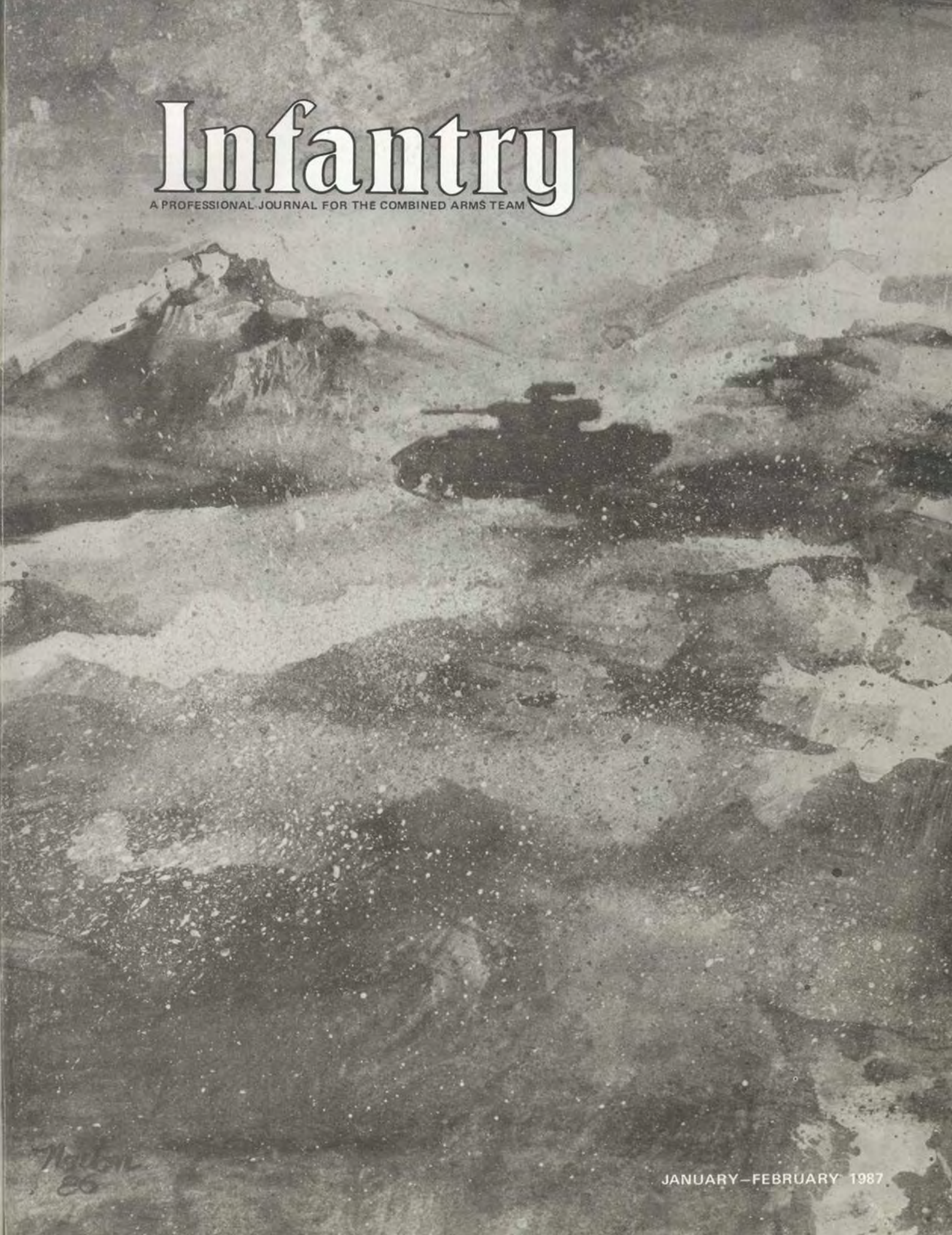
Infantry

A PROFESSIONAL JOURNAL FOR THE COMBINED ARMS TEAM



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Infantry

A PROFESSIONAL JOURNAL FOR THE COMBINED ARMS TEAM

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War is a burden to be carried on a steep and bloody road, and only strong nerves and determined spirits can endure to the end. *(General George C. Marshall, 15 June 1941)*

Commandant's NOTE

Major General Edwin H. Burba, Jr.
Chief of Infantry

AAWS-M

In the September-October 1986 issue of INFANTRY, I outlined the Infantry School's plan for antiarmor systems. The light antiarmor weapons and the medium and heavy antitank weapons of the future are critically important to the effectiveness of the combined arms team. In this issue, I would like to focus attention on one of these systems, the Advanced Antitank Weapons System—Medium (AAWS-M).

AAWS-M is the system that will replace the Dragon in all Infantry units. It will provide our forces, both heavy and light, the essential capability to kill tanks with a highly lethal manportable system. In doing so, it will fill the void between our light armor and bunker-busting weapons, which are not true tank killers, and our heavy vehicular system, TOW, and its follow-on systems.

The AAWS-M will significantly improve the dismounted Infantry's tank killing ability. It will kill the newest threat tanks at nearly twice the Dragon's range, day or night. Nevertheless, the total system will weigh roughly 45 pounds, which is lighter than the complete Dragon. AAWS-M also will be able to be fired from within bunkers and other enclosures, enhancing the gunner's survivability on an increasingly lethal battlefield.

In Europe, we face the potential of the largest armored battle the world has ever seen. The thousands of Warsaw Pact tanks include hundreds that employ the latest technological advances in armor, designed to defeat the most lethal antitank systems of today. This armor will be continually improved on newer tank models, and older models will be retrofitted where possible to increase their protection levels. AAWS-M gives the Infantry the mid-range lethality it needs to overcome these advances in armor.

The need for such a capability elsewhere is also clear. Considering the various environments in which our different Infantry units must operate, the first realization is that significant armor threats exist worldwide. Today, more than 100 countries have tanks and armored vehicles. Although many of these are older vehicles, all can be significantly upgraded, both in terms of better armament and through the use of various types of add-on armors that are readily available. Thus, we face a range of scenarios—from low intensity conflicts to conventional war—where tanks and armored vehicles will certainly play major roles.

To counter these threats, we need effective tank killers. Our tanks and TOWs will do the majority of the killing when they are available. However, AAWS-M is a critical part of the antitank equation, both as a complement to our heavy systems and in situations where only manportable systems can be employed.

It is important as a self-defense weapon against tanks, a contributor to the overall enemy tank kills on the antiarmor battlefield. Of most importance, however, is its role as a facilitator of enemy tank destruction. The AAWS-M's capability to stalk to close range puts enemy tanks at such risk that they must move, thereby destroying the integrity of their tactical formation and entrenchments and making them easy prey to friendly tank, TOW, aviation, and artillery kills. In the final analysis, AAWS-Ms may kill only a few systems, but without their contribution, few of the many other kills would occur. This is the nature of combined arms action, and, fortunately, the NTC experience is bringing this action to fruition better every day.

All Infantry (mechanized, motorized, airborne, air assault, light, etc.) must be capable of performing basic tasks. These include fixing the enemy, suppressing him, clearing obstacles, breaching fortified positions, assaulting to seize terrain and destroy enemy forces, fighting in restricted terrain and built-up areas, and conducting close overwatch. In heavy battalions (Bradley and M113), long-range fixing and suppressing are generally the responsibility of the fighting vehicles. The dismounted squad will have primary responsibility for clearing, breaching, assaulting, and conducting close overwatch, especially in restricted or urban terrain. The AAWS-M is the tank killer for this dismounted element. It gives these soldiers both the antitank protection and the offensive punch they need to eliminate enemy opposition on key terrain. Although the contributions of AAWS-M may be smaller than the numerous kills expected from the heavy systems, it is no less decisive when applied at the critical point and time.

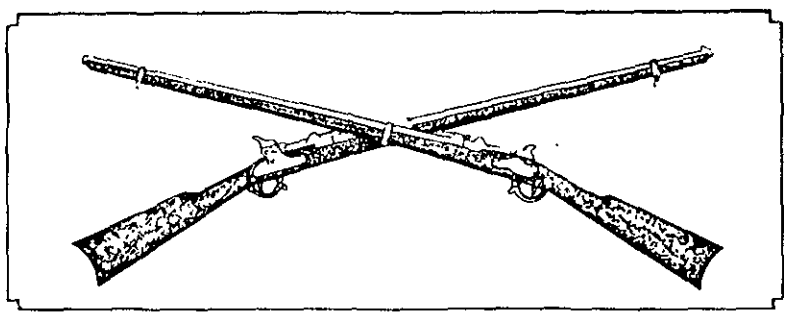
In defensive situations, the availability of a manportable system will thicken antitank defenses, providing the increased number of dug-in, protected weapons necessary to defeat vastly superior numbers of threat tanks. Again, our heavy systems should take the heaviest toll on the enemy. Dismounted elements equipped with the AAWS-M will have responsibility for flank protection, covering more restricted avenues of approach, and engaging enemy tanks that have penetrated our main engagement areas. Within our primary engagement areas, the AAWS-M can be employed to cover the multiple mid-range avenues of approach where heavy vehicular systems either cannot be employed or cannot take advantage of their long-range fires. The mix of heavy and medium systems the important ingredient. In wargame simulations and in training exercises at the National Training Center (NTC), a mix of medium and heavy systems generally proves even more effective than an increase in the number of available TOW systems.

For light infantry, the AAWS-M contribution is of even greater importance. More than half of our Infantry divisions will be light by 1990. Our light divisions have a special role being extremely transportable for rapid deployment and operational flexibility. Once deployed, the light infantry must be able to perform all Infantry missions. Because of the emphasis on strategic deployability, a light battalion has only four HMMWV-mounted TOWs. AAWS-M will be the light infantry commander's primary antitank capability. Light infantry will optimize its capability by fighting in MOUT or restricted terrain where its mobility and firepower, in most cases, is better than that of heavier units. While this terrain also restricts the enemy's use of tanks, those present will pose an even greater threat to mission completion. The manportability of AAWS-M will give the light infantry unrestricted use of the best terrain available for employment of its antitank systems. This tactical versatility will be essential in allowing light units to overcome their firepower disadvantage when facing enemy armor

A final note pertains to the critical role of the medium systems in contingency operations. Our special purpose forces require a tank killer that is suitable for parachute operations so that these units will have an immediate antiarmor capability in the early stages of forced entry and similar missions. As we learned in Grenada, even a few relatively obsolete armored vehicles in such situations present a significant threat to mission accomplishment.

All antiarmor systems (light, medium, and heavy) function in crucial roles for the Infantry. I have highlighted the importance of AAWS-M in this article because I feel that a manportable, tank-killing system is an absolute necessity for us, and it represents our number one combat developments priority.

That's why our Armor, Artillery, and Aviation components have come on board and supported us on replacing the Dragon. And that's why we have finally won our case with the Department of the Army, the office of the Secretary of Defense, and the Congress. Money has been made available, and three firms are now bending metal to develop three AAWS-M prototypes using different techniques. We will select the best of these based on tests and put it into the hands of our soldiers as quickly as possible. This will ensure that not only the Infantry but the entire combined arms force maintains a robust antitank deterrent and warfighting capability that will take us into the next century.



ADVANTAGES OF FIRING

As I read the September-October issue of INFANTRY, "Crossing the Meurthe," by E.A. Reitan (page 29) brought back old memories. My company, Company L, 30th Infantry, was in one of the two battalions of that regiment that crossed further north, as Mr. Reitan mentioned.

I completely disagree, however, with the conclusions he drew in his final paragraphs—that it wasn't necessary to fire one's rifle when attacking, since "there are enough deadly missiles flying around a battlefield anyway."

Just a few months earlier, Audie Murphy and I had been sent back to 3d Division Headquarters to receive our battlefield commissions. One of the reasons for my promotion, besides living longer than anyone else in the company, was my two years of college ROTC and the fact that I was a military history buff.

In Ardant du Picq's writings, I had read years before that few of his men in the Franco-Prussian War ever fired their rifles, and I had heard that the same thing held in World War II. Therefore, as a commander of squads, platoons, and companies, I insisted that my men lay down a barrage of rifle fire as they advanced. "Deadly missiles flying around" don't give an attacker fire superiority or keep the heads of the enemy down in their foxholes, unless those deadly missiles are flying and cracking near the defenders' heads.

Another advantage of firing is that the adrenaline flows—and the macho-Rambo spirit is aroused in the men. I used to be so adamant about "shooting up a storm" that I even sniffed the muzzles of my men's rifles to be sure they had fired in the previous action.

Breaking out of Anzio, I fired so many bandoliers of M-1 ammunition that the forward stock of my rifle started smoldering and I had to douse it in ditch water. (Yes, it kept firing.)

I'll never forget holding one of my dying rifleman replacements. His last words were, "Gee, Lieutenant, I didn't even get a chance to fire my rifle!"

DAVID J. DAZE
1LT, Retired
Glendale, California

FLOATING FOOTBRIDGE

During a recent field problem, an Engineer company at Fort Campbell built a unique bridge from aircraft cargo pallets, in the dead of night and under simulated combat conditions, for an infantry battalion to use in an assault river crossing. I would like to share the way this was done with INFANTRY readers, because it shows the true strength of the combined arms of Infantry and Engineers working together to complete a mission.

Company A, 326th Engineer Battalion (Air Assault) was given the job of getting the 1st Battalion, 327th Infantry across the river. The crossing would have to be fast so that the infantrymen could regain contact with the enemy mechanized forces without losing momentum.

The key leaders of Company A devised an innovative plan to use not only RB-15s to cross the infantrymen but also a field expedient floating footbridge constructed from aircraft cargo pallets. With the approval of the entire chain of command, preparations began.

The staffs of the Engineer battalion and the Infantry brigade helped the unit obtain all the necessary materials. Heavy drop pallets were brought up from Fort Bragg, and 463L aircraft cargo pallets were obtained from Fort Campbell's Army airfield.

Before the assault crossing, the river was spanned by two steel cables about four feet apart and secured at each end with deadmen. The pallets were also brought forward and camouflaged in the woodline. The far shore was secured by an Engineer assault force that crossed in RB-15s to protect the construction site.

Before the actual construction of the bridge began, a platoon from the Infantry battalion assumed the security of the enemy shore, and a platoon of Military Police assumed local security and

Soldiers cross river on floating bridge.

blocked roads into the area.

The construction of the bridge was simple: Pallets were floated out on the water, and two snap links were used at each connection—one to hook the two pallets together (using the tiedowns already on the pallets), and the other to hook the pallets to the steel cable. This was done quickly and quietly. Smoke was used at the crossing site and at other points up and down the river for concealment and deception.

Engineer rally points and engineer guides were used to control the flow of troops through the bridgehead line. The infantrymen linked up with the engineers about one kilometer away from the assault river crossing site and were brought to ORPs. At the ORPs, the infantrymen were given quick briefings on the enemy situation, the location of the units around them, and the concept of the operation in which they were about to participate. They were then guided either to the rafting site, where they would use the boats to cross the river, or to the floating bridge site, where they would walk across.

Several lessons were learned during the exercise:

- The 463L pallets could be put together more easily than the heavy drop pallets and in half the time.
- Using the cables, 100 meters of bridge could be constructed in an hour.
- The cables were not really necessary, but they added stability when foot troops crossed the bridge.
- Since each pallet could easily hold the weight of a combat-equipped soldier, such a bridge could be used to span a gap of any size.
- Kedge anchors or shore guys could be used on bridges that spanned rivers with strong currents using field expedient systems such as snap links and rappel ropes.
- Since all site preparations were below ground (the deadmen) or below water (the cables), the equipment could be left in place for future operations without being detected by aerial reconnaissance.

The entire Infantry battalion was across the river in less than three hours, including all the slice elements.

This bridge was a design that my commanding officer, Captain Samuel A. Guthrie, and I came up with, and we hope others will be able to make some use of it as well.

DANE S. TKACS
1LT, Engineer
Company A, 326th Engineers
Fort Campbell, Kentucky

REFLEX/NIGHT SIGHT

The new emphasis on night operations resulting from maneuver warfare doctrine brings forward a glaring problem: The present U.S. service rifle, the M16, does not have an effective night sight. Modern combat is showing that potential enemies try to capitalize on this night blindness with human wave attacks. During the daytime, the lack of a reflex sight causes the fleeting urban terrorist to use "hit and run" tactics that do not allow infantrymen time to properly use iron sights for firing. And in the future, American soldiers may be fighting far from resupply, and every shot will have to count. This is why a combat reflex/night sight system should be adopted as soon as possible to increase the speed, accuracy, and firepower of our infantry forces.

As it stands now, the iron sights on the M16 rifle force the infantry commander to rely on battlefield illumination, tracers, and a limited number of Starlite scopes. Giving every infantryman a night vision device is neither desirable nor economically feasible. Presently, they are too bulky, fragile, and expensive, and they require numerous replacement batteries. In the defense, enemy scouts probing our defenses are difficult to engage discreetly without giving the infantry commander's position away. Sentries with Starlite scopes cannot provide adequate security against large reconnaissance elements. The only options available are to shoot blindly with tracers, use illumination, send out a patrol (thereby subjecting the patrol to possible ambush without night sights), or let the reconnaissance element go about its business of picking our defenses apart.

If the enemy attacks our defensive position, infantrymen equipped with M16/M203 grenade launchers will be firing illumination rounds when they could be better employed firing high explosive rounds at dead spaces or covering a sector of fire with their rifles. Likewise, 60mm mortars and higher level supporting fires may be needed to provide illumination, detracting from killing power and setting a precedent that may lead to an over-reliance upon higher support.

Furthermore, in the offense, the commander will be facing defenders with prearranged fields of fire and obstacles. Illumination would serve only to help the defenders repel the attack and would act as a signal to let other enemy units in the area know where they needed to go to assist their comrades. The success of a night attack rests upon the assaulting unit's ability to neutralize the defenders' position quickly and accurately. A night sight would help.

I'm not advocating that battlefield illumination be done away with. Obviously, there will be times when it gets so dark that illumination must be used, as in thick jungle vegetation. But for the most part starlight and moonlight provide enough light for human night vision to work. What we need is not a fancy space-age device that can turn night into day but a sight that will allow our soldiers to aim and hit targets up to the limits of their natural senses—a sight that will allow the rifle to be accurately aimed at subtle battlefield indicators such as shine, movement, silhouette, noise, or muzzle flash.

Fortunately, such a sight exists. It has been found to be simple, sturdy, lightweight, and easily mountable to the M16 rifle's carrying handle with a single nut and lock washer. In addition, it doesn't block the regular iron sights, so they can still be used if so desired. It is relatively inexpensive and, most important, it is combat proven and tested as providing unequalled daytime target engagement speed and night firing accuracy. It is called the occluded eye gunsight or OEG for short. It consists of a small nitrogen-filled tube with a radioactive element that is visible in the daytime and at night. It is impervious to rain, snow, sleet, mud, and dirt. It has even been run over by a jeep without harm.

The OEG is not an optical sight, so the firer does not look through the sight and reduce his vision. It does not matter how dirty the lenses get as long as he can see

the sight's red dot Both eyes are used to fire, thereby improving the field of observation.

All the firer does is place the dot on the target and fire. Multiple targets that are moving can be engaged successfully and quickly. Firing while wearing the M17A1 field protective mask would also improve, because eye relief would not be as close as with iron sights.

The present unit comes with simple windage and elevation adjustments and can be zeroed in a matter of minutes. It is only 5¼ inches long and weighs only 5½ ounces. It fits compactly and neatly on the M16's carrying handle. The radioactive element lasts for 10 years and can then be simply and inexpensively replaced.

As a combat infantryman who has seen the shortcomings of iron sights in actual live fire exercises in both the daytime and at night, in the blistering heat of the 29 Palms desert, the cold of Fort McCoy, and the suffocating humidity of Camp Lejeune's forests, I can say without a doubt that the OEG is the near term answer to our present rifle sight shortcomings.

Something should be done to get this remarkable sight into our troops' hands as soon as possible.

MIKE SPARKS
Officer Candidate, USMCR
Lynchburg, Virginia

SYMPOSIUM ON LOW INTENSITY CONFLICT

The United States Southern Command (SOUTHCOM) and the U.S. Army Materiel Command (AMC) are jointly sponsoring a symposium on Low Intensity Conflict (LIC) in cooperation with the American Defense Preparedness Association. The symposium will be conducted 4 and 5 March 1987 at the Naval Training Center in Orlando, Florida.

The symposium will address these aspects of LIC: The political-military perspective; global aspects of the LIC threat; implications of LIC for U.S. forces; DoD organizational structure for LIC; logistics and engineering; C³I; combat and mobility (land forces, aviation, and "brown water"); materiel requirements and future development for LIC; and training. The symposium is unclassified except for one session on C³I, which will be Secret/No Foreign.

The purpose of the symposium is to apprise industry of LIC developments and materiel requirements and needs. More than 400 managers, engineers, and scientists from the DoD RDA community as well as industry are expected to attend.

For additional information, call AMC's Project Office for Low Intensity Conflict, located at the Belvoir Research, Development, and Engineering Center—AUTOVON 354-6873 or commercial (703) 664-6873.

GILBERT W. BUHRMANN, JR.
Fort Belvoir, Virginia

A BIT OF HISTORY

In the Spring of 1953, I was the commanding general of the newly reactivated 1st Armored Division at Fort Hood. We were preparing for a corps maneuver in which the division would be opposed by the 82d Airborne Division, a National Guard Infantry division, and two separate tank battalions.

Before the maneuver, an Assistant Secretary of the Army visiting the division mentioned that there was a paper on the Chief of Staff's desk that would eliminate the armored personnel carrier. I pointed out that this would do away with the concept of the armored division. I asked him to ask the Chief of Staff not to sign it until after he had visited the coming maneuver.

When the Chief of Staff arrived by plane at Fort Hood, I met him and took him to one of my armored infantry battalions. When he said he had never been in an APC, I suggested that he go with a squad that was leaving with its unit as part of the maneuver.

When he returned some two or three hours later and got out with the squad, he went up to the squad leader and said, "Doesn't the noise, vibration, and darkness bother you?" To which the squad leader replied, "Not as much as walkin', suh!"

When I took the Chief of Staff to his plane for Washington, we did not mention the APC further—but he never signed the paper eliminating the APC.

The Army may owe a lot to that Infantry squad leader.

BRUCE C. CLARKE
GEN, Retired
McLean, Virginia

INFORMATION NEEDED ON 3d ARVN DIVISION

I am currently working on a master's degree in Vietnamese History at the University of Hawaii. I am also a second lieutenant in the U.S. Army National Guard.

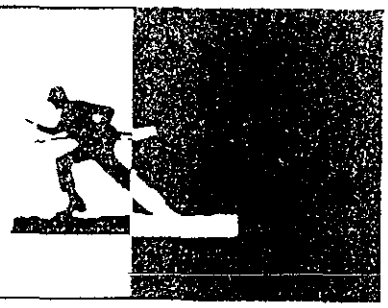
I am conducting extensive research for my thesis, which deals with an analysis of the formation, organization, training, and leadership of the 3d Army of the Republic of Vietnam (ARVN) Infantry Division in late 1971 and early 1972 in Quang Tri Province, South Vietnam, and on the subsequent operations of the 3d ARVN Division during the 1972 Easter Offensive.

I would like to hear from and talk to all MACV, XXIV Corps/FRAC, USARV, and other unit personnel who took any part in the discussion, planning, and implementation of the decision to organize and equip the division in the latter part of 1971 and early part of 1972. I would also like to hear from all U.S. Army advisors who served with MACV Advisory Team 155 (3d ARVN Division's U.S. advisory team) from the Fall of 1971 to the Fall of 1972.

My address is 1342 8th Avenue, Honolulu, HI 96816; phone (808) 735-6958.

HOWARD C.H. FENG

INFANTRY NEWS



THREE NEW MORTAR MANUALS were recently completed to assist in mortar training: FC 23-36 (M224 60mm Mortar), FC 23-91-4 (M23 Mortar Ballistic Computer), and FC 23-93 (M252 81mm Mortar).

Limited distribution of these manuals has been made to units that either have the equipment or are scheduled to receive it soon. For additional copies, write to U.S. Army Infantry School, ATTN: ATSH-SE-TSD, Building 1690, Fort Benning, GA 31905.

The point of contact for further information on the manuals is CPT Monaghan, Company B, 1st Battalion, 29th Infantry Regiment (ATSH-IN-B-1B), Fort Benning, GA 31905.

NEW MORTAR EQUIPMENT going to units will enable them to take a large step toward more effective indirect mortar fire.

The M23 mortar ballistic computer is scheduled for distribution during Fiscal Year 1987 as follows:

Jan 87	USA FA School	Ft. Sill
	4/31 Inf (M)	Ft. Sill
	10th SF	Ft. Devens
Apr 87	10th Mtn Div	Ft. Drum
	9th Inf Div	Ft. Lewis
	2/75th Rgr Rgt	Ft. Lewis
	1st SF	Ft. Lewis
	7th Inf Div	Ft. Ord
Jun 87	6th Inf Div	Alaska
Aug 87	25th Inf Div	Hawaii
	1/299th Inf (NG)	Hawaii
	2/299th Inf (NG)	Hawaii
	100/442d Inf (AR)	Hawaii
Sep 87	193d Inf Bde	Panama

The M252 81mm mortar is scheduled to reach the 82d Airborne Division during the fourth quarter of FY 1987. It will replace the M29A1 in light infantry units.

The Infantry School will provide assistance with these new items of equipment through the New Equipment Training Team (NETT). The point of contact at the School is Detachment 2, Company B, 1st Battalion, 29th Infantry (ATSH-IN-1B-B), Fort Benning, GA 31905.

A SUCCESSOR TO THE M16 weapon system is now being developed. The U.S. Army Armament Research, Development and Engineering Center (ARDEC) has awarded five competitive contracts for its development over a six-month period. The new system is referred to as the Advanced Combat Rifle.

After that period, the most successful candidates will be selected, on the basis of previously established criteria, for continued development. Ultimately, the effectiveness of the weapon systems under simulated combat conditions will be demonstrated to the Army.

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

• **BFV Modifications.** The Infantry Board recently conducted tests on weight allowances for proposed modifications to improve the survivability of the Bradley fighting vehicle (BFV) system. At the time the Bradley was designed, the primary threat to personnel carriers was the Soviet 14.5mm machinegun firing antipersonnel ammunition. Since then, threat analyses have reported that Soviet firepower has been upgraded to include 30mm cannon and hand-held HEAT, thus requiring improved protection for all BFV systems.

Proposed survivability improvements or increased armor protection will increase vehicle weight, which could result in decreased speed, agility, range, and reliability. To offset these potential performance degradations, the use of Multiple Launch Rocket System (MLRS) final drive assemblies and drive train improvements for the BFV are being considered.

The concept evaluation program test conducted 4 August through 3 October 1986 at Fort Benning compared the mobility and reliability of a standard BFV, a BFV modified with MLRS final drive, and BFVs modified with MLRS final drives and various up-weight options. Compatibility with the M1 main battle tank was also considered.

The Infantry School will use the test results to assist in making decisions regarding BFV modifications.

• **Current activities.** The Infantry Board is now conducting a follow-on evaluation of two second-generation and two third-generation image intensification night vision goggles designed ultimately to replace the AN/PVS-5 night vision goggles. Also being considered is a concept evaluation of three types of short range thermal sights for use with the M16A2 rifle and the M207 grenade launcher.

AN IMPROVED SMOKE generator system managed by the Office of the Project Manager for Smoke/Obscurants (PM Smoke) at Aberdeen Proving Ground, Maryland, has been approved for fielding to U.S. Army units worldwide.

Designated the M3A4 smoke generator, the system enables chemical smoke units to provide large area screening of troops and installations. It will replace the M3A3 smoke generator, used since the 1950s, and will fill unit shortages and equip the newly activated smoke generating units that are part of the increased chemical force structure.

The 9th Chemical Company, 9th Infantry Division, Fort Lewis, Washington, will be the first FORSCOM unit to be equipped with the new generators.

The 1986 index to INFANTRY has been prepared separately and is available to anyone who requests a copy. Please address your requests to Editor, INFANTRY Magazine, P.O. Box 2005, Fort Benning, GA 31905-0605.

TASK NUMBER	TASK TITLE	MOS AND SKILL LEVEL
051-192-1008	Install/Remove the M21 Antitank Mine	B2, M1
051-193-1002	Construct a Non-Electric Demolition Firing System	B2, M2
061-283-1002	Locate a Target by Grid Coordinates	H3, H4
061-283-1003	Locate a Target by Polar Plot	C2, C3, C4
061-283-6003	Call For/Adjust Indirect Fire	B2, M2, M3
071-311-6003	Load/Unload and Clear an M231 Firing Port Weapon	M2
071-311-6004	Perform Misfire Procedures on an M231 Firing Port Weapon	M1
071-314-0003	Perform Operator Maintenance on a 25-mm Automatic Gun	M3
071-314-0006	Load, Unload, Clear a 25-mm Automatic Gun on an M2/M3 Bradley	M2
071-314-0012	Engage Targets with the 25-mm Automatic Gun Using the ISU on an M2/M3 Bradley	M3, M4
071-315-0031	Perform Operator Maintenance on the AN/PVS-5 (Night Vision Goggles)	B1, H1T1, M1
071-315-0091	Place a Handheld Infared Viewer AN/PAS-7 into Operation	M1, M2
071-315-2306	Mount and Dismount an AN/PVS-4 on an M16A1 Rifle	B1, M1
071-316-2503	Load, Arm and Unload an Encased TOW Missile	H1T1
071-316-2536	Operate an ITV(M901) Dual Launcher Using Emergency Action Proceedures	H1T2, H2T2
071-316-2542	Engage Targets with an M60 Machine Gun Mounted on an ITV(M901)	H1T2, H2T2
071-316-2550	Occupy a TOW Firing Position	H2T1, H2T2, H3, H4
071-316-2601	Plan and Control TOW Section Fires	H3, H4
071-316-2652	Prepare and Issue an Oral Operations Order (TOW)	H3
071-316-2800	Manage a TOW Battery Program	H4
071-316-3015	Remove a Misfire TOW Missile from an M2/M3 Bradley	M1, M2, M4
071-321-4005	Assist Unit Commander in the Preparation of the Indirect Fire Support Plan	C3
071-322-4201	Ground Mount a 4.2 Inch Mortar	C1
071-324-3052	Direct Fire and Maneuver of a Dismount Team Against an Enemy Position	M2
071-324-4002	Load, Unload and Stow Smoke Grenades for the M257 Smoke Grenade Launchers	M1, M2
071-325-4401	Perform Safety Checks on Hand Grenades	M2
071-325-4413	Install an M18A1 Claymore with Trip Wires	C3
071-326-0500	Move a Casualty From the Immediate Battle Area	H1T1, H1T2
071-326-0550	Prepare Individual and Crew Served Weapon Positions in Urban Terrain	M1
071-326-3054	Direct Dismount Team Fires in the Defense	M2
071-326-3604	Conduct a Disengagement with an M2 Bradley Platoon	M4
071-326-5551	Select/Organize Mortar Platoon/Section Positions	C4
071-326-5804	Conduct an Antiarmor Ambush with an M2 Bradley Squad	M3
071-326-5917	Conduct a Mounted Assault with an M2 Bradley Platoon	M4
071-329-1004	Determine the Elevation of a Point on the Ground Using a Map	C2, C3, C4, H2T1, H2T2, H3, H4
091-504-4001	Establish Priorities for General Maintenance	H4
113-573-4003	Encode and Decode Messages Using KTC 600 E Tactical Operations Code	H2T1, H2T2, H3, H4
113-600-1012	Install Telephone Set TA-312/PT for Operation	C2, H1T1, H1T2
113-600-2009	Install and Operate Telephone Set TA-1/PT	C1

NOTE: For MOS 11H, the suffix T2 indicates the Track 2 test which is administered to ITV crewmen. T1 is for all others 11H soldiers.

AN ANALYSIS OF SQT results, Army-wide, for 1986 has been made at the Infantry School in an effort to identify the tasks in which less than 50 percent of the soldiers answered the questions correctly. (The Skill Qualification Test results were good, overall, with a pass rate of at least 93 percent on all MOSs.)

After the analysis, each task test was then rechecked by education specialists to ensure that there were no invalid or misleading questions and that the correct answers could be found in the appropriate Soldier's Manuals. From this process, a list was compiled to reflect the tasks in which Infantrymen appeared to need more training (see chart).

Because unit missions vary, all of these tasks may not be as critical to some units as to others. Still, this list can assist commanders who have already analyzed their units' SQT results in determining how their Infantrymen stack up with others.

THE NATIONAL INFANTRY MUSEUM has provided the following items:

The Sixth Annual National Infantry Museum Five-Mile Run was held recently. A record number of runners, 4,659, participated in spite of inelement weather. The Museum is grateful for the tremendous turnout, which made for another successful race and raised more than $14,000 for the Museum.

Among recent donations is a replica of an airborne dummy like the ones made for the U.S. Government and dropped into Normandy during the D-Day invasion on 6 June 1944. It was presented to the Museum by Mr. George Freedman, who worked on the design and manufacture of the original model.

The straw-filled rubber decoy dummies were dropped from C-47 planes about 145 miles behind the Normandy coastline into Nazi-occupied France to draw German soldiers away from the coast so that American soldiers could establish beachheads.

Rigged with fireworks to simulate small arms fire, they caused such confusion among the enemy troops that several German units were held in position for hours before being ordered to the actual scene of the fighting. Countless American lives were probably saved as a result of the diversionary effect of these para-

trooper simulators.

A large, hand-carved wooden plaque in the form of a 411th Infantry Regiment insignia, which contains the names of 33 members of Company A of that regiment who were killed in action during World War II, was donated to the Museum. The regiment fought in France and Germany in 1944 and 1945.

Some of the other unique items that have been donated recently are:

- A Japanese bugle carried by a member of the 26th Imperial Division, captured in December 1944 on Leyte by the donor, Colonel (Retired) J.B. Hendry, who at the time was a technical sergeant and acting platoon leader of the 3d Platoon, Company I, 511th Parachute Infantry Regiment, 11th Airborne Division.
- A holster, pistol belt, and ammunition pouches used by a soldier while he served with the A.E.F. in Siberia in 1919-1920.
- A Viet Cong flag, captured by the men of his unit, from a three-time recipient of the Combat Infantryman Badge.
- A number of valuable books and other articles.

The Museum makes an effort to share the historical artifacts and information that it receives. In addition to displays and exhibits in the Museum building and on its grounds, it provides displays at other locations on post. For example, the Museum recently placed a display on Yorktown in Infantry Hall and has provided artifacts for display in the Military Archives Room of the Infantry School's Donovan Technical Library. It also had a display at the Columbus, Georgia, Expo 87.

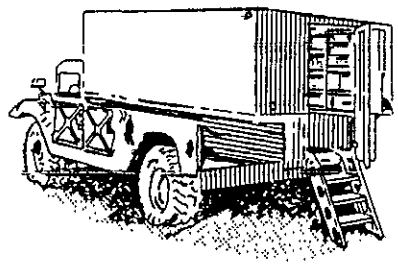
In carrying out its educational mission, the Museum conducted courses on military and Fort Benning history for teachers in Fort Benning's dependent schools system. In addition, the Museum's director and curator shared their professional expertise by serving on panels at the 15th Annual U.S. Army Museum Conference in Princeton, New Jersey, this year.

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

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

TWO LIGHTWEIGHT NUCLEAR shelters to fit on the Army's High Mobility Multipurpose Wheeled Vehicle (HMMWV) are being developed under a contract awarded recently by the U.S. Army Natick Research, Development, and Engineering Center.

The shelter that results from the testing will house and protect command, control, communication and intelligence hardware from the effects of tactical nuclear explosions.



In June 1985 the same contractor designed, built, and tested a graphite/epoxy wall of a similar shelter for the Defense Nuclear Agency. The International Standards Organization (ISO) wall withstood a simulated nuclear explosion more than half as powerful as the atomic blast that destroyed Hiroshima in World War II.

The Army shelter will have a similar ISO wall, but the advanced, lightweight design will feature additional resistance to the electromagnetic interference from nuclear explosions and automated fabrication techniques.

A NEW JOINT READINESS training center designed to evaluate non-mechanized infantry battalion task forces is being set up in Arkansas.

The center, with headquarters at Little Rock Air Force Base, is to provide a dedicated facility for the training of light forces under conditions ranging from low- to mid-intensity conflicts. Both the Active Army and the Reserve Components will be trained there.

To support this training initiative, an operations group and opposing force are scheduled for stationing at Little Rock beginning next year. Initial spaces call for 293 soldiers and 73 civilians.

The Joint Readiness Training Center is expected to provide the following:

- Training on unfamiliar terrain, linked to unit war plans.
- Professionally developed and controlled scenarios in concert with an objective evaluation by a dedicated operations group.
- The capability for rotational units to conduct exercises against a well-trained opposing force.
- Exposure to a stressful environment that closely duplicates combat conditions.
- An opportunity to conduct emergency readiness exercises and joint operations.

Most of the center's actual training exercises will be performed at Fort Chaffee, Arkansas, with a limited number being conducted at other locations that typify the environmental extremes associated with unit war plans.

The first light battalion rotation to Fort Chaffee is targeted for the summer of 1987. Six more light battalions are scheduled for training in Fiscal Year 1988, followed by 13 more each year in Fiscal Years 1989 and 1990.

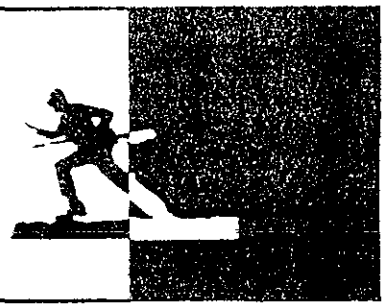
Little Rock was selected as headquarters for the training center for several reasons. For one, the ability to undertake joint training operations with the Air Force is improved by the availability of a C-130 wing home-based at Little Rock.

In addition, training areas and small arms ranges are accessible, and adequate billeting and other critical facilities are readily available.

A DEMONSTRATION CONTRACT has been awarded by the U.S. Army Missile Command (MICOM) for an Advanced Antitank Weapon System, Medium (AAWS-M).

This is the first of a two-phase program to develop a replacement for the Dragon manportable antitank weapon system.

FORUM & FEATURES



With a Special Capital "I"

CAPTAIN HAROLD E. RAUGH, JR.

Just days before World War II ended in Europe in 1945, a British Army infantryman wrote a letter to *The Times* (of London), entitled "In Praise of Infantry." This British infantryman, Field Marshal Archibald P. Wavell, was trying to overcome what he considered a lack of respect by his countrymen for the Infantry. Field Marshal Wavell's message is as timely now as it was in 1945, if not more so.

Wavell was no newcomer to the Infantry and its way of life. The son and grandson of professional soldiers, he had graduated from the Royal Military Academy at Sandhurst in 1900 and the following year had been commissioned in the Black Watch Regiment.

From then until 1943, when he was appointed Viceroy of India, Wavell had gained fame as one of England's outstanding soldiers. He had served with distinction in a number of important command and staff assignments, including active service during both the Boer War and World War I, as well as in several campaigns in northern India. It was while serving as Viceroy of India that Wavell wrote "In Praise of Infantry," which appeared in the 19 April 1945 issue of *The Times*. Except for several minor omissions, here is Wavell's letter:

My attention was lately called by a distinguished officer to the fact that, whereas in official correspondence and in the Press it is the practice always to use initial capital letters in referring to other arms of the service—e.g., Royal Armoured Corps, Royal Artillery, etc.—the infantry always suffered the indignity of a small "i". My friend wished to adopt the usual method of an Englishman with a grievance and to write to The Times *about it! But he proposed to do it vicariously, through me. Hence this article. I had not, I admit, noticed the small "i" myself, nor would it have worried me greatly if I had. But I do feel strongly that the Infantry arm (with a capital "I") does not receive either the respect or the treatment to which its importance and its exploits entitle it. This may possibly be understandable, though misguided, in peace; it is intolerable in war.*

Let us be clear about three facts. First, all battles and all wars are won in the end by the infantryman. Secondly, the infantryman always bears the brunt. His casualties are heavier, he suffers greater extremes of discomfort and fatigue than the other arms. Thirdly, the art of the infantryman is less stereotyped and far harder to acquire in modern war than that of any other arm. The role of the average artilleryman, for instance, is largely routine; the setting of a fuse, the loading of a gun, even the laying of it are processes which, once learnt, are mechanical. The infantryman has to use initiative and intelligence in almost every step he moves, every action he takes on the battle-field. We ought therefore to put our men of best intelligence and endurance into the Infantry.

Yet the Infantry in peace or war receives the lowest rates of pay, the drabbest uniforms, sometimes even the least promising of recruits; most important of all, it ranks lowest in the public estimation and prestige. This is all wrong and should be set right by methods more important than a capital I.

In all the long history of war on land the front-line fighting man, whose role is to close with the enemy and force him to flee, surrender, or be killed—the only method by which battles are ever won—has two categories only—those who fight mounted—once the Knights-at-arms, then the Cavalry, now the Royal Armoured Corps—and those who fight on their feet—the inevitable, enduring, despised, long-suffering Infantry (with a very capital I). Artillery, Engineers, R.A.S.C., and the like simply handle the weapons and equipment which Infantry have from time to time discarded, when they found that they encumbered their mobility and lessened their power to perform their primary role of closing with the enemy. The cannon, bombard, or what-not, when first introduced was an infantry weapon; when it impeded mobility it was handed over to second-line men, to support the Infantry. Similarly with other weapons and devices.

So that the real front-line fighters,

mounted or dismounted, are the men who should receive such panoply and glamour as are accorded to this dreary business of war. The mounted men have always had it—prancing steeds, glittering uniforms, sabretaches, scimitars, dolmans, leopard-skins, and the like in the old days; the imposing clatter of tanks and smart black berets in these sterner days. But the infantryman who bears the danger, the dirt, and the discomfort has never enjoyed the same prestige.

But I believe that what the Infantry would appreciate more than anything is some outward and visible symbol. No one grudges the parachutist his very distinctive emblem, but the infantryman is, I will maintain, subject to greater and more continuous, though less spectacular, risk than the parachutist, and should certainly have an emblem. What it should be I must leave to others—a rampant lion, crossed bayonets, a distinctive piping?

It can surely not have escaped notice that nearly all our leaders who have distinguished themselves in this war have all been infantrymen—Field-Marshals Dill, Alexander, Montgomery, Wilson; Generals Auchinleck, O'Connor, Platt, Leese, Dempsey, and others. Last war was a very static war, but there was a fashion for cavalry generals; in this war infantry generals have shown that they can move as fast as any.

So let us always write Infantry with a specially capital "I" and think of them with the deep admiration they deserve. And let us Infantrymen wear our battle-dress, like our rue, with a difference; and throw a chest in it, for we are the men who win battles and wars.

Wavell advances a number of cogent points in his article that apply as well to our own Infantrymen today. Why doesn't he receive more pay, a higher enlistment bonus, or a higher selective reenlistment bonus? Whatever happened to the proficiency pay given to holders of the Expert Infantryman Badge, or the incentive pay proposed in the late 1970s for Infantry

noncommissioned officers serving in combat leader—or "green tab"—positions? Why don't the Infantrymen in line units (battalion and below) who habitually spend sustained periods of time in the field living in austere conditions and separated from their families receive incentive pay?

What about the standards of our Infantry recruits? Why aren't the physical and mental standards for initial entry and subsequent promotions raised—for private soldiers as well as officers?

Granted, Infantrymen are authorized to wear the blue Infantry shoulder cord on the uniform coat of their Army Green uniform, but what distinction is there when this jacket is not worn? Why isn't there a distinctive Infantry (branch) color coding—a piping—in place of the current gold band on the shoulder boards of rank for the light green shirt, in a manner similar to that employed by the German Army? And what about the light Infantryman who almost always wears the battle dress uniform? Why isn't he authorized a "Light" Infantry tab, to be worn above his division patch like a Ranger tab; or a beret; or a special trench or commando knife he could wear on his pistol belt?

Positive answers to all of these questions will add immeasurably to the morale of each of our Infantrymen. They will also help create a more cohesive, efficient, and effective branch (and better units), and will help compensate the Infantryman for his additional privations, burdens, and responsibilities.

Wavell's laudatory praise of the Infantry—with a very special capital "I"—is as relevant today as it was four decades ago. The Infantry is destined to remain the paramount and indispensable branch of the Army. Long live the Infantry, Queen of Battle!

Captain Harold E. Raugh, Jr., is attending graduate school at the University of California at Los Angeles in preparation for an assignment to teach history at the United States Military Academy. Previously, he commanded Company B, 5th Battalion, 21st Infantry at Fort Ord

Training Management

CAPTAIN EDWARD C. SAYRE

The Army's training system is designed to give commanders everything they need to prepare their units for combat. This is basically a three-fold process that includes the basic combat training of the individual soldier, the sustainment of combat training, and unit field exercises that simulate actual warfare. Additionally, the system provides for training doc-

trine, individual and collective training, advanced training keyed to soldiers' career progression, and a wide variety of training resources.

It is the primary responsibility of battalion and company commanders to manage the aspects of the Army's training system that support the training of their soldiers and units. ARTEPs were developed in 1977 to guide them in their unit training and evaluation by identifying training objectives and minimum performance standards for critical missions and tasks. With both SQT/Soldier's Manuals and unit ARTEPs, the systematic integration of individual and collective training tasks has greatly improved standardization and combat mission readiness.

BTMS

With this system firmly entrenched in Army doctrine, it was then necessary to provide commanders at all levels with the management tools they needed to identify individual and collective training deficiencies, improve overall MOS quality through multi-echelon training and cross-training, and maintain a controlled and sustained training program to meet a unit's needs. The training program developed to attain these goals was the Battalion Training Management System (BTMS).

Within BTMS there are five levels of training management with each geared toward those who direct training at the various levels of command: first-line supervisors, platoon trainers (leader and sergeant), training supervisors (first sergeants and command sergeants major), training managers (battalion and company commanders and battalion S-3), and commanders (above battalion). Workshops are conducted for trainers at the first four levels to acquaint them with the program, and a training management system is provided for the higher commanders and staffs.

BTMS, which was formally integrated into the Army in 1979, mandated through command channels that everyone attend the applicable workshop. The one-week workshops were conducted at post level and continued for several years. Once a unit had held its initial workshops, a follow-on—called the BTMS Unit Sustainment Program—would be scheduled for the next year. This assured that commanders and troops at all levels would be exposed to the BTMS system of management.

The BTMS program is goal oriented and recognizes that unit commanders will never have enough time, money, or resources to accomplish everything they want to do. What the program does is to establish a framework within which commanders and staffs can establish goals and priorities and manage scarce resources.

There are some inherent problems with the implementation of BTMS, however, for the very people who should benefit most from it. First, it is a full-time job just gathering resources, coordinating training areas, and submitting support requests. Imagine every platoon leader and company commander trying to plan, supervise, and direct training in addition to these tasks. It cannot be done.

In addition, unit training, which is supposedly the Number One priority, often takes a back seat to mandatory training and short-fuse requirements from higher headquarters. It has often been said that mistakes in training can easily be overlooked because that is the purpose of training. But failures in other areas—meeting administrative deadlines, supervising subordinates properly, and passing I.G. inspections—are not as easily forgiven. Common sense dictates, therefore, the efforts that will emerge as top priorities.

Another problem is in the concept of decentralization. Decentralization is a key component of BTMS because it gives subordinates a sense of mission and the assurance that their input really counts toward the success of the mission. The system basically leaves it up to commanders, however, to decide how and to what extent they will implement the program. Commanders therefore instinctively hold onto control and subvert decentralization. Although unit commanders at all levels were quick to implement BTMS when it was introduced, they implemented only those parts of it that fitted their operating philosophy. While long- and short-range plans are now used by almost all higher headquarters, training is not

usually decentralized to any great extent. As a result, the initiative of leaders at lower echelons is decreased and this eventually leads to a "let's-wait-and-see" attitude.

The problem with the decentralization associated with BTMS is that more work is required to run it properly, and battalion and company headquarters often find that they lack the current staffing to do the job.

(The allocation of material resources does not present a problem for unit training in the Army. Assets and resources are budgeted yearly and are basically fixed. Unit commanders know what they have to work with ahead of time and, by employing long- and short-range planning, they can allocate those resources according to priorities. And as long as a commander uses his resources in the most cost-effective manner, he is not held liable for training deficiencies because he was never given the necessary resources to accomplish the task. Basically, he just "goes with what he's got." At all levels

of command, this resource programming institutionalized by BTMS is one of the single most effective benefits of the system.)

The basic policy concept needed to improve BTMS is to enforce training time through *administrative action.* As an administrative action, training would become accountable in the form of mandatory time periods for decentralized training. This could be institutionalized very easily on the unit's weekly training schedule and submitted to brigade headquarters for approval, and would ensure that training was given command attention at all levels.

The brigade commander must take charge of the decentralization process, because he has the authority to implement or emphasize the desired corrective action and to *standardize* BTMS throughout the subordinate battalions.

He can directly implement the unit training schedule with emphasis on decentralization by applying the administrative deadline process and by making sure training schedules are written at no higher than squad level, or in certain instances at platoon level. Command emphasis on an administrative matter has never failed to achieve results.

As for the implementation of BTMS, since it was designed to be implemented at battalion level, it should be accepted at this level to the best of the command's ability.

At company level, commanders have an inherent duty to train subordinates in leadership and to allow the soldiers to develop professionally. The best way to do this is by decentralizing training, allowing soldiers to make and implement training decisions, generate initiative, and foster a team concept. Subordinate leaders will not face punitive action for mistakes or shortcomings in training because training missions are not considered in the administrative deadline class.

Good intentions alone will not implement even the best ideas. Emphasis and command guidance should start from the top and provide for follow-up.

Training management in the Army today is far above what it was ten years ago. The addition and integration of individual and collective soldier tasks has allowed leaders to set priorities and to plan and execute more effective training. To fight, win, and survive the first battle of the next war, subordinate leaders must be able to conduct effective training and develop team integrity and leadership. BTMS is an effective tool for that purpose, and *it should be refined to the* fullest extent possible.

Captain Edward C. Sayre is assigned to the Materiel Management Center, 9th Division Support Command, Fort Lewis. He previously served with the 10th and 5th Special Forces Groups and with the U.S. Army John F. Kennedy Special Warfare Center at Fort Bragg, and recently completed the Infantry Officer Advanced Course. He holds a master's degree from Central Michigan University.

Unit Histories

A Guide to the Agencies That Can Help

MAJOR GLENN W. DAVIS

If you have been assigned to develop or expand the unit history of your organization as part of the U.S. Army Regimental System, there are several places you can go for help.

There is a Roster of Organizations, which lists the active associations of former members of various units that served within the U.S. Army structure at various times. If your unit went through a lineage redesignation (name change), an active association may still be in existence. You can get a copy of the current roster through Headquarters, Department of the Army, Office of the Chief of Public Affairs, ATTN: OCPA-CR, The Pentagon, Washington, DC 20310-1500; AUTOVON 224-0739.

Unit history cards will provide you with details on your unit's authority, assignments, and locations since its activation. These data cards can help you track where your unit was stationed and when. Then you can call various installation museums or veterans associations in the continental United States for assistance. Requests for unit history cards can be obtained through the U.S. Army's Institute of Heraldry, 5010 Duke Street, Alexandria, VA 22304-5050; AUTOVON 284-6632/6633.

Information relating to heraldic items such as coats of arms or historic insignia can also be obtained through the Institute.

Unit morning reports are in the custody of the National Personnel Records Center, 9700 Page Boulevard, St. Louis, MO 63132. These reports can give you your unit's personnel assignment status as well as casualty lists.

The historical records of most U.S. Army units or military installations in operation *before* 1953 are in the custody of the Military Field Branch, which is in the Washington National Records Center Building, 4205 Suitland Road, Suitland, MD 20746; commercial (301)

763-1710. These records can provide you with detailed after-action reports, personnel reports, and operational extracts, overlays, maps, and the like.

For units or installations in operation *after* 1953, such records are in the custody of Headquarters, Department of the Army, ATTN: DATM-FAR-SS, Room 1146, Hoffman Building I, 2461 Eisenhower Avenue, Alexandria, VA 22331-0301; AUTOVON 221-6179.

Photographs of various U.S. Army combat activities dating from 1940 to the present are in the custody of the Department of Defense, Still Media Depository, Code LGP-R, ATTN: Customer Services, Washington, DC 20374-1681; commercial (202) 433-6606.

Heraldic items in storage from any previous inactivation periods of your unit may be in the custody of the Pueblo Army Depot, ATTN: Transportation Officer, Pueblo, CO 81001-5000; AUTOVON 877-4048.

ADVERTISE

Former service personnel who may have information you can use can be contacted through advertisements in service magazines or various publications of veterans organizations. Two such publications are *Army Times,* 6883 Commercial Drive, Springfield, VA 22159, and the *VFW Magazine,* VFW Building, 34th and Broadway, Kansas City, MO 64111.

The current addresses of former U.S. Army service personnel who are now retired — who are receiving either retirement or disability payments — can be found through the Retired Army Locator, Headquarters, Department of the Army, ATTN: DAAG-PSR, Community Support Directorate, Office of the Adjutant General, Hoffman Building I, 2461 Eisenhower Avenue, Alexandria, VA 22331. Although this office will not give out the addresses of these people because of privacy considerations, it will verify their current status and will forward mail to them for you.

The United States Army Military History Institute, ATTN: Historical Reference Branch, Carlisle Barracks, PA 17013-5008, has a large collection of published unit histories from World War II. These works can be borrowed through the inter-library loan system at your local library.

Questions concerning the replacement of awards or the eligibility of U.S. Army personnel for awards can be directed to the Commander, Reserve Components Personnel Activities Center, Decorations and Awards, 9700 Page Boulevard, St. Louis, MO 63132. The U.S. Institute of Heraldry, mentioned earlier, may be able to provide background information on U.S. Army units that received foreign military awards.

The *Army Lineage Series,* produced by the Army's Center of Military History, contains lineage and heraldic data for each military unit's entire existence and lists foreign awards the unit received. (The series should be available through the library system.) The Institute may also be able to provide a copy of the letter of authorization for the coat of arms, distinguished unit insignia, and the lineage and honors statement.

Official certificates attesting to the award of organizational decorations can be obtained through Headquarters, Department of the Army, U.S. Army Military Personnel Center, ATTN: DAPC-ALA, 200 Stovall Street, Alexandria, VA 22332; AUTOVON 221-8698.

For published military literature, you may want to contact The Army Library, The Pentagon, Washington, DC 20314.

U.S. Army topographical maps and other types of maps for the area of operations your unit was involved in are in the custody of the Cartographic Section, National Archives, 841 South Pickett Street, Alexandria, VA 22304. Correspondence to obtain copies of the maps (at a set fee) must be addressed to National Archives, ATTN: NNSC, Washington DC 20408; commercial (703) 756-6700.

OCMH

A valuable source of additional information concerning your unit is the U.S. Army Center of Military History, Pulaski Building, 20 Massachusetts Avenue, N.W., Washington, DC 20314-0200. You can call or write to various branches within the Center at the same address for assistance. For example, for information about published histories, including the Army lineage series, contact the Organizational History Branch; AUTOVON 285-0308. For an official lineage and honors statement, contact DAMH-HCO; AUTOVON 285-0307. And for the names of former commanders and also for Unit Day selections and an official certificate, contact DAMH-HSO; AUTOVON 285-0308.

All of the agencies I have listed proved invaluable to me in developing a unit history for my regiment, the 64th Armor Regiment at Fort Stewart, and I feel sure they will help you as well.

Major Glenn W. Davis, *an Infantry officer, is S-3 of the 4th Battalion, 64th Armor at Fort Stewart, where he previously served as headquarters company commander. He has also served with the 25th Infantry Division in Hawaii and the 2d Infantry Division in Korea. He is a 1974 ROTC graduate of Northeast Missouri State University.*

An NTC Lesson

The Light Infantry Battalion 2IC

MAJOR ALAN J. ROCK

Articles on lessons learned from training at the National Training Center (NTC) at Fort Irwin are plentiful, but not much has been said about the key role of a battalion second in command (2IC) at the NTC, particularly from a light infantry viewpoint. Normally, the role of a battalion 2IC is limited to making sure his unit deploys safely and on time to the exercise area. Once there, however, the actual orchestration of military operations is handled by the commander and the primary staff, and the battalion 2IC reverts to his garrison role as a "brush fire stomper."

During an NTC rotation last year involving a brigade task force from the 7th Infantry Division (Light), it soon became apparent that each battalion 2IC was to play a much more significant role. From that experience, several lessons were learned, particularly regarding a 2IC's responsibilities in supervising and coordinating the battalion staff; planning administration and logistics; supervising the battalion tactical operations center (TOC); and coordinating casualty evacuation.

The key to the successful completion of any mission is a battalion staff's thorough analysis of METT-T (mission, enemy, terrain, troops, and time) and its ability to furnish the battalion commander with the information he needs to make timely decisions and formulate his commander's intent. The 2IC must therefore take an active role in the staff planning process and the development of the operations order.

Upon receipt of a warning order, the battalion 2IC can energize the battalion staff to do two things — begin looking ahead at the next mission so that initial planning can take place and determining what key information is needed from higher headquarters, adjacent headquarters, and the battalion's own units and staff sections. Frequently, staff sections wait until a brigade fragmentary order (FRAGO) is published before they begin any initial planning. Unfortunately, the order is often late arriving at the battalion's TOC, and valuable planning time is lost.

ASSUMPTIONS

Even if the battalion commander and the S-3 are not present at this point, the staff can develop some planning assumptions based on its initial mission analysis, along with possible courses of action. These steps will greatly assist the planning when the brigade FRAGO is received and also will provide the battalion commander and the S-3 an initial concept that can be refined once the formal command and staff process begins. Furthermore, this involvement by the 2IC will help reduce staff planning time and increase the time the battalion commander, his staff, and the company commanders have for preparing the battlefield.

Secondly, the battalion 2IC needs to work closely with the battalion S-3 during the initial command and staff process when a mission is analyzed and when specified or implied tasks are defined. For example, the 2IC can assign tasks and develop planning guidance for the S-1 and the S-4, who are often not present during mission analysis. (Unfortunately, most battalion S-1s and S-4s never really get involved in the planning process until courses of action are being analyzed, and even then their input can be flawed by a lack of necessary information.)

Clearly, the command and staff process is constrained during field operations, but here again the 2IC can help. He can make sure key questions are asked and mission information is exchanged, and that everyone — not just the battalion commander and the S-3 — understands the battalion's mission and the concept of the operation. Too often, the 2IC relinquishes this responsibility for staff coordination to the battalion S-3, who at this point is probably already overwhelmed with operational matters.

At times, too, the 2IC will have to use the radio or travel to the combat trains to inform staff officers of changes in mission guidance or to promulgate staff guidance to make sure the operations order is completely developed.

As for administrative and logistical planning, no field training exercise or command post exercise can duplicate as well as the NTC the effect of these factors on the battlefield.

A light infantry task force particularly needs to consider how it will resupply all its elements with all classes of supply over extended distances. The administrative workload increases dramatically with the attachment of more units, usually without any increase in the number of administrative personnel. In short, a great deal of stress is placed on all the administrative and logistical systems. Once again, the 2IC can play a

pivotal role in providing combat service support (CSS) planning guidance and in supervising CSS operations on the basis of the battalion commander's concept. Even when the 2IC, the S-1, and the S-4 try to anticipate problem areas, unforecasted requirements and the lack of an adequate logistics command and control system can prove troublesome.

Several of the major lessons learned in this area, although they directly apply to light infantry forces, are also worthy of consideration by heavy forces. One of these lessons concerns the location of the battalion's supply operators. Field Circular 7-13 suggests they be located as shown in Table 1. The task force's experience at the NTC indicates, however, that the disposition shown in Table 2 is better for several reasons:

- The headquarters company commander can provide continuous coordination with brigade support area (BSA) to support the battalion forward.
- The support platoon leader is better used to provide coordination between the combat trains and the field trains. In addition, by having the HHC commander coordinating with the BSA, the support platoon leader is free to supervise his platoon in getting supplies from the field trains to the combat trains.
- Many times, since the S-4 is gone from the combat trains, having the S-1 and the command sergeant major located there further facilitates administrative and logistical operations. Additionally, the location of the battalion S-1, S-4, and CSM near the TOC permits their timely involvement in planning the mission and developing the operations order.
- Administrative and logistics planning is further improved by reducing the number of locations to which the 2IC must go for coordination.
- This configuration provides for the establishment of an administrative/logistics center (ALC) as well as for an alternate TOC location by using the combat trains not only for their location from a command and control perspective but also for their personnel composition.

Several other lessons in this area can also apply to heavy forces. First, supply

FIELD TRAINS	COMBAT TRAINS	TOC/CP
S-1	S-4	Bn Cdr
PAC	Spt Plt Ldr	Bn XO
S-4 Cell	Doctor	CSM
	PA	HHC Cdr
	Chaplain	S-1/S-4 Cell (as needed)

Table 1

routes, both primary and alternate, should always be designated. These routes facilitate the selection of logistic release points and casualty collection points. And all CSS assets need to be controlled by the battalion S-4 so they can be used by the entire task force.

The high volume of all classes of supply needed by a unit to fight in a mid- to

FIELD TRAINS	COMBAT TRAINS	TOC/CP
HHC Cdr	S-1	Bn Cdr
S-4 Cell (S-4 NCOIC)	S-4	HHC XO
PAC	CSM	
	Doctor	
	PA	
Spt Plt Ldr	Chaplain	Bn XO

Table 2

high-intensity environment can severely strain the transportation assets of a light infantry task force. From the mission analysis, the battalion 2IC needs to anticipate transportation and resupply needs so that the FAST (forward area support team) can respond upon request. The battalion needs to file requests at least 24 to 48 hours in advance.

The logistical package (LOGPAC) system, with its standard Class I, III, V, and water resupply per company, works well, but the other classes of supply must also be considered. Additionally, the direct exchange of MILES equipment can become a problem. The battalion S-3 section should dedicate an NCO full time to the issue, turn-in, and direct exchange of MILES equipment and attach him to the battalion S-4 section. MILES can be treated as Class VII and become part of the LOGPAC system.

Depending upon the weather conditions, water can become the key resupply item. The 7th Division task force, using 175-gallon water pillows, 55-gallon blivets, and water cans, provided 1.5 gallons of water per man per day. During an infiltration attack, however, resupplying the battalion and company scout teams became difficult because of the distances between teams and because they were behind enemy lines. This is a clear case in which logistical considerations need to be part of the mission analysis and the development of the reconnaissance and surveillance plan. Aerial resupply is a possibility, of course, if METT-T permits and aircraft are available.

The key to the success of a battalion resupply mission and the battalion 2IC's ability to develop logistics planning guidance is the involvement of each *company* 2IC in determining the requirements for his unit in making sure the logistical status report (LOGSTAT) is accurate and submitted on time. *(Timely and accurate reporting continues to be a major planning factor.)*

Class IV supply needs to be in pre-palletized loads in the BSA. The loading of these supplies is labor intensive; configuring Class IV in pre-palletized loads to be pushed forward upon arrival in the area of operation would save a significant amount of time in preparing the battlefield.

A pre-positioned Class V supply package and, if possible, the pre-positioning of other packages of supplies in unit sectors during defensive situations also improves resupply operations during the battle when resupply vehicles may not be able to go forward.

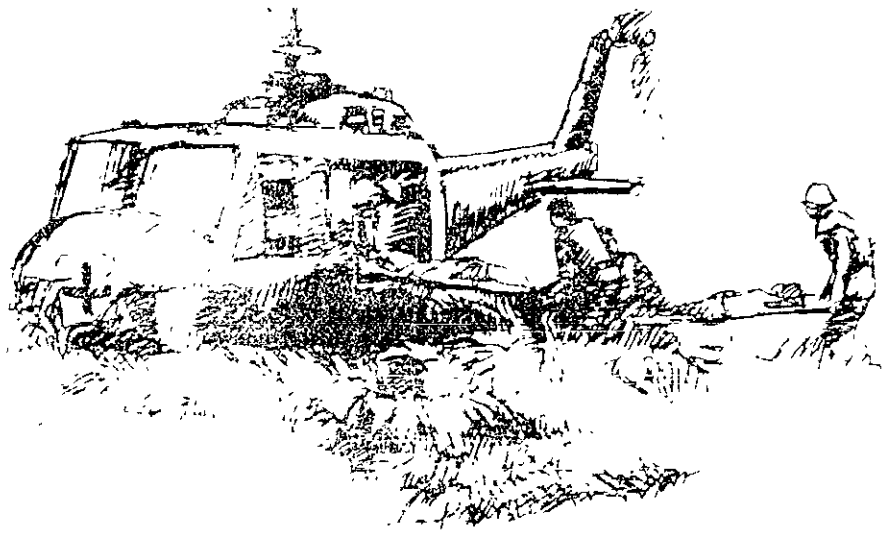
SECURITY

When it comes to protecting the combat trains, the best way is to avoid their detection through the selection of a good location and the use of camouflage. But units should also consider augmenting the combat trains with a minimum security force and providing the trains personnel with antiarmor weapon systems.

The hardware for the combat support computer system is durable and combat capable, but the software program as it pertains to the Personnel Daily Summary needs to be revised in the areas of tracking casualties, processing SIDPERS wartime transactions, and producing an accurate battalion rollout.

same time, commanders and leaders at all levels need to write awards and letters of sympathy. Many units never practice doing these in their field training exercises, and the battalion 2IC should see to it that several awards and letters are prepared by each unit.

Even though the 2IC may not be able to solve every logistical problem, particularly those associated with computer software, he still must ensure that a detailed administrative and logistical plan is developed that will anticipate shortcomings. His ability to ensure the smooth functioning of the ALC will prove invaluable throughout the training.



CASUALTIES

Coordinating for casualty evacuation is another key area of concern at the NTC. Few units practice casualty evacuation or educate their leaders and soldiers properly in the administration associated with casualty processing (DA Forms 1155/1156). The battalion 2IC must become actively involved in the process and, in conjunction with the staff — specifically the battalion S-1 and the medical platoon leader — must develop a medical evacuation plan that is based on METT-T. Once the plan has been approved, the S-1 should coordinate its execution from the combat trains through the ALC while the medical platoon leader supervises the execution of the plan in the forward areas.

A casualty collection plan should be developed for units and soldiers inserted deep behind enemy lines. Aerial evacuation is possible if the tactical situation permits. Alternative methods need to be developed even to the extent of reducing foxhole strength, if necessary, to provide litter-carrying teams.

Casualty collection points should be designated along primary and alternate supply routes and near identifiable terrain features so that they will be easy to locate. Drivers need to reconnoiter supply routes from the combat trains to the objective area (if the tactical situation permits) or to each unit defensive position so they will know how to find the casualty collection points. Units also need to provide guides at these designated points.

Contingency plans for aerial evacuation always need to be developed and coordinated. If ambulances are not available, the S-4 should also coordinate for additional ground transportation.

Finally, once the unit returns home from the NTC, the battalion 2IC should make sure this subject is not neglected in the battalion's training program. Units should practice medical evacuation, casualty collection, and the accurate completion of the forms in all field training exercises and ARTEPs.

TOC

The operation of the TOC is another area in which the 2IC can help solve some problems. The inability of a TOC to perform planning, reporting, and command and control functions adequately was mentioned in an INFANTRY article last year, along with the location of the TOC and a lack of security. (See "NTC: Lessons Learned," by Captain Gregory M. Heritage, INFANTRY, January-February 1986, page 39.)

If the 2IC gets involved in establishing set procedures for TOC operations, he can help solve such problems. He can do this by seeing that information management systems are developed and that all TOC personnel understand their respective duties. So much information is generated at the NTC that battalion staffs soon find themselves unable to function if they do not have a firm concept of the TOC SOPs and of the reports and information required by higher headquarters.

The 2IC needs to be present in the TOC during key military operations, because in the absence of the battalion commander he is the key decision maker. He also needs to supervise the use of both passive and active measures for protecting the TOC from detection. In brief, he is directly responsible for supervising all TOC operations.

The battalion 2IC cannot solve all the problems his unit encounters at the NTC, but in these areas at least he can play a pivotal role. He can act as the catalyst through which things happen. By carefully orchestrating and synchronizing the battalion's assets and by ensuring the timely and accurate exchange of information in and out of the battalion TOC, the 2IC provides the key to a successful NTC rotation as well as success on the battlefield. His competence and performance do make a difference.

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The First Step
A Second Lieutenant's Guide

GEORGE G. EDDY

I will never forget my first duty assignment as a second lieutenant, especially how I was greeted by my company commander in 1943. When I reported in the prescribed manner, copy of orders in hand, he glared at me and barked: "What'n hell are you doing here?" Startled, I pointed to the orders just given him and said that I was merely following them. "I don't know what I'm going to do with you," he fumed, "because you make the second officer overstrength in my company." (I refrained from saying that was really not my fault.)

"Well, since you're here, I'll have to do something with you, I suppose ... What do you know about unit supply?" Before I could respond, he went on: "Don't answer that. Lieutenant Zippo is going to some fool school next week, so you could—maybe—fill in for him for a couple of weeks." The company commander then dismissed me with a wave of his hand.

A few days after Zippo had left, first telling me condescendingly that I had nothing to worry about, we got word that First Lieutenant Hardcase from battalion was going to inspect our unit supply. When the supply sergeant heard this, he groaned: "He'll kill us." He did.

What does a second lieutenant need to know before reporting to his first duty assignment? Some cynics would say, "Everything," and then in the same breath, "But it's really hopeless." Others might say, "Nothing"; this is somewhat like the clean-slate approach where it is left to the first unit to prepare the mold. Still others might suggest that perhaps there is some ground in between, where the new officer helps himself to a certain extent, but comes prepared to learn as quickly as possible on the job. This latter position presumes, of course, that there are competent and willing "instructors" on hand—those who recognize such a responsibility and who either have the time for the job or are determined to find it.

As I reflect on my own experiences as a young lieutenant (which must be different in some respects from 1986 lieutenants but certainly not in the fundamentals), I have to admit that I did not know what I should have about:

- Supervising a unit mess.
- Running a rifle range.
- Administering unit supply.
- Handling unit administration and personnel.
- Running a motor pool.
- Supervising NCOs older and more experienced than I.
- Serving on a military court, or functioning as a TJA.
- Doing a lot of other things.

MISTAKES

Yet at 22 I was quite confident of my abilities when I probably should have been alarmed at my ignorance and inexperience. In fact, I was already in the "muddle-through" process but didn't realize it.

Right off the bat, I made several mistakes:

- I believed the officer who had said I had nothing to fear about the condition of unit supply—now in my temporary charge—and the inspection now upon us. Worse yet, I didn't even know how to spotcheck quickly and sufficiently to learn the actual situation. So, Lieutenant Hardcase fell upon us like a dive bomber, dropping his bombs all over the company area.
- When I became the unit PX officer, I foolishly let another officer jump in and help out during a big rush of business one night. When I tallied the sales results afterward, though, there was a cash shortage of more than $100.
- At one time I found several of the unit NCOs more agreeable and competent than several of the officers, but by imprudently associating with them for a time, I subsequently embarrassed them and myself.
- Once I led a small unit truck convoy for 15 miles before discovering that we were headed in the wrong direction. I had not really bothered to verify the route in advance, because I thought it was going to be quite routine.
- As the officer selected to put on a big dance for the company's first real relaxation since our arrival in England (remember Jack Lemmon as the Laundry and Morale Officer in *Mister Roberts?*), I rounded up a group of women from nearby British military units and some from a big laundry in a large town, plus a U.S. Army band. It was a great party. But when the dance was over, I foolishly let some of the women ride back to their RAF base and billets in the same truck as members of the band. The next day an RAF officer (male) found and informed me that the base CO (equivalent to a U.S. Army colonel) was in great distress about the damage done to base property by the truck, which had struck several buildings in the blackout condi-

tions, and about the considerable ruckus that ensued when RAF personnel tried to flush the band members from the women's billets. The commander suggested that for the next dance I go somewhere else.

While I am not trying to suggest that these instances are typical of the trouble young lieutenants get themselves into today, I believe there are some parallels. How prepared are today's lieutenants? What should they know?

A typical company commander concludes that second lieutenants are supposed to be ready to start work immediately with a minimum of orientation. After all, what is the service school doing, anyway? Additionally, he has many pressing matters that require his personal attention, and these tend to override any feeling that these young officers really merit his personal involvement. For all practical purposes, what generally occurs when a lieutenant comes in is a perfunctory greeting and orientation concluding with the admonition that the lieutenant had better be prepared to "get with it fast."

Most of us were taught that an officer is expected to display considerable initiative and resourcefulness, which implies that little guidance is needed. ("Don't bother me with the details, lieutenant," says the commander, "that's your job." Or, "Figure it out yourself; that's why you're an officer!")

PERSPECTIVE

Unfortunately, initiative and resourcefulness need a base of knowledge and the subsequent development of a proper perspective on such information and how best to integrate it. So there must be acquisition and assessment phases before effective action is forthcoming—both of which take time.

If we care at all how our young officers are to become effective in an organizational setting, it is both possible and necessary to plan how a lieutenant should use this time.

Just as an athlete prepares himself for a coming contest, so should a lieutenant get ready for his first assignment. He might ask himself what that assignment might be. What is the likelihood it will be a certain job? What are the jobs that second lieutenants typically get? Which is best for me? What should I seek?

Setting some appropriate goals should be the first order of business. Goals set the stage for the type of preparation that common sense ought to suggest is applicable. Without specific goals a person tends to drift, to accept whatever comes along. A young officer needs to recognize early that he is the only one who really is going to manage his career. He should never rely completely and passively on a central personnel management office to represent his best interests. For all practical purposes, to that office the typical second lieutenant is just another document file.

True, at the start of his career, he does not have much to go on and does need some appropriate guidance that a management office can provide. But he should use this guidance to look at each of his alternatives and at what each appears to offer in terms of performance demands as well as long-term opportunities.

Good decisions depend in great measure on "good" information—accurate and pertinent. Thus, one of the first actions a new lieutenant should take is to begin collecting information. A thoughtful appraisal of this information will help to establish the foundation for goal determinations and for the qualifications for various positions. This information originates typically from military service school instructors and published material, the central personnel management office, superiors, senior NCOs, peers, Army regulations, and other official documents such as field manuals, tables of organization, and the like.

In the process, a lieutenant can look especially at such vital matters as principles of organization, organizational practices, principles of leadership, motivation and conflict fundamentals, and case studies of effective leadership.

From his collected data, a lieutenant can develop an appreciation of the missions and roles of the units to which he is likely to be assigned and the specific duties and responsibilities in those units for young officers. As he studies these possibilities, he should try to judge each such position in regard to the qualifications required for successful performance.

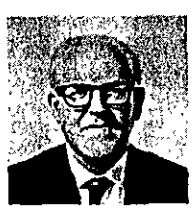
The basic question is: What is expected of a leader? Other questions come quickly to mind. Within the highly structured environment of a typical military unit, how much latitude does a new lieutenant have for action? What are the criteria for judging an organization? What are the essential elements of a good organization? Good operational procedures?

GOALS

As he works his way through these critical questions, he should develop a list of typical jobs and their demands. From this effort should come not only what is available now for the first assignment but also what other types of jobs ought to follow. In effect, the young officer has begun to develop a way of looking beyond his initial assignment. In other words, his career goals should extend outward for several years, say, from an initial assignment as a platoon leader to that of company commander. At the outset, of course, he must keep his sights set on the immediate demands and on meeting them satisfactorily.

There are various ways to analyze job opportunities and their requirements, even when a lieutenant may have little choice in his ultimate assignment. By knowing in advance what a particular position is all about, however, he can properly prepare himself.

The fact that he must collect considerable data about the positions he is most likely to encounter will serve him in significant ways. Like a football scout, he now knows what he is about to meet and is not likely to be surprised. If he has done his homework well, he knows he is ready. Thus, he can approach his new position with considerably less anxiety and with a great deal more confidence.



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THE REGIMENTAL SYSTEM

MAJOR JOHN A. HAMILTON

EDITOR'S NOTE. Special thanks are due to Major Kenneth L. Martin (TRADOC) and Major Larry Wagstaff (DA, DCSPER) for their assistance with this article.

The distinguished history of the United States Infantry is traced primarily through its regiments, because the regiment formed the basis for the combat organization of the Army up to and through World War II and the Korean War. But with the Pentomic reorganization in the 1950s, the Infantry regiment ceased to exist as a tactical unit.

In 1957 the Combat Arms Regimental System (CARS) was implemented to preserve the history of the Army's most distinguished regiments. Unit personnel were assigned, however, through an individual replacement system without regard to unit affiliation or loyalty. Although this system was cheaper and more efficient, it did not provide for unit cohesion—no allowance was made for soldiers to develop an enduring sense of identity with a unit. As a result, when soldiers changed stations, they had to be integrated into a new unit, learn new local policies and standing operating procedures, and gain the acceptance of the people in their new units.

Officers and NCOs also had to undergo a significant learning process. The emphasis, therefore, was on a well-rounded generalist who, through a variety of assignments, would devote a significant amount of his time and effort to learning new jobs.

In 1981, as part of the Army's New Manning System, the concept of the U.S. Army Regimental System (USARS) was approved, and this system is now being implemented. Its purpose is to keep soldiers together longer by allowing them to identify with or affiliate with a regiment. This will enable them to develop a sense of belonging and of loyalty and commitment to their regiment. Under this system, they will see the same places, the same faces, the same missions, and the same equipment. The system's aim is to produce soldiers who believe in and trust one another, thereby producing units that are better able to withstand the initial shock of battle. At the same time, these units can "grow their own" leaders.

The original design of the regimental system grouped together a number of units that were compatible in mission, MOS, and equipment. Like-type units in the continental United States (CONUS) were then paired under a regimental color and linked with like-type units in an overseas theater. One installation, usually the location of the lowest-numbered unit in CONUS, was designated the homebase of the regiment. The decision on which regimental colors would be retained was based on a regimental order-of-merit list developed by the Army's Center of Military History, which worked closely with the Department of History at the United States Military Academy.

A regiment in the new system is not designed to be a tactical organization. Today, rather, it is intended to provide a framework for personnel management in which a soldier is given an opportunity to affiliate with one regiment throughout his career. After affiliating, that soldier has the potential for recurring assignments to units of that regiment. This is not to be confused with "homesteading," in which a soldier may manage to stay on one installation or in one locale, for many years. Under USARS, the soldier rotates from CONUS to overseas, as required.

The regimental system is being implemented in two phases. Phase I began in January 1983 with the designation of the 23d and the 327th Infantry as USARS regiments, and by August 1984, 15 regiments (with a total of 68 battalions) had been so designated and some 25,000 soldiers were affiliated with those regiments. During Phase I, the U.S. Army Military Personnel Center (MILPERCEN) had an 83 percent success rate in moving affiliated soldiers either within their regiments (65 percent) or to valid assignments outside their regiments, such as drill sergeant or recruiter (18 percent).

Soldiers were involuntarily affiliated with specific regiments because of their current assignments. On the date a regiment was formally designated, therefore, the soldiers who were then assigned to units of that regiment were automatically affiliated with it. Unaffiliated soldiers who were assigned to units of the regiment after the designated date also became affiliated with that regiment. First-term soldiers were affiliated with regiments until 29 June 1984, when the Army decided to give them a chance to experience a variety of assignments before committing themselves to a particular unit.

If a soldier wanted to change his regimental affiliation, a request for personnel action had to be forwarded to MILPERCEN through his military personnel office (MILPO). The request was then approved or denied on the basis of the regiment's strength.

Proration models were developed for each Phase I regiment on the basis of personnel authorizations within it. These models provided personnel floors and ceilings for a regiment against which strength levels for its regimental units were managed.

Phase II, which was to begin in August 1984 when Phase I ended, was delayed pending a re-examination of the entire regimental system. This process took about a year.

In its re-examination, the Department of the Army revised and updated the system's design using the following guidelines:

- Retain the non-tactical framework.
- Group a variable number of Active Army Infantry, Armor, Field Artillery, Cavalry, Air Defense Artillery, and Aviation units under regimental colors.
- Place the ceremonial regimental headquarters at the regimental homebase.
- Make the system meaningful to soldiers by giving them an opportunity for professional development.
- Permit specialization of soldiers but also allow for generalization.
- Permit voluntary affiliation, allowing soldiers to pick their own regiment.
- Permit individual soldiers to pick a homebase, in cases where more than one CONUS station exists for a regiment.
- Make it fully supportable by the current personnel management system.
- Enable it to operate independently of the COHORT and unit rotation system.
- Make it capable of supporting either an individual or a unit movement system.
- Include force structure and modernization changes.
- Make it consistent with wartime planning and mobilization.
- Retain as many of the Combat Arms Regimental System

INFANTRY REGIMENTS
(as of September 1986)

REGIMENT	CONUS			OCONUS			EST DATE
	CURRENT		NEW	CURRENT		NEW	
1st IN	1-1	USMA	1-1				IR
(Lt)	2-1	9ID*	2-1				
	3-1	9ID	3-1				
1st SF	2-1-1	LEWIS	2-1-1	1-1-1	JAPAN	1-1-1	FY 88
	3-1-1	LEWIS	3-1-1	3-7-1	PANAMA	3-7-1	
	1-5-1	BRAGG*	1-5-1	1-10-1	GERMANY	1-10-1	
	2-5-1	BRAGG	2-5-1				
	3-5-1	BRAGG	3-5-1				
	1-7-1	BRAGG	1-7-1				
	2-7-1	BRAGG	2-7-1				
	2-10-1	DEVENS	2-10-1				
	3-10-1	DEVENS	3-10-1				
2d IN	2-2	9ID*	2-2				IR
3d IN	1-3	MDW*	1-3				IR
4th IN				2-4	56 FA BDE*	2-4	IR
5th CAV	2-7	1CAV	2-5(A/87)	2-36	3AD	3-5	FY 89
(M)	1-5	1CAV*	1-5	3-36	3AD	5-5	
5th IN				1-31	2ID*	1-5	FY 87
(M)							
6th IN	3-6	5ID*	3-6	1-6	1AD	1-6	FY 90
(M)	4-6	5ID	4-6	2-6	1AD	2-6	
	1-61	5ID	5-6	1-54	1AD	6-6	
				1-52	1AD	7-6	
7th IN	2-21	24ID*	2-7	1-7	3ID	1-7	FY 88
(M)	2-34	24ID	3-7	1-4	3ID	4-7	
8th IN	1-8	4ID*	1-8	3-8	8ID	3-8	IR
(M)	2-8	4ID	2-8	4-8	8ID	4-8	
				508	8ID	5-8	
9th IN	2-9	7ID*	2-9	6-327	6ID	1-9(A/87)	(IR)FY 89
(Lt)	3-9	7ID	3-9	New Bn	6ID	5-9(A/87)	
	4-9	7ID	4-9	New Bn	6ID	6-9	
12th IN	1-12	4ID*	1-12	1-13	8ID	3-12	FY 92
(M)	1-10	4ID	2-12	1-39	8ID	4-12	
14th IN	2-14	10MD	2-14	1-14	25ID*	1-14	IR
(Lt)	3-14	10MD	3-14	5-14	25ID	5-14	
15th IN	3-19	24ID*	3-15	1-15	3ID	1-15	FY 90
(M)	4-54	194 BDE	4-15	1-30	3ID	2-15	
				2-30	3ID	5-15	
16th IN	2-16	1ID*	2-16	1-16	1ID(F)	1-16	IR
(M)	5-16	1ID	5-16	4-16	1ID(F)	4-16	
17th IN	3-17	7ID*	3-17	4-327	6ID	1-17	FY 87
(Lt)	4-17	7ID	4-17	5-327	6ID	2-17	
18th IN	1-58	197 BDE*	1-18	1-48	3AD	4-18	FY 91
(M)	3-7	197 BDE	2-18	1-36	3AD	5-18	
20th IN				5-20	2ID*	5-20	IR
(M)							
21st IN	4-21	7ID	4-21	1-21	25ID*	1-21	IR
(Lt)	5-21	7ID	5-21	3-21	25ID	3-21	
22d IN	1-22	10MD*	1-22	3-22	25ID	3-22	(IR)FY 87
(Lt)	2-22	10MD	2-22	3-2	25ID	4-22(A/87)	
23d IN	2-23	9ID*	2-23				(IR)FY 87
	4-23	9ID	4-23				
27th IN	1-32	7ID	2-27	1-27	25ID*	1-27	FY 87
(Lt)	2-32	7ID	3-27(A/86)	1-35	25ID	4-27	
31st IN	4-31	SILL*	4-31				IR
(M)							
41st IN	1-41	2AD*	1-41	3-41	2AD(F)	3-41	IR
(M)	2-41	2AD	2-41	4-41	2AD(F)	4-41	
47th IN	2-47	9ID*	2-47				IR
	3-47	9ID	3-47				
51st IN				New CO	V CORPS*	E-51	IR
(LRRP)				New CO	VII CORPS	F-51	

52d IN (M)	6-31	NTC*	1-52				FY 88
60th IN	2-60	9ID*	2-60				IR
	3-60	9ID	3-60				
75th RGR	1-75	HUNTER AAF	1-75				IR
RGT	2-75	LEWIS	2-75				
	3-75	BENNING*	3-75				
87th IN	3-22	10MD*	1-87(A/86)	6-14	25ID	4-87(A/86)	FY 88
(Lt)	4-14	10MD	2-87	1-187	193 BDE	5-87(A/87)	
187th IN	5-187	101st*	1-187				(IR)FY 87
(Lt)	4-187	101st	2-187				
	3-187	101st	3-187				
325th IN	1-325	82d*	1-325	4-325	SETAF	4-325	IR
(Abn)	2-325	82d	2-325				
	3-325	82d	3-325				
327th	1-327	101st*	1-327	(IR)FY 87			
(Lt)	2-327	101st	2-327				
	3-327	101st	3-327				
501st IN				New Bn	6ID*	1-501	FY 88
(Abn)							
502d IN	1-502	101st*	1-502	4-502	BERLIN BDE	4-502	IR
(Lt)	2-502	101st	2-502	5-502	BERLIN BDE	5-502	
	3-502	101st	3-502	6-502	BERLIN BDE	6-502	
503d IN				1-23	2ID*	1-503	FY 87
				1-38	2ID	2-503	
504th IN	1-504	82d*	1-504				IR
(Abn)	2-504	82d	2-504				
	3-504	82d	3-504				
505th IN	1-505	82d*	1-505				FY 87
(Abn)	2-505	82d	2-505				
	1-508	82d	3-505				
506th IN				1-9	2ID*	1-506	FY 87
508th IN				2-187	193BDE*	1-508	FY 87
(Abn)							

*Location of Regimental Color
IR–Implemented Regiment
(IR) Date–Implemented Regiment Change
(A/86)–Activating Unit/FY of Implementation

(CARS) colors as possible.

As a result of this reevaluation, USARS was altered to broaden the regimental base and to allow soldiers more personal choice. Implementation resumed in Fiscal Year 1986, and eventually USARS will encompass the entire Army. The implementation of the combat arms regiments in the Active Army (Air Defense Artillery, Armor, Aviation, Cavalry, Field Artillery, and Infantry) will continue through Fiscal Year 1992.

The planned Infantry regiments are listed in the accompanying table. This list does not include regiments that will be placed in the training base, because the designations and implementation dates for these units have not all been approved. (The first unit to be redesignated in the training base was the 4th Training Battalion [Airborne] at Fort Benning, Georgia, now designated the 1st Battalion [Airborne], 507th Infantry.)

Neither does the list include U.S. Army Reserve or Army National Guard Infantry units. The Army Reserve USARS plan has not been completed, and the Army National Guard has its own USARS regiments, including many old and distinguished Infantry regiments allotted to various states.

USARS also includes the Corps of Engineers as well as the combat support, combat service support, and special branches. They will retain their "corps" titles and will be integrated into USARS under the "whole branch" concept. That is, all Engineer soldiers will affiliate with the Corps of Engineers and all Ordnance soldiers with the Ordnance Corps. Each branch will have its own heraldic accouterments and its own home, usually the installation where the branch proponent is located.

Currently, all career Infantrymen are being affiliated with a regiment of their choice, whether the regiment has already been designated or is planned for future designation. Soldiers may pick any Infantry regiment, consistent with their primary MOSs or specialty codes, and with some restrictions based on special qualification identifiers.

No personnel strength ceilings are imposed on any regiment. Thus, it is possible that some regiments will be over-subscribed and others will be under-subscribed. Once soldiers are affiliated with a regiment, they may change that affiliation at any time. Regimental affiliation, however, is a primary assignment consideration. First-term soldiers who are serving their initial Army enlistments may either affiliate with a regiment or delay affiliation until they reenlist.

Officers must affiliate with a regiment of their choice, but they may actually serve either within their regiment or in other regiments or units. As with enlisted soldiers, they may change affiliation at any time. Officers who have not attended the

Infantry Officer Advanced Course may affiliate or may delay affiliation until they complete the course. Regimental affiliation will play a significant role in the slating of officers selected for battalion and brigade command.

Although assignments to units of a regiment will be made easier by the personnel management system, there are no guarantees. The needs of the Army and the professional development of its soldiers will continue to be paramount. For enlisted soldiers, a valid requisition from a regimental unit must exist in order for the unit to receive an affiliated soldier. The Centralized Assignment Procurement system (CAP III) will tend to direct the affiliated soldier to the proper location—where there is a unit of his regiment. As in the past, regimental soldiers will continue to be given professional development assignments such as drill sergeant duty.

Soldiers who are affiliated with over-subscribed regiments may get fewer recurring assignments to their regiment. Conversely, soldiers affiliated with balanced or under-subscribed regiments may have more recurring assignments to the regiment.

In paired and linked combat arms regiments, and only in those regiments, two programs have been instituted to improve the system—the Regimental Adjutant Program and the establishment of Honorary Colonels, Honorary Sergeants Major, and Distinguished Members of the Regiment.

The Regimental Adjutant Program is designed to link the elements of a regiment, as well as all the soldiers affiliated with that regiment, with an "adjutant" who is assigned to MILPERCEN. Regimental adjutants are combat arms officers—captains or majors in the branch of the regiment. Previous assignment to a unit of the regiment is desirable but not required. These adjutants serve in that capacity as an additional duty.

A regimental adjutant has a number of important functions. He monitors regimental strengths and tracks where soldiers of the regiment are assigned. He also plays an active role in the affiliation process. He acts as a liaison officer between elements of the regiment through correspondence, telephone, and personal contact. Although he is not in a position to affect a soldier's assignment, he can interact with MILPERCEN's branches in tracking personnel actions and resolving problems. Finally, he maintains contact with the regiment's Honorary Colonel, Honorary Sergeant Major, and Distinguished Members.

The Honorary Colonel of the Regiment is a distinguished retired commissioned officer in the rank of colonel or above with former service in the regiment or in the chain of command above it. He is nominated by elements of the regiment, and the nomination is submitted to the commander of the installation where the regiment is homebased. The installation commander then approves the nomination and signs the appointment certificate. Each regiment has only one Honorary Colonel, who serves for a three-year renewable term.

The Honorary Sergeant Major of the Regiment is a distinguished retired noncommissioned officer in the rank of sergeant first class or above. He also must have served in the regiment or in the chain of command above the regiment. The nomination and approval process and the term of service are the same as for the Honorary Colonel.

Distinguished Members of the Regiment are individuals of the same distinguished stature as the Honorary Colonel and Sergeant Major. They may include active duty or retired officers, warrant officers, enlisted personnel, or civilians (other than retirees). For example, such a member might be a prior enlisted member of the regiment, recognized for his active duty accomplishments, or a distinguished member of the local civilian community with former service in the regiment.

The duties of these honorary posts are largely ceremonial and do not conflict with the chain of command. The occupants of these positions can foster esprit de corps and traditions, perpetuate the history of the regiment, and promote the warfighting spirit among the soldiers in the regiment.

Travel expenses for the Honorary Colonel and Sergeant Major are handled through invitational travel orders, funded by the installations or divisions requesting their presence. Legislation is now pending to allow payment of other incidental costs such as telephone calls and publication costs.

Currently, under the regimental system, a brigade headquarters and the headquarters company is not identified with a regiment. Nevertheless, a brigade in which all the subordinate battalions share the same regimental designation is in a great position to contribute to the success of the regimental system. For example, a regimental dining hall or museum may be created out of existing facilities.

Army Regulation 670-1 covers the wear of regimental accouterments, which include distinctive unit insignia and regimental brass. Procedures have been developed for distributing the distinctive unit insignia to soldiers who are affiliated with but not assigned to the regiment. (Policies governing the Army's regimental system are set forth in Army Regulation 600-82.)

The regimental system has great potential. Its success is dependent, however, upon the efforts of everyone who has a stake in its efficient operation—from the local commander to MILPERCEN. By allowing a soldier to affiliate with a regiment, the Army makes a commitment to that soldier. When an installation receives a soldier who is affiliated with a regiment located on that installation, every effort must be made to assign that soldier to a unit of his regiment.

The system *produces* cohesion and commitment, but it also *requires* commitment. The ultimate goal is to build a force that knows its missions, its equipment, and its fellow soldiers—and one that is capable of withstanding the first shock of battle in a high-intensity conflict and go on to victory.

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A SOLDIER'S LOAD

CAPTAIN WILLIAM C. MAYVILLE

Soldiers who march into battle carrying heavy loads do not usually perform well in combat. Their loads drain them of their strength, reduce their mobility, and slow their minds.

The problem with overloaded soldiers in combat is a recognized deficiency throughout the Army, but the solution to the problem is less recognized and even less understood. All commanders must therefore develop an appreciation for the problem and then resolve to practice *risk analysis* instead of *risk aversion* when determining the load their soldiers will carry.

Throughout history, soldiers have traveled into battle overloaded. Hardy Roman Legionnaires on the march carried 80-pound loads on long spiked stakes slung across their shoulders. Byzantine infantrymen found themselves with similar loads. Their ration carts and pack horses trailed behind them but did little to relieve their individual loads. During the American Revolution, from Boston to Saratoga, British soldiers fought their loads in addition to the American colonists.

In the Normandy invasion of 1944, when American infantrymen with 80-pound rucksacks dropped from their landing craft into the rough surf off Omaha Beach, many of them never made it to the beach. Many soldiers fell into deep holes while wading in, and their already heavy equipment absorbed so

Soldiers loaded for winter training, REFORGER 1985.

much more weight in water that they could not get up. Others managed to crawl as far as the shoreline where they collapsed. There, overcome with exhaustion, many of them drowned.

The problems with loading soldiers still plague armies. On 23 October 1983, when American soldiers assaulted the island of Grenada, many of them were overloaded. One soldier said:

We attacked to secure the airhead. We were like slow moving turtles. My ruck weighed 120 pounds . . . There were all those guys sitting on the side of the road with IV tubes in them. There's no way the guys could [have gone on].

Professional soldiers and military historians over the past 30 years have addressed this issue at great length. In *The Soldier's Load and the Mobility of a Nation,* S.L.A. Marshall cites three fallacious beliefs that lead to overloading.

The first of these fallacies is that large amounts of ammunition on a soldier's back gives him greater confidence in battle. Marshall contends that combat has never supported this myth, that soldiers will fight to the last round when necessary.

The second fallacy is that shortages in ammunition cause "tactical disarrangements" and that such shortages are therefore to be avoided. But Marshall cites the defense of Bastogne during the Battle of the Bulge in which soldiers willingly shared their limited supplies to survive eight days of encirclement.

The third fallacy holds that a soldier must be equipped for every possible contingency. Marshall blames staff officers for promoting this notion and argues that such thinking smothers and exhausts soldiers before they ever reach the battlefield. Certainly, the soldiers "sitting on the side of the road" in Grenada would have agreed.

Among other studies on the subject, in 1962 the United States Army Combat Development Agency collected and analyzed statistics from World War II and Korea relating to the soldier's fighting load. The study concluded that the soldier's load had a direct effect on his performance in combat, that his mobility was "degraded to an unacceptable degree by his prescribed load."

The agency further concluded that infantrymen, who represented 80 percent of all battle casualties in those wars, should be given special equipment and clothing to meet their unique combat requirements. The study recommended that the maximum fighting load be restricted to 40 pounds and that "officers at all echelons receive a thorough education and indoctrination in the problem of overloading the infantry combat soldier."

Today, more than 20 years later, the Army is no closer to a solution. Officers at all echelons have not received a thorough education on the issue, and the U.S. soldier still carries too much weight on his back. Infantry units continue to practice worst-case planning instead of tailoring loads on the basis of an analysis of the risks.

Although some people believe that advanced technology leads to lighter loads, it often has countervailing effects—it reduces the load only to increase it again later. The UH60 and the HMMWV (high-mobility, multipurpose wheeled vehicle), for example, are major logistical steps toward reducing the soldier's load. But other technological developments such as night vision devices, Vinsons, and Dragons put back the weight these logistical systems remove.

Despite a doctrinal emphasis on "agility," the configuration of battalion and company trains does not support the concept of lightly loaded soldiers either. In fact, these trains rarely have space even for all the rucksacks of a platoon or all the chemical suits of a company. This implies that soldiers must carry all their equipment, regardless of when they expect to need it. Certainly, mechanized soldiers have an advantage, but even they have limitations.

Peacetime training methods can also lead to overloading soldiers in combat. Units that put little emphasis on marksmanship, perhaps having their soldiers qualify only once or twice a year, indirectly reinforce the tendency to overload soldiers with ammunition in combat. These are the units that overlook the practice of "one shot, one kill," and in so doing prevent

MINIMUM ESSENTIAL EQUIPMENT
(Examples)

	WT (LBS)	TOTAL
COMMON ITEMS		
Drawers/T-shirt (1 set)	0.4	
BDU and boots (1 set)	7.2	
Pistol belt, suspenders and First Aid pouch (1)	1.6	
Canteen, cup and cover with water (1)	3.3	
Poncho (1)	1.7	
Gloves (1 pair)	0.3	
Socks (2 pair)	0.4	
MRE (1)	1.0	
Grenade (2)	2.0	
Bayonet w/scabbard	1.3	
Total		19.2
PLUS		
WEAPONS SYSTEMS		
Rifleman: M16 w/30-round magazine, 2 ammo pouches, 6 magazines/180 rounds	15.0	34.2
Grenadier: M203 w/M16 w/30-round magazine, ammo pouch, 3 magazines/90-rounds 12x40mm rounds	23.4	42.6
SAW Gunner: SAW w/200-round magazine, 1 SAW pouch, 1 drum/200 rounds	29.5	48.7

Table 1

CLIMATE PROTECTION
(Examples)

	WEIGHT
CLOTHING	
Field jacket	3.0
Field trousers	2.1
Parka, wet weather	1.0
Pile cap	0.3
WATER	
Canteen, 1-qt w/cover	2.7
Canteen, 2-qt w/cover	4.8
SLEEP GEAR	
Poncho liner	1.6
Sleeping pad	1.3
Sleeping bag	7.1

Table 2

their soldiers from learning fire discipline and gaining confidence as marksmen. These units expect to defeat their enemy through volume of fire on the battlefield, and heavy volumes of fire require heavy loads of ammunition, loads that soldiers will have to carry. Similarly, units that evaluate live fires by noise and volume of fire also encourage heavy loads.

The overzealous requirement to monitor the radio closely is another example. Typically, to meet their commander's requirements, soldiers duplicate their radio systems and carry extra batteries and accessories. To soldiers, then, the close monitoring of radios can mean heavier rucksacks.

Training light should involve risk, just as fighting light involves risk. The attitude that "nothing is too good for the troops" must sometimes be ignored. Training light means going hungry because each soldier is carrying less food. It means braving the cold with one less sweater or trying to accomplish a task with less ammunition.

Recognizing, of course, that hungry and cold soldiers may be in no better condition to fight than overloaded soldiers, the tendency to spoil them by giving them all they need and more may also lead to their demise. Commanders must realize that training with lighter loads may result in mistakes or in assessments that prove incorrect. But that kind of training allows soldiers to preserve their strength and to think faster than their enemies.

The solution to lighter loads is risk analysis, in which a commander makes an accurate tactical assessment and calculates what is really needed for each mission. To do this, he must be willing to take reasonable risks. Assessing the risk requires an equation that leads to removing any unnecessary equipment from the soldier's load.

Although the proper loading of soldiers is a concern of every echelon of command, the decision to remove certain items from a soldier's rucksack must be delegated to the lowest level of command. Still, a commander who decides, for example, that rucksacks and Kevlar helmets are not necessary for his immediate mission must have a way to get these items to his soldiers after their tasks in that mission are completed. Since no commander can dictate the conditions of his next battle, the value of a given piece of equipment will vary with each fight. A soldier is not likely to need all of his equipment for every battle, but each battle will most likely require different items of equipment.

The battalion is the lowest level of command that is capable of deciding the soldier's load, because the battalion commander has the staff and equipment necessary to secure and transport the items the soldiers do not carry. Company commanders are restricted in their efforts to reduce the loads by the transport organically assigned to them and by the battalion assets dedi-

THREAT PROTECTION
(Examples)

	WEIGHT
BALLISTIC	
PASGT helmet	3.1
PASGT vest	8.5
NBC	
Protective mask	3.0
Radiac meter (IM-174)	4.9
Individual decon kit	0.6
ARMOR	
Dragon	25.3
M21 mine	17.0

Table 3

MISSION LOAD
(Examples)

	WEIGHT
COMMUNICATIONS	
AN/PRC-77 w/battery	24.0
Telephone set, TAI/PI	3.5
AN/PRC-68 w/battery	2.9
MUNITIONS	
LAW	4.7
Claymore	3.5
60mm mortar round	3.5
Trip flare	2.0
VISION AIDS	
Night vision goggles	1.9
Thermal viewer	12.0
FOOD	
MRE	1.0
MISCELLANOUS	
Entrenching tool	2.5
ALICE pack and frame	6.3

Table 4

cated for their use. In most cases, the primary role of the company commander is to advise the battalion commander what he would like to leave behind and to request battalion support in transporting that equipment after the battle.

Ideally, the battalion commander establishes a maximum soldier's load for the battalion on the basis of his analysis of mission, enemy, troops, terrain, and time (METT-T). (The U.S. Army Infantry School now recommends a maximum load of 30 to 40 percent of a soldier's body weight. For a soldier weighing 160 pounds, this would be 48 to 64 pounds.) Within that limit, his subordinate commanders then decide on the composition of their soldiers' load.

In doing this, the subordinate commanders have four basic risk variables to work with: minimum essential equipment, climate protection, threat protection, and mission. Added together, these should weigh no more than the established maximum.

A soldier's minimum essential load includes his uniform, assigned weapon, and load carrying equipment (see Table 1). A minimum essential load is made up of the items a soldier always needs, regardless of his mission. These items are usually identified in a unit's standing operating procedures (SOP).

Climate protection includes all the equipment designed to enable a soldier to operate in severe temperatures and rough terrain. The wet-weather jacket and 120-foot rope are good examples (see Table 2 for others).

Threat protection refers to equipment that guards the soldier against the expected ballistic, armor, and nuclear-biological-chemical threat. The Kevlar helmet and protective mask fall into this category (see Table 3).

The mission load is made up of the munitions, food, and all the equipment required to accomplish the mission. Typically, this equipment includes ammunition, radios, and vision aids (see Table 4).

After the minimum essential load has been accounted for, items from the other three categories can be added, up to the established maximum.

If, for example, the battalion commander determines that the mission requires a maximum load of 65 pounds per soldier, and if the minimum essential equipment for a rifleman, as stated in the unit SOP, weighs 40 pounds, the company commander has only 25 pounds to divide among the other three categories. His chore (along with his platoon leaders) is to determine the right combination of climate and threat protection as well as the mission load without exceeding the total weight limit of 65 pounds.

It is helpful if units can conduct training designed to give subordinate commanders some practice in risk analysis. Members of the 82d Airborne Division have developed such exercises for platoon leaders. For example, in one such exercise each platoon leader is given load reference data and hypothetical METT-T data. His task is to analyze that data and load a certain soldier, using his company commander's guidance and staying within the maximum weight prescribed by the battalion commander. As part of the exercise, he must justify his decisions, state specifically what risks he is taking and why, and consider the effect that soldier's load will have, if any, on the load of the other members of the platoon.

Risk analysis such as this demands an accurate assessment of the mission and its tactical environment. The risk equation forces commanders to take along only the most important items. It implies that the success of a mission depends upon agility and a proper balance of firepower and maneuver. It trades large amounts of equipment for lighter, quicker soldiers.

Admittedly, risk analysis will not bring the proper balance of load and agility to certain types of infantrymen simply because of the equipment that goes with their jobs. Typically, the minimum essential equipment for a machinegunner is 56.2 pounds; a radio telephone operator, 58.2 pounds; an antitank crewman, between 59.4 and 64.6 pounds; and a mortar crewman, between 59.0 and 61.5 pounds. Their systems overload them, and risk analysis can provide little relief.

The solution to this particular problem requires imaginative thinking on the part of commanders. It requires that portions of these soldiers' loads be distributed to other members of the unit—water, meals, and sleeping equipment, for example. These adjustments themselves are risk assessments, but failing to make them threatens the survivability of the men who must carry these heavy items.

Strong legs and a good back are a soldier's most precious resources. They are the key to his success and survival on the battlefield. But putting a heavy load on those legs and that bac robs him of his mobility and agility. It steals his strength an denies him the ability to think quickly.

Today, the solution to the problem of heavy loads lies mor with training than with technology. Training light means practicing risk analysis, not risk aversion. The risk analysis formula draws on the skill and competence of a soldier's leader. It lightens the soldier's load by placing the weight of the risk on his leader, and it is the leader who must make the decision.

Captain William C. Mayville, a 1982 graduate of the United States Military Academy, recently completed the Infantry Officer Advanced Course and *is now serving with the 3d Infantry Division in* Europe He previously served as a rifle platoon leader, a weapons platoon leader, and a company executive officer.

the 9mm STORY

BY FIELDING L. GREAVES

In mid-January 1985, after a series of three test programs to find a new "XM9" double-action 9mm pistol for the United States military services, the Army announced its selection of the Beretta Model 92F as the clear winner. With that decision, the legendary M1911A1 Colt .45 pistol was finally retired after 74 years of honorable service—longer than that of any other firearm in America's entire military history.

It is an ironic twist that the United States should thus replace a 74-year-old service pistol with a new pistol chambered for an 83-year-old cartridge—a cartridge, moreover, that had been developed and used against us by our enemy in two world wars.

Most Americans familiar with the .45 Colt self-loader probably have heard why the Army adopted it originally: to give our troops a heavier bullet with greater knockdown power and to replace the puny .38 revolver that had proved so ineffective against fanatic and often drug-crazed Moro tribesmen in the Philippine Insurrection at the turn of the century. Few Americans, however, know much of the background of the 9mm cartridge, beyond the facts that it was used by the Germans in their Luger pistol in World War I, in their P.38 pistol and in both British and German submachineguns (SMG) in World War II, and that it has been adopted as the standard NATO pistol and SMG cartridge.

Despite its advanced age, the 9mm Parabellum cartridge today is far and away the most widely used sidearm cartridge in the world, the standard cartridge for a number of military forces on every continent of the globe as well as for police and constabulary units. Its origin and development therefore deserve our attention.

The story of the 9mm is an involved one. It properly begins with a man named Hugo Borchardt, a German immigrant who came to the United States at the age of 16. Borchardt, destined to be one of the 19th century's foremost gun designers, worked for a time at the Winchester, Colt, and Sharps firearms plants.

While working for Winchester in the early 1870s, he developed five different models of a .44 caliber revolver. One of its two major variations featured a fixed cylinder with a thumb-operated extractor. The other boasted the world's first swing-out cylinder with a cylinder pin extractor. This 1876 Winchester-Borchardt revolver was eight years ahead of the system patented by Colt, and was essentially the same as that found today in Colt, Smith & Wesson, Ruger, and other modern revolvers. (It is a generally accepted tradition that Winchester abandoned its work on revolvers as part of a "gentleman's agreement" with Colt, whereby Colt in turn would drop its production of the Burgess lever-action rifle, thus stopping each from competing in the primary field of the other.)

The Winchester-Borchardt revolver was offered to both the U.S. and the Russian governments. When no orders were forthcoming, Borchardt left Winchester to work for the Sharps Rifle Company, where he became foreman at the age of 24. There he collaborated in producing the famous Sharps-Borchardt single shot rifle, noted for its long-range accuracy. A drop-block action rifle, it featured a concealed hammer, sometimes miscalled "hammerless."

In the late 1880s, Borchardt returned to his native Germany to work in Berlin at the arms plant of Ludwig Loewe. It was there he produced the world's first commercially successful semiautomatic pistol, the 1893 Borchardt, which was chambered for a bottle-necked 7.63mm cartridge. The legend that Borchardt first offered his pistol to the United States and turned to Germany only after rejection in America is considered doubtful, since his 1893 German patent predates by three years his 1896 American patent.

The 1893 Borchardt 7.63mm pistol was a clumsy, grotesque affair. Its clockwork-type recoil spring was housed in a large, rounded protuberance that extended back over the shooter's wrist. The most advanced features of the pistol's design were Borchardt's use of the revolutionary toggle-link locked-breech action—designed in principle by Sir Hiram Maxim, the noted machinegun designer—and the fact that Borchardt's was the world's first pistol to use a removable magazine housed in the hollowed-out pistol grip.

It was left for another employee of the Loewe plant—which by this time had consolidated with an ammunition firm to become *Deutsche Waffen und Munitionsfabrik* (DWM)—to modify and greatly improve Borchardt's design. That employee, Georg

The 1893 Borchardt 7.63mm self-loading pistol, the world's first commercially successful semiautomatic pistol and the first to use a removable magazine housed in the grip.

Luger (1848-1922), substituted a flat spring for the original clockwork type, thus eliminating the ugly rear spring housing. The resulting pistol was the first Luger, which he dubbed "Parabellum" ("for war"), the pistol that in various models would eventually become the official military sidearm of 15 nations. Its distinctive, sleek, classic design would make it the world's most widely known and easily recognized handgun, and its "feel" and pointability, would make it one of the most eagerly sought after.

Switzerland in 1901 chose the Model 1900 Luger for its army, becoming the first nation to adopt it. The Swiss wanted a slightly less powerful round than the 7.63mm, though, so DWM simply shortened it slightly and designated it the 7.65mm, the cartridge that would become famous as the 7.65 Luger, which was to be known in the U.S. as the caliber .30 Luger.

In 1901 the United States bought 1,000 of the Model 1900 Lugers for testing, but ultimately rejected the design. Meanwhile, the German military services had expressed interest and had tested the pistol, but decided that the 7.65 bullet was too small. DWM, manufacturer of both the pistol and its ammunition, found a happy solution to the problem by simply expanding the bottle-necked cartridge case to make a straight-sided case to accommodate a 9mm bullet. Such was the birth of the 9mm Parabellum cartridge, known today as the 9mm Luger and, less often, as the 9 x 19, for the 19mm length of its case.

In 1904 the German Navy adopted the 9mm Luger. Known as the Marine Model, the M1904 pistol had a six-inch barrel. Some 15 copies of the M1904 were later made up in .45 caliber for testing by the United States, but a subsequent U.S. order for 200 more was turned down by DWM, probably beacause the plant was tooling up to produce pistols for the Germany Army, which by now had adopted the Model 1908 Luger. This model, which had a four-inch barrel, was officially designated the Pistole 08, or simply P.08. It replaced the German Army's old M-79 11mm service revolver.

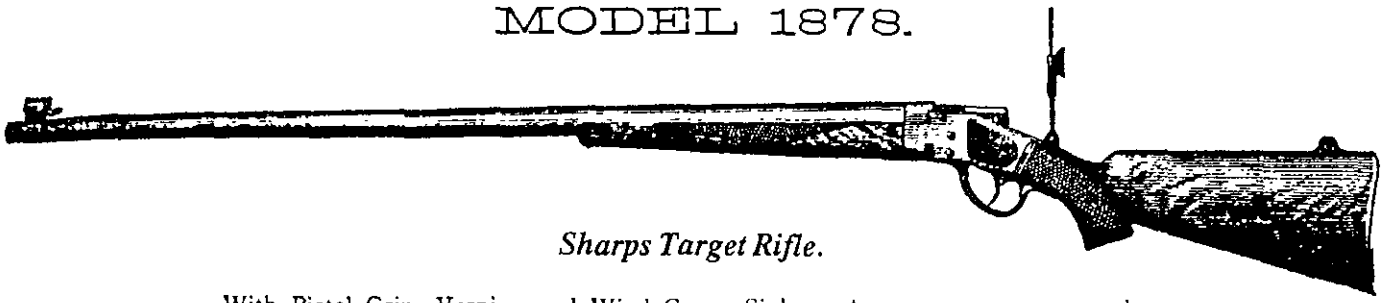
THE U.S. MEETS THE LUGER

It was the large number of German Army P.08 Lugers brought home by returning U.S. soldiers after World War I that first introduced the Luger to the U.S. public. Those war souvenirs did a great deal to popularize both the pistol and its cartridge in the United States. Outside of the U.S. armed forces, however, there was only a limited acceptance of semiautomatic pistols. The U.S. was primarily "revolver country," made so in part by the mystique of the .44 and .45 single-action weapons of the Old West, in part by the heroic G-men with their double-action .38 Specials, and in part by the fact that the revolver was the weapon carried by every cop on the beat.

In the between-wars years, the U.S. stayed with its M1911 service pistol—modified to the M1911A1 in 1926—and produced no 9mm handguns of its own, but there were new 9mm developments in Europe. In 1930 all of the DWM machinery to produce the P.08 was moved from Berlin to the Mauserwerke plant in Oberndorf. In 1935 the *Fabrique Nationale* plant at Liege, Belgium, began producing "John Browning's last pistol," his superb Model 1935 "Hi-Power" 9mm self-loader. This pistol featured a radical new advance that nearly doubled the firepower of the M1911A1: a box magazine with a staggered double column of a total of 13 cartridges.

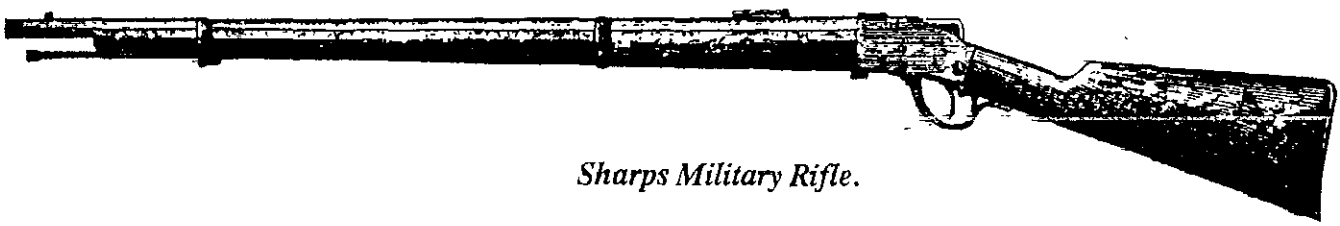
In 1938 the German military services adopted the new Walther commercial *Heeres Pistole* (service pistol) to replace the Luger and redesignated it the Pistole 38, or P.38. Luger production continued briefly but was halted early in World War II, and Mauser and other arsenals moved into the production of the P.38 only.

The P.38 incorporated two excellent new features, though strangely it failed to include the FN staggered column, large capacity box magazine of the Browning Hi-Power. One significant advance was its double-action mode of fire, whereby the first shot could by fired more quickly by a single pull of the trigger without the



Sharps Target Rifle.

With Pistol Grip, Vernier, and Wind Gauge Sights. Accurate up to 1500 yards.



Sharps Military Rifle.

Military and target models of the Sharps-Borchardt "hammerless" rifle, which actually has a concealed hammer.

need first to disengage the safety, or thumb-cock the hammer, or cycle the action to load a round into the chamber (as with the Luger, Colt, and Browning, depending on one's method of carrying the single-action weapon). After firing the first round double-action, the cycling of the slide on recoil accomplished the reloading and recocking and allowed the subsequent rounds to be fired in a single-action mode.

The other notable advance of the P.38 was its slide-mounted safety, which would lock the firing pin and drop the hammer of a cocked and loaded weapon without the need for touching the trigger. Disengaging the safety left the weapon ready for the first shot. The "hammer-drop" safety had an additional advantage—by re-engaging the safety it was possible to unload a chambered live round manually with the safety still on, something that could not be done with the frame-mounted safety of the Colt or Browning, which had to be disengaged for unloading.

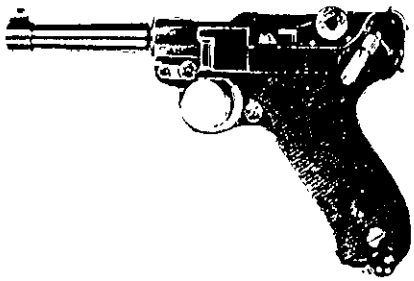
Yet another advantage of the Walther P.38 to the Germans in wartime was that it was cheaper to manufacture. According to a reported 1943 German document, it cost 35 *reichsmarks* to make a P.08, compared to 32 *reichsmarks* for the P.38, not a great difference for a single pistol, but in production of one million P.38s the savings reportedly would have paid for nearly a dozen Tiger tanks.

When the Germans occupied Belgium and took over the FN Browning pistol production, Belgian employees managed to smuggle FN blueprints of the Model 1935 to England, where they were sent on to Canada. There the Toronto firm of John Inglis produced 9mm Brownings, providing a quantity to Greece and making more than 200,000 for the Chinese Army of Chiang Kai-shek. In fact, the Browning eventually became the official sidearm of England, Canada, and Belgium as those nations switched to a 9mm weapon in the post-war years.

War's end and the return of millions of U.S. servicemen brought a great new influx of 9mm Lugers and Walthers—P.08s and P.38s—into the country, which vastly increased their popularity with Americans. Arms firms selling used military weapons added more. The military services showed a renewed interest in switching to the 9mm cartridge, but the large existing stocks of .45s in the inventory as a result of massive production during World War II caused official interest to be short-lived.

Civilian interest remained high, however, and for the first time, U.S. arms makers tooled up to produce 9mm pistols. Colt provided its single-action Commander model in 9mm, while Smith & Wesson went a step farther, producing the double-action Models 39 and 59. After collectors had rounded up most of the remaining military Lugers, the Mauser firm resumed Luger production for a time in the early 1970s, making commercial models available for the first time since before the war.

The formation of the North Atlantic Treaty Organization's (NATO's) military alliance led in 1962 to the NATO document known as STANAG 4090, which called



The Army Luger Pistole 08, which saw service in the German Army in both world wars. This 9mm model was a later development of Luger's original 7.65mm model 1900, the first military Luger pistol.

for the standardization of small arms ammunition in the interest of interoperability among the member nations. The 9mm Parabellum was selected as the NATO standard pistol and SMG cartridge. Although the United States had earlier adopted the NATO 7.62mm (.308) and later the 5.56mm (.223) rifle cartridge, it remained for many years the only holdout in clinging to its pre-NATO .45 pistol cartridge. Interest in switching to 9mm waxed and waned following the Korean War, but again the decision was deferred due to the large stocks of .45s on hand.

Three imperatives at last forced the United States to join the rest of NATO in adopting the 9mm. One was the discovery by a Congressional committee that the military services had accumulated piecemeal over the years no less than 25 different makes and models of handguns, including some 136,000 revolvers of various configurations in caliber .38 Special.

A second imperative militating toward adoption of the 9mm was the belated realization of the decrepitude of most of the .45s in the inventory. Finally, a spot check of a number of .45s in stock at the Anniston Arsenal in Alabama found that about 40 percent of them had hairline cracks or other indications of serious metal fatigue.

Those factors led to the establishment of the Joint Service Small Arms Program (JSSAP) to conduct tests of available pistols to select a double-action 9mm to replace the .45.

In the final round of testing of the eight competing pistols (see Table 1), the Beretta Model 92SB-F was the outstanding winner, with the Swiss-German SIG-Sauer Model

PISTOLS TESTED BY JSSAP

Smith & Wesson Model 459	14-rd mag	U.S.
Beretta Model 92SB-F	15-rd mag	Italian
SIG-Sauer Model P226	15 rds	Swiss-German
Heckler & Koch Model P7	13 rds	German
Walther Model P88 (evolved from P38)	15 rds	German
Steyr Model GB	18 rds	Austrian
Fabrique Nationale Browning Model ADA	14 rds	Belgian
Colt Model SSP (stainless steel pistol)	14 rds	U.S.

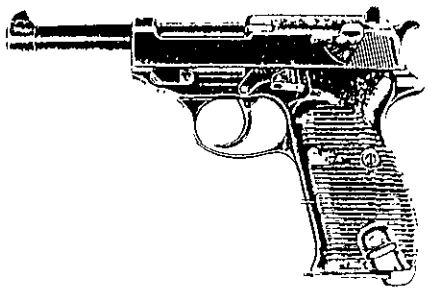
Table 1

P226 the runner-up. According to the current Beretta brochure on the winner, in claims which both JSSAP and the U.S. Army have declined to contradict, "The Beretta 9mm has consistently been the winner in every U.S. government performance trial by a wide margin against all competition. In all the important reliability tests (average number of rounds fired to malfunctions) the 92SB did more than twice as well as its nearest competition and from five to 50 times better than the others."

Initial quantities of the new M9 Beretta are expected to go to the Coast Guard, as the service most "in action" at present by reason of its war on drug smugglers, and to the Marine Corps, our quick response assault force. Air Force needs will be met later, while the Army, which has the greatest number of .45s on hand, is to be taken care of last.

The first two consignments of pistols, under the five-year contract for a total of 315,930 units, will come from Beretta's Italian-made stock and from Italian parts assembled in the United States. By the end of the third year, production must be fully switched to the Beretta Maryland plant at Accokeek, across the Potomac from Mount Vernon, and at least 134,000 pistols must be made entirely with U.S. parts and labor.

The 9mm has several notable advantages over the M1911A1. The M9's loaded chamber indicator allows the user to tell at a glance or a touch whether there is a round in the chamber. With an ambidextrous safety, a lever on each side of the slide, and an easily reversible magazine catch release button, the M9 accommodates left-



The principal German sidearm of World War II, the Walther P.38 double-action 9mm pistol.

	M1911A1 .45 Colt	M9 Beretta 9mm
Caliber	.45 ACP (Automatic Colt Pistol)	9mm Parabellum
Pistol weight, loaded	44 ounces	41 ounces
Pistol weight, empty	39 ounces	34 ounces
Bullet weight	230 grains	115 grains
Muzzle velocity	860 fps	1150 fps
Muzzle energy	378 ft-lbs	365 ft-lbs
Magazine capacity	7 rounds	15 rounds
Action mode	single-action	choice of single- or double-action
Safety	frame-mounted safety on left only, to lock slide & hammer; grip safety; half-cock notch.	loaded chamber indicator; ambi-dextrous slide-mounted safety to disengage firing pin & sear, drop hammer, and permit cycling action to unload with safety engaged.
Sights	square post front, square notch rear.	square post front, square notch rear, each with fluores-cent dot to aid sighting in poor light.
Weight of one loaded car-tridge	327 grains	194 grains
Weight of one million rounds (less weight of containers)	23.36 tons	13.86 tons

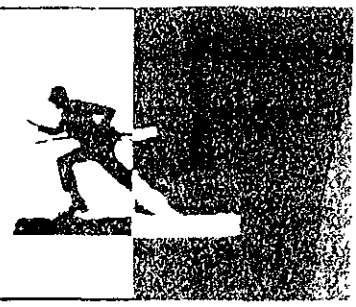
Table 2

handed shooters. Its double action and its larger magazine capacity provide a faster first-shot capability and greater potential firepower. The slide-mounted hammer-drop safety makes it a safer, more "idiot proof" firearm (see Table 2).

Many old timers in the United States regret the passing of the venerable .45 Colt autoloader. Nevertheless, in adopting the Beretta, we have, on balance, taken a long step forward. The combination of a safer pistol, a faster first-round capability, and an increased magazine capacity gives any individual soldier armed with the pistol a marked combat edge that is no less important in the nuclear age than it was in the days of the crossbow and the faster firing long bow. In choosing the Beretta, there is no doubt that we have picked the best.

Fielding Lewis Greaves is a retired Army intelligence officer. A former China area specialist and former Field Artillery officer, his assignments have included two attache tours, two Army Language School courses, two tours in Army Intelligence at the Pentagon, and three years as an instructor at the Command and General Staff College. His articles on a wide variety of subjects have appeared in various publications.

TRAINING NOTES



Pathfinder Training

CAPTAIN KEITH P. ANTONIA

A Pathfinder is a soldier who has been trained to control helicopters in any phase of airmobile operations. Army of Excellence TOE changes expand aviation assets while, at the same time, eliminating most Pathfinder units. As a result of these changes, the U.S. Army Infantry School's three-week Pathfinder course has been redesigned to train designated soldiers in units to perform Pathfinder skills instead of training soldiers going to Pathfinder units. (The new program of instruction is shown in the table.)

AirLand Battle doctrine dictates a highly mobile battlefield, and aviation assets will be used extensively by light, airborne, and air assault divisions for moving troops, equipment, and resupply on that battlefield. It is essential, therefore, that leaders and soldiers at all levels in these units be well prepared to conduct helicopter operations.

Leaders who are trained in Pathfinder skills and assigned to Infantry units can greatly assist the company and battalion commanders with the technical aspects of planning, reconnoitering, and executing both air movement and resupply operations with helicopters. A Pathfinder-qualified company executive officer, for example, can position troops and equipment on a pickup zone for a smooth, safe, and orderly extraction to suit the tactical mission. He ensures that squads and platoons maintain unit intergrity so that they will be able to maneuver as units and provide the greatest possible amount of firepower when they arrive on a landing zone in an objective area. He can use airmovement tables, airloading tables, and bump plans, and he can provide pickup zone control and ground-to-air communication if necessary. Furthermore, he can rig and inspect external loads for airmovement and is trained in the use of most available slingload equipment.

A Pathfinder-qualified leader is also an expert in recommending the formation

Pathfinder students act as hookup man, static probe, and slingload point signal man. Instructor is in left foreground.

...id number of helicopters that can land safely in a pickup or landing zone. He can mark night landing zones and advise the pilots of obstacles, wind conditions, surface conditions, the enemy situation, and friendly indirect fire around the site. He is familiar with the limitations of various aircraft with respect to ground slope, wind conditions, and other hazards and can educate the leaders in his unit on these matters. He also knows the configuration and the capabilities of medical evacuation aircraft and can call for the air evacuation of casualties.

In addition to his expertise with helicopter landing and pickup zones, a Pathfinder can reconnoiter drop zones and mark them for parachute drops of supplies and equipment by either Air Force cargo aircraft or Army helicopters. For this purpose, he is familiar with the use of the ground marking release system for day or night operations and can put the resupply right where a commander wants it. (Army aviation assets may be conserved by using Air Force cargo planes for resupply when this is feasible.)

NEW PATHFINDER POI

SUBJECT	HOURS
Airmovement planning & pickup zones	43.5
Slingload instruction	28.0
Air traffic control	12.0
Drop zone operations	28.0
Medevac operations	3.0
Army aviation overview	1.0
Land navigation test	4.0
HLZ/PZ operations	71.0
	190.5

A commander can also use a Pathfinder-qualified leader, such as a platoon sergeant or an S-3 Air NCO, for example, to train other leaders and soldiers in the unit on Pathfinder skills. He can teach vehicle rigging and hookup procedures for slingload operations and can conduct training on helicopter safety, loading procedures and techniques, hand and arm signals, and the marking of night helicopter landing sites using the inverted Y.

In short, a Pathfinder's knowledge applies throughout the airmobile planning sequence. If his commander will tap his expertise, their unit will be able to conduct safer, more efficient operations, which will contribute to the success of its overall mission.

Captain Keith P. Antonia is now assigned to the Ranger Department, USAIS, Fort Benning. He previously served in the Pathfinder Branch of the 1st Battalion (Airborne), 507th Infantry. He was a scout platoon leader in the 2d Battalion (Airborne), 508th Infantry on Grenada in 1983.

Motorized Support
Lessons Learned at the NTC

LIEUTENANT KARL P. MONGER

An NTC rotation is a challenge to any type of unit, and logistical support for the unit is a big part of the challenge. Logistical support for a motorized unit in a light infantry brigade is an even bigger challenge.

In early 1986, Company A, 2d Battalion, 60th Infantry (Combined Arms-Heavy)—the first unit in the Army to receive the M966 HMMWV-TOW and to train with it—participated in an NTC rotation as an antiarmor augmentation force for the 1st Battalion, 32d Infantry, 7th Infantry Division (Light).

Supporting the company required a significant support slice. In addition to its own organic elements, the company was augmented by two ammunition trucks (M35A2, with one M105 trailer and one M149 water trailer), a tank and pump unit (TPU-M54 with 1,200 gallon capacity diesel), a wrecker (M816), a support battalion contact team (M35A2 loaded with ASL parts and an M886 contact truck and three mechanics) and an ambulance with two medics. This large slice proved necessary because a light division does not have the vehicles or the supply capability to support or sustain an attached motorized unit.

Company A, 2d Battalion, 60th Infantry is part of a combined arms-heavy battalion, originally formed under the assault gun concept. Previously outfitted with M901 Improved TOW Vehicles (ITVs) structured into three line platoons of four vehicles each, the company was reconfigured into four line platoons of five HMMWV-TOWs in each platoon as part of the new motorized MTOE.

Without delving too deeply into tactical play, a light battalion focuses upon stealth, noise and light discipline, and the ability to hide. The amount of supplies and the number of vehicles that can be channeled through the combat trains, therefore, are extremely limited. A daily flow of supplies for Company A, however, includes 21 cases of MREs, 120 TOW rounds, small arms and miscellaneous ammunition, a TPU (diesel) carrying 40 gallons of mogas in cans, package POL (10w40 oil, brake and transmission fluids, and the like), a water buffa-

HMMWV TOW carrier.

lo, batteries, repaired weapons and communications equipment, and any needed repair parts. Given the extremely limited transport capability of the light battalion, this implied the company would encounter some resupply problems. Without detailing the problems, here is the company's final solution and the methods it used to support its operations.

Daily, a company logistics package (LOGPAC) was put together by the company executive officer (XO), and the needed supplies were gathered from the field and combat trains. The TPU was topped off about every other day by either another TPU coming forward from the Forward Area Support Team (FAST) or by taking the TPU to the FAST. Package products were used out of the 15-day basic load carried by the company, while ammunition was drawn from the support platoon in the combat trains. (We filled artillery canisters with sand to simulate the size and weight of the actual TOW rounds.) The MREs were also drawn from the combat trains. Repair parts were obtained from the PLL (prescribed load list), a cannibalization point, and anywhere else possible.

The company resupply and support system was operated by the company XO. The First Sergeant, as the senior enlisted man and the one with the most combat experience, was freed to help the company commander prepare for and control the flow of battle. The XO monitored the company/battalion command net and the battalion administrative/logistics net (with an AN/VRC-46 and an AN/VRC-47 radio) and was briefed constantly by the company commander on the tactical play.

Daily, the LOGPAC was taken to a company logistics release point (LRP), along with mechanics for forward repair work. The LRP was set up in a hidden location about one terrain feature from the company's forward position. One or two vehicles per platoon would then leave their positions, move along a covered and concealed route to the LRP to draw supplies, and return to the battle position. For fuel and ammunition, all vehicles had to move to the LRP. If the only supplies needed were food and water, a platoon sergeant would offload his vehicle, take all his platoon's empty water cans, and pick up all of his platoon's supplies himself.

When resupply was completed, the remaining supplies in the LOGPAC were taken back to the field trains under the control of an NCO, while the XO would go forward to the battle position with the mechanics and spare parts. A 2½-ton truck had to be used to fill flat tires, and it would remain forward, to return with the XO. While forward, the XO would receive updates and fragmentary orders on the tactical situation from the commander. (All LOGPACs were run under cover of night.)

Our experience demonstrated the number and type of repair parts that should be stocked in the PLL to support a HMMWV-TOW company of 20 M966s and one M998 in a desert environment (see chart).

Some of these are obvious choices. Others we learned to carry after a number of bad experiences. The constant velocity joint and the half shaft tend to break when the vehicle goes over terrain that causes the wheel on one side to bounce up too high. This hyperextends the joint, which shatters and breaks out of the metal cup. The fuel tank is made of plastic and, until a protective metal plate is designed, can be ruptured by big rocks. The tires, even though "run-flats," must be replaced when slashed on the side walls.

Some other observations on the M966: When the company received its M966s and it mechanics quality checked them, virtually every hydraulic line, hose, clamp, and connection had to be tightened. In particular, after about 50 miles of use, power steering and fuel lines began to leak and had to be tightened again. Brake calipers needed to be in-

ITEM	NSN	QUANTITY
Tank, fuel	2910-01-189-4770	1
Temp send unit	6620-00-993-5566	2
Oil pressure gauge	6620-01-181-1757	2
Temp indicator	6620-01-180-9037	2
Constant velocity joint	3020-01-168-7875	2
Shaft, half front left	2520-01-168-7876	2
Shaft, half front right	2520-01-168-7874	2
Generator pulley	2320-01-198-0633	2
Generator	2920-00-909-2483	1
Key, woodruff	5315-00-616-5526	2
Tire, pneumatic	2610-01-171-4746	5
Belts, V	3030-01-179-7604	2
Valve, tire	2640-00-555-2834	2
Parts kit, fuel filter	4330-01-198-7590	2
Seal, tire	5330-01-176-0923	2
Rim, wheel outer	2630-01-161-0005	2

spected daily because they had a tendency to loosen during use. All wheel lug nuts also had to be checked and tightened.

Operators need to be able, at least, to repair their own tires and check vital fittings for looseness, for, after all, mechanics in the field are not always readi- available. But the M966 BII (basic issue items) does not include a jack, and the tools are also limited, consisting of two screwdrivers, an open-end adjustable wrench, and pliers. This is woefully inadequate. (For tires, at the very least, each platoon should own a tire repair —NSN 2640-00-922-6921—and each operator should be trained in its use.)

Otherwise, the HMMWV has proved to be an extremely hardy vehicle. The gunner's hatch is constructed so that the supports form a roll cage. (I have seen a HMMWV sit completely upside down in a tank fighting position, not recovered r about eight hours. After recovery and inspection, the vehicle was driven away. The only damage to it was its broken radio antennas. The occupants were not injured, as they were wearing their seat belts.) The mobility and power of the vehicle is exceptional.

Overall, the NTC rotation taught the company some valuable lessons about logistical support. A light battalion is not currently capable of adequately supporting an attached motorized/mechanized force unless that force is augmented by a support slice. The light battalion's combat trains are not capable of handling the basic load of 120 TOW rounds on a recurring basis, and this number can double or triple when rounds are prestocked in the defense. A light battalion support platoon is not capable of drawing the amount of ammunition required for a TOW company from an ammunition transfer point or of moving that ammunition forward to the LRP. Too often, the light battalion combat trains, which focus upon stealth and the ability to hide, are given away by the convoy of trucks coming to pick up supplies.

The solution appears to be to have the support package for a HMMWV-TOW company prepared farther back, possibly at the FAST. The company XO can meet the package at a predetermined location (ammunition still loaded on FAST trucks) and escort it as part of the LOGPAC. The current BII and the organization of operator/organizational maintenance items need revision. These lessons, when applied aggressively, can turn the HMMWV-TOW company into a viable, sustainable augmentation force capable of providing a decisive antiarmor force on the modern battlefield.

Lieutenant Karl P. Monger is assigned to the 2d Battalion, 60th Infantry, at Fort Lewis, and has been a rifle platoon leader, support platoon leader, and company executive officer in the battalion. He is a 1983 ROTC graduate of Wichita State University

Modified Platoon Wedge

LIEUTENANT SEAN D. McDEVITT

With the advent of the nuclear age and the increased lethality of small arms, the success or failure of military forces in an armed conflict is largely dependent upon their small unit leaders. The Vietnam conflict emphasized the importance of having small unit leaders who were able to react quickly to a highly mobile and often dispersed enemy, and to engage him decisively. The failure of a small unit leader to engage an enemy force effectively and immediately resulted in loss of contact or, worse, the decimation of his unit.

Today's infantry platoon leader faces the same problems when attacking a highly mobile, dispersed force such as a guerrilla unit. The platoon line formation, the most common movement formation, simply does not provide the modern-day platoon leader with the highly flexible, instantaneous response he needs to deal effectively with a guerrilla force.

The time needed to react to a small attack, such as a sniper, also poses a problem for the platoon line formation. By the time a platoon leader has had his lead squad deliver a heavy volume of suppressive fire and deployed his second squad to maneuver and destroy the sniper, that sniper usually has had plenty of time to withdraw to another position and resume his harrassment.

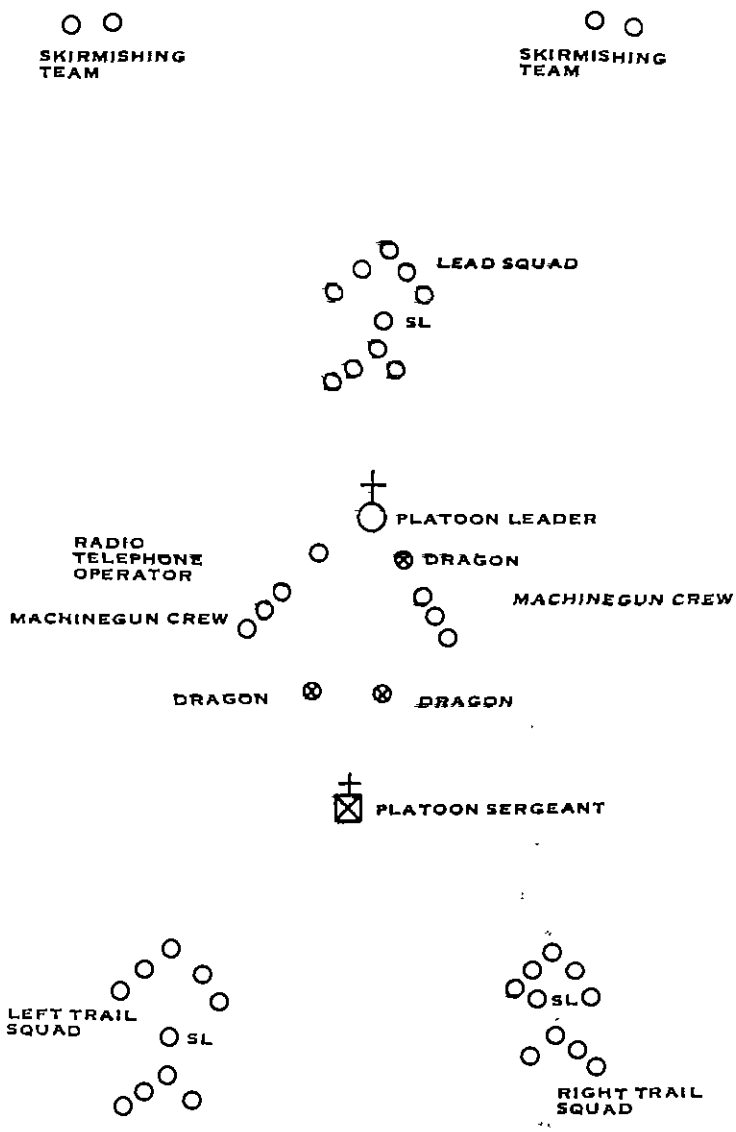
If an enemy unit is deployed in depth, as in an elastic defense configuration, a few harrassing attacks by one or two soldiers can quickly throw an approaching unit into a state of disarray and low morale, rendering it unable to mount an effective counterattack and maintain contact with the enemy.

Another difficulty with the platoon line formation is that, while it engages the enemy with the smallest unit possible, the formation, being relatively long and narrow, is vulnerable to ambush.

While the platoon line formation offers dispersion and maneuver, a platoon leader is at a severe disadvantage when using it against a guerrilla force. What we need is a formation that allows a platoon leader to react instantly to one or more small attacks and to suppress them while retaining protection from indirect fire and also his ability to contact the enemy with the smallest unit possible.

The solution is to deploy a platoon in a wedge formation with two, two-man skirmishing teams providing forward security. This formation, developed by members of an Infantry Officer Basic Course class, enables a platoon leader to successfully engage and defeat the mobile, dispersed elements of a guerrilla force.

By employing the proven tactical advantage of the wedge, this formation allows for maximum flexibility both within the squads and for the platoon as a whole. The platoon is formed with one squad forward to serve as a point element and two squads back to provide support and maneuver. Each squad is formed in a fire team wedge. The platoon leader, the radio-telephone operator, and the heavy weapons section are situated in the center of the wedge, allowing for the greatest possible control and flexibility in the event of contact (see sketch). If the formation needs to maneuver in thick vegetation, soldiers can be placed between the command element and the two rear squads to relay commands.



SECURITY

Each team of skirmishers serves as point security. The skirmishers deploy 100 to 250 meters to the front of the formation to provide early warning of both enemy forces and danger areas and hopefully discover small ambushes and snipers before the main body of the platoon is exposed. During a test of this modified platoon wedge in field conditions, the skirmishers did detect small ambushes and often surprised the enemy elements completely, forcing them to retreat.

If the skirmishers meet considerable resistance, the lead squad deploys and lays down heavy suppressive fire. Depending on the enemy situation, the platoon leader can deploy one or more of his heavy weapons with the squad providing support. The platoon leader then has the option of deploying either one or two of the rear squads to maneuver against the enemy instantly instead of having to wait for the trail squad to arrive from the rear of the formation. This gives the platoon leader flexibility in reacting to an opposing force while still preserving a great deal of control over his unit.

In the event of multiple enemy attacks, the platoon leader can assign each squad leader an opposing force to maneuver against. Primary control is thus delegated to the squad leaders, and the platoon maintains its momentum instead of becoming bogged down in a few, isolated attacks.

In addition to being flexible and more easily controlled, the modified platoon wedge is difficult to ambush, because it employs a point element followed by two rear elements that provide both flank and rear security. If an enemy force does try to ambush the platoon, the squads that are not in immediate contact are free to maneuver instantly against the ambushing unit.

A final advantage of the modified platoon wedge is that it makes a perimeter easier to establish when the platoon halts. Since the platoon is already in a triangle formation, all that is required to establish a perimeter is for each squad leader to bring his fire teams on line and occupy a designated sector—that is, one side of the triangular perimeter.

When we tested the technique, we found that we could maintain our forward speed better and, at the same time, eliminate a great deal of the confusion that we had had with the platoon line formation. The platoon leader was always in the center of the formation with his radio-telephone operator and platoon sergeant. If necessary, the platoon could move out instantly with little re-forming and confusion. There was no need to reposition

the platoon leader, the platoon sergeant, or the radio-telephone operator, since in movement they also occupied the center of the formation. Noise discipline was also better.

In today's low-intensity conflicts against small, highly mobile enemy units, the modified platoon wedge provides a practical and efficient means of combat. With practice and leadership, a platoon leader can use this formation to fix and destroy any small guerrilla force.

Lieutenant Sean D. McDevitt, an Infantry officer, is a 1985 graduate of the United States Military Academy. He has attended the Infantry Officer Basic Course and the Airborne, Ranger, and Mortar Platoon Courses and is now a mortar platoon leader in the 1st Battalion, 9th Infantry in Korea

Scouting Fire Teams

CAPTAIN PAUL A. HAND, U.S. Marine Corps

Over the past few years, the subject of maneuver warfare has been discussed at length in articles, books, and editorials. In all these discussions, however, we sometimes forget that warfare consists of small units making progress on the battlefield. To paraphrase S.L.A. Marshall, battalions, regiments, and divisions cannot advance if platoons and companies do not advance. All discussions of maneuver warfare must therefore include a discussion of how the platoon and company take advantage of these concepts.

Tactics at company level should be more than simple frontal or flanking attacks. Our manuals tell us that a platoon uses fire and maneuver to close with and destroy the enemy. To many of our leaders, though, fire and maneuver means moving in the direction of the enemy until their lead elements run into his defensive positions. Unfortunately, a key item missing from this definition is locating the enemy: to maneuver effectively against him we must be able to find his positions or formations, determine the extent of his positions, and, more important, determine what he intends to do.

As a result, as studies of Vietnam and observations of our present training show, our companies all too often blunder onto an enemy (or aggressor) position and then react. They often cross open areas without scouting the far side, blindly travel through forested areas without scouts to their front, or travel with open flanks.

These problems directly affect a unit's ability to accomplish its mission. If a platoon or company is forced to deploy into unfavorable enemy situations, that unit at best may lose a lot of time and at worst may suffer many casualties and be unable to continue with its mission. A positive solution to this problem is for infantry units to train and employ scouting elements. If they do not, they will probably not use them in combat either and will therefore invite disaster by attacking blind into possible enemy positions.

The use of scouting elements is not a new idea, in either the Marine Corps or the Army. Various manuals for small units in both services discuss either the employment of scouts or some analogous movement techniques. It may be helpful, however, to pull together information from those sources and discuss how a platoon leader can employ his scouting elements effectively. (While my own experience has been primarily with the United States Marine Corps, Capt. A.D. Davis IV of the U.S. Army has offered some suggestions dealing with Army doctrine.)

Army Field Manual 7-8, The Infantry Platoon and Squad, states that the lead platoon uses the movement technique that suits the likelihood of contact. (To a large extent, the platoon leader must take into account the terrain as well.) The three basic techniques that an Army unit uses

for movement are bounding overwatch, traveling overwatch, and traveling. Most units would not use these techniques, however, because—with the exception of traveling—they are somewhat complex and time consuming. But if contact with the enemy is expected, and if his exact whereabouts are not known, bounding overwatch might be the most tactically sound method to use.

A better way of dealing with this problem, and one that offers security and speed with the smallest force forward, is the use of scouting elements.

The Marine Corps' Operational Handbook (OH) 6-3E states that the scouting fire team is the basic tactical unit for scouting. While it discusses the scouting fire team in terms of a five-man fire team, the principles remain the same for a four-man team. The current Army organization of a five-man fire team is easily configured for use as a scouting fire team. Whether Marine Corps or Army, though, it is the principle of scouting itself that should be adopted.

Within a fire team, the scouts normally work in pairs so that they can mutually support each other. (Scouts should not be used individually.) Scouts are normally employed when a platoon is the advance party for an advance guard or the lead platoon in an approach march. During a flanking attack, scouts should be used to help find a route to the objective, verify the flank, and clear snipers or sentinels who otherwise might impede the attack.

The organization of a scouting fire team lends itself to mutual support. A Marine fire team uses the skirmishers formation or the wedge, while an Army fire team might use the wedge or a line formation. The Army's wedge formation should be modified slightly when a fire team is acting as a scouting element: The fire team leader should be behind the formation where he can maintain contact with the squad leader and control the rest of the fire team. The frontage for the fire team should normally be 50 to 75 meters. If it is more than that, a squad should be used as the scouting element.

The platoon leader controls the movements of his scouting element but he may use the squad leader to assist him. The fire team leader controls his fire team.

In open terrain, scouts may be employed as far out as 400 to 600 meters. In dense terrain, they move out to the limits of visibility. Ideally, the bulk of the platoon is positioned to support the scouting elements by fire if they should become engaged.

The main purpose of the scouting element is to provide early warning of enemy to the front, which is consistent with the principle of security. Traveling ahead of the platoon, the scouts look for possible enemy positions and particularly for possible locations of enemy machineguns. They advance stealthily using all available cover and concealment. In some situations, it may be necessary for them to move by bounds so that one element can overwatch the other as they advance. If the scouting elements encounter sentinel posts or patrols, they overcome this resistance as well as they are able. If the enemy force is large, the scouts try to force the enemy to open fire with his machineguns and other weapons so they can determine his dispositions.

One of the most important pieces of information the scouts must obtain and pass on to the platoon leader is the location of the enemy's flanks. The platoon leader will then be able to decide whether to conduct a flanking or frontal attack or to fix the enemy in place while the remainder of the company maneuvers against the enemy position. This prevents the bulk of the platoon and the company from becoming prematurely engaged.

There are three methods that a platoon can use in employing these scouting elements. The first of these methods uses movement by successive bounds (not to be confused with bounding overwatch). The bulk of the platoon is held under cover while the scouts move forward to an intermediate objective that has been designated by the platoon leader. When the scouts reach and secure this objective they signal the "all clear" to the platoon leader. Upon receiving this signal, the platoon leader signals the platoon to advance to the intermediate objective. When the bulk of the platoon reaches that objective, the platoon leader orders the scouts to move to the next intermediate objective.

Machineguns can be used to cover the movement of the scouts and of the platoon to each objective. In addition, the platoon leader can (and should) direct that only one squad at a time advance to an objective while the remainder of the platoon covers it.

Using another method, which could be called traveling overwatch, the platoon leader follows in the trace of the scouting elements while the platoon sergeant holds the rest of the platoon under cover. The scouts advance to designated intermediate objectives. When the fire team leader signals the all clear, the platoon leader directs the scouts to the next intermediate objective and then signals the platoon sergeant (by radio or messenger) to bring the rest of the platoon up. The platoon leader then moves out with his scouts so that they will arrive at the next intermediate objective while the platoon is moving to or has arrived at the previous intermediate objective.

This method has the advantage of be-

ing faster than movement by successive bounds, but it does not have the same level of security—particularly for the scouts who are moving uncovered while the platoon moves to the previously cleared objective. This method might be used when there are suitable march objectives such as in wooded, hilly terrain. The scouting elements, in this case, should be within visual distance of the platoon so that they can be supported if they should become engaged.

The third method involves the simultaneous movement of the scouting elements and the platoon. Obviously, this method should be called traveling. The scouting elements and the bulk of the platoon move at the same speed, and the platoon leader can move either behind the scouts or with the bulk of the platoon. The scouts can be employed up to 600 meters forward, but it should be noted that although they may be visible in open terrain, they will be difficult to support by fire should they become engaged. This method would be the fastest and should be used in open terrain or when there are no suitable march objectives.

Finally, movement within the scouting element should also be planned with an eye toward security. A scouting element, either fire team or squad, can move in a skirmishers (or line) formation, a method often called "a line of scouts." A scouting element can also move by bounding overwatch, in which a portion of the element moves to a designated objective while being covered by the fires of the rest. In the case of a fire team, two men advance to an objective designated by the fire team leader while the other two cover their movement. The two men who were overwatching first then move to the next designated objective while being covered by the other two. If the scouting element is a squad, one fire team advances to a designated area while being covered by the fires of the other team.

To implement these concepts, companies must begin training with scouts. This training should fall into two categories. First, a platoon leader should practice employing scouts whenever his platoon is the advance party for an advance guard, or the lead platoon in an approach march. Even in training, platoon leaders will find that when they use their scouts properly they will never blunder into an enemy position.

This training could begin on a sand table or a chalkboard as platoon leaders train their squad leaders and fire team leaders in these principles. In the field, aggressors could be positioned at various points forward of the assigned objective. The platoon would be required to find these pockets of resistance and clear or bypass them, depending on the mission. A good idea would be to have the platoon run into a superior force, thereby making the platoon leader fire and maneuver on his own or fix the enemy in place while the company maneuvered

If small unit leaders are forced to make these decisions in training, they will be able to provide much more creative and flexible leadership in a real conflict where blundering into an enemy position could spell disaster. These techniques will also make a unit better able to conduct hasty attacks, which will probably be the most common type of attack on the battlefield.

Secondly, extensive training should be conducted for the scouts themselves. This training should fall into two general categories—scouting skills and tracking skills.

The scouting skills, which should be taught first, include:

- Observation techniques.
- Listening techniques.
- Battlefield movement.
- Range estimation.
- Reconnoitering.
- Identifying possible enemy positions

The tracking skills should include:

- Identifying indicators.
- Interpreting signs—displacements, staining, weathering, littering, and camouflage.
- Reporting.

Training and using scouting elements is an old idea whose resurrection coincides with the rise of maneuver warfare. Units that use scouts aggressively never become engaged until their leaders have chosen the time and place for engagement. Scouts save lives and help units accomplish their mission by giving commanders at all levels the information they need to act before the enemy does. Most important, scouting elements make possible fire and maneuver—the very bulwark of tactics. We can maneuver on the enemy only if we know where he is.

Captain Paul A. Hand, U.S. Marine Corps, is assigned to the 3d Battalion, 6th Marines, 2d Marine Division. Among other assignments, he has served as a platoon commander, a rifle company executive officer, and a small unit tactics instructor at the *Marine Corps' Basic School*. He has also completed the Amphibious Warfare School.

SWAP SHOP

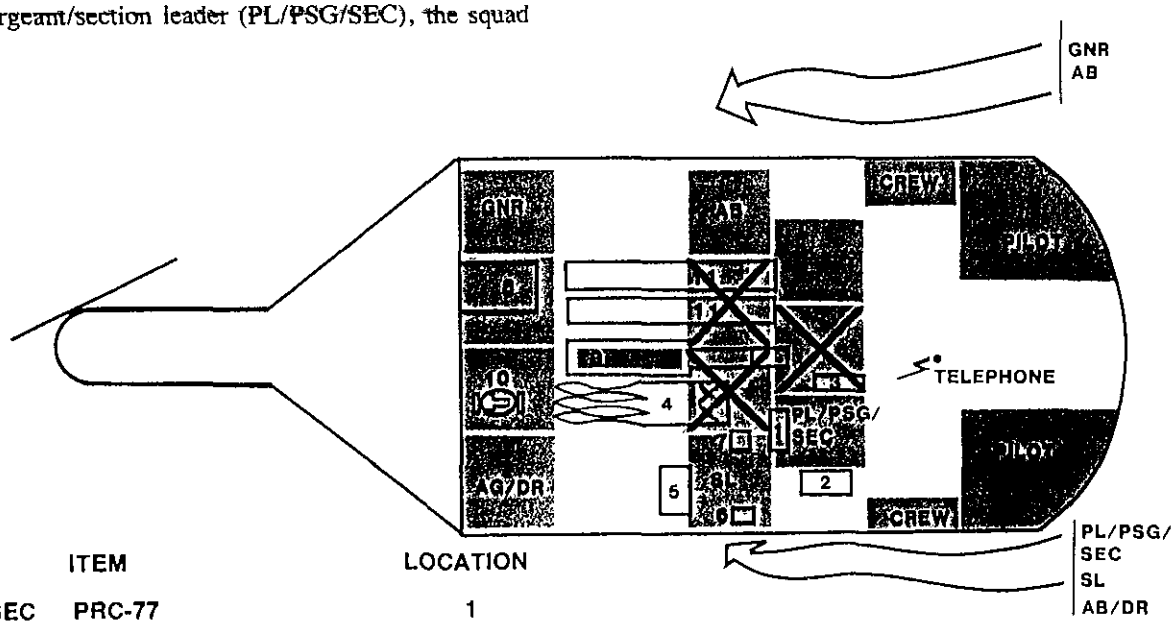
The diagram in Field Manual 90-4 (page G-2) shows the configuration of the UH1H (Huey) helicopter for an airmobile antiarmor crew using the TOW I. This diagram fails to account for the TOW II and its requirements for a night sight, battery power conditioner, spare batteries, and collimator.

The sketch below shows how a Black Hawk can be configured to carry a TOW II crew. The seats marked with an X should be removed.

There should be five soldiers per chalk: the platoon leader/platoon sergeant/section leader (PL/PSG/SEC), the squad leader (SL), the gunner (GNR), the assistant gunner/driver (AG/DR), and the ammunition bearer (AB). Each carries the items shown in the table.

The crew should load from the front with the chalk split as shown. The PL/PSG/SEC, SL, and AB load first, then the AG/DR and GNR. The ammunition bearer helps the gunner store the launch tube. The squad leader holds the traversing unit to allow the assistant gunner/driver to board quickly.

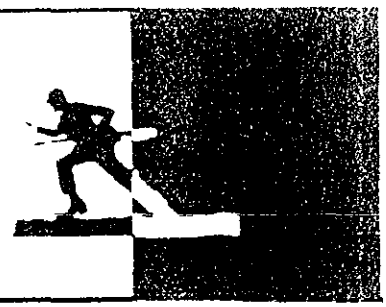
The crew unloads in reverse order.



BEARER	ITEM	LOCATION
PL/PSG/SEC	PRC-77	1
	Night sight	2
	Collimator	3
SL	Tripod	4
	Day sight	5
	Battery power conditioner	6
	Batteries	7
GNR	Missile guidance set	8
	Launch tube	9
AG/DR	Traversing unit	10
AB	Ammunition (2 rds)	11

(Submitted by Lieutenant David E. Johnson, Headquarters, 3d Brigade, 9th Infantry Division, Fort Lewis, Washington.)

CAREER NOTES



PLDC PREREQUISITE FOR BNCOC

Soldiers now must graduate from the Army's Primary Leadership Development Course (PLDC) before becoming eligible to attend the Basic Noncommissioned Officer Course (BNCOC).

The policy, which took effect 1 October 1986, is part of an overall trend toward making training in the NCO education system sequential and progressive, as well as linking it to promotions.

The policy change will affect mainly staff sergeants who were promoted from the rank of sergeant before 1 July 1986 when an earlier policy change made PLDC graduation mandatory for promotion to staff sergeant.

RECLASSIFICATION INCENTIVES

Soldiers in overstrength military occupational specialties (MOSs) will have an opportunity to reenlist into shortage MOSs at any time instead of waiting until their normal reenlistment window.

The change, effective 1 October 1986, applies to staff sergeants and below in overstrength MOSs who are otherwise qualified for reenlistment. These reenlistments are authorized at any time, regardless of the soldiers' current transition dates.

Staff sergeants and below who are in critically overstrength MOSs (as determined by the Commander, MILPERCEN) and who are at their normal reenlistment point will be restricted to reenlisting for retraining only. Those who decline retraining will not be offered any other reenlistment options and will transition to a Reserve Component or to the civilian community.

This change to the reenlistment program puts more responsibility on the unit reenlistment NCO. He will need to find the soldiers in the overstrength MOSs and explain the new options to them.

The soldiers will have to understand that promotion may come faster in the new job. Job satisfaction is another incentive for the soldier to migrate into a shortage skill.

These are the guidelines for the new reenlistment option:

- First-term soldiers must complete at least 18 months of active Federal service before seeking reenlistment.
- Mid-term soldiers and careerists must complete at least 12 months on their current reenlistments.
- Soldiers who have received either enlistment bonuses or selective reenlistment bonuses will have to repay the unearned portion of those bonuses when reenlisting into shortage skills.

Soldiers in special assignments such as recruiting duty, drill sergeant duty, or other assignments that have restrictive periods of stabilization are ineligible to reenlist under these options until those stabilization requirements have been met.

Soldiers stationed in the United States who choose this option will undergo training in a temporary duty (TDY) and return status whenever possible. When a soldier returns to his unit, he will be placed in a job using his newly acquired skills.

Soldiers stationed overseas may request this new reenlistment option upon completion of their overseas tours or before they complete their tours, provided they can attend training in a TDY and return status.

All soldiers who go TDY and return will be stabilized for at least 12 months upon completion of the MOS training.

The reenlistment window for initial-term soldiers is six months before their transition date and for all other soldiers, three months before.

In extreme cases, or when an installation is critically short in the overstrength MOS, the commander of MILPERCEN can consider requests for exception, on a case-by-case basis, when they are fully supported by the chain of command.

CSM SELECTION AND SGM PROMOTION BOARD

A Department of the Army board will convene 3 February 1987 at Fort Benjamin Harrison, Indiana, to consider eligible soldiers for selection as command sergeants major and promotion to sergeant major. The board will also review records of soldiers for possible elimination from the Army under the Qualitative Management Program (QMP).

Sergeants major, promotable master sergeants, and master sergeants eligible for promotion, with basic active service dates not earlier than 3 February 1961 and dates of birth not earlier than 3 February 1936, are eligible for consideration for selection to command sergeant major. There are several exceptions, however, so soldiers meeting these requirements should check their full eligibility with their personnel service centers.

All soldiers in the zone of consideration for command sergeant major must state whether they will accept selection. Once selected for command sergeant major positions, they will not be permitted to decline except for extreme hardship reasons. Master sergeants who decline to be considered for command sergeant major will still be eligible for sergeant major consideration.

Master sergeants with dates of rank of 31 July 1984 and earlier and basic active/enlisted service dates before 1 August 1977 are eligible for consideration for promotion to sergeant major. Again, there are exceptions.

Command sergeants major, sergeants major, promotable master sergeants, and master sergeants in the zone of consideration who have basic active/enlisted ser-

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Sergeant Major
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Ms. Juliette Miley
Chief, Assignments
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MSG John B. Henson II
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SFC MOS 11B/11M
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SGT(P) through SFC, MOS 11C/11H
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SFC Charles L. Nunley
Chief
Drill Sergeant Assignments
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SSG Brenda Heidelberg
Assignment NCO
Drill Sergeants
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SSG William R. Norris
Assignment NCO
Drill Sergeants
221-8070

SFC Harold E. Kennedy
Professional Development/
Reclassification NCO
221-9458

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vice dates of 3 February 1959 or later, or who have approved local bars to reenlistment, are eligible for QMP consideration.

The Enlisted Records and Evaluation Center requires one set of originals of DA Forms 2 and 2-1 for each soldier eligible for consideration in any category by this board. Soldiers should correct any conflicting data between their Forms 2 and 2-1 before sending them and must verify that their forms are correct and complete.

Eligible soldiers may write letters concerning matters they feel are important to their consideration by the board. Letters should be addressed to President, CSM/SGM Selection/Promotion Board, care of Commander, USAEREC, ATTN: PCRE-BA, Fort Benjamin Harrison, IN 46249-5301.

Any letter must contain the soldier's signature and complete social security number and must arrive by 26 January 1987. Letters to the board president, and any enclosures, become part of the board record and are *not* used to update the Official Military Personnel File.

Soldiers may obtain copies of their Official Military Personnel Files at no cost from Commander, USAEREC, ATTN: PCRE-RF-I, Fort Benjamin Harrison, IN 46249-5301. Requests must include full name and social security number, correct mailing address, and signature. USAEREC must receive any OMPF update material by 26 January.

QMP FOR CSMs/SGMs

The Army's Qualitative Management Program (QMP) has been expanded to include command sergeants major.

Beginning with the CSM/SGM selection board scheduled to convene in February, command sergeants major, as well as sergeants major, will be reviewed under the qualitative screening subprogram of the QMP.

The QMP is designed to improve the quality of the enlisted forces by denying reenlistment to soldiers who do not measure up to Army standards.

This change in policy will ensure that all noncommissioned officers above the rank of corporal are reviewed annually under the qualitative screening subprogram. If soldiers do not have the potential for continued service, the boards will select them for DA bars to reenlistment. Once barred, they become ineligible for promotion and for many types of schooling. Bars also can affect their eligibility for reassignment.

Once a bar is imposed, it can be removed only by the DA Reenlistment Appeals Board. The soldier must first file an appeal. About 45 percent of all appeals are approved. If no appeal is made, or if the appeal is denied, the soldier's career will end at the expiration of his current term of service.

SERGEANT MAJOR ACADEMY

Senior noncommissioned officers with their eyes on becoming command sergeants major need to complete the United States Army Sergeant Major Academy (USASMA) resident or non-resident course before their appointment.

Soldiers who are non-graduates (enrolled but removed from the course before successful completion) of the USASMA or the USASMA Corresponding Studies Program are not eligible for command sergeant major consideration. Soldiers who are selected for command sergeant major and have not yet attended or been selected to attend will be automatically selected for the resident course and will be required to attend.

Soldiers in the zone for command sergeant major will be required to sign an acceptance statement for consideration. This statement will also indicate they are accepting attendance at the USASMA. Attendance carries with it a 19-month service obligation prior to voluntary retirement.

Soldiers selected for command sergeant major after 1 October 1986 without having attended USASMA may not be frocked. Those selected since that date will be graduates of USASMA when they are appointed.

LANGUAGE TRAINING

The Army is looking for volunteers to attend language training. The soldiers selected will attend the Defense Language Institute Foreign Language Center at the Presidio of Monterey, the Presidio of San Francisco, or the Department of State's Foreign Service Institute in Arlington, Virginia.

To be eligible, a soldier must:

- Be a high school graduate or have the General Education Degree equivalent.
- Have a Defense Language Aptitude Battery score of 89 or higher (85 for training in Dutch, French, Italian, Portuguese, or Spanish), or have completed a foreign language course at the Defense Language Institute Foreign Language Center.
- Have an interim or final secret clearance.
- Have no major speech impediments.
- Have a minimum physical series of 111211.
- Have an aptitude test score of standard test 95 or higher.
- Waive unfulfilled enlistment or reenlistment commitments in accordance with AR 601-210 or AR 601-280.

Soldiers who meet these criteria are encouraged to submit DA Form 4187, Request for Personnel Action, to MILPERCEN, ATTN: DAPC-EPT-L, 2461 Eisenhower Avenue, Alexandria, VA 22331-0400. Each request must include a current DA Form 2, DA Form 2-1, and verification of Defense Language Aptitude Battery score.

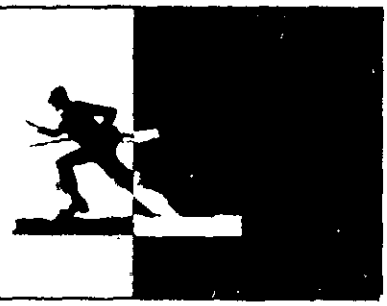
Local personnel service centers can supply details and help in completing DA Form 4187.

"ACTING SERGEANTS" BECOME CORPORALS

The appointment of specialists four to "acting sergeants" is no longer authorized. The rank of corporal will replace acting sergeant for soldiers assigned to sergeant positions.

Before a soldier can be appointed to corporal by his commander, he must meet these requirements: Serve in the NCO position for 60 days and successfully complete the Primary Leadership Development course, or serve in the NCO position successfully for 120 days.

OFFICERS CAREER NOTES



LTC PROMOTION BOARD

A Department of the Army selection board is scheduled to convene 24 February to consider Army competitive category majors for promotion to lieutenant colonel.

The zone of consideration will include majors with active duty dates of rank of 2 December 1981 to 1 May 1983. Above-the-zone consideration will include those with dates of rank of 1 December 1981 and earlier. Below-the-zone consideration will include officers with dates of rank of 2 May 1983 to 1 March 1984.

Evaluation reports must arrive at Evaluation Reports Branch, MILPERCEN (DAPC-MSE-R), by 24 February. Only originals will be accepted, since machine-reproduced and electronically transmitted copies cannot be microfiched.

Eligible officers may write letters to the board on matters they feel are important for the board to consider. Letters should be addressed to President, Lieutenant Colonel, Army Competitive Category Promotion Selection Board, ATTN: DAPC-MSB, 200 Stovall Street, Alexandria, VA 22332-0400, and must arrive before 24 February.

Letters to board presidents should not be used to update Official Military Personnel Files, (OMPFs). Letters and enclosures become part of the board records and are *not* filed in OMPFs.

Majors who are eligible for consideration should review their records to make sure they are complete and up to date. Each officer's record should contain a current record of physical examination and a recent photo. The board will review photographs in hard copy.

Officers can get copies of their Official Military Personnel Files and Officer Record Briefs at no cost by writing to Commander, USA MILPERCEN, ATTN: DAPC-MSR-S (Selection Board Processing Unit), 200 Stovall Street, Alexandria, VA 22332-0400. Social security number and current mailing address must be included.

Corrections or additions to an officer's OMPF and ORB should be forwarded through his supporting personnel service center to MILPERCEN as soon as possible.

AIDS TESTING IN OFFICER TRAINING PROGRAMS

Under the Army's AIDS testing policy, students in officer training programs will be denied commissions if they test positive for exposure to the virus.

Soldiers attending Officer Candidate Schools, cadets enrolled in service academies, and students in the ROTC program will be promptly withdrawn if they are infected with the human T-lymphotropic virus Type III (HTLV-III), also know as human immuno-deficiency virus (HIV). Like all others who are infected, these will be barred from entering the service.

OCS candidates who test positive will be withdrawn from the program. Soldiers who served on extended active duty immediately before entering the school will be allowed to remain in the enlisted ranks so long as they suffer from no immunological deficiencies or progressive clinical illnesses related to the virus. If they become so ill as to warrant referral to a medical board, they could be discharged.

Cadets, likewise, must withdraw from the United States Military Academy if they are confirmed carriers of the HTLV-III antibody. That separation may be delayed, however, until the end of the current academic year. This decision will be made on a case-by-case basis. Cadets granted such a delay in their final year, provided they are otherwise qualified, will be allowed to graduate without commissions.

All cadets and officer candidates discharged solely on the basis of a positive HTV testing will be given honorable discharges.

Students enrolled in ROTC precommissioning programs will have to withdraw immediately. They will be entitled to retain any financial support through the end of the academic semester in which the withdrawal is effective. They will not have to repay any of the financial assistance they have received under the program.

OBC-RC CLASSES

The eight-week Officer Basic Course (OBC) for the Reserve Components has been discontinued at some of the service schools. OBC-RC will continue to be taught, however, at the Infantry School and at the other combat arms schools.

The only Infantry OBC-RC for Fiscal Year 1987 is scheduled to begin 21 June and end 24 August 1987.

CAS³ PREREQUISITES

The entrance prerequisites for the Combined Arms and Services Staff School (CAS³) have been revised to increase the Active Army target audience to officers with six through nine years of commissioned service and to limit Reserve Component attendance to officers with no more than 13 years of commissioned service.

Officers must have credit for completion of a branch officer advanced course or equivalent and must have successfully completed Phase I of CAS³, the non-resident portion. Obligated service for active duty officers is one year.

Points of contact at TRADOC for further information are Captain Tindell, AUTOVON 680-4441, or Ms. Ann Britt, AUTOVON 680-2161.

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MAJ Lars Larson
Branch XO
LTCs, Functional Area
221-7823

LTC Thomas Schwartz
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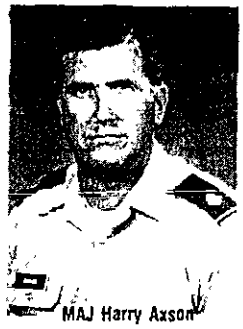

MAJ Harry Axson
LTCs, SC 11, Command, ROTC
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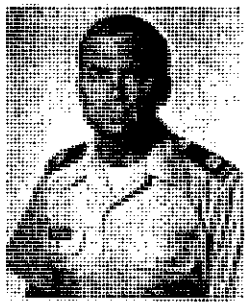
MAJ Bill Taylor
MAJs, SC 11
221-0318

MAJ Dorian Anderson
MAJs, Functional Area
221-0318

MAJ Mike Van Buskirk
LTCs, Functional Area 54
221-0317

CPT Phil North
MAJs/CPTs, Functional Area 54
221-0317

CPT Ken Curley
CPTs, Branch Away From Troops
221-0207



CPT Frank Wiercinski
CPTs, Post-IOAC, Command
221-0209

CPT Rob Johnson
CPTs, Functional Area
221-0209

CPT Eric Cooper
LTs, SC 11
221-0207

Ms Connie Parham
LTs Accessions
221-0207

CPT(P) Mike Robinson
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We have recently received from the Army's Center of Military History three more of its fine publications, two of which are in the Army's official World War II historical series (the "green books"):

• MANHATTAN: THE ARMY AND THE ATOMIC BOMB, by Vincent C. Jones. U.S. Army in World War II. (Superintendent of Documents, 1985. S/N 008-029-00132-2. 660 Pages. $21.00) This well written, definitive and scholarly study tells how the U.S. Army was drawn into the atomic energy program and its important role in developing the atomic bomb during World War II.

The author, himself a World War II infantryman, has served as a historian with the Center since January 1955. In 28 chapters in this book, his first in the World War II series, he tells of the formation of the Manhattan District in August 1942; the building and operation of the large-scale process plants; the administration of the support activities; the making, testing, and eventual combat employment of the atomic bombs; and the difficult post-war problems that confronted the Army in the atomic energy field until late December 1946 when the U.S. Atomic Energy Commission took over the responsibility for atomic energy matters in this country.

• THE CORPS OF ENGINEERS: THE WAR AGAINST GERMANY, by Alfred M. Beck, *et. al.* U.S. Army in World War II. (Superintendent of Documents, 1985. S/N 008-029-00131-4. 608 Pages. $31.00). This volume, the fourth in a series telling the story of the Army's Corps of Engineers during World War II, traces the involvement of engineer units in developing bases in Iceland and the United Kingdom; their participation in campaigns in North Africa, Sicily, and Italy; and their role in aiding the Allied victory in northwest Europe from June 1944 to May 1945. Of more than passing interest are the accounts of the actions of the engineer special brigades (amphibious units), two of which—the 5th and 6th—took part in the Normandy landings in June 1944, and of the numerous times engineers fought as infantrymen.

• FIELD ARTILLERY, REGULAR ARMY AND ARMY RESERVE, compiled by Janice E. McKenney. Army Lineage Series. (Superintendent of Documents, 1985. S/N 008-029-00136-5. 761 Pages. $34.00). This volume gathers in compact form the official historical records of field artillery regiments in the U.S. Army. It includes the lineages and honors of the 58 Regular Army field artillery regiments in the force structure at the end of 1982, as well as the lineages and honors of the Regular Army and Army Reserve elements of each regiment that have been active since the inception of the combat arms regimental system in 1957.

Field artillery groups and brigades, division, and corps artillery will be covered in a subsequent volume. Army National Guard regiments will also be covered in another volume.

As with all volumes in the lineage series, this one makes a significant contribution to the field of American military history.

We were quite pleased to receive from the publishing house of Charles Scribner's Sons its reprint—in three softback volumes—of Douglas Southall Freeman's classic Civil War work: LEE'S LIEUTENANTS (Volume I, 773 Pages; Volume II, 760 Pages; Volume III, 862 Pages. Each volume, $16.95). These three volumes were originally printed by Scribner's between 1942 and 1944; it is good to have them back. If you don't know these books, we suggest you get to know them at your earliest convenience.

An informative publication we have received from the office of the Superintendent of Documents is UNITED STATES ARMY WEAPON SYSTEMS, 1986. (From the office of the Deputy Chief of Staff for Research, Development, and Acquisition. S/N 008-020-1070-7. 159 Pages. $7.00, Softbound). After an introductory section, the weapon systems and other equipment are grouped by specific Army mission areas such as close combat, air defense, fire support, soldier support, and the like. This is a valuable reference work, well done and well presented.

Finally, here are several more interesting, useful, and well-illustrated books from the Sterling Publishing Company:

• MODERN AMERICAN SOLDIER, by Arnold and Lee Russell. Uniforms Illustrated 16. (1986. 72 Pages. $6.95, Softbound.)

• FRENCH FOREIGN LEGION, 1940 TO THE PRESENT, by Yves L. Cadiou and Tibor Szecsko. Uniforms Illustrated 15. (1986. 72 Pages. $6.95, Softbound.)

• HITLER'S TEUTONIC KNIGHTS: SS PANZERS IN ACTION, by Bruce Quarrie. (1986. 200 Pages. $19.95.)

• WAFFEN-SS, by Brian L. Davis. (1986. $17.95.)

• GURKHA: THE ILLUSTRATED HISTORY OF AN ELITE FIGHTING FORCE, by Christopher Chant. (1985. 160 Pages. $17.95.)

Here are a number of our longer reviews:

THE PAPERS OF GEORGE CATLETT MARSHALL, VOLUME 2: "WE CANNOT DELAY," 1 JULY 1939 - 6 DECEMBER 1941. Edited by Larry I. Bland, Sharon R. Ritenour, and Clarence E. Wunderlin, Jr. (The Johns Hopkins University Press, 1986. 746 Pages. $35.00).

It is difficult today for many of us to understand the U.S. Army's pitiful condition in September 1939 when General George C. Marshall became its Chief of Staff. Twentieth in size among the world's armies, it was smaller than the armies fielded by Greece, Portugal, Sweden, and Switzerland. It lacked every material resource needed to fight a mod-

ern war, and its human needs were almost infinite.

George Marshall knew what the Army needed, and as he watched the major European powers square off for the second time in 25 years, he began to fight for the Army's needs, both in Congressional committee rooms and in public forums. At the same time, he guided and directed the Army's reorganization of its combat divisions and air forces, its support structures (including his own staff), and its leadership hierarchy. He had to find suitable division, corps, and army commanders to lead the new field units, while having to worry about defending the Western Hemisphere from possible German encroachment and sending many of his own badly needed arms and supplies to Great Britain to keep her in the war.

In this book, the second in a projected six-volume series, the editors continue their fine work by presenting another selection of documents—559 all told—from General Marshall's personal and official correspondence, speeches, and statements, plus transcriptions from tapes. With only a few exceptions, the documents in this volume were produced by General Marshall himself. All have come from papers in the George C. Marshall Research Library.

Throughout the period covered by this book, Marshall demonstrated a deep concern for the welfare of the common soldiers, who he knew would carry the heaviest burden if and when the U.S. entered the war. He did not hesitate to chastise his field commanders when he felt they were not doing all they could in this respect.

RED DAWN AT LEXINGTON. By Louis Birnbaum (Houghton Mifflin, 1986. 402 Pages. $18.95). Reviewed by Captain Michael E. Long, United States Army.

The tone of this thoroughly excellent book is set in its preface. The author states that "written history lacks a sense of how events appeared to those who experienced them. Furthermore, the diaries and journals of both British and American participants in the early days of the American Revolution reveal no awareness of participating in cataclysmic events."

Louis Birnbaum provides a reader with a unique insight into the day-to-day activities that occurred during this most critical period in our history. He truly places his reader at the center of the conflict and conveys a sense of immediacy in his writing. His is indeed the work of a true scholar, an individual who was a noted teacher of U.S. history for many years. His work is the result of a careful study of many primary source documents, some of which are being used for the first time.

Rich color illustrations appear throughout the book; they complement nicely the fine narrative to provide a first class historical work worthy of perusal by military history buffs and students of the American Revolution.

JANE'S MILITARY VEHICLES AND GROUND SUPPORT EQUIPMENT, 1986. Seventh Edition. Edited by Christopher F. Foss and Terry J. Gander (Jane's Publishing, 1986. 979 Pages. $137.50).

This volume surveys the non-combat military vehicles and support equipment used by the world's military forces to support their combat units in the field. Included are detailed descriptions of armored engineer vehicles, bridging systems, mine warfare equipment, NBC equipment, and construction and demolition equipment.

The authors point out, and rightly so, that "the last seven years have seen a quiet but steady revolution in the thinking of many military planners, namely the realization that trucks and other such military vehicles, together with all types of ground support equipment, are now as important to the soldier as the service rifle, the military projectile and the armored vehicle track." Infantry leaders would do well to remember that, and to use this fine reference book to keep current with the many changes in this important field of support equipment.

YESTERDAY'S SOLDIERS, by Frederick M. Nunn (University of Nebraska Press, 1983. 365 Pages). Reviewed by Captain Harold E. Raugh, Jr., United States Army.

This scholarly treatise narrates and outlines the influence of European military professionalism, particularly that of France and Germany, on South American armies from 1890 until the outbreak of World War II.

The author concentrates on the German military influence in Argentina and Chile and that of France in Brazil and Peru, and divides his book into two time periods: 1890-1914 and 1919-1940. Throughout these two periods, but especially in the earlier one, South American military officers, in their quest for a national identity, tended to reject their own national, military, and political traditions. Instead, they tried to search for an idealized past, one that may have been known in Europe but never in South America.

The South Americans were convinced "that the [military] profession embodied those ideals and values most suited to the total mobilization of social, economic, and administrative energies in a harmonious and reliable way in peacetime as well as in war." The author adds that this was a "grandiose delusion."

As World War II approached, the European influence waned. A new global superpower, the United States, loomed on the horizon, and the South American nations tended to gravitate towards this country. Indeed, the vast majority of senior military officers in South America today have been trained by the U.S., and their policies and programs often reflect that influence. There is a subtle reminder from the past, however, in terms of the indelible impression left by those officers who had been trained by Europeans—"yesterday's soldiers."

Extremely well researched, this book ably fills a void in the history of European military influence in the western hemisphere.

THE SELECTED ESSAYS OF T. HARRY WILLIAMS. T. Harry Williams (Louisiana State University Press, 1983. 276 Pages. $19.95). Reviewed by Major Don Rightmyer, United States Air Force.

"The best way to take military history is, like any other kind, in small, well-chewed bites."

I intended to start this review along those lines but the subject of this book stole the words from my pen. The late T. Harry Williams, a professor of history at Louisiana State University for 38 years, was renowned both for his teaching and for his writing of history. This volume of 14 essays, written over the years, was gathered to celebrate and share the historical heritage he left us to enjoy.

The essays are divided into three parts: Civil War and Reconstruction, Military Policy, and Biography. Each essay provides a bite-size chunk of historical thought that a reader can digest in a few minutes and then lean back to savor for hours.

For example, Williams gives a number of poignant insights into the true nature of the Civil War in "That Strange Sad War." Despite the extreme claims by both sides about the fighting ability of the adversary, Williams feels that each of the armies themselves eventually had a much better appreciation of the other's true capabilities. He points out that too often we forget that many of the officers on both sides had known each other at West Point, in business, or in politics.

In "World War II: The American Involvement," he closes with an interesting comparison of America's two military traditions, which he calls the "Macs" and the "Ikes." Williams proposes a number of characteristics for each leader but summarizes with these: "The Ikes have exemplified militarily the ideals of our industrial, democratic civilization, which took shape in the nineteenth century; the Mac generals have represented militarily the standards of an older, more aristocratic society." He concludes that both types have been present in our military services from the beginning and probably always will be, and that both are products of the American tradition and may play a useful role in the military life of a democracy.

These are but two of the bite-size chunks of history provided by the author. Each chunk gives a few ideas for us to ponder over and discuss. This sort of thing never hurts the true military professional.

TARGET TOKYO. By Gordon Prange (McGraw-Hill, 1984. 595 Pages. $24.95). Reviewed by Colonel Robert G. Clarke, United States Army Retired.

This is a smoothly told story, well researched and footnoted and drawn from the late Gordon Prange's voluminous notes. Readers of Prange's earlier books on the war in the Pacific will certainly appreciate this one, which provides a definitive account of the operations of the Richard Sorge spy ring in Tokyo before and during World War II.

Sorge headed what was probably the most highly placed and most successful Soviet espionage ring in World War II. He was chief Tokyo correspondent for the *Frankfurter Zeitung* from 1933 until his arrest in 1941. Using his correspondent's credentials as an entree, Sorge successfully established himself as a true Nazi and an almost official member of the German Embassy. He soon became a respected confidante and a prized source of information for the German ambassadors with whom he became close friends. Thus he had an open channel to discussions and information within the highest levels of the German government.

Among the leading members of Sorge's spy net was Hotzumi Ozaki, a brilliant young Japanese journalist who was an expert on China and who had access as a cabinet consultant to the innermost circle of advisors to the Japanese prime minister.

During eight years of espionage, Sorge and his associates channeled a wealth of information to the Soviet Union by courier and wireless report. His biggest contributions to the Soviets were his warning to Moscow about Germany's planned attack on Russia in 1941 (which Stalin ignored), and his assurances to Moscow that the Japanese, in late 1941, would not attack Manchuria but would strike southward.

When Sorge and his accomplices were arrested in October 1941, Moscow made no attempt to rescue its star spy, and he and Ozaki were hanged. It was not until 1964 that the Soviet Union officially acknowledged Sorge as being one of its operatives.

Prange's book makes excellent reading and is one that thoughtful INFANTRY readers will want to have in their libraries.

NOTE TO READERS: All of the books mentioned in this review section may be purchased directly from the publisher or from your nearest book dealer. We do not sell books. We will furnish a publisher's address on request.

EMPEROR OF THE CENTURIES. By Abbott William Sherower (Napoleonic Heritage Books, 1986. Volume I, 118 Pages, $24.95; Volume II, 138 Pages, $22.50; Volume III, 253 Pages, $28.50). Reviewed by Lieutenant Colonel John C. Spence III, United States Army Reserve.

This review encompasses the first three volumes of a planned extensive survey of the life of Napoleon. The second and third volumes are scheduled for publication in 1987.

The first volume represents the factual and evidentiary results of more than 50 years of research by the author. Since Napoleon's career was of such monumental proportions, it is appropriate that Abbot Sherower should prepare the reader with an excellent prefatory first volume.

The serious student of Napoleon and of his historical era will look forward to the publication of these volumes. Sherower's writing reflects a broad perspective of one of history's most enigmatic and enduring figures. His style is deeply analytical and reflective. The second volume, for example, probes into Napoleon's ancestral background and examines the factors that influenced his character and personality development at an early age. One of these factors is Carlo Bonaparte—a Corsican lawyer who sired Napoleon and his regal siblings—who has previously received inadequate historical attention.

Volume three explores Napoleon's adolescence, his military schooling, and the beginning of his military career. Again, Sherower breaks new ground. For instance, he examines the effect the works of Genevan political philosopher Rousseau had on Napoleon during the waning days of the Age of the Enlightenment.

Even if the reader is not a serious student of Napoleon and his times, these three volumes contain a wealth of factual material. Although Napoleon departed the world stage more than 150 years ago, his legacy is an enduring one. Much of the administrative structure of modern France, surviving through five republics, is based on Napoleonic reform. And the Code Napoleon, with its civil law emphasis, forms the legal foundation not only for France but for other countries as well.

Napoleon's military exploits—his philosophy of strategy, tactics, and military organization—will undoubtedly be the subject of later volumes. Based on the scholarly excellence demonstrated thus far by the author, the complete series will be an important addition to Napoleonic historiography.

CAMPAIGN IN RUSSIA: THE WAFFEN-SS ON THE EASTERN FRONT. By Leon Degrelle (Institute for Historical Review, 1985. English translation of *Front de l'est, 1941-1945*. 353 Pages. $17.95). Reviewed by Doctor William J. Fanning, Jr.

In 1941 Leon Degrelle, the charismatic leader of the pre-war Rexist Movement in Belgium, raised a band of Belgian volunteers to fight for the Third Reich in its struggle against the Soviet Union. Convinced that he was taking part in a crusade to protect Western civilization from the scourge of Bolshevism, Degrelle also hoped that in doing so he could win for his country a place of honor in Hitler's New Order for Europe. The Wallonian Legion became one of several foreign units of the elite Waffen-SS.

One might expect from a man of Degrelle's standing and accomplishment an informative, if obviously biased, account of the Wallonian Legion's three years in the hellish cauldron of the Eastern Front. Unfortunately, he presents this campaign —as well as a brief excursion by the Legion to the West to take part in the Battle of the Bulge—in a burst of rather disjointed engagements. He makes little effort to link the activities of his unit to the overall developments in the conflict. In fact, his narrative, for the most part, leaves out references to important military operations such as Stalingrad and Kursk, as well as the names of leading German commanders. The reader finds it difficult to obtain from his account a clear picture of the role played by Degrelle's volunteers in the Russo-German war.

The book leaves much to be desired. With its incessant praise for a good "lost cause"—Degrelle conveniently omits references to all but a few isolated German atrocities or disposes of them in philosophical fashion—and its lack of important military data, this book is hardly worth the jacket price.

BUREAUCRACY AT WAR: U.S. PERFORMANCE IN THE VIETNAM CONFLICT. By Robert W. Komer (Westview Press, 1986. 174 Pages. $20.85). Reviewed by Doctor Joe P. Dunn, Converse College.

Why we failed in Vietnam has been a hot topic since 1975. In recent years much of the critical focus has been on our flawed military strategy. Harry Summers, Bruce Palmer, and others articulately have damned U.S. policy as it was designed by national leadership. They emphasize the policy mistakes of overemphasis on counterinsurgency, undue restrictions on the military conduct of the war, and the attrition strategy.

Robert Komer, who headed the U.S. pacification effort in Vietnam for three years (1966-1968), is equally damning, but his focus is different. Komer concentrates on performance rather than policy, the bureaucratic institutional constraints that inhibited success. This theme was first expressed in his 1972 book, *Bureaucracy Does Its Thing*, but it is much more thoroughly and systematically developed here.

His chapter titles indicate Komer's concerns: Why We Did So Poorly, The Flawed Nature of Our Chosen Instru-

ment, Institutional Constraints on U.S. Performance, Institutional Obstacles to the Learning Process, Lack of Unified Management, Attempts at Adaptive Response, Was There a Viable Alternative Strategy? and his brilliant summation, What Lessons Can Be Learned? His book is a clear call for better and more creative management at all levels. Komer supports counterinsurgency, and he rejects much of the rest of the Summers-Palmer argument.

Interesting, provocative, and assertive, this book and Thomas C. Thayer's *War Without Fronts*, upon which Komer draws heavily, are two of the best books on the war that I have read lately. They definitely need to be read alongside Summers' *On Strategy* and Palmer's *The 25-Year War*.

RECENT AND RECOMMENDED

TOP SECRET: THE STORY OF THE INVASION OF JAPAN. By James Martin Davis. Ranger Publications, 1986. 24 Pages. $6.00, Softcover.

RETAKING THE PHILIPPINES: AMERICA'S RETURN TO CORREGIDOR AND BATAAN, October 1944-March 1945. By William B. Breuer. St. Martin's Press, 1986. 284 Pages. $18.95.

JOINT STAFF OFFICER'S GUIDE, 1986. National Defense University-Armed Forces Staff College. Superintendent of Documents, 1986. S/N 008-020-01084-7. 354 Pages. $16.00, Softbound.

EFFECTS OF CLIMATE ON COMBAT IN EUROPEAN RUSSIA. Reprint of the 1952 Edition. Center of Military History, Superintendent of Documents, 1986. S/N 008-029-00145-4. 88 Pages. $3.00, Softbound.

THE FRAMING OF THE FEDERAL CONSTITUTION. U.S. Department of the Interior. Superintendent of Documents, 1986. S/N 024-005-01000-9. 112 Pages. $4.75, Softbound.

REAGAN'S LEADERSHIP AND THE ATLANTIC ALLIANCE: VIEWS FROM EUROPE AND AMERICA. Edited by Walter Goldstein. Pergamon-Brassey's, 1986. 209 Pages. $19.95.

THE STAR WARS CONTROVERSY: AN INTERNATIONAL SECURITY READER. Edited by Steven E. Miller and Stephen Van Evera. Princeton University Press, 1986. 327 Pages. $9.95, Softbound.

OVER THE BEACH: THE AIR WAR IN VIETNAM. By Zalin Grant. W. W. Norton, 1986. 311 Pages. $18.95.

MARITIME STRATEGY, GEOPOLITICS, AND THE DEFENSE OF THE WEST. By Colin S. Gray. National Strategy Information Center, 1986. 85 Pages. $8.95.

GRANT AND LEE: THE VIRGINIA CAMPAIGNS, 1864-1865. By William A. Frassanito. Scribner's, 1986. A Reprint of the 1983 Edition. 442 Pages. $13.95, Softbound.

RUNNING CRITICAL: THE SILENT WAR, RICKOVER, AND GENERAL DYNAMICS. By Patrick Tyler. Harper and Row, 1986. 374 Pages. $19.95.

A MISSING PLANE. By Susan Sheehan. Putnam's, 1986. 201 Pages. $18.95.

PRESIDENTS' SECRET WARS: C.I.A. AND PENTAGON COVERT OPERATIONS SINCE WORLD WAR II. By John Prados. William Morrow, 1986. 480 Pages. $22.95.

THE AUTOMATED BATTLEFIELD. By Frank Barnaby. The Free Press, 1986. 185 Pages. $18.95.

THE DAY THEY ALMOST BOMBED MOSCOW. By Christopher Dobson and John Miller. Atheneum, 1986. 289 Pages. $16.95.

PARATROOPER! THE SAGA OF U.S. ARMY AND MARINE PARACHUTE AND GLIDER COMBAT TROOPS DURING WORLD WAR II. By Gerard M. Devlin. A Reprint of the 1979 Edition. St. Martin's Press, 1986. 717 Pages. $14.95, Softbound.

GHOST FLEET OF THE TRUK LAGOON. By William H. Stewart. Pictorial Histories Publishing Company, 1985. 132 Pages. $9.95, Softbound.

BEYOND REAGAN: THE POLITICS OF UPHEAVAL. Edited by Paul Duke. Warner Books, 1986. 338 Pages. $9.95, Softbound.

GENERAL GEORGE CROOK: HIS AUTOBIOGRAPHY. Edited and Annotated by Martin F. Schmitt. A Reissue of the 1946 Edition. University of Oklahoma Press, 1986. 326 Pages. $9.95, Softbound.

PEARL HARBOR IN PERSPECTIVE. Edited by Michael Sampson. The Arizona Memorial Museum Association, 1 Arizona Memorial Place, Honolulu, HI 96818, 1986. 92 Pages. $3.95, Softbound.

FORTRESS USSR: THE SOVIET STRATEGIC DEFENSE INITIATIVE AND THE U.S. STRATEGIC DEFENSE RESPONSE. By William R. Van Cleave. Hoover Institution Press, 1986. 60 Pages. $4.95, Softbound.

THE MARCH TO VICTORY: A GUIDE TO WORLD WAR II BATTLES AND BATTLEFIELDS FROM LONDON TO THE RHINE. By John T. Bookman and Stephen T. Powers. Harper and Row, 1986. 340 Pages. $9.95, Softbound.

MAKING SPIES: A TALENT SPOTTER'S HANDBOOK. By H.H.A. Cooper and Lawrence J. Redlinger. Paladin Press, 1986. 272 Pages.

TRACKED AND WHEELED LIGHT ARMOURED VEHICLES. An *International Defense Review* Editorial Supplement. Interavia S.A., 1986. 62 Pages. $8.00, Softbound.

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From The Editor

INFANTRY IS ALIVE AND WELL

INFANTRY magazine is NOT going out of business. Recent news items announcing the cancellation of the DA periodicals program have led many people to believe the magazine is on its deathbed. But those same news items also say that an alternative program is now being developed under which INFANTRY and the other service school magazines will continue to be published.

Further information concerning the new program will be announced as it becomes available. Meanwhile, the INFANTRY staff appreciates the concern of the magazine's supporters.

READER SURVEY

We recently completed a readership survey and want to thank those of you who participated. We sent two copies each to 600 infantry companies—both Active Army and Reserve Component—selected at random from our free distribution list. An officer in the unit was asked to complete one form and an NCO the other. We also sent surveys to 300 paid subscribers.

Overall, the results were favorable. In the surveys received from units:

- 66% said they regularly read all or most of the magazine; another 17% said they read some of it.
- 90% agreed that the magazine keeps soldiers informed of new developments in doctrine, tactics, weapons, training, and professional development.
- 76% agreed that it offers a forum for the expression of new ideas and individual opinion on issues.
- 66% found it a valuable training reference.
- 80% said it offers a new way for a soldier to acquire military knowledge outside his immediate duty assignment.
- 75% said it permits professional soldiers assigned away from the mainstream of combat arms activity to stay up to date on current developments.
- 88% rated the writing clear and generally easy to understand.
- 76% found the illustrations generally appealing and imaginative.

Of the many subjects you said you wanted to see covered more often, training techniques, tactics, weapons, and equipment, combat developments, leadership and counseling, and NBC warfare and training were rated highest.

Many of you were most kind in your comments about the magazine and the job we're doing. But the things you said you did *not* like have also given us some things to think about—and some good ideas to follow up on.

Some of the negative comments left us puzzled, though. One reader, for example, said we should "be bold" and publish articles by "young officers" instead of "generals and civilian specialists." Not guilty! In 1985 and 1986, 83 of the 172 authors whose articles appeared in INFANTRY were captains and lieutenants; only 6 were general officers, and only 9 were civilians. (Captains, in fact, were by far the most frequent contributors during that period—41%—followed by majors, lieutenant colonels, and lieutenants, in that order.)

As with previous surveys, some of you expressed opinions that directly contradicted one another: Some said we should publish more "controversial" articles, more opinion; others said opinion articles use space that could be better used for doctrinal material. Some said "how-to-do-it" articles were a big help to them in their jobs; others—one, actually—said such articles were "an insult to the intelligence" of the reader.

Obviously, even in a homogeneously Infantry audience, there is great diversity—officers and enlisted personnel, Active and Reserve Component, light and mechanized (and all the variations), and line and staff orientations—so, it is not surprising that one magazine cannot make everyone happy all the time. But we'll still try.

Finally, to the company commander who said he wished we would send copies of INFANTRY to his company, we can only say: Check your distribution channels to find out why you are not getting mail that is addressed to you. Every infantry unit in the United States Army, down to company level, is on our mailing list—or at least we try to see that it is! So if you, too, are frustrated and thinking your unit has been left out, go bug somebody about it. Or write us to be sure you're supposed to be getting the magazine. We want you to have it.

We pledge to all of you our best efforts in giving you a magazine that will help you do your jobs better, both now and in the future.