bear in mind, therefore, that his reserves are limited and should not be committed unless a major threat develops at a decisive point.

As the time for the breakout nears, and as the tension

within the pocket builds, the commander must become a tower of strength, conscious that his troops are watching his every action. Even his command post's location can be important; it should always be approximately in the center of the pocket. Under no conditions should the operations of an encircled force ever be conducted from outside the pocket.

The soldiers' morale may be bolstered if the commander issues only brief, clear orders, provides reassuring information, and makes frequent visits to critical points on the perimeter. Exaggerated optimism is out of place. Soldiers want to know the truth and usually discover it for themselves, and they will lose confidence in their commander if they believe he is tampering with the facts. Usually, the truth, told without an emotional display, reassures and can even stir the troops to greater efforts.

STEPS

In order, then, the steps to a breakout attempt are as follows:

- Emphasize the defense.
- Establish a chain of command.
- Stabilize the defense.
- Reinforce the combat units with support troops.
- Evacuate nonessential or wounded personnel, if possible, and destroy excess equipment.
- Gradually shift emphasis from the defense to preparations for the breakout effort.
- Form the breakout force.
- Shorten the defense perimeter, while strengthening the sector selected for the breakout.
- Carry out deceptions, including feints or diversionary attacks.
- Execute the breakout.

Today's combat commander can expect to face an opposing force that is built around highly mobile elements supported by strong tank reserves. These forces can conduct high-speed combat operations that favor encircling and destroying their opponents.

Therefore, the commander of a force threatened with encirclement must take immediate steps to break out of his opponent's grasp. And if his tactical decisions are both timely and sound, he can rest assured that he and his soldiers will live to fight another day.



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the **BATTALION**

Executive
Officer

LIEUTENANT COLONEL WOLF D. KUTTER



An assignment as a battalion executive officer is a challenging one, and one that many officers look forward to. It can also be either the most fulfilling one an officer ever had or the most frustrating, for he must try to accomplish the unit's mission and promote the welfare of the soldiers of the battalion at the same time.

In the spirit of professional exchange, therefore, I would like to share some of my own experiences as a battalion XO in the hope that they might prove helpful to other officers who may be assigned to the job.

Needless to say, it is a position that must be defined from the outset by the battalion commander. A commander, for example, might entrust his XO with being the unit's deputy commander, as practiced by the West German Army, or he may feel more comfortable with his XO acting as the chief of staff for the battalion's principal and special staff officers. No matter how the executive officer's role is defined, though, the outcome ought to be that the battalion's command group, consisting of the commander, the command sergeant major, the XO, and possibly also the S3, ratify a kind of contract of expectations that everyone clearly understands. The command sergeant major, for instance, works *for* the battalion commander and *with* the XO.

A new XO should be aware of the many roles he will be expected to play: He will be a teacher, conciliator, sounding board, investigator, coordinator, facilitator, planner, supervisor, counselor, and leader. In all of them, he should lead by example and avoid the pitfalls of "managing."

It has been my experience that most of the soldiers, noncommissioned officers, and officers of a combat arms battalion want to do a good job. I believe that most soldiers are happy in a well-disciplined unit, that NCOs will exercise whatever authority they are given, and that today's combat arms officer is the best I have ever seen.

If all this is so, then what is the job's special challenge?

First, some of the problems the new XO faces are unique to that job. Although he has seen most of them before, he will be seeing them from an entirely different perspective.

The pace of the job is especially hectic because of annual inspector general (AGI) visits, maintenance assistance team reviews, and the unit's training activities. Maintaining the battalion's equipment and managing personnel, logistics, and financial resources effectively usually also fall within the XO's special domain. In addition, he has to accomplish all of these tasks in the face of reduced manning levels and a potentially high turnover of personnel, which means that policies, procedures, and SOPs need to be constantly reviewed, reinforced, revalidated, and retaught.

The XO often finds himself explaining key rules for the third or fourth time in a year because the people responsible for adhering to them are gone. He can expect breakdowns in the various support systems in the battalion because of what I call an "underlap" of personnel. He may be too thinly staffed to have an understudy for the PLL clerk who knows where to deliver the key req-

uisition form so that a critical part for his M113 can be drawn.

People are not the only challenge. Equipment is another. Training hard with our weapons, our wheeled and tracked fleet, and our communications equipment is our reason for existing; we are expected to be a combat ready force. Sometimes, though, reducing the use of equipment can be an advantage. There is no profit in training so hard today that the next command group has to have as its first priority a "get well" equipment program.

Repetitive, thorough maintenance training that includes operators and supervisors will preserve equipment, reduce the demand for spare parts and major assemblies by 20 to 40 percent, and also improve readiness. In my battalion, the time we dedicated to equipment recertification because of the high turnover of personnel paid high dividends.

All of these challenges can be seen in terms of goals, and the quest for a combat ready battalion can be broken down, particularly as it concerns the XO's role, into immediate, intermediate, and long range goals.

My own immediate goal as an XO was to mitigate frustrations, particularly among noncommissioned and junior officers — frustrations caused by not having the needed tools, spare parts, manuals, or supplies — and to troubleshoot any problems in the personnel, maintenance, and supply systems. For example, if the direct support maintenance company failed to honor an unserviceable equipment turn-in date and the battalion motor officer did not get immediate satisfaction, it was time to act.

Intermediate goals are the ones most commanders concentrate on, such things as the successful completion of ARTEPs and AGIs, and general defense plan exercises, all in support of combat readiness. As a result, the XO will usually spend most of his time on these goals as he plans, organizes, and coordinates the staff to accomplish those missions. But his focus really should be wider.

His long range goal should be to make sure the young men who join his unit today become tomorrow's successful leaders. Through his efforts, a squad leader who reports for duty with previous assignments in recruiting, ROTC, and at a training center should become a successful platoon sergeant. Similarly, he should see that each junior officer gets the professional development he needs to perform vital roles in combat at least one level above his current rank.

In short, the XO has a trustee responsibility. He must not only achieve the highest possible readiness for the moment but in that process set aside the time to build tomorrow's Army leadership today. In addition to these professional development programs, he should become involved in programs that include the soldier's family, the facilities he lives in, and the equipment he operates.

In reviewing my tenure as a battalion XO in light of these goals, several issues come to mind having to do with the differences between the XO as chief of the battalion staff and the XO as deputy commander.

As the chief of the battalion staff, I held three short morning meetings a week to coordinate actions, review programs, and issue instructions. If I had been limited to that role, however, the battalion staff would not have been able to accomplish as much as it did. Therefore, I carefully nurtured my role as deputy commander, because as the principal administrator and logistician of the battalion, I had to have the force of law behind any instructions I issued. Extensive face-to-face discussions about problems, especially with company executive officers and their commanders, were normal, and we tended to resolve those problems more easily that way. We rarely had to involve the battalion commander in trivial details.

In the continuing tug of war between centralizing and decentralizing functions, I resisted all efforts to wrest control from subordinate commanders, and similarly refused to centralize functions under battalion control. PLL clerks were not centralized under the battalion motor officer, the battalion supply activity center remained disbanded, and financial resources were parceled out to company commanders. This kept things cleaner and simpler, and it put the burden of performance where it belongs — on the subordinate “green tabbers,” who are always ultimately responsible.

This is not intended to imply that the battalion staff was secondary to the company commanders; there was no competition. Our purpose was simply to provide superior service and good staff products. We encouraged the companies to regard the battalion staff members as their best employees, and the staff members likewise had ready access to points of contact within the companies to get their jobs done.

On the assumption that an XO should state policy based on the battalion commander's guidance while the staff should develop procedures, in our battalion we preferred to give mission orders to the staff, we kept reports and statistics to a minimum, and we had frequent face-to-face communications with our subordinates — and with our superiors, too, for that matter. This face-to-face communication process can be compared to the function of the cop on the beat — the more he walks, talks, and observes, the better feeling he has for what is really going on in the neighborhood.

The XO usually finds that various members of the battalion will bring policy issues to him soliciting his support for one action or another. Invariably, in considering these issues he should ask himself, “Am I trying to achieve the highest standards in one of the battalion's functions or subsystems at the expense of another?” The correlative question is, “Can we accept something less than 100 percent in that function — perhaps 85 to 90 percent — and thus avoid sacrificing that other function?” For example, we could say, “We're going to redo all our clothing records for the AGI.” Or we could say, instead, “We'll validate all clothing records against the Unit Manning Reports, seeing that the S4's SOP specifies such checks monthly and that supply sergeants are actually reconciling their company clothing records transactions

with the S4 CTA 50-900 section monthly.”

Another recurring issue is that of specializing versus generalizing jobs. Having seen lieutenants switched from one position to another within a battalion every six months for “career enhancement” purposes, I can only suggest that trying to make everyone a generalist is self-defeating. We have enough turmoil among our leaders without creating more. What we need to do is to build expertise, which means specializing, not generalizing. There is nothing more valuable than an S1 who has held the same job for two years. (Not to mention an XO who has been around for a while. Today, a battalion commander often has as many as three different XOs during his 30 to 36 months of command.)

Junior officers in particular need to be left in one place long enough for them to develop a bond with their NCOs; such a bond promotes trust, mutual respect, and unit cohesion. Further, it is precisely the long range goal of professional development that can bring out the tactical expertise of an S1 or S4. The XO should have these officers enroll in correspondence courses or professional writing programs to expand their tactical knowledge as well as to raise their esteem among their peers and superiors.

TECHNIQUES

In dealing with all of these interrelationships between challenges, goals, and certain key issues, the XO has to develop some techniques for problem-solving. These techniques can be discussed in terms of planning, organizing, controlling, supervising, and evaluating.

Planning. When the XO is doing his planning, he needs to look ahead three to nine months and develop his own detailed calendar of events, making sure that he and his staff have consistently touched base with the division and brigade staffs. Planning requires him to be his battalion's ambassador in dealing with the various organizations. If the people in these organizations regard him as such, they are more likely to tell him about crucial changes that affect his battalion.

The XO must also visualize proposed plans and the arrival of new equipment in terms of the work effort required of every echelon in the battalion. This may entail reconciling a “can do” attitude with the actual productivity of the various organizational echelons. A case in point is determining the number of mechanic manhours actually available against the projected maintenance requirements generated by back-to-back FTXs plus an ARTEP.

Organizing. When it comes to organizing, a multilevel approach is best. The XO's first step is to make sure the staff officers are organized to offer the best assistance to him and the battalion commander. At the lower level, the XO should ask if the effort is organized so that the NCOs have what they need to do their jobs — people, time, supplies, equipment, and facilities.

Organizing also means that directives and procedures

such as maintenance SOPs, driver training directives, and platoon ARTEP letters of instruction are widely distributed. It also means that everybody is given the time they need to read and comprehend all of this information.

Finally, organizing implies that the XO has a firm grasp of the key indicators that provide him with warning signals. I am not advocating management by statistics. What I am advocating is the organization of controls, the formulation of key questions, and some indications that a plan is on track. Thus, knowing what to look for on a readiness report, a technical inspection sheet, or a deadline report, and then asking the right kinds of questions, constitutes mental organization.

Controlling. Communicating and controlling can be among the most fascinating aspects of the XO's job. Face-to-face communications are usually more warm and meaningful, especially when they are coupled with positive reinforcements. Enlisted soldiers and NCOs should see that the XO cares when he comes to their worksite, and the old truism that what is checked gets done still holds up. It makes a big difference when the XO asks a company motor sergeant about his zero balance lines, about the reconciliation of due outs, and how his new mechanic is working out, and thanks him for a great effort on the last FTX.

Because control involves communications, the XO should encourage the flow of information. He needs to let his subordinates, especially the staff officers, know that he wants even bad news to come to him promptly. His subordinates must also be encouraged to build open, honest communications in all of their functions. This means with and between constituents — S4 to supply sergeants, company XOs, the brigade S4, and so on. When communications are open and frank, and the XO makes the rounds of his own constituents — the brigade staff, the brigade XO, and so on — he will undoubtedly pick up enough information to keep the battalion commander informed and two steps ahead of any problems.

And if he finds that the best staff directives have been modified, it is his job to find out why.

Supervising. The XO should decide first what is important enough to warrant his personal attention and what the staff should supervise for him and the commander. He should remember that oversupervision stifles initiative; it does not allow people to grow in their jobs, to make enriching mistakes, or to produce up to their potential. So the XO must decide carefully what he wants to observe, what he should check, and what he really needs to supervise.

Good staff supervision will highlight problem areas, but before he jumps, the XO should ask himself if the problem is structural or procedural or if it reflects a lack of resources or a failure to adhere to published directives. In other words, he should let his own good judgment tell him what to do. (For example, when a company fails to turn in its Class IX report, he might consider that the company XO is new and the motor sergeant is on leave.) And he should remember that short-range solutions often

have long-term ramifications.

Sometimes just standing for a few minutes at one of the key intersections of the battalion (places such as the mess hall, the motor pool, and near billet entrances) can give him an indication of the progress that has been made and of what still needs to be done. These standards should relate to the basic tools readily at hand for the junior officers and the noncommissioned officers. Standards expressed in terms of the soldier's manuals, battalion SOPs, and technical manuals improve comprehension, foster the XO's role as teacher, and provide a degree of continuity.

Evaluating. This is something we generally do not do very well. It is probably the pace in the battalion that keeps us from seeking the feedback we need to do a good job of it. Nevertheless, the XO must insist that it be done continually; he must cull the results from after-action reports and then integrate better methods of doing things into the next cycle of events.

These "oughts" of what to do should then be related to the immediate, intermediate, and long range goals that have been established. Feedback may tell the XO that his mess hall account went into arrears on the last day of the month because the dining facility manager overbought Class I items. An evaluation may indicate that this is a recurring problem and that the wrong kinds of main dish items were purchased.

Similarly, feedback may tell the XO that the battalion's administrative transactions are not timely and that, in fact, his people do not know how to use the various support systems effectively. Whatever his evaluation of these and similar problems, the result may very well be a "dirty dozen" list that he and the command group will have to work on. And if things should ever get monotonous, he may ask himself what else can be done to unlock the human potential in the battalion, what small action if implemented might pay off in terms of his goals.

Any officer who is fortunate enough to be assigned as a battalion executive officer should enjoy the opportunity and feel rewarded by it. During his tenure, he can be certain that tomorrow's leaders will be preparing themselves by following his leadership and his example.



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TRAINING NOTES



THE BAYONET

JOHN P. GARZONE

After a ten-year absence from the Army's training calendar, bayonet training has reappeared — much to the delight of some and the despair of others. Although many soldiers feel that the bayonet is little more than an expedient can opener, and should remain so, the bayonet has found staunch support with others who feel it embodies an infantry soldier's will to fight. The question today, though, isn't whether soldiers should have a bayonet, but rather how they should use it. The answer depends upon your view of modern combat.

THE GREAT DEBATE

Any proponent of bayonet training will quickly tell you its most important result as he sees it: The training promotes aggressiveness and confidence in each soldier. He believes that hand-to-hand combat is the most feared and desperate of situations, and that only a trained bayonet fighter can survive it and win. This view is usually countered by the observation that there is little need for bayonet fighting in an age of automatic weapons and mutually

supported firepower. Those who argue against the bayonet feel that bayonet fighting is an undesirable if not unacceptable tactic. Both sides can call upon a mountain of historical data and experience to argue their cases.

The bayonet saw its greatest use during World War I when an infantry assault with fixed bayonets was the only way ground could be gained and then held against resistance. The soldiers who did not use their bayonets aggressively paid the price. The arrival of the machinegun shortened the day of the bayonet and its use decreased as automatic weapons multiplied.

During World War II, the bayonet was confined to small and desperate engagements or individual acts of heroism, and its mere use in combat became remarkable and awe-inspiring. For most, it became a forgotten weapon and the bayonet fighter a ghost of the past.

Today, the trained bayonet fighter is coming back, and whether you love it or hate it bayonet training is here again. So, what's a trained bayonet fighter?

According to the War Depart-

ment's 1918 bayonet training manual, a trained bayonet fighter was a soldier who could disable or kill an opponent with a fixed bayonet using any of four basic attack movements. Those same four movements are taught today at Fort Benning to all new infantrymen in a program of instruction called Instinctive Rifle Bayonet Fighting (IRBF) techniques.

IRBF stresses the four attack movements and is aimed at training a soldier to use them quickly and instinctively if the need ever arises. The instruction program covers nine hours, which are divided into six hours on learning the movements and three hours on a bayonet assault course.

The new infantrymen first learn the attack movements on a drill pad with each soldier alternately playing offensive and defensive roles. During the six one-hour periods, each soldier learns the thrust, butt stroke, slash, and smash attacks and how to combine them with parry and blocking movements. The emphasis is on the offense, and the soldiers are continually urged to take the initiative and press the attack. Aggressiveness is a main goal of the training — and

certainly teaches that.

After they have learned the four basic attack movements, the new soldiers are put through a specially constructed bayonet assault course, which is 460 meters long and quite tough to negotiate. The path of the course leads around and up a hill in much the same way an assault route would in an actual combat situation. Obstacles and bayonet targets are spotted along the course.

The soldiers first run the course in groups of ten, negotiating the obstacles and pausing at each target to deliver, on command, a specific bayonet attack. Each soldier is evaluated on how well he executes the movements, and on his aggressiveness, control of his weapon, balance, speed, and use of the proper movement techniques to get over the obstacles. Individual instruction is given on the spot to any soldier who encounters problems.

On their second run through the course, the soldiers are required to run the course as fast as possible while negotiating all the obstacles and attacking all the targets.

ADDING IT UP

The bayonet training program at Fort Benning gets high marks for promoting aggressiveness and confidence, and it does have the advantage of reinforcing physical conditioning, methods of movement, and bayonet attack techniques all at the same time. But there are some problems.

The doctrine on the use of the bayonet has not changed significantly over the years, in spite of the dramatic changes that have been made in the Army's weapons and tactics. The basic moves and counter-moves of bayonet fighting are well known and practiced by all of the world's major armies. In effect this creates a static condition with no one having a particular tactical advantage — unless the advantage is the weapon itself.

If it is the weapon, the U.S. Army may have a problem. The bayonet it

now issues to its soldiers has been reduced in length to six and one-half inches, it used to be as long as 14 inches. The soldier's rifle — the M16A1 — has also been reduced to a size and a construction never intended for bayonet fighting. Since other military forces still feature stronger weapons and longer bayonets, this puts the U.S. infantryman at a distinct disadvantage. Further, it is uncertain whether the present bayonet can be mounted or used effectively on the M203. This equipment problem is especially noteworthy, because the new infantrymen at Fort Benning must use a simulated rifle made of rubber when they run the bayonet assault course to avoid damaging their M16 rifles.

Although the current bayonet

training program aspires to teach a quick and aggressive bayonet attack with instinctive reactions, it does not actually provide for such an attack since there is no live opponent. On the drill pad, the students are taught to execute the attack movements on command. But on the course itself, the targets cannot react to an attack. In the past, the Army used the pugil stick, which, though it occasionally caused injuries, did give a degree of realism to the training. Today, there is no form of pugil stick training.

Finally, there is no provision at the present time to make sure the training is reinforced at a soldier's permanent duty station. So while the new program makes an interesting and motivating break in the routine of physical training at a training center,

OBSTACLE NUMBERS AND NAMES

- 1 LOGGALLY CRAWL OVER
- 2 HURDLES JUMP OVER
- 3 PARRY LEFT THRUST
- 4 PARRY RIGHT BUTT STROKE TO GROIN
- 5 PARRY THRUST
- 6 LOG BALANCE AND HORIZONTAL LADDER
- 7 DITCH JUMP/DITCH
- 8 PRONE TARGETS IN CRATERS
- 9 PARRY LEFT BUTT STROKE TO HEAD
- 10 PARRY THRUST
- 11 DIRT MOUND CRAWL OVER
- 12 TUNNEL CRAWL
- 13 PARRY RIGHT THRUST
- 14 PRONE TARGETS IN CRATER
- 15 FENCE VAULT
- 16 PARRY LEFT BUTT STROKE TO HEAD
- 17 THRUST
- 18 DOUBLE APRON BARB WIRE FENCE, INVERTED CRAWL, PRONE

it is not yet on the training calendar of the Army's TOE infantry battalions.

Bayonet training is a constant subject of conflict for commanders and trainers alike, because it reminds everyone of the ultimate job of the infantryman to disable or kill an enemy soldier. Technology and terminology have not made this job any easier to learn or any less deadly to practice. Today's bayonet training shows that the Army can produce an aggressive

and confident bayonet fighter. What it needs to do now is to match that

spirit with the best equipment and techniques it can provide.



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Individual Training

CAPTAIN WARREN D. WILSON

In my initial field exercise as a company commander, I directed one of my platoon leaders to prepare a defensive position blocking a critical avenue of approach. I also told him to use a hasty minefield. When I inspected the completed platoon position sometime later, I found the men well placed and the platoon's weapons properly sited. The hasty minefield area also had been neatly blocked with engineer tape. The platoon leader was convinced that his platoon could hold the position and cited many tactical considerations to support his conviction.

But there was a major flaw in his plan. The squad he had assigned to put in the hasty minefield in reality could not have done so, because not one of its soldiers knew how to

emplace, arm, disarm, or recover the antipersonnel and antitank mines. The squad leader did not even know how to record a hasty minefield. And neither the platoon leader nor the squad leader knew what type of mines or how many of them were available in the unit's basic load.

My immediate concern was to find out how this situation had come about. I discovered that the platoon had been tested on hasty minefields a year earlier during an ARTEP evaluation, and that it had passed. Since then, however, because of the rapid pace of field training exercises, it had not practiced installing hasty minefields. Instead, minefields had always been simulated, because the "men know how to install them anyway." Unfortunately, many of

the men who had known what to do had left the unit.

I also discovered in all of the platoons other deficiencies in individual skills in basic combat readiness, which pointed to inadequate individual and squad level training. Many reasons for this were cited, but the one repeated most often was the lack of time. Competing requirements, many said, took scheduled individual training time away from the squad leaders. (This, of course, also gave a weak squad leader a ready excuse for the poorly trained soldiers in his squad.)

As I checked further, I became convinced that lack of time was chiefly a convenient excuse. True, it was difficult to schedule formal training time, but there was unscheduled time

available if a squad leader would just use it — time that became available either because the scheduled training ended early, or because of short delays on a firing range, or because of pauses in the action during field training exercises. There was a lot of such time. The problem was how to use it.

My first sergeant and I believed in one basic premise: a squad leader has the primary responsibility for training his men. As the leader closest to his men he is the one they should look to for training and guidance. Whether he is an experienced staff sergeant or a young acting sergeant, the squad leader's ability and leadership determine whether that squad could accomplish its mission.

RESULTS

Stating the premise was easy. Producing results was a bit harder.

The program that worked the best for my company was based on Army Skill Qualification Training (SQT) and squad competition. Each month the first sergeant and I would select 25 to 30 specific SQT tasks to be tested at the end of the month during a Squad Competition Day. These tasks were chosen from each major SQT subject area with one to three specific tasks picked from each major area. For example, from the NBC subject area, the selected tasks might be to maintain the protective mask and accessories, to administer an antidote to a nerve agent casualty, and to initiate unmasking procedures.

The squad leaders were responsible for teaching their men the chosen SQT tasks before the competition. Although training aids and TEC tapes were available in the company area, they had to find the necessary training time.

We scheduled the Squad Competition Day in conjunction with our monthly weapon zeroing and familiarization firing. Fortunately, the range had an area large enough for us to set up the required number of test stations.

The chain of command, except for the squad leaders, administered the

competition. Each leader was made responsible for a major SQT subject area such as land navigation or NBC. He then developed the test for that station from the appropriate SQT manual. The tasks for the crew-served weapons were chosen on the basis of comparable difficulty, which meant that a line squad could be rated against a mortar or TOW section with a minimum of controversy.

In addition, we gave two written tests during the competition. The first was a simple 10-question squad member test, with questions ranging from those that might be asked by a promotion board to questions on information from the latest commander's call. The second was a 25-question test for the squad leaders. In it, the topics might range from leadership and counseling techniques to squad-leader level SQT questions.

SPOTLIGHT

On Competition Day, the squad leaders were in the spotlight as they led their men through each station. At the more time-consuming stations only two men might be chosen to perform the task, while at others all the men would be tested. The results were then averaged for each squad. This stressed the importance of each soldier being a team member, because each man's performance affected his entire squad's score.

When the competition ended, each station placed the squads in rank order. Points were awarded according to squad position, thereby

eliminating the differences in scoring between the stations. Ties were broken by adding up the number of place points involved and dividing by the number of tied squads. The results were tallied and then prominently posted in the company area.

The competition always created a lot of interest and was generally the main topic of conversation for at least a week afterward. (Regardless of what soldiers may say, they thrive on good competition.) The soldiers of the winning squad were given four-day passes, while the squad leader received an appropriate letter of achievement. The second place squad members received three-day passes. The members of the most improved squad also received three-day passes. Every squad, therefore, had an incentive to do well.

This squad competition proved effective for several reasons, the principal one being that it gave the squad members a goal to strive for as a team. Additionally, in this way we could practice and test most of the basic SQT skills over a six-month period. In the process, the squad leaders learned how to manage their available time more effectively, and the company's leaders were able to assess the squad leaders' abilities to tailor their training accordingly.

What is most important, the company's combat readiness was much improved, and the next time a platoon leader was directed to prepare a defensive position and employ a hasty minefield, he could feel confident that his squad members knew how to do it.



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ARTEP DEVELOPMENT

MAJOR RICHARD L. ST. JOHN

The various Army Training and Evaluation Programs (ARTEPs) that have been developed by the Training and Doctrine Command (TRADOC) are undoubtedly the keys to unit training. But some units have special missions for which no formal ARTEP is available. For this reason, there is a place for the development of special ARTEPs by units in the field.

The Berlin Brigade, for example, faced with a mission that requires training in military operations in urban terrain (MOUT), designed, developed, tested, and published its own MOUT ARTEP, one that was specifically suited to its unique mission, organization, and situation. The actual development work, which was divided into six phases, was done by the 3d Battalion, 6th Infantry.

Phase I, the planning phase, was accomplished by the battalion S3. This phase, which took about two weeks, included defining the problem and preparing a detailed plan and schedule that would carry the battalion through the publication of a finished product.

In Phase II the basics of the plan were implemented within the battalion. This entailed publishing the plan, allocating tasks to key members of the chain of command in the companies and staff sections, and setting up a milestone schedule. A reference library of all available MOUT documents was assembled and made available to those working on the project. Then the S2 and S3 prepared a document that contained a com-

prehensive description of the likely combat environment in Berlin in the event of war. It included a hypothetical description of the city and, generally, how each side would fight, along with some additional considerations that would affect urban military operations.

Phase III, the actual developmental period, began with the identification of all the tasks and missions that would have to be performed by individuals and units, through battalion level, in a MOUT environment. Once this was accomplished, the tasks, conditions, and standards for the ARTEP were developed in the standard ARTEP format.

Next, comprehensive support requirements were developed for each task and mission that included the opposing force, transportation, ammunition, training aids, and the evaluators and controllers needed to conduct the ARTEP. The final step of this phase was the publication of the first draft of the ARTEP.

The battalion was then ready for Phase IV, which was the execution phase. During this six-week period the battalion tested the ARTEP using several training sites in the city, ranging from sewers and subway stations to abandoned buildings, and the brigade's local training areas.

The primary purpose of this phase was to evaluate tasks and not the units that participated in the testing program. Measuring the proficiency of individuals and units in MOUT tasks and missions was secondary to confirming the relevancy of the tasks,

conditions, standards, and support requirements that had been identified and published in Phase III.

Once the execution phase was over, a more reflective analysis phase — Phase V — began. While Phase IV required all the battalion's resources and personnel, this fifth phase returned the effort to the selected members of the chain of command who had carried the load through the earlier development phase. For their critique, they solicited comments from everyone from individual soldiers to the leaders at brigade level. Next, all of the valid comments were translated into modifications to the draft ARTEP that had been used in Phase IV.

In the final phase, Phase VI, the completed ARTEP document was published and turned over to the brigade for further publication and implementation.

Many of the tasks and missions in this ARTEP, with little or no modification, are applicable to any unit that is training to operate in a MOUT environment.

In addition, the brigade's experience graphically illustrates that there is a place for ARTEP development in the field.

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ENLISTED CAREER NOTES



FORCE ALIGNMENT PLAN

Two years ago the Army was short 16,000 enlisted soldiers in the ranks of SGT/SP5 and above. Today, that figure has been reduced to 2,650, and in two years the shortage will be totally eliminated. But that progress is partially offset by a continuing imbalance in certain MOSs. While some skills are overstrength in noncommissioned officers, others are short, particularly in combat arms skills in which there was a shortage of 7,000 at the end of September 1981.

As a result, a force alignment plan has been designed to improve the matching of skills, eliminate poor performers, retain good ones, and support the modernization of the Army. The plan includes some recent changes in policies on promotion, reclassification of MOSs, on reenlistments, and on the handling of selective reenlistment bonuses and prior service enlistments.

Several of these policy changes became effective 1 October 1981:

- Reenlistment objectives to major commands are to be specified by MOS as well as quantity.
- Prior service enlistments are now allowed only in critical skills.
- Selective reenlistment bonuses have been readjusted (affects the soldiers in certain MOSs).

The following additional policy changes became effective 1 January 1982:

- Reclassification is permitted into shortage skills only, subject to medical standards.
- Reenlistment is allowed only in a soldier's present skill or in a shortage skill.
- A soldier must be CPL/SP4 or above to reenlist except for two-year enlistees.
- A soldier must have at least three

area aptitude scores of 95 or more on the Armed Services Vocational Aptitude Battery (ASVAB) that was given before 1 October 1980 or three scores of 85 on the current ASVAB. (This affects all SGT/SP5s and all CPL/SP4s on the promotion list.)

- The PSG/SFC promotion board now selects soldiers by MOS within a career management field. (Affects all SSGs being considered for promotion.)

- Some soldiers will be promoted to SGT/SP5 and SSG to fill MOS needs. (Affects CPL/SP4s and SGT/SP5s in overage MOSs.)

- Promotion opportunities by MOS will be published to encourage voluntary reclassification.

DRILL SERGEANT DUTY

Drill sergeants are a select group of NCOs responsible for developing discipline, motivation, morale, esprit de corps, and professionalism in new soldiers. Because of their influence, only the best qualified professional soldiers should be assigned as drill sergeants.

Soldiers are selected for this duty on the basis of their individual qualifications and their demonstrated potential to handle increasing responsibility. Volunteers must be in the ranks of SGT through PSG/SFC in any MOS.

Applications from volunteers must be submitted through command channels on DA Form 4187, following procedures 3-34, DA Pamphlet 600-8, and must include the following:

- DA Form 705 or 705-R, Army Physical Fitness/Readiness Scorecard, showing successful completion of the Basic Physical Fitness Test or the Army Physical Readiness Test

within the last six months.

- A statement from a medical officer that the applicant does not have a history of emotional instability.

- A copy each of DA Forms 2 and 2-1.

- A list of three training centers in order of preference.

All male soldiers in the rank of SGT/SP5 must meet the following additional qualifications:

- Have a minimum of four years of service.

- Have successfully completed PNCOC/BNCOC or PLC.

- Have been recommended for drill sergeant duty by a commander in the rank of LTC or above.

The soldiers selected for drill sergeant duty will be stabilized for two years at an Army Training Center with the option of requesting an additional 12 months. They also receive special duty assignment pay, a supplemental issue of uniforms with free laundry, and authorization to wear the distinctive drill sergeant hat and badge.

In addition, they will have the pride of accomplishment in doing a difficult and demanding job.

There is a continuing need for highly qualified personnel to serve in these vital duties at Army Training Centers. For more information, soldiers who are interested may contact their local military personnel offices or their career branches.

CLASSIFICATION

Classification, in the "life cycle management" process, relates to a soldier's initial award of an MOS and to any subsequent changes in the MOSs awarded to that soldier. It is a continuing process.

An enlisted soldier's classification begins the day he enters the Army and continues as long as he stays in, keeping pace with his growth in knowledge and experience and with the changing needs of the Army.

Classifying a new soldier is mainly a process of sizing up his human attributes by examining, testing, and categorizing his physical and mental qualities and inquiring into his educational and occupational background and interests. With this information, the Army has a basis for determining what sort of training the soldier is best suited for and how he can be employed most effectively.

Usually a soldier is awarded his first MOS by the training center or service school at which he completes his advanced individual training. An MOS may be awarded when a soldier becomes qualified through formal training or formal on-the-job training or on the basis of skills he has acquired as a civilian.

A soldier is reclassified when his MOS must be withdrawn or changed or when a new primary or secondary MOS is designated.

This redesignation of a primary MOS should be considered carefully at all personnel management levels from the unit commander in the field to the Enlisted Personnel Management Directorate. The primary MOS represents the experience of the soldier and also an investment in time and money by the Army. It is an asset in the Army's inventory of skills, which in turn serves as a basis for determining training requirements, promotion ceilings, and other actions of individual and Army-wide importance.

For these reasons certain restrictions and controls must be imposed in the redesignation of the primary MOS. To that end all reclassification actions are monitored by the Force Management Division of EPMD to ensure that they conform to the grade and MOS management policies and procedures outlined in DA Circular 611-81-4 (Career Management of the Enlisted Force) and Section VII, Chapter 2, AR 600-200.

The Army recognizes that soldiers perform best when they are well motivated, thoroughly understand their tasks, and are satisfied with their performance. It tries to provide each soldier with a sense of the importance of his present job and with a pattern of visible progression toward successively higher levels of work that will challenge his initiative and ability. This is accomplished through the Enlisted Personnel Management System (EPMS).

EPMS extends beyond the MOS system and affects all aspects of enlisted personnel management. Its fundamental effect is on the training, evaluation, classification, and promotion features.

Under EPMS, all enlisted career fields have been reshaped to accomplish the following:

- Reflect a modified grade structure that brings authorized grades in-line with future feasible assets.
- Consolidate MOSs and merge them at the higher grades, where practical.
- Standardize career management fields having a fixed grade-skill relationship.
- Provide visible and logical patterns for progression to successively higher level jobs.

SRB CHANGES

Soldiers who hold MOSs for which there is no Skill Qualification Test will now take the Common Task SQT (CTSQT).

The CTSQT will cover selected critical tasks that are applicable to all soldiers in Skill Level 4 and below. Included are the critical tasks all soldiers must be able to perform to survive and win on the modern battlefield. Many of them are also included in the MOS-specific SQTs.

Like the other SQTs, the CTSQT is organized into three parts: Skill Component (SC), Hands-On Component (HOC) and Job-Site Component (JSC). The 16 tasks, written by seven different U.S. Army Service Schools, cover such critical areas as com-

munications, map reading, basic weapons, survival techniques, NBC, first aid, and physical fitness.

These tasks have been included in two new field manuals, entitled Soldier's Manuals of Common Tasks. FM 21-2 covers Skill Level 1, and FM 21-3 covers Skill Levels 2, 3, and 4. These manuals were distributed to units worldwide in May 1981.

CTSQT scores will not be used in promotion decisions. Their purpose is to help identify and eliminate common task training deficiencies.

During the first test period (1 December 1981 to 31 August 1982) the CTSQT will cover only the Skill Level 1 tasks in FM 21-2. The soldiers who must take this test should already have copies of their SQT notices and Job Site Components. The notices inform the soldiers of the specific areas they should study in the manual. Those who are not sure they can perform the tasks should get help from their supervisors or check the appropriate references at the end of each task summary in the manual.

Training Standard Officers (TSOs) at units or installations will inform units when the test will be given and which soldiers will take the CTSQT. They will also announce sites and dates before 1 November each year.

Soldiers who are notified that they are scheduled to take the CTSQT should make sure they receive the CTSQT Notice so that they can prepare for the test.

HANDICAPPED DEPENDENTS

Soldiers with physically, emotionally, or intellectually handicapped dependents have a way of letting assignment authorities know about them and their special needs. These soldiers can submit an application requesting recognition of the specific condition and asking that the availability of specialized care be considered in the assignment selection process.

This program does not provide a means for deletion from assignment

or for stabilization in a specific geographical location.

Procedure 4-28, DA Pamphlet 600-8 contains detailed instructions

for submitting an application. The application should contain, at least, a statement outlining the handicap of the dependent, a medical statement

signed by a physician verifying the handicap, or, if appropriate, a statement of the intellectual or educational handicap.

RESERVE COMPONENT NOTES

RESIDENT MOS COURSES

Resident school instruction is often available for enlisted Reservists assigned to MOSs for which they have not been fully trained.

Such formal schooling is especially valuable for Reservists when their unit's designation is changed, or when their units receive new, unfamiliar equipment.

The U.S. Army Formal Schools Catalog (DA Pamphlet 351-4) describes the Army's resident courses.

All applications for attendance must be submitted in accordance with AR 135-200, Active Duty for Training and Annual Training for Individual Members.

For information about class

schedules and space available, commanders should call their respective CONUS training offices.

DRILL SERGEANTS SCHOOL

Army Reservists who want to become drill sergeants are encouraged to apply for one of the drill sergeant courses conducted at Fort Leonard Wood, Missouri; Fort Knox, Kentucky; and five other stateside posts. A new eight-week class reports about every four weeks throughout the year.

Applicants must be in the rank of CPL or higher and must be hard-stripe NCOs. Specialists who have been appointed as acting sergeants by unit orders may also apply.

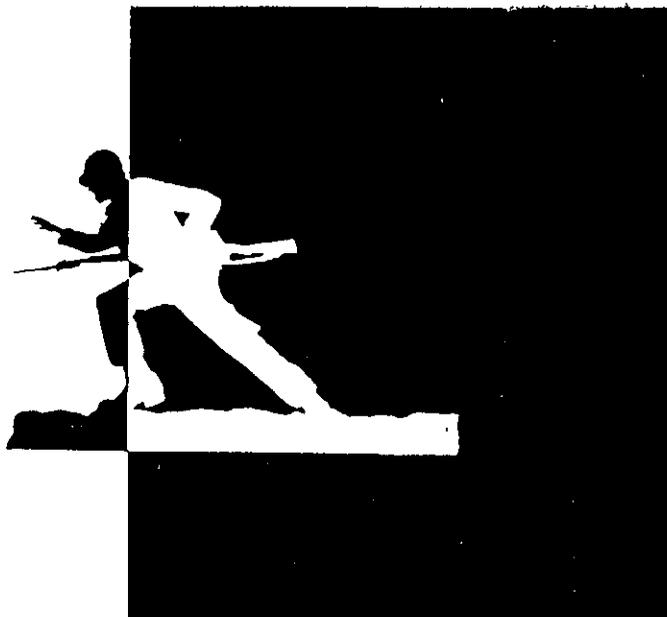
All applicants must be prepared to

pass the three-event physical fitness test upon reporting to drill sergeant school.

In addition to Forts Leonard Wood and Knox, Reservists may take the drill sergeant course at Fort Sill, Oklahoma; Fort Dix, New Jersey; Fort Jackson, South Carolina; Fort Benning, Georgia; and Fort McClellan, Alabama.

Many Army Reserve units, including reception stations and training divisions, have requirements for drill sergeants up to and including the rank of SGM.

For additional details, anyone who is interested should read TRADOC Regulation 350-16 and AR 600-200, or call his major U.S. Army Reserve Command.



OFFICERS CAREER NOTES



BRANCH CHIEF'S NOTES

With the new year a new Officer Distribution Plan (ODP) has taken effect. Essentially, it reduces the number of authorized positions in USAREUR and FORSCOM and increases TRADOC requirements. These changes significantly affect the assignment process.

The two items that follow in these notes should help clarify the ODP and the assignment process. Combined with some of the information in our Infantry Branch Newsletter (CY 1982), these items are a way for us to communicate with infantry officers.

We will be working closely with USMA, ROTC, and OCS representatives on initial assignments for our new lieutenants. Additional schooling for them, such as Airborne and Ranger, will also be a primary concern.

Captains will continue to move in and out of the Advanced Course and will begin to attend CAS¹ at a more rapid rate, until all captains can attend.

Generally, majors and lieutenant colonels will alternate between their two specialties and continue to attend staff and senior service colleges, respectively.

We hope that our new Infantry Branch Newsletter will help you with your plans for 1982.

COL JAMES A. SULLIVAN

OFFICER DISTRIBUTION PLAN

The total number of officers in the Army, by each grade and specialty, does not match perfectly either the total authorizations (from TOE and TDA documents) or the total positions for any given grade and special-

ty. (There are four grades — captain through colonel — and about 37 specialties, or about 148 combinations of grades and specialties.)

Given these odds and all the other variables involved, a perfect match of grades, specialties, and preferences is unlikely. Even if we could freeze authorizations and count noses it wouldn't help. Because assignments are usually made three to nine months in advance, the match-up has to be made on the projected (estimated) inventory versus the projected authorizations.

The Officer Development Plan (ODP) grew out of the need to get the right number of officers with the right grades and specialties to the places where they are needed the most.

The ODP is essentially a matrix (or several of them) with grades on one axis and specialties on the other. Almost every installation has its own matrix, its own ODP. For example, on Fort Carson's ODP, at the intersection of "captain" and "SC 11," the number 53 appears. This means that the sum of the Infantry captains at Fort Carson, plus those on orders to Fort Carson, minus those on orders to leave Fort Carson, should equal 53, no more and no less.

It is a good idea to note here that a given unit can have many vacant positions (authorizations from TDA and TOE) and still be over its ODP. When a friend tells you his unit needs captains and your assignment officer tells you that unit is overstrength, both are correct. The inventory of officers — by extension, the ODP — does not equal authorizations.

The ODP is developed annually for the coming calendar year (CY). Requirements are the projected needs (by grade and specialty) for all Army elements, primarily the sum of all

projected TDA and TOE positions. The projected officer inventory is another matter.

The challenge for the Officer Personnel Management Directorate (OPMD) is to project, months in advance, all the new officers coming on active duty, plus retirements, resignations, promotions, specialty designations and changes, professional schooling and all the other factors that affect the availability of an officer for assignment in a given grade and specialty.

There is only one way to make this projection — name by name, file by file. Career managers (assignment officers) review each individual's status to confirm his specialties, assignment actions, qualifications, schooling, availability, term of service, and personnel actions. Once this inventory has been completed, each officer can be placed in one of three basic categories:

First, an officer may be deleted from the list and not counted at all because of his expected retirement or release from active duty.

Second, he may be considered available for reassignment. As an example, for the CY 1982 ODP, an officer is considered available for reassignment if he is to complete a tour between 1 January 1982 and 30 September 1983 and has not already been placed on orders.

Why September 1983? Because assignments are made nine months in advance, and by December 1982 some officers will be placed on orders with report dates as far away as the following September.

Generally, officers who are available for reassignment are considered available in either of their specialties; the chief exception is an officer (usually a captain) who is not qualified in his initial specialty. In

this case, he will not be considered available in his additional specialty. Another exception is an officer who is in training (FAO or language) for a particular assignment.

The third category, officers who are not available for reassignment, includes those whose tours will not be completed by the end of September 1983. These officers, working in one of their two specialties, are not considered available for reassignment in their other specialties.

Once each officer is thus categorized, it is possible, through a computer program, to compare the available projected inventory with total projected requirements throughout the world. The officers in the first category are not counted at all. Those in the third category are counted against a requirement that matches their grades and serving specialties. The remaining officers, available for reassignment in either specialty, are matched against the appropriate requirements until the inventory is exhausted.

Again, this is accomplished with a computer program, and it does not always work out perfectly. In some cases officers are "left over" in particular grades and specialties; far more common, though, there will be shortages of officers in several grade and specialty combinations.

The net result of this comparison is called the Asset Utilization Plan (AUP), which reflects, by grade and specialty, the number of officers each branch should be able to provide in each specialty. In total numbers, then, AUP equals ODP, which reflects each major command's share of those officers, again by grade and specialty.

A unit's fill of officers is a reflection of the number of officers in the inventory and the unit's priority. This priority is determined, primarily, from the Department of the Army Master Priority List (DAMPL). One element of the DAMPL reflects personnel priority; this is a number that, when all of a MACOM'S units are consolidated, determines its percentage of fill. Another computer

program converts AUP to ODP in accordance with these priorities.

The process permits selective grade substitutions (for example, using extra lieutenants against shortages at other grades) and ensures that all elements receive a reasonable share of the available officers. This process determines an ODP for each MACOM; the MACOM commanders then sub-allocate officers to their subordinate commands and installations.

At MILPERCEN, the ODP has two main functions. First, the Distribution Division, OPMD, uses it to determine the requisitions that will be "opened," that is, passed to the assignment divisions to be filled; and second, it shows an assignment officer which commands have shortages that he needs to fill.

Because there are never quite enough officers to go around, the ODP is a way of making sure the ones that are available are placed where the Army needs them most.

ASSIGNMENT PROCESS

The Officer Personnel Management Directorate (OPMD) directs the reassignment of Army Promotion List (APL) officers in the ranks of lieutenant through colonel. The OPMD provides the major commands with the officers they need to perform their missions, and the major commands determine the specific duty assignments for the effective employment of these officers.

But the assignment process is rarely simple and straightforward. Each assignment must be carefully considered because of special job prerequisites, such as military education, language ability, additional skill identifiers, security clearance, or because of problems related to the officer and his family.

The following example, although not a typical assignment action, demonstrates in a simple situation the major steps in an assignment process over a two-month assignment cycle.

On 29 December, the personnel

manager for U.S. Army Europe (USAREUR), submits a requisition for a major in specialty code (SC) 41 to replace an Armor officer in the G1 office of a division who is due to leave on normal rotation the following October.

The Distribution Division of OPMD receives the requisition, confirms the loss of the Armor officer, and ensures that USAREUR is projected to be below the ODP for majors in SC 41. Then it validates the request and forwards it to the AG Branch, which controls the assignment of officers in SCs 41, 42, and 43.

The controller at AG Branch reviews the participation of all branches in SC 41 assignments and finds that Infantry Branch is behind in participation and should be given the requirement. By 25 January the responsible assignment officer in Infantry Branch has the requirement.

The assignment officer reviews his management book for available officers in the CONUS sustaining base. This book contains a list of Infantry officers grouped by additional specialty codes and in the order of their dates of availability (DTAV).

After eliminating from consideration all the officers who are not available (those who are either serving overseas, attending a military PCS school, or serving in USMA or ROTC instructor duty during the next academic year), the assignment officer picks out five majors (11/41) whose DTAVs make them the most available for consideration.

In reviewing the Career Management Individual Files (CMIFs) of these officers, the assignment officer compares them in terms of military education level, last overseas tour, last tour with troops, eligibility for promotion, branch immaterial assignments, and personal preferences.

Officers A and B are eliminated from further consideration outright, because MAJ A is locked in to attend CGSC for his next PCS, and MAJ B will probably be selected for promotion by the next board.

MAJ C is available, has not been overseas since 1972, and has been away from the kind of troop opportunity that is available in Europe longer than any of the other officers being considered. But he wants a CONUS assignment, while both MAJs D and E want to get back to Europe.

MAJ E has never served in a branch immaterial assignment (USAREC, ROTC, USMA, USARMR) and should be assigned instead as XO (SC 41) in a district recruiting command. In the end, MAJ D, who is currently assigned to Fort Monroe, gets the assignment to Europe. (MAJ C remains vulnerable for overseas assignment if there are no volunteers. Otherwise, he will be

assigned to CONUS, hopefully to a FORSCOM or TRADOC installation with troop opportunities.)

The next step in the process is for the assignment officer to prepare an assignment worksheet. The appropriate enroute schooling is determined and requested. When the school request is approved and returned several days later, the final assignment worksheet is prepared. The worksheet is then circulated to the SC 41 controller, to the appropriate professional development officers, and to the Infantry Branch Chief for concurrence.

MAJ D's losing command, Fort Monroe, is then alerted by telephone to the proposed assignment action. This alert notification is passed down

the chain of command to MAJ D. Seventy-two hours after the losing command receives the alert, and not later than the end of February, a Request for Orders (RFO) is transmitted by MILPERCEN, unless either the losing command or MAJ D responds to the alert with a request for reconsideration of the assignment. The losing command publishes orders for MAJ D on the basis of the information in the RFO.

When these orders are issued for MAJ D, the personnel people at Fort Monroe adjust their projected strength to show themselves short one major in October. Fort Monroe then submits a requisition to MILPERCEN by 1 April for a major in SC 11, and the process starts over again.

RESERVE COMPONENT NOTES

CGSC WRITING REQUIREMENT

Officers who are now beginning their Command and General Staff College education through correspondence studies or through U.S. Army Reserve Schools will find their writing requirement doubled.

Before the 1981-82 school year, officers were required to write one 750- to 1,000-word paper on a military subject. In line with the Army's renewed emphasis on writing skills, this requirement has been expanded to include a 500- to 750-word argumentative paper plus a 1,000- to 1,500-word staff paper. This change parallels a revision in the resident CGSC course.

Exempt from the new requirement are students who are already enrolled in Phases III and V of the CGSC with USAR Schools and those who have already passed the writing requirement through correspondence courses.

Phase I students must submit the argumentative paper by 31 May 1982. Because about one student in five fails the first effort, students actually have until 1 October 1982 to pass the requirement.

For students enrolling now, the second paper — the staff paper — will have to be successfully completed by 1 October 1983 so that they can continue into Phase V of the course.

Even with a second submission, not all students succeed. Last year, 131 students were dropped from the course for failure to meet the earlier one-paper requirement.

CAS³ AND CGSC

Reserve officers will no longer receive Command and General Staff College equivalent credit for education and promotion purposes by completing the Combined Arms and Service Staff School (CAS³) course.

The change rescinds the earlier policy that the CAS³ be considered the full educational equivalent of the CGSC.

The change will have little effect on the Reserve officer educational system. The Reserve officers who have completed CAS³ will be granted CGSC equivalency for promotion purposes.

For most Reserve officers, the completion of CGSC is still required

for promotion to colonel, and the completion of half the course is required for promotion to lieutenant colonel.

OER RATING CHAIN

The Officer Evaluation Reporting (OER) System rating chain for all officers now corresponds to their chain of command, even when the chain contains a mixture of Active and Reserve Component officers.

This eliminates a previous rule that required active duty officers to be rating officials for many Active Component officers serving in USAR units.

As an example of how the new policy works, an Active Component officer serving as a platoon leader with a USAR company could be rated by his Reserve company commander with the Reserve battalion commander serving as his senior rater.

Or, a USAR officer serving in an Active Guard Reserve status on the Department of the Army staff would normally be rated by an Active Component branch chief, while an Active Component division chief would be the senior rater.

BOOK REVIEWS



The Battery Press of Nashville, Tennessee, again has sent us a number of its reprints, each of which has been done in the Press's usual fine manner. Each is worth your attention. The latest reprint offerings are: **OUT OF THE BLUE: U.S. ARMY AIRBORNE OPERATIONS IN WORLD WAR II**, by James A. Huston (Originally published in 1972. 1981. 327 Pages. \$19.95); **THE FIRST SPECIAL SERVICE FORCE: A WAR HISTORY OF THE NORTH AMERICANS, 1942-1944**, by Robert D. Burhans (Originally published in 1947. 1981. 376 Pages. \$22.00); **THE 27th INFANTRY DIVISION IN WORLD WAR II**, by Edmund G. Love (Originally published in 1949. 1981. 677 Pages); and **THE DEADEYES: THE STORY OF THE 96th INFANTRY DIVISION**, by Orlando R. Davidson, *et. al.* (Originally published in 1947. 1981. 310 Pages).

The Press has also issued the third volume in its elite unit series: **PROVIDENCE THEIR GUIDE: A PERSONAL ACCOUNT OF THE LONG RANGE DESERT GROUP, 1940-45**, by D. L. Lloyd Owen (1981. 238 Pages. \$19.50), an interesting account of a particular kind of unit doing particular kinds of jobs in North Africa from June 1940 to April 1943 and on the European mainland from May 1943 to May 1945.

Here are a number of other useful and interesting books:

MECHANIZED INFANTRY, by Richard Simpkin (Pergamon Press, 1980. 134 Pages. \$26.00), and **A PERSPECTIVE ON INFANTRY**, by John A. English (Praeger, 1981. 346 Pages. \$29.95). Is there a need for infantry in a modern military establishment? Has the infantryman become obsolete? If there is a need for infantry, what form should modern infantry

units take and what kinds of individuals should be in those units?

These are but a few of the questions addressed by the two authors mentioned above, one (Simpkin) a retired British Army Brigadier and a long-serving tank officer, the other (English) a serving member of the Canadian Defense Forces and an infantry officer in Princess Patricia's Canadian Light Infantry.

Simpkin's book is the more difficult to read and understand, but it seems safe to say he believes there will be little use for the infantryman on the modern battlefield unless that worthy is mounted in a vehicle that closely resembles the main battle tank; in fact, he thinks the primary infantry vehicle should be based on the main battle tank and should afford the infantryman the same kind of protection. He also argues that the infantryman should be a member of the armor community. In many respects, his words echo those of J.F.C. Fuller who, in the 1920s and 1930s, argued for an "all-tank" force.

English, on the other hand, does not doubt that there will always be an infantry and that it will remain "the basic fighting arm in the combat zone." He feels, too, that the "current tactical emphasis on energy-consuming mobile armored warfare in Europe may be as misplaced as the attention focused on mobile cavalry operations prior to the Great War."

English calls for more and better individual small-unit training for the infantry, for placing more emphasis on maneuver, for teaching infantrymen "how to think rather than what to think," for developing "lean and hard-marching" soldiers, and for "the critical reading of the lessons of past wars."

These are two books that everyone

in today's infantry community should get hold of, read, and study carefully.

VIETNAM ORDER OF BATTLE, by Shelby L. Stanton (U.S. News Books, 1981. 396 Pages. \$49.95). This is truly an outstanding reference book, one of the finest yet produced on the war in Vietnam, and one that is going to have to be used by anyone studying the activities of the U.S. Army and Allied ground forces in Vietnam between 1961 and 1973.

Stanton put in six years in Vietnam as an infantry officer in a variety of assignments. In this book, which is organized as a true order of battle, he explains the general Army command structure in Vietnam, unit deployments and stations, their weapons and equipment, their insignia, a chronology of their combat operations, and their functions and missions.

The book is filled with photographs, line drawings, tables, and maps, and contains several appendices, one of which lists U.S. casualties by various categories. This is one of those publications we cannot recommend too highly.

SO PROUDLY WE HAIL: THE HISTORY OF THE UNITED STATES FLAG, by William Rea Furlong and Byron McCandless, with the editorial assistance of Harold D. Langley (Smithsonian Institution Press Book, 1981. 260 Pages. \$22.50). Everything you wanted to know about our country's flag — its development over the years, its various designs and colorations, and its predecessors — is in this book. Filled with illustrations of various kinds and color reproductions, it is the best we have seen on the subject. Here is another of those reference books that is far more important than its title indicates.

FOLLOW ME: THE HUMAN

ELEMENTS IN LEADERSHIP, by Major General Aubrey S. Newman, US Army, Retired (Presidio Press, 1981. 323 Pages. \$14.95). This collection of leadership vignettes includes some of the author's "Forward Edge" columns from ARMY Magazine. Its appearance is well-timed because it comes in an era when management techniques seem to have replaced basic leadership terms and human motivators.

General Newman takes the reader through his colorful Army career, which spanned 40 years from his graduation from the Military Academy in 1921 until his retirement as Chief of Staff of the Continental Army Command (CONARC) in the pre-Vietnam period.

All his tales provide practical lessons that are timeless. He deals in a candid and common sense manner with such real issues as alcoholism, integrity, peer pressure, and bootlicking. He offers no "school solution" to the current infantry leader's problems, but merely relates what was successful for him. But he presents the lessons learned so simply and directly that they are at once convincing and applicable in similar situations.

For the infantry buff, General Newman's book should bring added interest as he spins each yarn into a khaki fabric that is warm, human, and even funny in parts. He has succeeded in writing a "how to lead" manual that is an excellent leadership primer for today's infantryman, who must wrestle at times with other "how to" publications.

EISENHOWER'S LIEUTENANTS: THE CAMPAIGN FOR FRANCE AND GERMANY, 1944-1945, by Russell F. Weigley (Indiana University Press, 1981. \$22.50). Reviewed by Major Thomas J. Waraska, Headquarters TRADOC.

This is an excellent one-volume history of the American Army's campaign in Europe. The generals' and the Army's preparations for the amphibious assault into and the movement across western Europe are analyzed in a fast-paced and readable

commentary. General Eisenhower is the hub of this book in which his subordinate generals and their actions are critically evaluated.

Such generals as George S. Patton, Jr., Omar Bradley, Courtney Hodges, Jacob Devers, and the British Army leader, Bernard Montgomery, emerge from this book in a different light than usual. They are pictured as overly conservative, methodical, and predictable. U.S. infantry units are often criticized for their poor performance, especially in closing with the enemy. The author, a professor of history at Temple University and well known throughout the military history profession, also believes that some of the subordinate American generals — Ridgway, Gavin, Gerow, Middleton, and J. Lawton Collins — were more capable and aggressive than their seniors.

The campaigns from Normandy to the Elbe River are covered in appropriate detail, and Weigley selectively highlights a number of excellent small-unit actions. Although the details may be considered excessive for some of the actions, they do serve to emphasize the role of individual soldiers in the subsequent victories.

Weigley does feel that the American units performed reasonably well, but he also feels that their pace of advance across Europe was not fast enough and that a daring thrust might have ended the war more quickly. Although the British Army escapes his harshest criticism, it is cited for its failure to open the Antwerp estuaries, thereby creating for the northern group of armies some serious supply problems.

This is a solid book. Weigley's analysis is informative, well documented, and thought provoking. Anyone who enjoys good military history should add this book to his library.

WILLIAM ORLANDO DARBY: A MILITARY BIOGRAPHY, By Michael J. King (Shoe String Press, 1981. 219 Pages). Reviewed by Captain Harold E. Raugh, Jr., Fort Benning, Georgia.

Commissioned from West Point in 1933, William O. Darby served in routine field artillery assignments until the United States entered World War II. His subsequent meteoric rise in rank paralleled the evolution of the Ranger battalions, units formed early in 1942 and patterned after the British Commandos.

Darby was among the first American soldiers to go overseas and he served initially as aide to the commanding general of the Army's Northern Ireland Force. From this position, Darby secured command of the embryonic 1st Ranger Battalion and was promoted from captain to lieutenant-colonel in less than ten weeks. He led the battalion in the invasions of North Africa, Sicily, and Anzio, and in all of the conventional fighting in between. He earned two Distinguished Service Crosses, a Silver Star, and two Purple Hearts.

A dynamic and courageous leader, Darby twice refused promotion to colonel because he would have had to leave his beloved Rangers. Eventually, the battalion was expanded into a regiment-sized Ranger Force, which consisted of the 1st, 3d, and 4th Ranger Battalions, but it was not authorized a force headquarters until much later.

In trying to break out of the Anzio beachhead in 1944, the 3d and 4th Ranger Battalions were decimated by the Germans at Cisterna, and only 6 out of 767 Rangers returned to friendly lines; the others were either killed or captured.

Shortly thereafter, Darby took command of the battered 179th Infantry Regiment of the 45th Infantry Division and led it for two months before being called to Washington. He returned to Europe in early 1945 and talked his way into the assistant division commander's position in the 10th Mountain Division in Italy. He was mortally wounded on 30 April 1945, just one week before the war ended in that country. On that same day, Darby's name appeared on a list of nominees for promotion to brigadier general. Shortly afterward, he was promoted posthumously, the on

ly Army officer promoted in that manner to flag rank during the war.

Michael King, author, has served in Ranger units and also as visiting associate professor of military history at the Army's Command and General Staff College. His research for this volume has been quite extensive, and the actions of the Ranger battalions and related units are chronicled in accurate detail. King does make one obvious mistake, though, when he refers to Terry Allen as a lieutenant general; Allen was a major general.

This book is highly recommended to the student of elite units and to those who favor biographies of combat commanders.

THE MILITARY-NAVAL ENCYCLOPEDIA OF RUSSIA AND THE SOVIET UNION: VOLUME 3, edited by David R. Jones (Academic International Press, 1981. 247 Pages. \$31.00). Reviewed by Alexander S. Birkos, Mount Shasta, California.

In this volume the reader will find 63 entries, practically all devoted to naval subjects. He will also find the errata to Volume 2.

David Jones continues his notable attention to clear writing and great detail in each article. There is not only anecdotal material but also an exhaustive treatment of the historical development of Russian shipbuilding on the Baltic. This volume clearly points up the fact that the Russians long have had a strong urge to build a large and modern sea-going fleet. Thus, the current Soviet naval buildup, which has been a source of concern to the West, is not really a startling development but a continuation of policies that were pursued long before 1917.

Professional officers who want to undertake research on Russia's armed forces or defense policies will find this encyclopedia an indispensable reference tool. Aside from the abundance of information in each article, the bibliographies at the end of each entry are in themselves invaluable time-saving guides to sources for further study.

BRINGING UP THE REAR, by S.L.A. Marshall (Presidio Press,

1979. 310 Pages. \$12.95). Reviewed by Colonel Robert G. Clarke, Office of the Joint Chiefs of Staff.

S.L.A. Marshall's association with the United States Army covered almost half a century and included World War I, World War II, the Korean War, the Mid-East crises, and Vietnam. He was a true citizen-soldier who answered his country's call to duty time and time again.

This is a delightful memoir in which Marshall, who died before the book was completed, gives his readers a behind-the-scenes look at some of the major political and military events of his times. It is well structured and reads easily in the true Marshall style. Modesty was never one of Marshall's strong traits, but this only insures that the reader will be told some stimulating tales of how Marshall fought his battles and won more than he lost.

Marshall was our most prolific military writer and his efforts through the years helped shape and influence the Army. Especially strong was his influence on the infantry.

The Army lost a true friend when S.L.A. Marshall died, but his writings will continue to pay tribute to him so long as soldiers fight and armies march.

DIE SCHLACHT UM MOSKAU, by Janusz Piekalkiewicz (Luebbe Verlag, 1981. 288 Pages. DM 48.) Reviewed by Colonel Wolfgang Gerhardt, German Army.

In July 1941, Hitler attacked the Soviet Union. By December, the Germans were in the suburbs of Moscow. This book describes that famous battle in its day-by-day events and shows what it looked like to soldiers on both sides of the lines. The author's narrative is supported by photographs, many of which have never before been published.

The author, of Polish descent but now living in West Germany, has written a number of other works on World War II operations. This book is filled with individual battle scenes, with stories of suspense, and with tales of tragic events. His story is dramatic, yet realistic. The German

offensive literally froze stiff and came to a dead stop in the Russian winter.

The book also contains organizational charts, maps, weapon diagrams, individual action reports, and a well-rounded bibliographic note. It is highly recommended not only to military historians but to young officers and noncommissioned officers as well. It is hoped that the author will find an English-language publishing house so that the dramatic events he narrates can become known to a non-German reading audience.

SECOND FRONT NOW, 1943, by Walter Scott Dunn, Jr. (University of Alabama Press, 1980. 318 Pages. \$21.50), and **1943: THE VICTORY THAT NEVER WAS**, by John Grigg (Hill and Wang, 1980. 254 Pages. \$12.50).

Both writers, one American (Dunn), the other British (Grigg) advance the same thesis: The military forces of the United States and Great Britain could have landed successfully in northwest Europe in 1943, a year before they did. Dunn, in fact, feels that an Allied invasion in 1943 would have met far less German resistance. Like Grigg, he feels the final decision was a political one.

Dunn stays mainly with the military aspects of the whole business while Grigg concentrates his attention on the political and grand strategy aspects as well as on the campaigns that were conducted in 1943. Both do admit that the war in the Pacific had some effect on the American effort.

Was an Allied cross-Channel attack in 1943 possible? These authors say yes, *if* certain things had been done differently. So the reader must make up his own mind. As he reads the books, though, he must remember the assumptions.

MALIGNED GENERAL: A BIOGRAPHY OF THOMAS S. JESUP, by Chester L. Kieffer (Presidio Press, 1979. 376 Pages. \$16.95). Reviewed by Captain Michael E. Long, Fort Benning, Georgia.

The United States Army suffered a number of growing pains during its early years, particularly in the period

between the end of the War of 1812 and the outbreak of the Civil War. As the author puts it: "Not only did the service lack proper organization, training and discipline, but it displayed other serious deficiencies. Political consideration rather than merit was often the basis for the appointment and promotion of officers. The contract system of supplying troops was inefficient and haphazard primarily because contractors were not subject to military control. The Quartermaster Department, the principal supply agency of the Army, was also in a state of confusion and disorganization."

This crisis-managed environment set the stage for the arrival of General Thomas Sydney Jesup, whose biography has been carefully documented by Chester Kieffer, a retired Army historian. Kieffer describes Jesup's military career in meticulous detail, and describes him as "one who was loyal to his many friends with his personal life beyond reproach."

Although many historians consider Jesup a secondary figure in American military history, he was the soldier Secretary of War John C. Calhoun called on to reorganize the Quartermaster Department and to put it on a businesslike basis. The system Jesup set up made each individual accountable for his own acts and made it mandatory for those who received money or property to account for it properly.

Jesup also served as a field commander during the Seminole War in the 1830s and was accused of violating the white flag of surrender when his troops captured the Seminole leader, Osceola.

Kieffer has made extensive use of

the Jesup family papers to bring out the good qualities of a military man he thinks has been badly maligned. It is a worthy addition to the military historian's bookshelf.

THE POLITICAL INFLUENCE OF THE MILITARY: A COMPARATIVE READER, edited by Amos Perlmutter and Valerie Plave Bennett (Yale University Press, 1980. 508 Pages. \$10.95, Paperbound) Reviewed by Doctor Joe P. Dunn, Converse College.

Amos Perlmutter's *The Military and Politics in Modern Times* (1977) is one of the more significant texts in civilian-military relations. Written primarily to support the above text, the compendium under review is the first comprehensive reader in this field.

The 59 selections are grouped under three headings consistent with the three major models analyzed in the text: the professional soldier, the praetorian army and the praetorian state, and the revolutionary professional soldier. Each section has an excellent introduction that develops themes and historiography. The excerpts, which include works by the classic scholars in the field, are well chosen both in quality and balance. Unfortunately, as is typical of such readers, the selections are so truncated that the individual articles lose much of their effectiveness.

This book will probably be well received in advanced courses in military sociology and civilian-military relations and, in some cases, international or developmental politics. But this is not a book for the general reader. Its effects will be felt within a small circle of academia but will not reach far beyond that.

RECENT AND RECOMMENDED

WARPLANES OF THE WORLD, 1918-1939. By Michael J.H. Taylor. Scribner's, 1981. \$17.95.

B-57 CANBERRA AT WAR, 1964-1972 By Robert C. Mikesh. Scribner's, 1981. \$17.95.

STUKA AT WAR. By Peter C. Smith. Scribner's, 1981. \$19.95.

NATIONAL SECURITY POLICY FOR THE 1980s. Edited by Robert L. Pfaltzgraff, Jr. The Annals of the American Academy of Political and Social Science, Volume 457, September 1981. Sage Publications, 1981. 237 Pages. \$7.00, Soft Cover.

INTELLIGENCE REQUIREMENTS FOR THE 1980s: COVERT ACTION. Edited by Ray Godson. National Strategy Information Center, 1981. 243 Pages. \$7.50, Soft Cover.

HOW TO BECOME A SUCCESSFUL FREELANCE WRITER: A PRACTICAL GUIDE TO GETTING PUBLISHED. By Jordan K. Young. Moonstone Press, PO Box 661, Anaheim, California 92805, 1981. 121 Pages. \$9.95, Soft Cover.

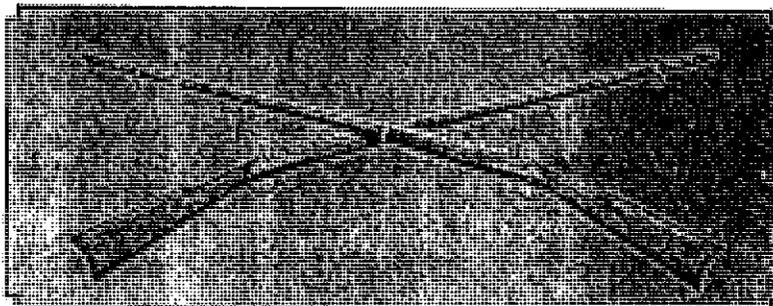
WATCH-WORD!!! A GLOSSARY OF GOBBLEDYGOOK, CLICHES, AND SOLECISMS. By Argus John Tresidder. Published by the Marine Corps Association, Quantico, Virginia, 1981. 110 Pages. \$2.50, Soft Cover.

ESCORT TO BERLIN: THE 4th FIGHTER GROUP IN WORLD WAR II. By Garry L. Fry and Jeffrey L. Ethell. Arco Publishing, 1980. 226 Pages. \$16.95.

EAGLES OF MITSUBISHI: THE STORY OF THE ZERO FIGHTER. By Jiro Horikoshi. Translated by Shojiro Shindo and Harold N. Wantiez. University of Washington Press, 1981. 160 Pages. \$18.95.

SOVIET NAVAL DEVELOPMENTS. Second Edition. Foreward by Norman Polmar. The Nautical and Aviation Publishing Company of America, 1981. 138 Pages. \$14.95.

USAAF AT WAR IN THE PACIFIC. By David Mondey and Lewis Nalls. Scribner's, 1981. \$22.50.



INFANTRY LETTERS



MC1-1 PARACHUTE

Dear Sir,

I read "The MC-1 Parachute," by Lieutenant Charles T. Payne, in your November-December 1981 issue (page 9) and take exception to the assertion that 82d Airborne Division troopers are being subjected to an "unnecessary danger" by jumping the MC-1 (which should read "MC1-1") parachute. I would like to clarify some misconceptions created by the article.

First of all, the article leaves the impression that the 82d Airborne Division is eliminating all of its T-10s and replacing them with MC1-1s. This is not the case. The Division, which recognizes the advantages and disadvantages of each type of parachute, presently maintains a mix of sixty-five percent MC1-1s and thirty-five percent T-10s.

Second, Lieutenant Payne failed to explain that the Division uses the two types of parachutes for different operations. Since my return to the Division in January 1981, the policy has been that T-10s are used for mass tactical exercises using the mass exit techniques (jumpers exiting both jump doors) while MC1-1s are restricted to use for airborne training with single door exit procedures (SDEP). It is true that if mass exit techniques are used by troopers jumping the MC1-1 the risk of high altitude entanglement is higher than with the T-10.

This problem has been eliminated in training by the XVIII Airborne Corps' adoption of SDEP. With the termination of the "traffic cop" or Controlled Alternating Parachute Exit System (CAPES), SDEP allows for complete simulation of combat during training while still providing jumpers with a way to control their

flight and landing. Its only drawback is that by restricting jumpers to exiting only one door at a time, it usually requires a second pass over the drop zone to exit all jumpers, thereby delaying tactical assembly.

As for parachute landing fall (PLF) injuries, the T-10 is far from the proven best choice. In fact, a three-year Division historical analysis has revealed that the injury rate for jumping the T-10 is three times as high as that for the MC1-1. While the jumper has trouble changing his facing or direction of drift with the T-10, the MC1-1 allows him to select a landing area and choose the type of PLF he will execute. Since the MC1-1 provides eight knots of forward thrust, and since the average daily wind speed is about five knots, the resulting landing is usually forward or to the side, a landing much preferred over the random PLFs that result from jumping the T-10. In higher than normal winds (9-13 knots) the PLF injury rate is more than five times as high for T-10s as for MC1-1s. Since the vast majority of injuries that do occur result from PLFs, the small increase in entanglement injuries with the MC1-1 is easily offset by a substantial reduction in PLF injuries.

Of course, there is the occasional careless jumper and the uncertain new trooper, both of whom are prone to make mistakes. The former can be corrected by proper leadership, the latter by training and, as with any new job or piece of equipment, experience. In fact, the basic airborne school at Fort Benning, Georgia, presently conducts three of the five jumps needed to qualify parachutists with the MC1-1.

There is a funny thing about the few guys I have met who express concern about the MC1-1. Their personal

preference for a parachute to jump themselves is almost always the MC1-1.

Perhaps Lieutenant Payne's several misconceptions result from his absence from the Division since the many changes, but in any case a correction is appropriate to set the record straight.

CLYDE M. LEAVELLE
CPT, Air Defense
Fort Bragg, North Carolina

DESERT OPERATIONS

Dear Sir,

We read the last two articles in your desert operations series with great interest. (See INFANTRY, July-August, September-October, and November-December 1981.) From our experiences and travels while attending the Israeli Defense Forces Armored Corps Advanced Course, the information is good. There are, however, some additional hints and techniques that might help those who work in a desert environment.

The second article of the series contains a pertinent discussion of trafficability in the desert. It might, however, restrict the commander's imagination in planning should he use the description of the restrictions in conjunction with a hasty terrain analysis. Our experience has shown us that trafficability maps, used with standard topographical maps, provide an excellent means by which to plan maneuver. The trafficability maps, which are based upon a medium tank's characteristics, give a quick and usually accurate description of the terrain to be traversed in an easily read color code.

The applicability of proper terrain

analysis in the desert can be illustrated by the successful German maneuver around the British flank in Cyrenaica in 1941 and by the Israeli maneuver against the Egyptians in the Sinai in 1973. In each of these cases the defender considered the terrain on one or both flanks untrafficable. No detailed reconnaissance was conducted to validate the assumption. The attacker, through proper terrain analysis and reconnaissance, found routes through or around the defender, forcing a collapse in the continuity of the defense.

The Israelis place great emphasis on terrain analysis. In their doctrine no terrain is considered totally untrafficable. For this reason they always allocate forces to isolate the cross compartments formed by difficult desert terrain.

At times, given the difficulty of movement caused by cross compartments and poor trafficability, the terms *front*, *flank*, and *rear* have little meaning in a major battle. The proper analysis of desert terrain and the use of all available aids such as trafficability maps and air photo analysis will help an outnumbered force to succeed.

Camouflage, as a passive measure against air attack, is indispensable. Evasive action, coupled with the ability to conduct camouflage drills quickly, can provide a successful defense against attack by high performance aircraft.

Navigation in the desert, as anywhere else, requires practice. Desert navigation in the Mid Eastern/North African areas is aided by native wells, which should be marked on 1:50,000 maps or located on aerial photos. The wells, dug into the desert floor, are easily recognizable at a distance by a discoloration around their openings. The different sand, soil, and rock composition beneath the surface provides a clue to the existence of such a hole.

Aerial photos and stereoscopes are also useful in determining routes recently travelled. Wadi crossing sites are generally recognizable by their well-worn entrance and exit sites. The

use of stereoscopes on air photo strips are also helpful in determining the relative depth of wadis that must be crossed and the suitability of established crossing sites.

WAYNE J. SABO
CPT, Infantry
EDWIN L. KENNEDY
CPT, Infantry
Fort Benning, Georgia

AIMING STAKES

Dear Sir,

Training the modern infantryman is a continuing process, and quite often we pick up little techniques that enable us to do our job that much better. I would like to share one of those techniques with INFANTRY's readers.

While conducting a live fire defense at night, I found that my company had some problems with rounds being fired high and even out of sector. Why hadn't we checked our positions to make sure each man knew his sector of fire? Believe me, we had. Not only was each position checked, but I made sure that each man had aiming stakes. When the problems appeared, I realized that the aiming stakes were the cause. I should say it was the way they were being used that was the cause.

Eventually, we thought of a way to keep our soldiers firing in sector and maintaining low grazing fire. We came up with a low level firing device that we consider quite effective.

As with regular aiming stakes, we found that one stick for the left limit and one stick for the right limit was not enough. It was still too easy to traverse left or right out of sector. So we decided to use two sticks for the right limit and another two for the left limit to insure that our soldiers kept their fire in their sector.

We placed one stick near the barrel and the second back by the stock. When the rifleman had his weapon against both sticks he was on his left or right limit.

With sturdy sticks this system

worked quite well for staying in sector, but a soldier with little or no illumination at night still tended to raise the muzzle of his weapon and fire high.

To solve the problem, we took a piece of WD1 communications wire (twine or rope will also work) and tied it around the left front aiming stake. Then a rifleman had his partner walk forward of their position to determine any dead space and to find a waist high aiming point where he could get effective grazing fire. The wire was then stretched tightly to touch the top of the barrel and tied securely to the right front aiming stake. (The line must be tight!)

Now when it gets dark, our soldiers can fire within their sectors and if they start to elevate their rifle barrels they will feel resistance and this will let them put out good effective grazing fire. At any time, the firers can still pull their weapons out and move to their alternate or supplementary positions.

This method worked for us and I hope it works for others as well.

WILLIAM J. MARTINEZ
CPT, Infantry
Co C, 2d Bn, 504th Infantry
Fort Bragg, North Carolina

LEADERSHIP, NOT MACHINERY

Dear Sir,

The article "ITV and IFV Transition," by Captain Robert L. Magurnis in the November-December 1981 issue of INFANTRY (page 18) provides significant information that should be of concern to the professional infantryman. The author's thoughts on cross-training, maintenance, logistics, and leader training are commendable. However, I find great dissatisfaction with his statement that "the introduction of the IFV should give the infantryman that same esprit de corps that long has been associated with armor and cavalry units."

Leadership is the key to esprit

ces, not machinery. His statement tends to make one think the infantry has no esprit de corps.

His position that the IFV crewman will at last fight from his vehicle raises a common fear among armor and infantry leaders. We should never forget that our primary mission is to close with and destroy the enemy. We cannot perform this mission while moving rapidly across a battlefield buttoned up. History has proved that armor can be defeated by dismounted infantry unless other dismounted infantry is available to properly clear the area. We need not relearn this lesson by seeing IFVs burning next to M-1 tanks.

A final argument: If we allow entire infantry squads to be referred to as "crews," we will ultimately have just that — IFV crews of eight soldiers instead of squads of eleven. There will be one driver, one gunner, and six port firers.

This may seem ludicrous, but when the pendulum swings away from the military, the budget choppers can dream up many ludicrous ways to save money.

GARY H. CAVENDER
CPT, Infantry

ARNG MOS TRAINING

Dear Sir,

I am concerned that, with the MOS qualification structure it has now, the Army National Guard would not be ready to fight in a "come as you are" war, especially in regard to its prior service personnel.

Under the Guard's present policy, enlisted personnel with active Federal service of 12 weeks or more are exempt from Initial Active Duty Training (IADT). This includes about 100,000 of the Guard's 316,000 enlisted personnel.

Even for those who do attend IADT, few MOS-producing schools qualify them in all the tasks they must perform to be MOS qualified. This training then becomes the responsibility of their unit commanders, and it is possible, therefore, that 32 percent of all ARNG enlisted men would have to be declared not MOS qualified.

Presently the method of qualification prescribed by ARNG regulations for qualification at unit level is on-the-job experience (OJE). This OJE is obtained through various combinations of unit training assemblies and annual training. The unit commander can use OJE as a means of determin-

ing MOS or a time factor (completion of AT) or both.

But the problem is that OJE is defined as an unstructured and unsupervised routine performance of duty (experience) that will give the soldier enough experience to enable him to perform the duties of an MOS satisfactorily and, subsequently, to be awarded the MOS. The individual soldier is held responsible for satisfying the requirement of OJE during his monthly training periods. This means that a soldier has to be assertive if he is going to develop and attain his MOS that way. As a commander of four companies, I have found that assertive people are a small minority. Besides, a National Guard unit has only 39 training days in which to perform the subjects required by regulation and by higher headquarters, and this does not give the individual Guardman much time to train on his own for an MOS.

The unstructured OJE is also a contravention of the concept outlined in the Army's Battalion Training Management System (BTMS). BTMS uses tasks, conditions, and standards to measure the soldier's ability to perform in his MOS in a structured program using Job Books and Soldier's Manuals to guide the development of

A PROFESSIONAL JOURNAL FOR THE ENLISTED ARMS TEAM

From The Editor

AUTHORS! AUTHORS!

Each year, INFANTRY provides an opportunity for about 75 authors to have their articles read by more than 50,000 readers. In most cases, these articles are the writer's first published works. More than 100 letters to the editor also make their way into print each year, and these, too, provide an outlet through which our readers can respond to the articles or express their professional opinions on other subjects.

This dialogue forms an excellent worldwide communication system that brings all Infantrymen "into the net." (Bet you didn't know that INFANTRY is mailed to 722 foreign subscribers in 52 countries!) Every Infantry unit in the Army (Active, Reserve, and National Guard) and every Senior ROTC detachment also receives INFANTRY.

As the Army's second oldest periodical, we are always happy to receive both articles and letters from professional Infantrymen around the world. Your opinion is important and your expertise is vital to a more efficient combined arms team.

Keep those cards and letters coming!

DRK