

Infantry

A PROFESSIONAL JOURNAL FOR THE COMBINED ARMS TEAM



NOVEMBER-DECEMBER 1985

Infantry

A PROFESSIONAL JOURNAL FOR THE COMBINED ARMS TEAM

A Department of the Army Publication

November-December 1985

Volume 75, Number 6

65th Year

Editor

Albert N. Garland

Deputy Editor

Marie B. Edgerton

Editorial Assistant

Mary H. Wolstenholm

Business Manager

M. Lena Biskup

Contributing Artists

Mary Ann Norton

Charles Willis

Ramona Roland Forte

Charles R. Pagan



ARTICLES

- 20 **ON BEING A LIEUTENANT**
Captain Richard D. Hooker, Jr.
- 24 **LEADERSHIP AND PREVENTIVE MAINTENANCE**
Colonel Donald C. Fischer
- 28 **LONGSTREET AND JACKSON**
Captain Michael A. Phipps

FORUM AND FEATURES

- 10 **THE MORAL DIMENSION: The Thoughts of Ardent du Picq**
Colonel Richard F. Timmons
- 12 **MANAGING FUNCTIONAL AREAS**
Major Gary W. Anderson, U.S. Marine Corps
- 13 **YOUR FIRST ASSIGNMENT**
Major Eric E. Holdeman
- 15 **HHC EXECUTIVE OFFICER**
Captain Samuel J. Padgett, Jr.
- 16 **MORTARING: Can We Now Move Forward?**
Warrant Officer-2 Keith F. Hoyle, British Army
- 18 **A MAGAZINE FOR THE MACHINEGUN**
Captain Bruce P. Mamont

TRAINING NOTES

- 33 **LAW OF WAR TRAINING: A Practical Program**
Captain Frederic L. Borch III
- 35 **THE M203 IN URBAN FIGHTING**
Captain Christopher E. Allen
- 36 **LIVE FIRE EXERCISES**
Captain Gary A. Bracht
- 39 **MOUNTED LAND NAVIGATION**
Lieutenant Richard Thomas
- 40 **HAND AND ARM SIGNALS IN THE ROK ARMY**
Master Sergeant Raymond E. Brinkman

DEPARTMENTS

- 2 **COMMANDANT'S NOTE**
- 4 **LETTERS**
- 6 **INFANTRY NEWS**
- 42 **ENLISTED CAREER NOTES**
- 44 **OFFICERS CAREER NOTES**
- 47 **BOOK REVIEWS**

COVER

Conventional ground forces play an important role across the
tire spectrum of potential conflict.

USAIS

Commandant
MG John W. Foss

Assistant Commandant
BG Edwin H. Burba, Jr.

Deputy Assistant Commandant
COL David J. White

Command Sergeant Major
CSM Jan Schalavin

STAFF

Secretary
LTC Linwood Burney

DEPARTMENTS

Combined Arms and Tactics
COL Robert S. Fiero

Ranger
COL Stanley E. Shaneyfelt

DIRECTORATES

Combat Developments
COL Thomas K. Seybold

Evaluation and Standardization
COL Joseph S. Napier

Training and Doctrine
COL James I. Daily

29th INFANTRY REGT/WEAPONS DEPT
COL William H. Gavan

INFANTRY PROPONENCY
COL Richard D. Meriaux

THE SCHOOL BRIGADE
COL Frederick Peters

NCO Academy
CSM David J. Kloss



INFANTRY: Published bimonthly at the United States Army Infantry School (Building 4), it provides current information on infantry organization, weapons, equipment, tactics, and techniques. It also includes relevant historical articles and serves as a forum for professional ideas. Unless otherwise stated, the views herein are those of the authors and not necessarily those of the Department of Defense or any element thereof. The use of funds for printing **INFANTRY** was approved 19 February 1985 by Headquarters, Department of the Army, The Honorable John O. Marsh, Jr., Secretary. Official distribution: three copies to each infantry and infantry-related unit and to appropriate staff agencies and service schools.

SUBSCRIPTIONS: One year, \$10.00; two years, \$18.00. Single copy, \$2.50. A foreign (non-APO) subscriber must add \$3.00 per year for postage on each subscription. Payment must be made either by United States currency, by international money order, or by a check or draft drawn on a bank in the United States. One-year subscriptions are not refundable. Two-year subscriptions are refundable, but service and handling charges will be deducted. The expiration date of a subscription is shown in the first four-digit number on the address label's first line (the first two digits indicate the month, the last two digits, the year). Please notify your postmaster and **INFANTRY** promptly of any change of address.

CORRESPONDENCE: Address all correspondence to Editor, **INFANTRY** Magazine, Box 2005, Fort Benning, Georgia 31905-0805. Please furnish complete return address. *Queries are answered promptly.* Manuscripts are acknowledged within 30 days. Telephones: Editorial Office — 404-544-4951 (AUTOVON 784-4951); Business Office — 404/545-5997 (AUTOVON 835-5997).

POSTMASTER: Second-class postage paid at Columbus, Georgia and at Pensacola, Florida. Send Form 3579 to Circulation Department, **INFANTRY** Magazine, Box 2005, Fort Benning, Georgia 31905-0605. For forwarding to



Commandant's NOTE



Major General John W. Foss
Chief of Infantry

INFANTRY SMALL ARMS AND MARKSMANSHIP TRAINING

Infantry units accomplish their missions on the battlefield through a combination of fire and maneuver. When we think of fire we often think of a high volume of fire from one of the many supporting arms of our combined arms team. But in doing this we should not forget that our infantry squads and platoons will often live or die on the basis of their ability to place their own accurate fire on the enemy.

Our Infantry heritage has been based upon the individual soldier and his small arms. These small arms now include the M16A1 rifle, soon to yield to the product-improved M16A2 rifle; the M249 squad automatic weapon (SAW); and the M60 machinegun.

These fine weapons will do us little good, however, if our infantry soldiers are not crack shots. Therefore, one of the first things we as infantry leaders must do is to emphasize marksmanship training at all levels. The Infantry School has taken several steps to ensure that our small arms marksmanship training is given the priority it deserves, both in the school and in the field.

Good marksmanship, of course, starts with a solid basic rifle marksmanship (BRM) program. At the Infantry School, we have just completed a comprehensive study of the present BRM program and are now validating an improved version of it. The new program will stress precision shooting and downrange feedback and will place more emphasis on the fundamentals of marksmanship and dry fire. To do this properly, we have set higher standards that soldiers must meet before they go on to the next firing event. For example, the new BRM program requires our soldiers to qualify at night and under NBC conditions.

We have modified the standard trainfire qualification course to include a third position—the kneeling unsupported—and

have added more long-range targets (250 meters or more) to take advantage of the M16A2's capabilities.

We have also revised the advanced rifle marksmanship (ARM) training program, which is taught only to infantrymen in OSUT. We have added to this program a moving target scenario, an increased night firing requirement, and a squad firing exercise. Long range firing will be added for the current M16A1 rifle and even longer range firing will be added as more M16A2 rifles become available.

This brings me to the important subject of rifle zero. We have found that many of our soldiers do not know how to zero their rifles properly. Because they do not, many of their other firing activities amount to a waste of time and bullets, neither of which is plentiful. Admittedly, the 25-meter zero is the current method of initially obtaining a battlesight zero. It is still an expedient method. Firing at 25 meters was never meant to take the place of a standard course of fire, though, so battlesight zero must be confirmed at the longer ranges.

None of this is totally new; we understand that. But over the years, we have let down woefully in our marksmanship training and have allowed far too many of our basic marksmanship skills to atrophy. Downrange feedback, for instance, was routine when we used the old known-distance (KD) ranges. Even though many Infantrymen feel we should go back to those ranges, there are other ways to get the feedback our soldiers need—technology and our trainfire ranges can serve the same purpose. The important thing is to give each firer precise feedback on where his bullets are striking the target so that he can adjust his sights or aim as necessary.

As part of our increased emphasis on marksmanship skills, we will propose having one qualification course for most soldiers and another, more demanding course for infantrymen.

After all, infantrymen fire their weapons for a living. This latter course would be an outgrowth of our beefed-up BRM and ARM programs and would go a long way toward reinforcing the preeminence of the U.S. infantryman on the battlefield.

The revitalization of marksmanship training requires that we also develop programs to sustain the new soldier's skills when he gets to a unit. An important ingredient in unit sustainment is command emphasis and leader training. We at the Infantry School have therefore developed marksmanship training programs for our leader courses. We have included these training programs in the Infantry Officer Basic and Advanced Course curricula and eventually will add them to our Basic and Advanced NCO Courses.

This leader training includes more than just weapon qualification periods. It is designed to train our leaders in training techniques that will enable them to evaluate the marksmanship skills of a unit, develop a training program to upgrade them, and then implement the program.

As an aid to commanders, the Infantry School is also developing a master marksman program for noncommissioned officers, the goal of which will be to train experts in small arms marksmanship on a variety of infantry weapons. The highly skilled NCOs who complete this program will have come from units and will return to their battalions to help design training programs and train other NCOs to be effective marksmanship instructors.

In addition to these efforts, we have produced several aids for leaders to use in their rifle marksmanship training. Field Circular 23-11, *Unit Rifle Marksmanship Training Guide*, August 1984, is an excellent reference manual on proven methods, and every company should have a copy. (This manual will be revised.) We have also produced two TV tapes—"Teaching Rifle Marksmanship," Part 1 (Number 2E/010-071-1685-B) and Part 2 (Number 2E/010-071-1826-B)—that demonstrate the step-by-step techniques of teaching basic shooting skills. (See *INFANTRY*, March-April 1985, page 7.)

The good shooting skills infantrymen learn for use with their rifles will carry over to other small arms and weapons as well. The best riflemen in a unit should be identified as the automatic weapon gunners, and training on the SAW and the M60 machinegun should receive equal emphasis with the rifle in a unit's marksmanship training program. The best riflemen will probably also be the best Bradley gunners.

In the SAW, we now have the first true squad automatic rifle since the *Browning Automatic Rifle (BAR)* passed out of the inventory. The SAW has a GO/NO GO phase in its qualification exercise as did the BAR. The BAR marksmanship program consisted of two trainfire style exercises. The

first was the transition course in which the firer engaged point targets at ranges of 150 to 500 yards. Area targets were presented to him at 200, 300, and 400 yards. The second exercise was a quick-fire course with targets presented to the firer at ranges of 25 to 330 yards.

Our SAW qualification program has 10-meter firing (using the standard 10-meter M60 machinegun target) as its GO/NO GO phase. The extended range portion of the program calls for bipod firing at point targets at ranges from 100 to 600 meters and at an area target at 800 meters from the firing line. The addition of the 600- and 800-meter targets, a recent change to the SAW qualification program, is consistent with the range of the weapon. The accuracy, range, and penetration of the new SAW ammunition can give every SAW gunner the potential punch of a machinegun team. In fact, in September and October 1984, the Infantry Board conducted a test that confirmed the fact that the M249's accuracy is comparable to that of the M60 machinegun. (See *INFANTRY*, July-August 1985, page 10.) Whether or not we will replace the M60 is still under consideration and discussion.

As we continue our efforts to give the infantryman the best possible equipment, we are evaluating the configuration and use of new optics or day/night sights in our enhanced M16A2 program. If these tests prove that modified rifles with scopes are practical, it will mean a significant increase in the probability of hits by a trained rifleman at extended ranges. These sights will also have the potential for simplifying basic rifle marksmanship training, which would be another step toward giving the infantryman an opportunity to influence the battle at increased ranges.

As for the future, the advanced combat rifle (ACR) will make aiming faster and training easier. We expect that it will also be more reliable and easier to maintain than any weapon we have had to date. Technological improvements are being investigated that will allow the rifleman a much greater probability of hitting his target at all combat ranges. Among them are salvo fire, flechettes, and advanced fire control devices. Also, caseless ammunition in the future may allow us to carry more ammunition with less weight, a training priority with any infantryman.

The demand for weapon proficiency and basic marksmanship skills in our infantrymen is as great today as it has ever been. As trainers, leaders, and commanders, we must continue to give them the best equipment and the best training programs we can to insure their success on the modern battlefield.

Infantry soldiers love to fire their weapons, and they want to be good shots. Given that desire and our training programs, we can make the American rifleman of today as feared by potential enemies as he was in the past.

INFANTRY LETTERS



BRAVO!

Captain Mark D. Rocke should be highly commended for his excellent article "Training and Administration" (INFANTRY, July-August 1985, page 25). For as long as I can remember, and that goes back a long way, the burden of administration on a company commander has had a detrimental effect on the training of his unit.

All sorts of commanders, staff officers, higher headquarters, and so on have imposed administrative requirements on the unit commander, making it virtually impossible for him to devote most of his effort, time, and thought to his most important job—training his company. No other responsibility should take priority.

Captain Rocke's article provides the company commander with efficient, practical, and time-saving techniques that will help him focus his attention on training, training, and more training.

I hope Captain Rocke's recommendations are included in the curricula of our branch schools, or at the least, seriously considered by those in high levels of command.

Bravo! Captain Rocke.

ROYAL REYNOLDS, JR.
BG, USA (Retired)
Arlington, Virginia

BAYONET STANDARD FOR MARINE INFANTRY

I have been following the bayonet debate in the past several issues of your publication. As your readers may be aware, Marines have a long history of training in the "spirit of the bayonet," and still carry it as standard field gear.

No matter what the logical or theoretical arguments against the bayonet may be in this day of high-tech warfare, the bayonet is still needed by the infantry—

Marine or Army. The mission of the Marine infantry is to "locate, close with, and destroy the enemy by fire and maneuver, and to repel the enemy's assault by fire and close combat. . . ." I assume the mission of Army infantry is similar.

While the Army is (or seems to be) training primarily to fight the Warsaw Pact in Europe, it is also giving more thought to low- and mid-intensity conflict. No matter what the intensity of conflict is, infantrymen will still be involved in some very *high*-intensity combat. Whether against highly trained troops or guerrillas, there are still going to be battles, especially at night, in which a bayonet may make a difference.

In the Vietnam war there were several verified instances in which infantry Marines fought off determined assaults to the point of using bayonets and entrenching tools. Army personnel can read of one of those battles in a book by Army Colonel (Retired) Dandridge M. Malone, *Small Unit Leadership: A Commonsense Approach*. I am certain that at some time during the Vietnam war at least one Army unit found itself in a similar situation.

The life of even one infantryman saved in combat may make a difference in the outcome of a skirmish, and it will certainly make a difference to that soldier.

I do not advocate rows of infantrymen charging a hill, bayonets fixed, as in days

of old. But the bayonet is an inexpensive, cost-effective, versatile piece of equipment that should not be neglected. And the aggressive spirit that is taught in bayonet training is an asset to any infantry unit.

WAYNE P. WILCOX
1st Lt., USMC
Lorton, Virginia

THREE KINDS OF INFANTRY

I enjoyed the article by Colonel Huba Wass, de Czege on "Three Kinds of Infantry" in the July-August 1985 issue of INFANTRY (page 11). This article represents the kind of clear and innovative thinking the Army has come to expect from Colonel Wass de Czege. I would like to offer a few comments.

Colonel Wass de Czege is right on target in his description of the missions and nature of armored infantry and regular infantry. We should think of armored infantry (along with the main armor forces, of course) as the primary instrument for exploitation, pursuit, and deep maneuver. The overriding goal of armored infantry is to ensure that the tank forces are protected and that they can keep moving. Although armored infantry may have to fight dismounted, it is most effective when it remains mounted, since the advance of the tank forces is slowed to foot-pace when the armored infantry dismounts.

Squad organization in armored infantry is necessarily different from that of the regular infantry. (For one thing, armored squads are smaller.) Armored infantrymen, I think, should also be armed differently—primarily with sub-machineguns like their tanker cousins. Armored infantry commanders must be offensive minded and must be operationally oriented (instead of tactically).

If the armored infantry is the lance,

POSTAL REGISTRATION

1. **Date of Filing:** 30 September 1985.
2. **Title of Publication:** INFANTRY Magazine.
3. **Frequency of Issue:** Bimonthly.
4. **Location of Known Office of Publication:** U.S. Army Infantry School, ATTN: ATSH-I-V-M, Fort Benning, GA 31905-5593.
5. **Location of the Headquarters of the Publication:** U.S. Army Infantry School, ATTN: ATSH-I-V-M, Fort Benning, GA 31905-5593.
6. **Publisher and Editor:** Albert N. Garland, INFANTRY Magazine, P.O. Box 2005, Fort Benning, GA 31905-0605.

then perhaps it is correct to think of the regular infantry as the mace and shield. Regular infantry is tactically oriented for the most part. It suffers the heaviest blows, is given the most onerous tasks, and is more likely to become involved in positional, attrition-style warfare.

As Colonel Wass de Czege notes, regular infantry supported by tanks creates the penetration and holds the shoulders in order to break the armor formations free into the enemy's rear. Well-suited for holding ground in all but the most difficult terrain, regular infantry absorbs the enemy's main attacks and shields the armor for counterattacks.

Tenacious on the defense, dogged in the offense, regular infantry depends heavily on artillery and tank support. I would add that the vehicles in which the regular infantry moves must be artillery-resistant.

I disagree slightly with Colonel Wass de Czege's description of light infantry. In mid- and high-intensity warfare, the number of light infantry units in theater should be kept small. Light infantry should *never* be used in roles where armored and regular infantry will suffice.

Many of the tasks Colonel Wass de Czege prescribes for light infantry—defending in rugged terrain, freeing other forces to become operational reserves, holding chokepoints—can be performed just as well by regular infantry and should be. Light infantry can hold ground, but such a mission does not take advantage of its best qualities.

Instead, light infantry should be directed to objectives that take advantage of its particular skills in speed, shock, surprise, and violent but limited offensive action, most often against the enemy's flanks and rear. Light infantry hits hard, unexpectedly, then slips away. It is the commander's stiletto. As such, it should be employed only under special conditions.

Colonel Wass de Czege's discussion seems to center on mid- to high-intensity warfare. It is worth noting that armored infantry has little or no utility in low-intensity conflict. Regular and light infantry, conversely, are well-suited for low-intensity conflicts, where they complement each other well.

I would like to suggest that the artillery

reconsider its own organization in light of "Three Kinds of Infantry." Just as we need one infantry organized and trained for exploitation and deep maneuver and another prepared to slug it out dismounted, so we need one artillery type organized and trained to accompany and support armor spearheads and another prepared to support the regular infantry-armor team in the main battle area. These two separate functions require artillery organizations with substantially different capabilities and orientations. But this is the subject of another article.

SCOTT R. McMICHAEL
MAJ, Field Artillery
Combat Studies Institute
Fort Leavenworth, Kansas

TAKES OFFENSE

My unit, the 1st Battalion, 315th Infantry, takes offense at Captain Tony N. Wingo's article in your May-June 1985 issue (p. 42).

Throughout the article, Captain Wingo refers to "RC" units that do not train the middle weekend of their annual training period. It should be pointed out that only National Guard units do not train the middle weekend. Army Reserve units have been training throughout their annual training period for years.

In the case of our battalion, we go directly to the field and return to cantonment at the last possible minute. We train as we intend to fight.

NEAL J. CORMIER
CPT, Infantry, USAR
Bristol, Pennsylvania

SOME DON'T, BUT SOME DO

In response to Captain Wingo's article "Extended FTX for RC Units" (May-June 1985, p. 42), I would like to make a few comments.

He makes some good points about the tendency of RC units to fail to rearm, refuel, and repair forward, and about the typical schedule—7 days on, 2 days off on the middle weekend, then 6 days on. In the 32d Separate Infantry Brigade

(Mechanized), Wisconsin Army National Guard, this calendar of events has not been the case for at least the past four annual training (AT) periods.

During AT 1982, 1983, and 1984, I served as assistant intelligence sergeant for the brigade, and on each of these AT periods we went to the field on Sunday or Monday after arriving and remained tactical for nine or ten days.

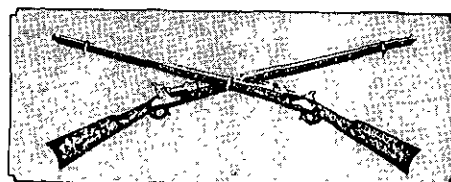
AT 85 brought a new challenge to the troops of the brigade. Most of one mechanized infantry battalion and parts of the other were airlifted to AT by C-130 aircraft to a tactical airstrip on Saturday. They footmarched to a marshalling area and spent Sunday in pre-combat inspections and a move to a tactical assembly area where units were task-organized. From the first Monday through Tuesday of the second week, battalion task force on-task operations were conducted.

All of AT 85, including the move to the AT site with A and B bags and Alice packs, the sustaining operations, the move directly to the field, was a dress rehearsal for ODT-86. The 32d Brigade will be the largest RC unit ever to deploy outside the continental United States in peacetime, complete with equipment, to participate in REFORGER 86.

This brigade takes very seriously its role in the total force. We have enjoyed some excellent relationships over the past decade with the Big Red One and now with the 5th Infantry Division (Mechanized).

The Active Army and National Guard combat units have their own unique, inherent strengths and weaknesses (which could be the subject of an article in INFANTRY), but we all strive for a state of readiness that will hopefully make unnecessary the ultimate comparison of the two.

RONALD D. HOLMES
SFC
Appleton, Wisconsin



INFANTRY NEWS



DURING THE PAST SEVERAL MONTHS we have been receiving requests for information about the various classes taught at the Infantry School—start dates, for example, and end dates for such courses as OCS, ANCOG, IOBC, and IOAC.

We would be happy to furnish, on request, schedule information on particular courses. Please address your request to Editor, INFANTRY, P.O. Box 2005, Fort Benning, GA 31905-0605, or call AUTOVON 835-2350 or commercial 404/545-2350.

THE 29TH INFANTRY REGIMENT/WEAPONS DEPARTMENT, formed at Fort Benning late last year, is responsible for the training and support of the U.S. Army Infantry School (US-AIS), the U.S. Army Infantry Training Center (USAITC); and the U.S. Army School of the Americas (USARSA).

The Regiment/Department was formed from a reorganization of the Weapons, Gunnery, and Maintenance Department of the Infantry School; the USAITC's Infantry Training Group; the 1st Battalion, 29th Infantry; and the 11th Company of The School Brigade. The new organization assumed the combined missions of the original four elements and is now proponent for infantry weapon systems and land navigation.

The Regiment/Department is composed of two battalions. The five companies in each battalion have functionally combined instructors, subject matter experts, and training equipment. Of the ten companies, five have been designated companies/committees of the Weapons Department and are the proponents for specific infantry weapon systems.

Because of their unique missions, the BIFV New Equipment Training Team (NETT) and the Maintenance Management Division (MMD) of the WGMD

have been retained intact

To make sure Army agencies and units in the field know where the functions of

the old WGMD are now being performed at Fort Benning, a directory is provided here. (All numbers are AUTOVON)

REGIMENT/DEPARTMENT HQ	784-6008/6864
BIFV NETT	835-5510/1336
Maintenance Management Division	784-7214/7363
1st Bn, 29th Inf/BIFV-Mortar Division	784-4060/3612
Co A (OSUT BIFV Training)	784-1917/3613
Co B (Mortar Committee)	784-2916/1450
Co C (Land Navigation Committee)	835-4476/7336
Co D (BIFV Committee)	784-1446
2d Bn, 29th Inf/Antiarmor-Small Arms Division	784-6742/6819
Co A (Mech Spt/OSUT Training)	784-6033/6260
Co B (Antiarmor Committee)	784-6474
Co C (Small Arms Committee)	784-6221
Co D (OSUT Tactical Training)	784-6006

Additional information on the Regiment/Department can be obtained from the 29th Infantry Regiment/Weapons Department, ATTN: ATSH-IN-S3, Fort

Benning, GA 31905-5598; AUTOVON 784-6020. (A hotline will be established soon for 24-hour operation using that same number.)

FIELD CIRCULAR 22-5, DRILL AND CEREMONIES, dated September 1985, has been distributed to all company-sized Army units. This field circular supersedes Field Manual 22-5, October 1984.

Individuals and units who want to recommend changes to the FC are asked

to use DA Form 2028, Recommended Changes to Publications and Blank Forms, and to direct them to the address shown in the FC.

The new Field Manual 22-5 is expected to be available during the first quarter of Fiscal Year 1987. (See INFANTRY, May-June 1985, page 6.)

THE DIRECTORATE OF TRAINING AND DOCTRINE has established an ARTEP Mission Training Plan (AMTP) hotline at AUTOVON 835-AMTP (2687) or commercial 404-545-AMTP. Units involved in the AMTP field trials are encouraged to use this hotline to leave messages pertaining

to the Infantry School's prototype AMTP 7-247J-10 (Mechanized Infantry Platoon and Squad) and the supporting drill manual, Field Circular 7-21.

Units not directly involved in the AMTP field trials may also use this line to comment on or ask questions about any other USAIS ARTEP product. The Col-

lective Training Branch, Training Division, DOTD, will return your call within two working days.

Callers who need immediate information on the AMTP or other APTEP products, except for light infantry division (LID) products, should call AUTOVON 835-4848/1317. Comments or questions about LID products that require immediate responses should be addressed to the Light Infantry Task Force at AUTOVON 835-5298/5620.

THE INITIAL CONTRACT for the new 9mm Beretta pistol was awarded recently. This contract is for the first increment of 315,930 weapons, which will replace some of the Army's current .45-caliber and .38-caliber pistols. (See INFANTRY, May-June 1985, page 6.)

THE DIRECTOR OF THE National Infantry Museum has given us the following news items:

The Museum has recovered portions of two World War II U.S. CG4A gliders from a wooded area in rural Douglas County, Georgia. When they were manufactured during the war years, the fragile gliders were delivered from the factories in large wooden packing boxes. Because of an acute shortage of building materials after the war, surplus gliders often were purchased for the wooden boxes; the gliders were usually discarded. These particular gliders had been purchased for that reason by a Douglasville mortician.

A CG4A glider is an extremely rare find today, and the portions collected represent a valuable addition to the Museum's collection. As funds become available, the Museum's staff hopes that at least one of the gliders can be restored for display.

The Museum has been given a large group of military artifacts that belonged to the late General William H. Simpson. The group includes medals and decorations, uniform items, and the flag of the Ninth U.S. Army, which General Simpson commanded in Europe in 1944 and 1945. The Ninth Army participated in some of the heaviest fighting of World War II. General Simpson was a 1924

graduate of the Infantry School.

Articles relating to the military career of the late Major General Philip H. Draper, Jr., have also been given to the Museum, while the family of the late Private Henry Clay Davis, a World War I infantryman from Georgia, has presented a group of his uniform items. The items include breeches, belt, puttees, overseas hat, dog tags, and coat with First Division insignia and overseas and discharge stripes.

Private Davis's uniform had been carefully preserved and had been worn through the years with pride by the former doughboy at patriotic rallies and parades. His daughter, who presented the items, said: "He told us of one battle where, before the fighting started, there were flowers and green grass. After the battle, he said, everywhere you looked there were dead mules and men."

A guidon from Headquarters and Headquarters Company, 513th Parachute Infantry Regiment, which was carried during Operation VARSITY (the jump across the Rhine River in March 1945), has been given to the Museum and placed on display. A World War I pennant of the 359th Infantry Regiment has also been added to the collection.

A Beretta automatic pistol from World War II has been placed in the arms collection. The donor, who served on USS LCI 590, picked up the pistol on the beaches of southern France during the 1944 Allied invasion.

The foreign collection has been expanded by a gift from the French Government of four contemporary French uniforms—Foreign Legion, tanker, alpine, and paratrooper. The Foreign Legion uniform is on display in the Museum's French Gallery.

A cut-away of the Dragon antiarmor system and a large lighted photograph showing the Dragon in operation were recently given to the Museum by the Raytheon Company, manufacturers of the Dragon.

Work on the Museum's new Heraldry Room is under way. The Director expects that each infantry regiment will be represented by its insignia. The room will trace the evolution of U.S. Army insignia from 1775 to the present.

The National Infantry Museum Men-

tors, volunteer tour guides, have completed their first year of service to the Museum and to the public. The Mentors have broadened the Museum's outreach to the public by sharing their warm welcome and their knowledge of the collection with the visitors.

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.

JUNGLE FATIGUES are not permitted in USAREUR. Personnel who are assigned to Europe must make sure that they have several sets of BDUs available for wear immediately upon arrival in Europe.

THE DIRECTORATE OF COMBAT DEVELOPMENTS has furnished the following news items:

- **Infantry Battalion (Ranger).** Now that the Infantry School has developed a TOE for the Infantry (Ranger)/regimental headquarters, the time has come to reorganize the battalions that are organic to the regiment. (See INFANTRY, May-June 1985, page 8.) The reorganization of the infantry battalion (Ranger) will align the battalion with other units organized under the Army of Excellence design criteria.

The reorganized battalion will still consist of a battalion headquarters and headquarters company and three rifle companies, but its overall strength will be slightly less because of the conversion to nine-man rifle squads. The battalion will now be organic to the Ranger regiment and will no longer be a separate unit.

Since this is a living TOE, it will reflect only currently fielded equipment. New items of equipment, scheduled for distribution in the future, will be added to the TOE as incremental change packages.

This means that the unit's TOE and its modified TOE will be more closely aligned.

The draft living TOE for the infantry battalion (Ranger) is scheduled to be reviewed by Headquarters TRADOC this month.

• **Maneuver Control System Battalion Terminal.** The Maneuver Control System (MCS), a full military specification developmental system, has been undergoing testing in USAREUR for more than four years.

The system consists primarily of the Tactical Computer System (TCS) and the smaller Tactical Computer Terminal (TCT). These computers are meant to pass S-3/G-3 information between brigades, divisions, and corps.

Infantry School action officers have been working with the Combined Arms Center and other proponent schools and centers to develop the operational concept for a briefcase-size battalion terminal for use in the MCS. This terminal would increase the timeliness and accuracy of the information flow between a battalion and its higher headquarters.

The new equipment will help reduce voice traffic on FM nets while increasing the amount of operational information passed between headquarters.

• **Combat Bayonet.** The Directorate recently established requirements for the development and fielding of a more practical, utility-type field knife and hand-to-hand combat bayonet. The proposed multi-purpose knife/bayonet would be a considerable improvement over the current single-purpose M7 bayonet.

When used with its scabbard as a wire cutter, for example, it would be capable of cutting barrier material, such as concertina or barbed wire, and could be used for cutting communications and power lines. Or it could be attached to the M16 rifle for its traditional use as a close combat weapon or for use in crowd control during civil disturbances. A sharpening device will be either part of the scabbard or included as a component item.

The initial issue of the new bayonet is expected to go to combat soldiers as a replacement for the current bayonet and scabbard, possibly as early as the first quarter of Fiscal Year 1987.

• **Enhanced M16A2 Rifle.** The Infan-

try School is coordinating the technology and directing the development of an "enhanced" M16A2 rifle. (See INFANTRY, July-August 1985, page 10.) Significant increases in target detection, target acquisition, and target hits at extended ranges and also a capability for quick conversion for use during night fighting will be among the rifle's features.

At the present time, the School foresees no personnel effects and only minor logistical changes, but it does recognize the fact that training concepts and strategies could be greatly affected.

Preliminary testing of prototype developmental hardware is scheduled to begin at Fort Benning in the second quarter of Fiscal Year 1987.

• **HMMWV.** The high mobility multi-purpose wheeled vehicle (HMMWV) is found in increasing numbers in the Army. In September 1985 the utility variant of the HMMWV began replacing the M151 jeep, the M880 tactical pickup truck, and the M561 Gamma Goat in combat and combat service support roles. HMMWV variants will also replace TOW weapon carriers, armament vehicles, communication vehicles, and ambulance systems as the fielding of the new vehicle continues. (See INFANTRY, September-October 1983, page 5.)

The HMMWV is enjoying a high degree of soldier acceptance because of its 6.2-liter V8 diesel engine, automatic transmission, power assisted steering, and four-wheel independent suspension system. These features provide the soldier with the best handling and ride characteristics ever associated with a tactical vehicle.

• **Improved Sock and Cooling System.** Requirements for a new sock and for a soldier microclimate cooling system were presented by the Infantry School at the Seventh Clothing Advisory Group meeting. These items are scheduled for presentation at the next meeting of the Army Clothing and Equipment Board for final approval of the development concept.

The improved sock, made of state-of-the-art materials, is intended to replace the current olive green wool sock as a companion to the new combat boot.

The microclimate cooling system for

the individual soldier will be a self-contained system weighing no more than 15 pounds. When worn as part of an integrated NBC ensemble, the system will provide a means of dissipating the body heat generated by physical exertion or stress in ambient temperatures up to 120 degrees Fahrenheit. It will provide a soldier with six hours of independent operation without being recharged or refueled.

THE PRESIDENT OF THE U.S. ARMY Infantry Board furnished the following news item:

• **Individual Drinking Water Flavors.** In combat or during extended field exercises soldiers sometimes have to purify their drinking water with iodine or chlorine tablets. Because of the taste of the treated water, some soldiers allow themselves to become dehydrated rather than drink it. Other soldiers, trying to make the water more palatable, put commercial water flavorings into this halogenated water. Unfortunately, ingredients in some of these commercial mixes negate the purifying effects of the disinfectants.

To encourage individual soldiers to voluntarily drink more fluids, Natick Research and Development Center (NRDC) developed a water flavoring that was designed to be better tasting and to be microbiologically compatible with halogenated water. The Infantry Board conducted a customer test of this flavoring for NRDC in September 1983. (See INFANTRY, January-February 1984, page 5.)

Two series of IDWF are being developed, one for hot, the other for cold regions. Three to six flavors will be developed to provide a variety of choices to meet individual preferences. The flavors and degrees of sweetness or intensity will be designed to encourage voluntary drinking. The flavorings are expected to be individual demand items available through unit supply channels. Nine individually wrapped packets of IDWF, to be used on the basis of one to a one-quart canteen, would be provided as a one-day supply in a waterproof package weighing less than eight ounces and measuring less than ten cubic inches.

The Infantry Board conducted an Operational Test I of the IDWF at Fort Benning between 22 July and 23 August 1985. More than 300 one-station-unit-training soldiers took part in the test while undergoing infantry training in a field environment. The daily high temperatures reached at least 85 degrees Fahrenheit.

Water was taken from a local creek, processed, halogenated (iodine or chlorine tablets), and furnished in one-quart canteens at the beginning of each day to all test soldiers. The canteens were replenished as necessary. The uncooled water varied from 71 degrees to 98 degrees Fahrenheit. Half of the test soldiers were given a one-day supply of IDWF; the rest used halogenated water only.

The test measured changes in the soldiers' levels of dehydration based on mean daily weight loss for the two groups of soldiers. Data was collected on the soldiers' weight, fluid consumption, and overall acceptance of the flavorings.

The Army's Quartermaster School will use the test results to assist in the independent evaluation of the IDWF for a validation in-process review.

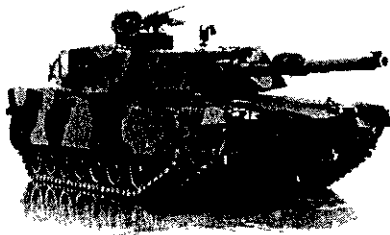
THE DESERT PHASE of the Ranger Course was recently moved from the desert of New Mexico near Fort Bliss to Dugway Proving Ground in Utah, which offers better desert terrain. The training, otherwise, is unchanged.

After the mountain phase, which is conducted in North Georgia, the Ranger students return to Fort Benning for staging out of Lawson Army Air Field and then fly to Utah. There, the airborne-qualified students execute a mass tactical jump into the desert carrying all the equipment they will need for the next six days. (For details, see "Ranger Desert Phase," by Captain William D. Phillips, *INFANTRY*, March-April 1984, page 10.)

After the desert phase, the students prepare to fly to Florida where they conduct an airborne assault into Eglin Air Force Base and begin their final days of training.

THE FIRST OF A NEW GENERATION of Abrams M1 battle tanks was turned over recently to the Army. Known as the M1A1, the tank has greater firepower, improved computerized fire control, and better crew protection.

The M1A1 has more armor, a 120mm gun in place of the 105mm gun found on the M1 tanks, and an air cycle system to protect the four-man crew from nuclear,



biological, and chemical agents. Mechanical improvements have also been made.

With a 1,500-horsepower turbine engine, the M1A1 can cruise at more than 40 miles per hour on hard surface roads and 30 miles per hour cross country. It can reach a speed of 20 miles per hour in less than seven seconds. It can travel twice the distance of other tanks before needing an engine overhaul, and its engine and transmission can be replaced in less than an hour.

The tank's thermal imaging and laser sighting systems enable the gunner to fire accurately through dense fog, smoke, or dust while the tank is traveling at combat speeds.

THE NIGHT VISION VIEWER, AN/VVS-2, should be tested before use, the Army's Communications-Electronics Command warns, when the night turns pitch black, stormy, or a combination of the two.

The viewer does not make its own light. It only increases the low-level light available on a normal night. Cloudy nights with no moon or stars will not produce enough low-level light for safe operation, and rain and lightning will distort the already weak image.

If the night is extremely dark or the weather conditions poor, the viewer should be adjusted to its maximum res-

olution. If a driver's view is still limited or distorted, he should stop his vehicle and get some guidance.

The AN/VVS-2 also is a delicate instrument that requires lots of tender care. For example, the viewer should never be exposed to direct sunlight, and the viewer should never be used when lightning is splitting the sky — powerful light can blind the driver. When the viewer is not being used, its head assembly should be kept covered, whether it is stored or mounted. The cover protects the viewer from sunlight. When the viewer is not needed, it should be stored, but first it should be disconnected from its power source and its batteries should be removed to prevent corrosion. Finally, the viewer should never be plugged in when the batteries are in it, because the batteries will explode.

The storage box for the viewer is in a different place in different vehicles. The Bradley doesn't have a storage box as such, so the viewer must be firmly strapped to a storage pad to the left of the driver.

THE ARMY'S NEW black leather combat boots will be available in military clothing sales stores in June 1986 and will be issued to new soldiers beginning in January 1986. (See *INFANTRY*, September-October 1984, page 6.)

The boots feature padding around the top, speed lacing, improved traction and support, and a replaceable heel. They are designed to be more comfortable, durable, and resistant to water and mildew than the Army's current combat boots.

The new boots will be available in 133 sizes, 22 more than the current boots.

THE U.S. ARMY REGISTER will no longer be sent automatically to organizations that were on the special distribution list. The Register is now designated DA Pamphlet 600-100, and organizations must request it from the Baltimore Publications Center using DA Form 12-9c.

FORUM & FEATURES



The Moral Dimension: The Thoughts of Ardant du Picq

COLONEL RICHARD F. TIMMONS

The first military analyst to pay close attention to human emotions and the "moral effect" they have on warfare was the 19th century French army officer, Charles Ardant du Picq. He was colonel of the 10th Regiment of the Line in 1870 when he was mortally wounded and died soon after the beginning of the Franco-Prussian War. Despite his wide popularity during and after World War I, his name is now hardly recognized by American soldiers, and his writings, therefore, are too often ignored. Yet the moral dimension in warfare is a subject of continuing importance.

Although only a colonel at the time of his death, Ardant du Picq has come to be regarded as a unique military analyst who spent a lifetime trying to understand why men react as they do under conditions of close combat. His intent, through studying ancient and modern battle at the individual point of confrontation, was to establish a doctrinal foundation upon which an army could base its tactics, strategy, weaponry, and plans for the successful application of military force. In this respect he can be closely compared to American Brigadier General S.L.A. Marshall, whose group interview methods immediately following battles during World War II, Korea, and Vietnam sought to discover exactly

what Ardant du Picq pursued. Although separated by a century, these two men drew identical conclusions on many of the same points.

Ardant du Picq was born on 5 November 1821 at Perigueux, France, and at the age of 21 entered the French Military Academy at Saint-Cyr. He graduated two years later and was commissioned a sub-lieutenant in the 67th Regiment of the Line. For the next 26 years he served almost continuously in infantry battalions and regiments posted both in France and overseas.

His first combat experience came with the 9th Battalion of Foot Chasseurs during the Crimean War; he was captured in late 1855 while leading the French column in the final assault on the bastion of Sebastopol. Released in 1856, Ardant du Picq spent the next ten years campaigning in Syria, Algeria, Africa, and Sardinia, for which he received recognition for bravery from France and her allies. In February 1869 he took command of the 10th Regiment of Infantry of the Line, which was committed to combat against the Germans on 22 July 1870. Within a month, Colonel Ardant du Picq was mortally wounded by artillery fire from a German cavalry reconnaissance patrol.

Although his adult life was devoted to

studying individual and small unit combat, Ardant du Picq published very little. In fact, his only in-depth written effort, *Battle Studies*, is actually a compendium consisting of a previously published pamphlet, *Ancient Battle*, printed in 1868; memoirs and several written studies completed in 1865; a well-organized collection of notes on the subject of modern battle; and a final project entitled *Study on Combat*, which was published a decade after his death.

Interestingly enough, it may be that Ardant du Picq was the first military analyst to use questionnaires in trying to gather information on individual experiences. He sent out "circulars" to various officers who had undergone the rigors of combat and asked for their thoughts on a wide range of questions. (These form the basis of *Study on Combat*.)

As expressed in his writings, Ardant du Picq's interest was in the soldier's heart and mind, which he considered the dominant aspect of combat. "In all matters that pertain to an army, organization, discipline, and tactics," he said, "the human heart in the supreme moment of battle is the basic factor." He strongly believed that the psychology of soldiering had to be understood first, and from this could be developed "a method

of combat, sanely thought out in advance," that would permit "prescribed tactics conforming to the national character, which may serve to guide an ordinary officer without requiring him to have exceptional ability." In other words, from an understanding of man in combat, the principles of battle would become evident and the avenues to victory in war more apparent to the educated officer.

What makes Ardant du Picq so different from other analysts is that he was willing to venture into a realm that had no scientific basis in his attempt to explain the mechanics of human emotions and their overwhelming importance to the results of battle. For him, "material dynamics" and mathematics were of no consequence, despite what the then popular Henri Jomini had to say.

Instinctively, Ardant du Picq's predecessors had felt the things he sought to explain, and they had sometimes provided faint glimpses from experience, but their feelings and glimpses were unsupported by explanation: the often-quoted Napoleonic observation, for example, that in war "the moral element is to all others as three to one"; or Marshal de Saxe's statement that "the human heart is the starting point in all matters pertaining to war"; or Frederick the Great's comment that "three men behind the enemy are worth more than fifty in front of him, for moral effect."

Intuitively, soldiers know these observations to be correct, but only a few can explain their underlying meaning and the crucial importance they make on the field of battle. Ardant du Picq worked to analyze the cause and effect of human nature and, as a consequence, became one of the most lucid writers on the psychology of the soldier in battle.

In his works he presents a chain-like logic to explain the feelings and emotions men experience in battle and the advantages of understanding the human aspect. The starting point for this logic is a belief in the unchanging nature of mankind: Human nature today is fundamentally the way it has been for thousands of years and will be for thousands more. That being so, he reasons, the key to understanding past conflict is the same as for understanding present and future

battles; and that key is man—the only identifiable constant throughout the entire changing spectrum of warfare. Because man fights the battles and exists as the only constant in war, understanding the emotions and feelings of the soldier can explain how and why battles are won and lost.

From his studies of ancient and modern battle, and from personal experience, Ardant du Picq concludes that both winning and losing armies harbor certain traits and attitudes that can be either fostered or changed by leaders. It follows that if the mind can be prepared and conditioned for combat, the results can become more predictable, and an educated judgement is then possible in terms of battlefield success. The next step is to determine what factors or conditioners have influenced the minds of soldiers throughout history and have caused armies to succeed or fail.

CHARACTERISTICS

Ardant du Picq contends that victorious armies and the men in them have certain characteristics in common:

- Unity.
- Mutual support.
- Cohesion.
- Determination/resolution.
- Discipline.
- Trust.
- Perception.
- Tactics appropriate to the national character.

In combination, these characteristics produce the moral force of an army. Each one represents a feeling or an attitude that each soldier in the organization holds and that the group shares.

If these factors are properly developed within an army and are directed toward an objective in combat, they have a powerful moral effect on the enemy. When this is coordinated with the physical or material aspects of the army (weapons, number of troops, defenses, logistics, and the like), it begins a chain reaction in the minds of the enemy soldiers that leads to fear, then to terror, and ultimately to flight and destruction.

Although his thoughts are not expressed this way, Ardant du Picq's in-

tent seems to be to explain how to disrupt and then shatter the enemy's perception of his own situation. Each soldier on the battlefield, therefore, creates within himself (or each unit within itself) a "moral contract" of how things are now and of what they should be upon confronting the enemy. Everything one opponent does to another must focus on breaking the "moral contract" in the soldier's mind (or in the consciousness of the unit). This, of course, is why surprise, mobility, shock, envelopment, deep penetration, firepower, and speed are so crucial. Unfortunately, these tactics are often misapplied by those who don't really understand what is to be achieved from their use.

Ardant du Picq knew that moral ascendancy comes from the "heart" and represents feelings that spring from the perceptions of those in the ranks. Without it, the materiel of an army has little value, for the will and resolution to use it is lacking. As a consequence, a preponderance of men, weapons, supplies, defenses, and industry will never make up for a lack of moral force.

By explaining the psychology of men in battle, Ardant du Picq has made a real contribution to us—he has conveyed the meaning and importance of the "moral effect." I see no room to criticize his reasoning. It not only makes sense, it has the weight of military history behind it.

The nature of man will dominate the battlefield as long as conventional weapons prevail. Ardant du Picq's study of this human dimension of war is timeless in its application and, in a profession mesmerized by technology, is the essential ingredient battle leaders must ceaselessly study and strive to understand.



Colonel Richard Timmons, a 1984 graduate of the Army War College, is now G-3/DPTM of 1 Corps and Fort Lewis. He previously served in the 101st Airborne Division (Air Assault) as a battalion commander and as a task force commander in the Sinai in Egypt.

Managing Functional Areas

MAJOR GARY W. ANDERSON, United States Marine Corps

A functional area manager at battalion level has a difficult job. He has to satisfy all the people above him who have anything to do with his functional area, and at the same time supervise all those below him who have the same functional area as an additional duty.

The problem with additional duties is that they are just that—additional. A harassed lieutenant or captain may have at least four or five additional duties. The sad fact is that although few aspiring young officers are relieved of duty in peacetime for tactical incompetence, many run afoul of the system because they cannot handle the intricacies of postal matters or electronic warfare.

To all of you who are functional area managers, therefore, I offer the following principles—principles that have come from my experience as a functional area manager and a supervisor of such managers. My observations are presented from a lieutenant's point of view, for this is where these battles are either won or lost.

The first thing you should consider on assuming an additional duty is that somewhere in the chain of command there is an officer who has that job as his primary duty and who spends his entire time worrying about that job. This means, of course, that you as a functional area manager—albeit as an additional duty—must be prepared to make that additional duty the most important thing you do for a stipulated time each week.

Accordingly, you are well advised to establish an early relationship with the folks up the line who ultimately will do the inspecting of that area in your unit. Your interest and concern will be your best assets in establishing your credentials.

Find out all you can about your functional area. Ask for a courtesy inspection as soon as you take over. This does two things. First, it makes your immediate supervisors in that particular functional chain a part of any problem you may have. Second, and most important, it gives you a place from which to start.

If you find your area is in good shape, you can start a program to keep it that way. But if your initial inspection is unfavorable, let your boss know quickly. Although you can't be blamed for the problem, you will be held responsible for what comes next. If you need help, ask the commander or XO for it now; on the other side of all this, make sure your report comes complete with your plan to remedy the situation. No one, particularly a leader, likes to hear unvarnished bad news; your job is to make the news better.

CHECK SOPs

Next, check on the way your functional area is handled in your battalion's SOP. (Every functional area has orders and SOPs that pertain to it.) It is amazing how many battalions come to grief because they did not conform to their own SOPs. This is usually caused by pure laziness. Writing and updating an SOP is a pain in the neck, and the easy way out is to take an SOP from the next higher unit and change the names to match your unit. This is easy — until you find that you have directed yourself to maintain equipment and conduct training that your unit doesn't rate or need. It gets worse when you are gigged on an inspection for failing to comply with your own directive. So be sure to review your unit orders and

SOPs. If you can't conform to your own directives, change them to reflect reality, if directives from higher headquarters will allow it.

Remember, too, that sound documentation is your only way of demonstrating that you are conducting the classes, briefings, or whatever is needed to keep your unit current in its skills as they relate to your functional area. And don't forget to document concurrent training that relates to your area — documenting the amount of time your unit spends exercising in NBC gear, for example, will help show a pattern of attention to such training. (Needless to say, everyone concerned should keep a copy of all such documents in his files.)

As a battalion level functional area manager, you may feel that you are at the end of the world. If so, imagine what life is like for your company level subordinate managers. If a particular functional area is a secondary duty for you, it may rank third for them. This can present a real leadership problem for you, because in supervising them you must compete with a number of other demands, and you cannot monopolize their time to the detriment of their primary duties. Your supervisory activity, then, is best accomplished by a combination of the carrot and stick approaches. Praise these officers or NCOs in front of their company commanders when they do well. Conversely, give them an opportunity to make things right before you report them for the things they don't do well.

Above all, remember that your area probably is not the only thing that is placing a demand on their time; in fact, it may be a fairly minor one. It will become major only if something goes radically

...rong, and your job is to see to it that nothing does go that wrong. In the world of functional area management, delegating isn't necessarily a virtue.

Make certain that you know — or learn — your business. If you had to take over your additional duty without having any experience with it, rectify the situation as soon as possible. Attend a school if you can. If you can't, take a correspondence course. If all else fails, learn fast on the job. As a minimum, know how to do preventive maintenance, teach relevant classes, and use equipment.

Develop a plan for attaining unit objectives within your area, and keep some milestones. For instance, two weeks before a major inspection or tactical exercise is not the time to begin squaring away your area. Everyone should know what the milestones are; your commander, your senior functional manager, and your subordinates should all be helping you move in that direction. If you fall behind, ask for help. Make everyone part of the problem; then they will have to become part of the solution.

Now we come to the payoff — the inspection. If you haven't followed the principles outlined thus far and your inspection is tomorrow, this part won't help

you. On the other hand, if you have a good area, this will help you present it in the best possible light.

Many good units get marginal inspection grades because they organize poorly for inspections. You'll get good grades if you apply these principles:

- Find a quiet area in which to lay out your presentation. Don't end up flailing around in your own office with the telephone and other distractions. Lay on a conference room or classroom well in advance.

- Prepare the presentation. Lay it out in exhibit format using the inspection checklist. (Almost all inspections have one.) And have it all together. Don't look disorganized by running around during the inspection looking for odd pieces of documentation.

- Never make the same mistake twice. Review all previous inspection reports—you can be sure the inspector has. Make sure you have corrected any previous problems. If you haven't completely solved them, document what you have been doing toward that goal.

- Don't argue with the inspector. Any good inspector will look closely at what you've been doing, and will give you the courtesy of a thorough inspection. If he

nitpicks, you are probably in good shape. This means he is having to work hard to find problems. *But if he finds problems* when he looks at your first exhibit, you're in big trouble. Don't make it worse by antagonizing him.

None of these inspection tips will make an unsatisfactory unit satisfactory, but they can help you put the final touches on weeks or months of hard work. Your value to your unit in combat may revolve around your tactical proficiency, but you'll never get to that point if you are relieved in peacetime for failing a brigade career-planning inspection. Success as a functional area manager will help you develop a reputation for competence that will serve you well throughout your career.



Major Gary W. Anderson, a U.S. Marine Corps infantryman, has served as a platoon commander, company commander, and battalion staff officer. He holds a master's degree from Pepperdine University and has written numerous articles for publication in various military journals.

Your First Assignment

MAJOR ERIC E. HOLDEMAN

For most officers, their first assignment is a time when their learning curve is at its peak—a time when they formulate their basic conceptions of what the Army is or is not; how it operates; and how they operate within it.

That first assignment is indeed different from all the other assignments an officer can expect to have during his military career. Never again will he experience the frustrations and successes that come from being a newly commis-

sioned officer. And as the initial weeks and months grow into years, his "military personality" will develop.

Recognizing the fact that a great deal of literature is already available to guide young officers who are willing to read it, the ideas and thoughts set forth in this article represent only a few of the guideposts some of my acquaintances and I have found to be particularly helpful. We hope that the young infantry officers who are now facing their first assignments will

find them helpful, too. I therefore address the following advice directly to them.

As a leader, your mission, of course, is to lead soldiers. But the first principle of leadership is knowing how to follow. Giving orders is easy; taking them can be difficult. The example you set for your subordinates in executing the directives given to you can be an unspoken testimony to the esteem in which you hold the Army as a way of life. Your attitude

toward your duties and their performance will be reflected by the members of your platoon. If you become moody and disenchanted with the tasks at hand, these feelings will be conveyed to those who must follow your orders. Half-hearted orders will be executed in a half-hearted manner.

Physical fitness and maintaining personal conditioning are much more important than most lieutenants realize. One easy way to gain your men's attention is to do either poorly or extremely well on a PT test. The officer who falls out on a morning run will also find his other leadership tasks harder to perform. At your level of leadership, you must strive to learn everything your subordinates know and more. Their respect will follow.

INTEGRITY

The one leadership trait that can help bond your men to you is unquestioned integrity. It is something we all start with and something only you can take away from yourself.

Motivating your subordinates is the key to your success. Every person can be motivated to do things he may not want to do, although the tactics and techniques may vary considerably. But whether you use stick or carrot, your goal is to keep the motivation performance oriented.

One last thing on leadership—we all want to be liked. Many a new lieutenant has had to face the fact early in his first assignment that respect for his decisions and for him as a leader is more important than being liked. If you set high standards for your men and insist on performance, success will follow, as will the respect of your men.

When you walk into your first unit, you must start evaluating the people you will be working with, and that means your NCOs. You lead your platoon, but you do it through your NCOs, and your primary job is to lead them. Don't try to become the super squad leader to every soldier. The NCOs will be glad to show you their technical expertise, and as they teach you, you will be able to evaluate what they are made of and in turn to train them in the areas you find deficient.

Don't fail to turn to your platoon sergeant or First Sergeant for advice or counsel. Their practical experience and know-how in dealing with everyday problems can be of great assistance. But remember that you are still the leader, and you must make the decisions.

Among your specific duties, there are at least two that you may need to be worried about—property accountability and safety.

PROPERTY ACCOUNTABILITY

Property accountability will be an important part of your weekly activities. It's one of those subjects that may have been glossed over in your schooling, but one that can come back to haunt you later if you don't pay attention to it.

A good inventory cannot be over-emphasized. Every supply room has the publications you need to read to become an expert on supply accountability. Do thorough inventories, and if you don't see an item, don't sign for it. You must have a continuing program of inventories and subsequent supply actions if you want to keep from paying out of your own pocket.

SAFETY

You pay in another way if you neglect safety, because you are responsible for the safety of your men—on and off duty. This is a fact that many young officers find hard to accept. You may ask yourself, "How can I influence what a sergeant does when he's off duty?" You can do it by preaching "Safety First." Accidents rarely "just happen." They are caused by an inattentive chain of command. The soldiers who are killed or maimed by the hundreds each year suffer, for the most part, needlessly.

Find out the safe way to do things, from changing tires to backing vehicles. (The safe way isn't always the quickest.) When you move on to your next assignment and look back on your tour and no one is missing, this will be your reward—and you'll know you did a good job.

Something else that goes with you when you leave that first tour is your

reputation. Because the Army is relatively small, and in many ways a closed society, you can expect to meet acquaintances and friends again and again throughout your career. The reputation you build, therefore, is no small matter, and it begins with your first assignment.

First impressions are lasting. When you walk in the door of your new unit, you make a statement, without saying a word, about who you are and what you think of the Army. Your appearance, uniform, and personal grooming are the first indications of what type of officer you will be, and military courtesy is another indicator of who you are and what can be expected of you.

Company commanders usually throw their lieutenants into the breach to find out what type of officers they are. So, sooner or later as a new officer you will be given a project or task, large or small, that will give you your chance to shine.

And you will want to do well, because there is an underground pipeline of information between officers about other officers and their ability to perform. If you should fail in your first effort, it will take many more successes to overcome that failure. If you have a number of successes before your first failure, though, that failure will be seen as only a minor aberration in your otherwise sterling performance.

While striving to do well in your first assignment, though, you should not neglect your family.

If you aren't married now there is a good chance that you will be. When you marry you accept another commission as important as your military one, and the balancing act between a military career and a family is not an easy one. Priorities change and your wife can become disenchanted with Army life quicker than you can say "short tour to Korea." If you unknowingly teach her to dislike the Army, you may face a "me or the Army" decision later in your career.

There are some things you can do, of course, to make the Army a good experience for all. First, if you express positive feelings about the Army and your experiences, your wife will be much less likely to express its negative aspects. Allow your family to participate in your career by talking over the next assign-

ment with them and then taking their opinions and feelings into consideration. Keep your wife informed about your activities at work and any upcoming training events. This will make her feel like a part of your military life and not separate from it.

Participating in the social life of the Army brings you into contact with other military couples, and these friendships can help to sustain not only comrades in arms but their spouses, too.

The Army is a profession, not a job.

Do not expect to receive more than you give. Normally, you'll receive less. The pressure to succeed and continue advancing through the ranks will increase with your years of experience. No amount of money or benefits can adequately pay for the hours, the separations, the hardships that come with Army life. If after a few years of service you decide the Army is not for you, then finish your service honorably and move on to something you enjoy more. If you decide to stay, be the best officer you know how to be.



Major Eric E. Holdeman is assigned to Army Readiness and Mobilization Region V at Fort Sheridan. His first assignment after being commissioned from Officer Candidate School in 1972 was in the 2d Armored Division at Fort Hood. He had an earlier article published in *INFANTRY*, "Everything You Wanted to Know About Ranges" (September-October 1979).

HHC Executive Officer

CAPTAIN SAMUEL J. PADGETT, JR.

The executive officer (XO) of an infantry battalion headquarters company has a variety of duties and responsibilities that an officer newly assigned to the job may not fully understand. The headquarters XO is assigned many additional duties as well, depending upon the mission and organization of his particular unit.

An XO's first step in understanding his job should be to understand his unit's particular organization. In a regular infantry division, for example, an infantry headquarters company usually consists of a battalion headquarters section, which is made up of the S-1, S-2, S-3, and S-4 personnel, and a company headquarters section, which is made up of the company commander, the XO, the first sergeant, and the supply sergeant. In addition, there is a communications platoon, a maintenance platoon, a medical platoon, and a support platoon (which includes the mess team and the transportation section.)

Because of the diverse organization of the company, its commander must call on his XO to monitor several important aspects of the unit's daily operation—usually education, maintenance, crime

prevention, and physical security—and any other missions that may suddenly become crucial to the company's mission.

As education officer, the XO closely monitors the education level of the soldiers in the company. He is the link that connects the company to the education center for such classes as the Basic Skills Education Program (BSEP) and the Advanced Skills Education Program (ASEP).

He works with the sections, the platoons, and the first sergeant to identify the soldiers who need this kind of training. He keeps an up-to-date education bulletin board and talks to each soldier about his personal educational goals. Furthermore, he keeps all personnel informed of new classes, programs, and educational opportunities. (It takes a bright, intelligent soldier to operate and maintain the Army's new and sophisticated machinery.)

As maintenance officer, the XO represents the commander in the motor pool. This is a daily function and one that requires tedious attention to detail. Poor maintenance can instantly decrease unit readiness, especially if the unit has ve-

hicles that are older than the drivers, and the Army's new hardware requires its own kind of special care and attention.

The headquarters XO's primary function in this area is to see that all vehicles are operational. He must know the status of each and must see that all vehicles receive their scheduled maintenance, even when their drivers, for one reason or another, are not present for duty.

This means that he must check each vehicle regularly and see that all deadline deficiencies are corrected immediately. All priority (0-3) parts should be ordered the same day the need for them is determined, and regular (0-6) parts should be ordered as soon as possible after the priority parts. And he must check the deferred maintenance board to see that all items have been ordered and the requisitions properly recorded.

Each day, he should see that the parts bin is cleared out, and that the parts are put on the equipment within 24 hours. Vehicles that are not operational but awaiting parts must be repaired the same day those parts arrive.

Each day, the maintenance officer (XO) must inspect the vehicle line for police, leftover parts, and vehicle line-

up. (A well policed and straight line-up of vehicles reflects the discipline of a unit, and a mobile unit can remain mobile only if it has a successful maintenance program.)

Crime prevention and physical security are also high priority programs, because fraud, waste, and outright negligence have led too often in the past to lost and stolen equipment. The XO must therefore initiate effective programs that are aimed at safeguarding all U.S. Army hardware. This includes strict compliance with AR 190-31, Department of the Army Crime Prevention Program; AR 190-13, The Army Physical Security Program; and FM 19-30, The Physical Security Manual.

The XO's goal should be absolute security. He should see that all of the necessary forms are filled out properly so that weapons and ammunition are not lost or misplaced. At the same time, an emphasis on locking and securing wall lockers and rooms can save the Army and its individual soldiers money, manpower, and plain grief.

As part of his crime prevention effort, the XO must inspect the company areas at least once a month. A casual walk through the troops' rooms during a week-day, for example, can yield unexpected results. Troops lounging in their rooms often take shortcuts by leaving their rooms and valuables unsecured. By making on-the-spot corrections and by informing platoon leaders and platoon sergeants of any fraudulent violations, the XO can prevent potential problems.

And the XO must see that crime prevention and physical security are emphasized all the time—not just when a general inspection is coming up. Informative classes and posters can help maintain this emphasis.

In addition to these regular duties and responsibilities, a headquarters XO usually must also juggle such extra duties as tax assistance officer, unit fund officer, awards officer, indebtedness officer, unit supply officer, tool control officer, and field sanitation officer. His job is a difficult one indeed, for a failure in any one of these areas can result in low

morale and an ineffective organization. An XO must therefore display maturity and experience if he is to anticipate possible problems and prepare the unit to solve them.

In summary, the headquarters XO is the commander's inspector and his personal representative in all areas of tactical operations and daily garrison activities. He is also an advisor to the commander on many areas that in the headquarters section are normally divided among the staff officers. If he neglects one of these areas, his unit's combat readiness, to some extent, will be impaired.



Captain Samuel J. Padgett, Jr., served as executive officer of a headquarters and headquarters company in the 25th Infantry Division in Hawaii. He was commissioned in 1981 from the Officer Candidate School and is now attending the Infantry Officer Advanced Course.

Mortaring

Can We Now Move Forward?

WARRANT OFFICER-1 KEITH F. HOYLE, British Army

Before we go too far down the rocky road of no return, our current mortaring systems need further review. While already in the throes of a major change, we need to adopt new procedures and new technology, and at the same time allow old and impractical procedures to fall by the wayside.

For example, the laser range finder and the thermal imager will greatly improve the fire support team's ability, and our gun line procedures must be ready and able to accept this change. But first, the

sentiment that surrounds the 4.2-inch mortar must be put to one side to allow room for newer and better systems that will have a more positive effect on the modern battlefield. Frankly, the 4.2-inch mortar provides complications that we can do without.

The weight of the whole system is impractical and unmaneuverable, and it does not lend itself to the fast moving and rapidly changing battlefield of the 1990s. It is essential that a weapon system be movable, either dismantled into easily

carried parts or placed on a carriage. Each 4.2-inch round weighs 29 pounds, which is three times as much as an 81mm round, but it does not produce three times the lethality. For each 4.2-inch round we bring forward, we can bring up three 81mm rounds.

Another problem is that the rifled barrel on the 4.2-inch mortar wears faster than a smooth barrel, and an extra fire direction center procedure must be employed to "aim off" a round for drift.

When comparing systems, of course,

we need to beware of putting too much emphasis on maximum range. A deployed mortar platoon needs a large area in which to operate, camouflage its vehicles, and disperse its ammunition. If the mortar has a very long range, it is likely to be deployed farther to the rear than current doctrine calls for. More than likely, it will then be deployed in an area that is out of the battalion commander's control. If it begins to sound like an artillery piece, that may be its future—out of the battalion commander's control!

SIGHTS

By far the biggest problem to be overcome at the moment is the sighting system. Should all of our mortars — 60mm, 81mm, 120mm — have the same sight? Quite clearly the M64 sight, currently on the M224 (60mm) and planned for the M252 (81mm), will be too delicate for the 120mm. It may also be unsuitable for the M252, which also produces quite a traumatic shock to the sight. Whichever is chosen, all the sights currently in use need three modifications to speed up mortar deployment and to simplify plotting procedures.

First, the sight scale rings, now numbered progressively in a counter-clockwise direction, should be numbered in a clockwise direction in the same way as the aiming circle. This very simple modification would allow the complicated and unnecessary use of deflections to fade into obscurity and would provide the following benefits:

- Plotting procedures would be much simpler with only one set of scales to be read.

- Once the aiming posts had been established, each sight could be slipped to read the mounting azimuth. This means that the sight would read the grid azimuth along which the barrel was pointing.

- Azimuths from the plotter would be applied directly to the sight.

- On a mortar firing toward the east, the sight would read 1600 mils. This would make orientation and safety supervision much simpler.

The second modification needed on the sight is to the telescope. Currently, the

elbow can be set in only two positions. This means that the gunner has to either stand or crouch down when laying the mortar; no position in between will do. If the cross-hair were engraved on the telescope and not on the elbow, the eyepiece could be rotated without moving the cross-hair. This would save valuable seconds, as the gunner would not need to "set" the eyepiece but could position it for himself.

Finally, the sight needs a simple periscope attachment, which would provide several advantages:

- It would prevent sight blockage.
- The aiming circle would not have to be put to the left front of the platoon but could be positioned anywhere.
- The gunner would have no problem seeing the posts when firing from a mortar pit.
- The posts would not need to be offset 400 mils to the left as they are in the current procedure.

Our plotting procedures also need to be reviewed, especially as the mortar ballistic computer (MBC) is about to be issued. Any simplification to plotting procedures must be a time and money saving bonus. (Currently, students at the Infantry Mortar Platoon Course spend almost 40 percent of the course learning plotting procedures. When the MBC is issued, two more weeks will be added to the course.)

Procedures can be simplified as follows:

- There should not be any differences between the charts — the surveyed chart should not be used. It is unrealistic to expect to have surveyed points on a constantly changing and fast moving battlefield.

- The scale should be fixed at 1:25,000. A larger scale, 1:12,500, is unnecessary, because mortar accuracy should not be desired down to ten meters. (Although we would expect to hit a trench or point target with mortar fire, we cannot do it aiming at the point and firing one round. Because of the mortar's characteristics—the effects of wind, variations in round weight—this is not realistic. We hit a point target by putting an adjusting round as close as we can and firing for effect. This uses the large beaten zone of the mortar to spread the

rounds out and hopefully hit the point target.)

- The board should be gridded on deployment so that the pivot point is the mortar location. (The first two simplifications above would effectively do away with the need to "drop below the pivot point" when the range exceeds 2,900 meters.)

FUTURE

When mortars fire, they are subject to radar detection. This can "fix" a mortar position quickly and accurately and allow it to be counter-bombarded almost immediately before any adjustments can be made, or at a more crucial stage of the battle when adjustment has been completed.

There are only three ways to defend mortars against radar:

- Fire on the lowest charge employing a low trajectory to stay under the radar scanner and reduce the time of flight.

- Delay registration or adjustment until the last possible moment.

- Position the mortar line where there is high cover—behind hill features, behind woodlines, in small wooded clearings, or in city streets.

If mortars are to produce the necessary fire support for a battalion commander, they must be able to produce accurate supporting fire when they are subjected to counter-bombardment. Even though they may be firing from an entrenched position, that position will not protect the crew from the fragments of an airburst.

We should think now about firing mortars from under armor. In fact, the next generation of mortars must be completely contained within an armored tracked vehicle that can keep up with the M1 tank and M2 fighting vehicle. It must not have a hatch — such as the ones on the M106 or M125 — that opens to enable the mortar to fire, because this will allow airburst shrapnel to enter the hatch.

We should start to look at a turret-mounted mortar, a weapon system for the next century. It is conceivable that in 10 years we will be able to put an 81mm round out to 7,500 meters. First-round hit accuracy will be provided by laser range finders, more accurate sighting

equipment, position locating computers, and ammunition that consistently has exactly the same weight and propellant for each round. This vehicle should be based either on the M2 or its replacement, with a redesigned turret containing a breech-loaded 81mm mortar and a different layout inside to accommodate at least 100 rounds of ammunition. With a crew of four, this should not be a problem.

The mortar is a very simple weapon system. Anything that detracts from this simplicity or requires complicated pro-

cedures will cause problems that we must make every effort to eradicate. The mortar must remain highly mobile, protected, and within the control of the battalion commander. New ideas and concepts must be fully thought out and, if acceptable, integrated quickly into our training. It is essential that new concepts and procedures be disseminated quickly to all TOE units and that a procedure for this be organized at the Infantry School level.

Although mortaring in its current form has been with us since 1916, only now

is it being affected by new technology and materials. Mortaring is ready for a quantum jump forward and must not be held back by repressive ideas and negative thinking.



Warrant Officer-1 Keith F. Hoyle is part of an exchange between the British School of Infantry and the U.S. Army Infantry School, where he is assigned to Company B, 1st Battalion, 29th Infantry to conduct mortar instruction.

A Magazine for the Machinegun

CAPTAIN BRUCE P. MAMONT

Some soldiers seem to consider it the height of fashion to sling belts of M60 machinegun ammunition diagonally across their shoulders. Slinging the ammunition does permit a soldier to use both his hands for his rifle and also distributes the ammunition evenly and close to the body. Unfortunately, the first time the bearer takes cover in the prone position, the ammunition becomes fouled with mud, snow, or sand that is certain to cause it to malfunction in the machinegun.

Although I don't endorse that way of doing things, I do sympathize with the problem. Ammunition cans are unwieldy and can't be comfortably suspended on a strap to leave a rifleman's hands free. The 100-round bandoliers in the cans are no better. They are almost as bulky as the cans themselves and lack the cans' weatherproofing and security. (The full belts of ammunition that litter a squad live fire course after an exercise testify to how easily ammunition carried in a bandolier can be lost while the bearer is running.)

The original -12 operators manual for

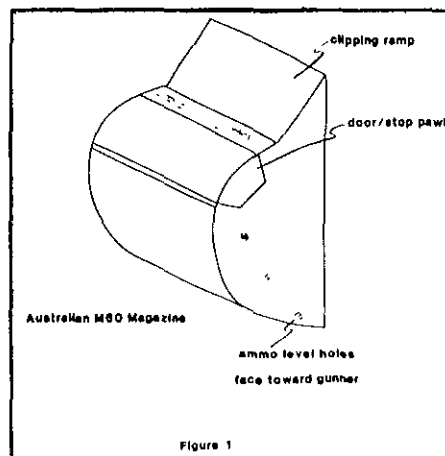
the M60 showed a magazine to hold the 100-round-belt box. This magazine encased the box in rubberized canvas to protect the belt from the elements. A sheet metal clip was mated with a clamp and lever mounted on the left side of the machinegun receiver for attaching the magazine. The belt fed into the receiver through a slot in the side of the magazine.

That magazine was not rigid enough, though, because of its canvas construction and could not support the weight of the ammunition. The solution was to

replace the magazine with the present system of a hanger group and bandolier. But the bandolier is no more rigid than the magazine was, and it provides even less waterproofing for the belt. Besides, it is not unusual to encounter ammunition not in bandoliers that lacks the web collar necessary to suspend the ammunition on the hanger group.

In reviewing small arms literature in search of alternatives, I was struck with the many types of magazines foreign machinegun designers use. One in particular looked promising—a semi-cylindrical magazine the Australian Army uses on the M60.

Constructed of sheet metal coated with nylon as a dry lubricant, this ingenious device enables a gunner to carry a short 40-round belt (see Figure 1). The small magazine keeps weight and profile low and still holds enough ammunition for several good bursts. Before a belt is expended, the assistant gunner can attach another one. The belt from an external can feeds smoothly over the magazine's round top. At the end of an engagement the belt can be broken to a length of 40



rounds and the short belt stored in the empty magazine.

A small door on the magazine acts as a stop pawl. The door is spring-loaded, which permits the magazine to be loaded or unloaded, keeps the magazine relatively weatherproof, and prevents the belt from dropping back into the magazine if the feed tray cover on the M60 is opened. The spring on the door is just strong enough to keep the door closed without creating tension on the belt against which the machinegun has to pull. Rigidly clamped to the receiver, the magazine holds the belt in a stable position for positive and reliable feeding.

During movement, the gun initially fires from the 40-round belt, as described above. When static, the belt can be clipped to an external belt without unloading the magazine. Before resuming movement, the external belt is broken at the receiver and reclipped to the short belt in the magazine.

My unit, the 1st Battalion, 4th Infantry, 3d Infantry Division, set out to make one of these magazines. A prototype based on the Australian pattern was made by Staff Sergeants Roy McCarty and Jimmy Watson. First, a cardboard model was used as a mold for a fiberglass magazine. Although it was light and rigid, this fiberglass prototype was not satisfactory because of its method of attachment. A web strap similar to that on the present cloth bandolier was tried, but it would not hold the magazine tightly enough. The fiberglass was then replaced with metal so that the magazine could be welded directly to the hinged hanger group, an organizational Class IX repair part. M60 ammunition cans were cut with a band saw to form the sides, bottom, and back of the magazine; the rounded top was made of fiberglass; and a door was adapted from an M16 dust cover. A slot by the door allowed the door to function as a stop pawl, just as in the Australian design, and a metal strip welded at the top of the magazine formed a firm platform for clipping new belts of ammunition onto the last round of the belt being fired. The sides of the box were left about one-half inch higher for a length of one inch to guide external belts and to prevent a belt from twisting laterally (see Figure 2).

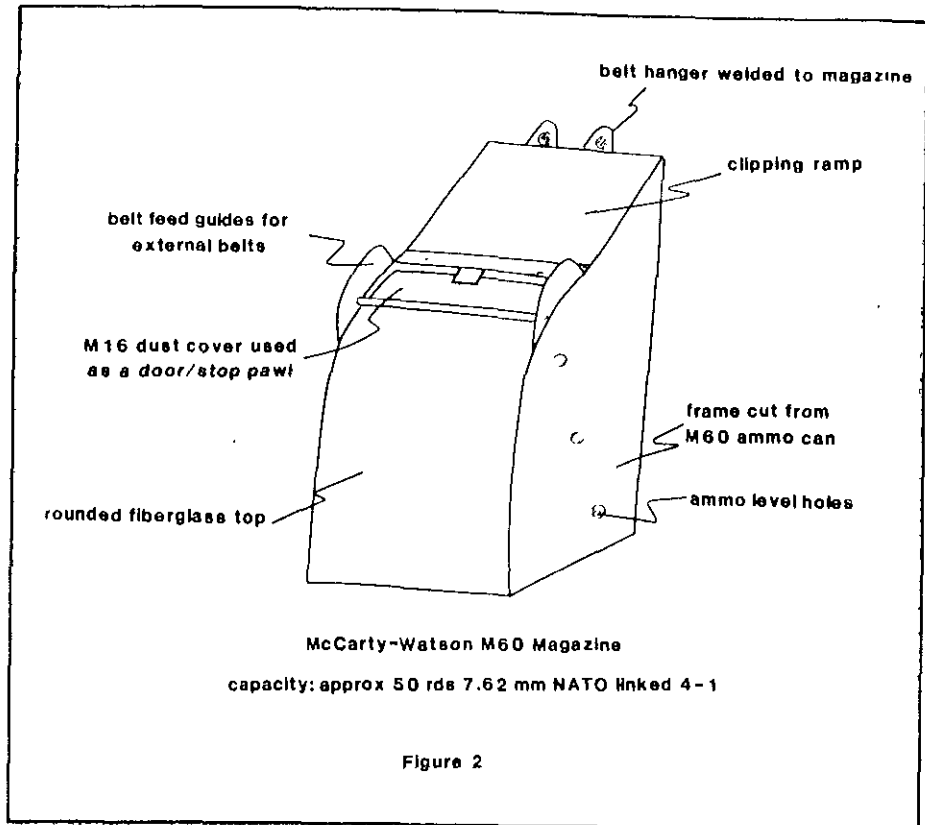


Figure 2

In the spring of 1983, two of these magazines were constructed of metal and tested with blanks during a 12-day FTX. The magazines performed as expected.

Even a roughly fabricated field expedient magazine such as this would offer our Army many advantages over no magazine at all. When clean ammunition is positively positioned for best feeding, a machinegun is much more reliable, and it lasts longer. But this magazine would not solve the problem of carrying additional belts of ammunition.

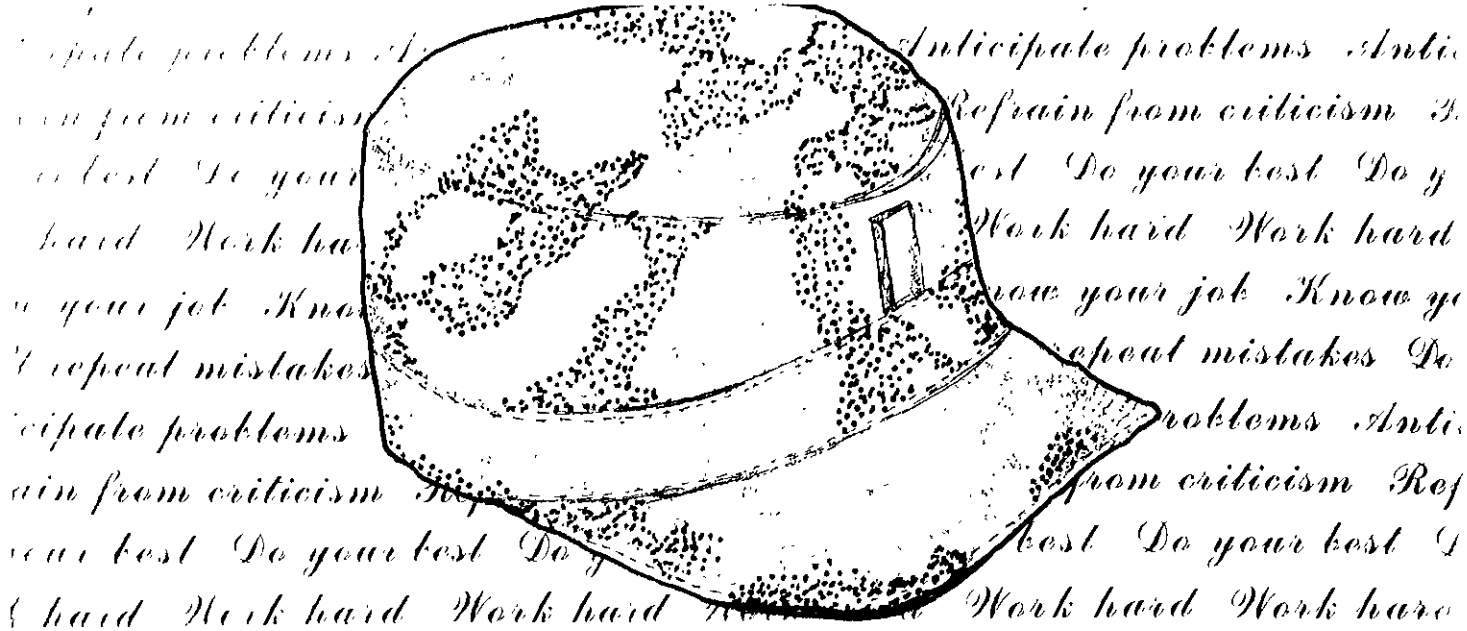
During a discussion of this problem in our unit, Captain John D. Gardner suggested that the assistant machinegunner hand-carry a small field pack (the "butt pack") containing 300-400 rounds. When the machinegun was put into action, the pack would be placed alongside the gun. The belts inside the pack would then feed from underneath the flap on the side of the pack. Unfortunately, the pack would still have to be replenished from cans carried by the squad members.

An Australian innovation again suggested an alternative. Australian M60 ammunition is packed in 100-round belts that are put into plastic sheaths, similar to socks. A "sock" can be pulled on and

off, or can be ripped open in an emergency with a pull tab. Ammunition in a sock-sheath similar to this could be slung or carried in another field expedient container, well protected from the elements. Better yet, ammunition pouches could be used that would hold a 100-round belt each. These pouches could be carried by squad members or designated ammunition bearers.

The U.S. Army has apparently succeeded in solving the problem of carrying ammunition for the M249 Squad Automatic Weapon (SAW). The ammunition for the SAW is issued in 200-round belts already packed in a magazine. Illustrations of the operational tests on that weapon show ammunition pouches that enable the gunner to carry magazines securely. If the same thought process that provided a complete system for the M249 were applied, it should be fairly easy to solve the problem for the M60 as well.

Captain Bruce P. Mamont recently completed a master's degree from the Florida Institute of Technology and is now assigned to the TRADOC Combined Arms Test Activity at Fort Hood. Formerly, he attended the Infantry Officer Advanced Course and served with the 3d Infantry Division in Germany.



ON BEING A LIEUTENANT

Captain Richard D. Hooker, Jr.

Not long ago I finished a three-year assignment with the 82d Airborne Division during which I had served as leader of a rifle platoon and an antiarmor platoon, and as executive officer of a brigade antiarmor company. It also marked the end of my tour with troops as a lieutenant.

My years as a cadet had prepared me for my duties as a lieutenant as well as any institution or program of instruction could have. Still, I found that in many cases there was no substitute for being on the ground and actually experiencing the challenges and the problems of serving with troops.

I wasn't the best lieutenant in the division, but I think I was a good one. And I certainly didn't learn all the answers or face every possible situation. Even so, maybe some general observations on what it's like to be a lieutenant and to lead troops in our Army today will be of some use to you, the lieutenants who are just starting out. I ask only that you read what I have to say and compare it with what you've been taught, what you've heard, and what seems to appeal to your common sense.

YOUR PEERS

Among your peers, you'll find good officers and bad ones. As cadets or officer candidates, you've all spent your officer training period in a close-knit and competitive environment. You will find life in your battalion much the same, though perhaps not quite as all-encompassing. The biggest difference,

I think, is that here the competition is real, and the stakes are pretty high—your standing in the battalion, the jobs you'll have as you progress and gain seniority, even the cut of your OERs.

In some battalions the lieutenants are fiercely competitive and cliquish. In others, there is a close, fraternal association among the lieutenants. Regardless of the chemistry you may find when you arrive, you will find it best to test the waters carefully and become familiar with the peculiarities of your new unit before jumping in with both feet. At first you may tend to cling to the familiar face or experience of fellow lieutenants who came from the same source of commissioning you did—ROTC, U.S. Military Academy, or OCS. This is perfectly normal, but I urge you to seek out the friendship and association of your peers from all commissioning sources and all backgrounds. You'll find many who are sharp and willing to help you, regardless of how they got there.

You may at times find yourself judging some of your peers harshly, but open criticism of other lieutenants, however legitimate, almost always comes back to its source in one way or another. An officer's substandard performance will usually, though not always, be apparent to the people who really matter. Except in very close circles, therefore, you will find it best to guard your opinions closely.

If you are specifically asked to give your opinion of another lieutenant, an honest and frank response is certainly in order. But you should try to keep your comments as professional as possible and do your best to point out the good things

about him as well as the bad.

All things considered, your peers may well make the difference between your success and your failure in the battalion. Ultimately, you may find yourself in combat and depending upon your fellow lieutenants for the survival of your men and the success of your mission. Even in garrison, much depends on the nature of your relationship with your peers: help with additional duties, for example, or advice, or the exchange of needed information. If you make a serious investment in your relationships with your fellow lieutenants, both personal and professional, the return will be well worth it.

THE OLD MAN

You've probably guessed already that your company commander will have the greatest single influence on your development and your eventual success or failure as a lieutenant. I served under six different company commanders in three years. Two, I thought, were poor; the others were hard-working, committed to their profession and their companies, and genuinely concerned with their lieutenants. Each was different, and each stressed slightly different things. All had a tremendously difficult job to do and never enough resources to do it with.

I offer these basic principles concerning company commanders:

- Establish and maintain a reputation for working hard; it can gain you immediate respect and can help to turn away the wrath an occasional honest mistake can bring on.
- Never make the same mistake twice. This is fundamental and is usually what separates the good lieutenants from the mediocre ones.
- Do your best to anticipate problems, and always take the initiative, while keeping the boss informed. Every lieutenant should do all he possibly can to relieve the commander of his administrative burden and free him to lead his troops. If you find that in acting independently you usually make a mistake, it may be necessary to reevaluate your professional aspirations. The solution, however, is *not* to retreat into a shell and do only what you are specifically told to do.
- Know your job inside and out and act like a leader. You will be amazed at how many lieutenants lack the aptitude or the inclination to exercise leadership. Although your company commander may or may not be blessed with it himself, he will almost certainly recognize it and approve of it in his subordinates.
- Never, never, criticize your company commander, either openly or to anyone you would not trust your career with. Commanders, being human, are as sensitive as anyone else to criticism. The difference between them and other people is that they can do something about it and usually will.

You should expect that at some time during your first tour you will probably have a company commander who is something less than your ideal. If you do, swallow hard, put your head down, and do the best you can under the circumstances. It is in your interest, as well as in the interest

of the company and its mission, to make the best you can of the situation

This is not to say that you should overlook obvious cases of truly poor leadership, such as breaches of integrity, abuse of your soldiers, or even outright criminal activity. (These cases are extremely rare but not unheard of.) Let your common sense be your guide, along with whatever advice you may seek from such outside sources as the chaplain or the battalion executive officer. Again, you should confide your initial misgivings only to those you feel you can trust, and only after you have made sure your information is correct and complete. If you are in the right, you can be confident that your chain of command will take the necessary action. If you are wrong, you will probably pay a heavy price for having raised the issue.

Sometimes despite your best intentions, you may find that you just can't work for a certain commander. This is a tough situation and one that doesn't have a completely satisfactory solution. If all else fails, it is probably best to confront your commander with your feelings and request another assignment. If the channels of communication are so poor that this is not really a good idea, an interview with your battalion commander may be your only alternative. In such a case, you should expect a somewhat-less-than-glowing OER, but if your performance has been sound and effective, and you don't have an excessively negative counseling file, you will probably not be hurt permanently. If you retain your self confidence and your drive, you have every reason to expect success and recognition as you go on with your career.

"TOP"

As a young officer I had a much higher opinion of my rank than I would have later on. This is not to say that a lieutenant, even a brand new second lieutenant, doesn't enjoy a certain degree of authority or respect. In time I found, and I think you will find, that where you show genuine respect to the senior NCOs in the unit, you will get genuine respect in return. This begins with the First Sergeant.

First Sergeant is a rather puzzling rank and position, because nowhere is there an exact description of who the First Sergeant is or what he does. You can expect good and bad ones in roughly the same proportion as company commanders, and much of my advice about them goes hand in hand with my previous comments about company commanders.

Good First Sergeants seem to have a few things in common. For one, they accept responsibility for the noncommissioned officers in the unit and take an active role in NCO development. They also exhibit a high degree of loyalty to the commander, both personal and professional, and work closely with him in all areas having to do with the administration and daily running of the company. I never met or heard of a First Sergeant fitting this description who did not enjoy a good reputation; conversely, I never met or heard of one who did not meet it who was rated a success.

There are some basic principles that cover your dealings with the First Sergeant. First among them is to rely on his



guidance and advice when dealing with your NCOs and troops, until he gives you reason not to. A good First Sergeant can be a fount of wisdom on such matters, and any problem you may have, he has probably seen many times before.

Next, you should never try to pit the company commander against the First Sergeant. If you think about it for a minute you'll see that your commander cannot hope to succeed without the willing cooperation of his right hand man. (Make no mistake about it, that means the First Sergeant and not you.) If you must oppose the First Sergeant on some issue—a promotion, for example, or disciplinary action, or some other issue you feel strongly about—be sure to do it in a way that doesn't compromise his position or prestige. And win or lose, try to keep the issue a strictly professional one, for the working relationship you develop with the First Sergeant of your company can be a most effective tool for you to use as you go about your duties as a platoon leader.

THE BACKBONE OF THE ARMY

The other NCOs in your unit will also be important to you. It is with sergeants that the business of running the Army is carried on. They will be your tools just as your weapons, vehicles, and radios are, but with the added dimension that they are emerging leaders just as you are. The younger ones may seem to be too much like your junior enlisted men at times. The older ones may strike you as tired or just reluctant to pitch in and get involved. In the main, I found that the NCOs I worked with shared the strengths and weaknesses

common to all ranks, and all people.

With the exception of your platoon sergeant, you may be surprised to find that the knowledge gap between you and your NCOs is not as great as you may have expected it to be. All of them will be experienced soldiers, but most will be new to the art of leadership. They will make mistakes, as you will, but it is vital in garrison as well as in the field that you exercise leadership *through* your NCOs and not around them.

Sometimes you may be tempted to do their work for them. The pitfall here is that in either training or combat you simply cannot run a platoon by yourself. Your good sergeants will learn to be competent leaders by leading. The substandard ones may have to be removed or reduced. If, in spite of everything, you rely on what you've been taught and work through your subordinate leaders, you'll be a fair bet to succeed.

Often a new lieutenant, when he first joins a unit, worries more about his platoon sergeant than about any other single person in it. There's a good reason for this—it's a rare man or woman who can walk into an experience as difficult and challenging as leading a platoon and do it well without help. If I have any words of advice about the subject, they are these: Just as the First Sergeant must be treated with great respect so that his authority with the troops will be a visible, tangible thing, so must the platoon sergeant be supported in front of the troops so that his position as the "doer" in your platoon is clear and unchallenged. His mission in life is to execute your orders and "run" your platoon. Your mission is to tell it where and how to run.

Much of what you and the platoon sergeant do will overlap. For this reason, the closest cooperation is required, and that means clear and open channels of communication between the two of you at all times. Mutual respect and two-way communication—it's hard to go too far wrong if you bear these in mind.

THE TROOPS

As for the troops themselves—the soldiers of your platoon—much has been written and said about what a privilege it is to lead American soldiers. You will undoubtedly spend some of your best moments as a lieutenant interacting with your soldiers and sharing with them the fellowship and comradeship that is one of the great blessings of military life. You should be prepared, though, for an endless series of problems and challenges from them.

One of your most important missions will be to help them solve their personal problems—problems with finances, marriages, education, work, or even health. Sometimes this can be extremely frustrating, because so many of these problems could have been avoided if these soldiers had used common sense or adhered to basic SOPs. Even so, you really have to take a concerned approach and do your best to help. You can't solve the problems of the world, of course, or even guarantee that the same soldier won't repeat the same mistake all over again. What you can do, and must do, is convince that soldier (and by so doing, the rest of your soldiers, too) that you really, sincerely *care* about him. Once your platoon is convinced of this, you are well on your way.

How should you act around your troops? I won't presume to suggest that there's any one approved method of leading. I personally observed any number of different "types" in action, and there seemed to be good *and* bad lieutenants who shared the same kind of personality. I suspect, though, that the most successful ones were the ones who didn't try to submerge or mask their own personalities in an attempt to adopt a particular "style." After all, it's tough to try to be something you're not and still be convincing.

I tried to follow this rule of thumb: Reward them for good performance; counsel, correct, or punish them for poor performance; avoid playing favorites; and always try to be fair. (Being fair implies consistency, something all soldiers prize from their leaders.) You should not expect to be popular with every one of them, but if you sense that the good ones (the majority) seem to respect you, you'll know you are in the ballpark.

In the main, your soldiers will be different from you in many ways. They will generally be younger, less educated, probably less career-motivated, perhaps less physically fit. Does this mean that you are a better soldier or a better person than one of them is? In one sense perhaps it does, for, after

all, the government has made a considerable investment in preparing you to lead. But we are all Americans, and Americans tend to recognize ability over privilege, merit over position. American troops have always looked on themselves as *anybody's* equal; it's probably one of our Army's greatest strengths. My point is this: Demonstrating your right to lead your soldiers through competence and effectiveness and aggressiveness is a worthy goal and one you should strive for. But if you lean too much on your rank or position, or constantly refer to your education or background, you run the risk of seeming to think you're "too good" for your soldiers. And whatever a lieutenant may think of his talents and abilities, that has never been the case and never will be. So, before all else, dive into the business of managing and leading *people*, with all its frustrations. (I'm betting that the lessons I learned will be the most important of all in the years to come.)


Although I mentioned the importance of being yourself and avoiding a leadership style that is foreign to your personality, there are two character traits that I recommend to you, regardless of your personal style. The first is the ability to be calm under stress or adversity, and the second is a sense of humor. These qualities seem to steady the troops in a bad spot, and, perhaps more importantly, they help to steady you, too. That's not original advice, I'm afraid, but it's some of the best I was ever given. I hope it will serve you as well as it has me.

These, then, are the things I think of to share while the memories of my days as a lieutenant are still fresh in my mind. I won't try to tell you that every day of those three years was fun and easy; as a matter of fact, very few of them were. It was for me a period of hard physical and mental effort. I wasn't born with these lessons in mind. I learned them by making mistakes and then learning to do it the right way. But I was relieved to discover that a new lieutenant is not tasked with a mission that is beyond his abilities. He is only asked to exert himself to the fullest, and in the end that proves to be enough. I can truthfully say that I never lacked the feeling of job satisfaction, and I never doubted for a moment that what I was doing was vitally important to my unit and my country.

My hope is that you will go into your platoons, not in fear of what you have yet to learn, but with confidence in yourselves and faith in what you've been taught to believe.

I welcome you to the ranks of the Field Army. Whatever we "Old Soldiers" may say, we need your energy and optimism, and we wouldn't want to do it without you.

Captain Richard D. Hooker, Jr., is now attending flight school at Fort Rucker. He is a 1981 graduate of the United States Military Academy. He has also completed the Airborne, Ranger, Air Assault, Pathfinder, and Jumpmaster Courses. In the 82d Airborne Division, he served with the 1st Battalion, 17th Air Cavalry and with the 1st Battalion, 504th Infantry



LEADERSHIP AND PREVENTIVE MAINTENANCE

Colonel Donald C. Fischer

Really great leadership ability often begins with childhood. Parents and other adults control the development of a child through situations that lead to positive reinforcement and the avoidance of failure. Self-confidence and maturity develop from exposure to situations that involve gradually increasing levels of difficulty and responsibility.

People who have had such experiences are fortunate, and they can usually be recognized by their strength in dealing with others and in handling their professional and personal lives.

But there are too few such people to fill the Army's needs for leaders. And, unfortunately, developing leaders at a later stage is more difficult. It requires the same approach, but it must be done in a shorter time with more distractions and greater pressures.

Leadership development is, in fact, one of two major problems facing a battalion commander. The other is taking care of equipment.

Just before I took command of a battalion in Europe, I had the good fortune to be exposed to General John Galvin's thoughts on how battalion and company commanders might relate these two problems—how they might use the unit preventive maintenance program to place commissioned and non-commissioned officers in situations of controlled but increasing difficulty in which they were required to lead. (Much of this is alluded to in the recently published FM 43-2, which covers organizational maintenance management.) The ideas presented here are based on my experience with this approach.

There are several reasons why a unit's preventive maintenance program is a fertile area for leadership development.

We all know the problems of organizational maintenance: Readiness rates are high, yet inspections reveal *nonoperational* vehicles; resources and repair parts are available in quantity, yet vehicles are down for long periods; motor stables and preventive services are conducted, yet organizational and

operator maintenance are rated poor.

Much of the problem stems from making the condition of the equipment the responsibility of the battalion executive officer, the S-4, the company executive officers, and the motor sergeants.

In private life, when a car or truck breaks down, the owner takes it to the shop and sees that the problem is corrected. And since he's paying for this service, he makes sure it is done right. The same should be true in a military unit: The readiness of a vehicle or a piece of equipment should be the responsibility of the people who "own" and use it—the platoon leader, the platoon sergeant, the section officer in charge (OIC), and the section NCO in charge (NCOIC).

Unfortunately, equipment "owners" in the Army often do not realize the extent to which they are really responsible for the care and use of that equipment. Leaders should make sure that their subordinates have safe and well-maintained equipment to operate, that they know how to operate it, and that they know where they are to go and what they are to do. Failing to do these things is a weakness in leadership, and that is the major cause of accidents, losses, and low operational readiness rates.

In using the maintenance program to develop leadership, a commander first has to examine his own attitude toward the preventive maintenance program—such things as repairs, services, forms, and relationships among support elements in a company or battalion. Scheduling, inspections, work planning, and the way preventive maintenance sessions are conducted must all contribute to the commander's control of the program. Above all else, a commander must actively participate in and control the program.

One of the major steps he can take to get active involvement in the maintenance program is to take a realistic approach to scheduling. Any schedule must be related to the unit's mission, training, and support requirements. Therefore, he should not simply enter a time on a training schedule, for example, and blindly require that everyone be there.

Motor stables should be scheduled only when required, and heavily used vehicles should receive the necessary attention daily—during, before, and after operation checks. Lightly used vehicles, like those on hand in headquarters elements, do not need this constant attention. (There is nothing worse for a soldier's attitude than having to do the same things over and over again to vehicles that do not move.)

There is no need, either, for entire units to be in a motor pool for motor stables. (This is valuable only when large numbers of people need training, when the unit has received new equipment, or when there is a sudden, heavy requirement of some kind.)

Smaller numbers of people are easier to handle and to supervise. Thus, it is easier to keep everyone busy, and a motor sergeant does not receive more DA Forms 2404 (Preventive Maintenance Inspection Worksheet) than he can handle at one time. Too often, large batches of unprocessed 2404s lie in in-boxes for extended periods awaiting parts research and ordering while the same deficiencies and shortcomings continue to show up week after week.

This approach requires that motor stables be spread

throughout the week. It is a good idea to have such sessions Monday through Thursday. This leaves Friday free for parts runs, clean-up, training, personal business, or anything the motor sergeant needs to do to run an orderly, and humane, operation.

A good company training schedule, therefore, tells each platoon or section when it should be doing organizational maintenance as part of the company plan. Concurrent activities should be encouraged according to what is needed. The scheduled period should not be limited to vehicles. It can be used for weapons cleaning, organizational clothing and equipment maintenance, or shop equipment maintenance. Anyone who does not need to be involved should be doing mission work instead.

With this approach, a commander and all of the elements of his unit know what everyone is supposed to be doing—concentrating on essential tasks. The potential for wasted time is reduced and, because the entire unit is not in the motor pool at one time, it is easier for the commander to observe, evaluate, correct, and teach.

CONTROL

The most valuable means of controlling the maintenance program and evaluating how well the officers and NCOs are supervising equipment operation and maintenance is the form 2404. That form is intended to be a means of identifying a maintenance requirement, an organized way of making notes that simplifies subsequent actions. Used correctly, it is a source of information for everyone involved—mechanic, operator, parts clerk, officer and NCO supervisor, and commander.

Often, though, as many operators will testify, the form is filled out, but it does not contribute to correcting the identified problem. In these cases, the preparation of the form has become an empty ritual.

The commander should require that a file be kept of the 2404s prepared for each vehicle. This type of file is often referred to as the "vehicle health record."

Copies of unprocessed 2404s should be placed in a manila folder after inspections are performed. Over a period of time, this collection can show a commander and his subordinate leaders whether operator maintenance is being performed before a vehicle is serviced or used. And if the file is regularly monitored, it can also show how the motor pool works to correct organizational deficiencies and how well the responsible officer and NCO push for corrective action.

The vehicle health record, accordingly, provides the basis for auditing the internal maintenance structure, assuring corrective action, and teaching leadership accountability to the officers and NCOs of the company.

RESPONSIBILITIES

Everyone involved in such a maintenance program has certain responsibilities for making it work, from the battalion commander and command sergeant major (CSM) down to



the junior NCOs at squad level.

First, the battalion commander provides guidance to the companies on conducting motor stables and preventive maintenance sessions, and directs that such sessions be included in the company training schedules. (When standard times are set throughout the battalion, scheduling and supervision are simpler—especially in such dispersed units as air defense or combat service support battalions.) Then the S-3 checks those training schedule activities to insure compliance.

It is absolutely necessary to create an atmosphere in which soldiers can be sure that scheduled activities such as motor stables will actually take place. After a while, compliance becomes automatic and requires less supervision. Such an atmosphere also leads to a less adversarial relationship between the company and the battalion headquarters.

Of course, a battalion commander must make sure all of his officers know how to use the basic maintenance and supply forms and the related management techniques. He should conduct this training himself to demonstrate the importance of the activity, to increase credibility, and to participate in learning with his younger officers.

Meanwhile, the CSM, in his role as senior enlisted trainer, should go into the companies and headquarters to watch the sergeants do their jobs, making sure the First Sergeants are also there. The motor pool is the main setting for his NCO professionalism program, and the training schedule and the 2404 file are his main tools.

An important part of this teaching process for both the battalion commander and the CSM is inspecting company operations.

For his inspection, a battalion commander walks into a motor

pool, selects a health record for one of the vehicles, and calls the “owning” officer and NCO. He reviews and critiques the 2404s for operator maintenance deficiencies on the vehicle and counsels the officer on what is needed to see that such deficiencies do not recur.

During his inspection, the commander checks standing organizational deficiencies to see whether parts are on requisition and whether reconciliations with the direct support unit are being conducted. He also checks publications, particularly the 12-series forms, looks at hand receipts, and follows up on shortages through the supply room.

The CSM also reviews the commander's file of 2404s and critiques the performance of platoon sergeants, section NCOs in charge, and squad leaders. He makes sure that the NCOs understand and support the preventive maintenance program and that they do not fail in the eyes of the platoon leaders, the company commander, or the battalion commander.

In short, starting with the 2404s as a base, the battalion commander and the CSM—with the owning lieutenants and the company commander in tow—check the entire maintenance and supply system within a company.

The battalion commander always throws the problem of checking and assuring that corrective action is taken back to the officer who owns the equipment, or the CSM throws it back to an NCO, if he is the one who owns the equipment. Thus, in a company chain of command, the junior officers and the NCOs see how to do the checking.

After this counseling, the most important thing the “owning” officer or NCO can do is to be there when the equipment is prepared for servicing and to ensure, through the platoon sergeant or section NCOIC, that the operator-

correctable faults are eliminated.

Down at company level, the company commander and the first sergeant function much the way the battalion commander and the CSM do at battalion level. The company commander's chief responsibility is to provide time on the training schedule for motor stables and preventive maintenance sessions and, above all, to make sure the platoon leaders are there. He sees that motor stables are observed, that the commander's file is reviewed, and that equipment and records are checked for corrective action.

The commander must push his platoon leaders to take corrective action and must make sure the company's support structure is really supporting the maintenance program. The motor pool, unit supply room, armorer, NBC NCO, and communications NCO must be available according to the preventive services being performed. The commander should also visit the direct support unit and push it for the necessary assistance and support.

File reviews, battalion inspections, and organizational maintenance technical inspections become the base for evaluating and counseling junior officers and NCOs.

The First Sergeant is the senior enlisted trainer in the company, and this is his most important role. He precedes the company commander in the motor pool and makes sure that PMCS (preventive maintenance checks and services) activities occur and that the NCOs who should be there are there. He critiques the platoon sergeants and squad leaders or section chiefs, and makes sure the company's NCOs do not fail in the eyes of the officers.

In this maintenance-leadership program the greatest advances in officer professionalism and leadership occur at platoon level. The motor pool is a microcosm of all the most difficult leadership problems—it is a place where people and resources must be brought together to perform clearly defined tasks.

A platoon leader plans, along with his platoon sergeant, for the use of those people and resources. He resolves all conflicts in demands for people—such as duty rosters, sick call, personal business—and for equipment, and overcomes the many other obstacles he may encounter.

He also solves the support problem. He reviews the 2404s generated from previous sessions and check with the motor pool, the unit supply room, and the direct support unit to ensure that the required corrective steps are being taken.

The platoon leader—because he is in direct contact with the company commander and the company motor officer and is at the same level as the shop officers and the battalion staff—can make things happen that the vehicle operators and junior NCOs cannot.

Similarly, the platoon sergeant is the most influential in the development of the platoon's NCOs and enlisted soldiers. At the rank of staff sergeant or sergeant first class, he is usually the highest ranking person the junior NCOs and troops come in contact with every day.

For motor stables or preventive maintenance services, the platoon sergeant puts people with equipment. He teaches

soldiers how to do checks and operator services; makes sure tools, supplies, POL products, rags, and other necessities are available for an effective session; and assures that the dispatcher, the mechanics, the PLL clerks, and the unit supply people provide support.

In performing these functions, the platoon sergeant is also teaching the junior NCOs the skills and obligations of leadership. The example he sets in these sessions is more important than a hundred NCO professionalism classes.

At squad or section level, a successful performance at motor stables will teach the junior NCO more about leadership than just about any other activity. The job is defined; the people are there; there are certain tasks to be performed; and there is immediate feedback that both a soldier and his supervisors can use to evaluate efforts and results.

The NCO accompanies the operator when dispatching a vehicle and assures that all operator checks are performed. He sees that the soldier knows his destination and has all the required tools and dispatch records, that the vehicle is safe and presentable, and that the vehicle leaves the motor pool on time. The NCO tells the operator to report back on completion of the mission. At that time, he assures that the mission has been accomplished, supervises the completion of after-operation checks, and sees that the vehicle is fueled and secured before allowing the soldier to quit for the day.

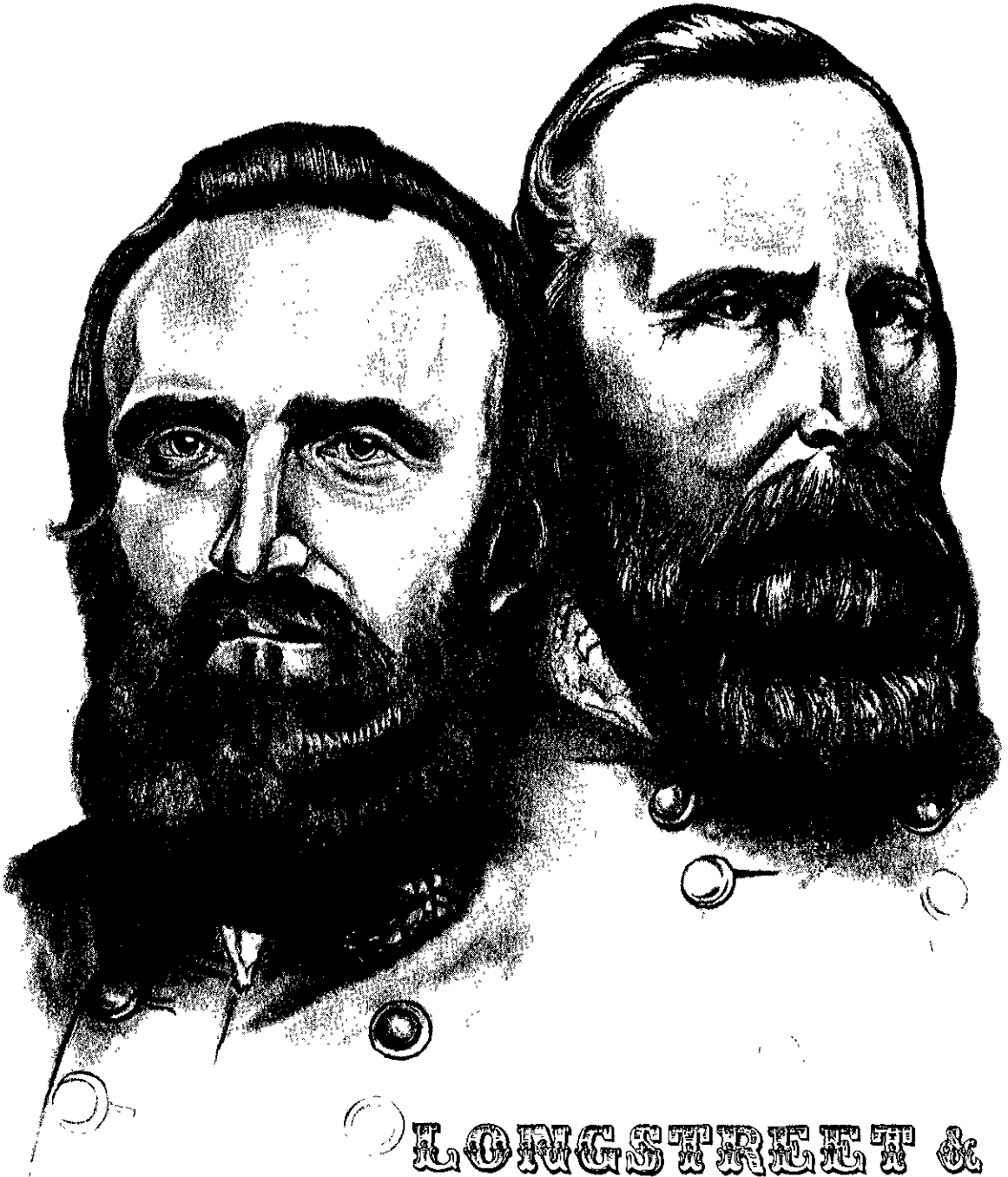
From the top down, then, this is a model for developing leadership through the preventive maintenance program. Scheduling and the 2404 give a commander two powerful tools for controlling the program. Each officer and NCO has a specific role in preventive maintenance activities that capitalizes on his position and authority. Each supervisor is placed in situations that help him develop his leadership ability while at the same time helping the commander improve the unit's operational readiness.

The most important aspect of this model is the potential effect of such a program on the new soldier—whether he is a private or a lieutenant. The new soldier is exposed to superiors who are actively involved in creating a positive working environment. From this exposure, he develops habits and expectations of competence, excellence, and concern for subordinates. He will then try to become that kind of officer or noncommissioned officer.

What better way to create an "Army of Excellence" than to display excellence in everything we do?



Colonel Donald C. Fischer, an Ordnance officer, is currently Assistant Chief of Staff for Materiel, 2d Support Command, VII U.S. Corps, in Germany. He has commanded an engineer construction company in Vietnam, and an ammunition company, a divisional materiel management center, and a missile maintenance battalion in Europe. He holds master's degrees from the Air Force Institute of Technology and the U.S. Army Command and General Staff College. He is also a graduate of the Industrial College of the Armed Forces.



LONGSTREET &
JACKSON

C. P. Phipps 85

CAPTAIN MICHAEL A. PHIPPS

General Robert E. Lee's top corps commanders in the American Civil War were Lieutenant Generals James Longstreet and Thomas Jonathan Jackson. The campaigns of both are deserving of attention from historians and biographers. Unfortunately, though, only Jackson has received that attention in any great detail. In fact, he has been all but elevated to the level of deity by some, while Longstreet has been generally ignored, at least in his positive accomplishments. Most of the accounts that there are of his campaigns tend to criticize him for some fault or other.

Some writers, for example, have generally stereotyped Jackson as offense-oriented and lightning quick in maneuver, while characterizing Longstreet as defense-oriented and slow-moving in maneuver. To a certain extent, both characterizations are misconceptions. Jackson was capable of extreme lethargy and fought more defensive than offensive battles. Longstreet and his troops, on the other hand, made some of the greatest marches of the war while delivering numerous sledge-hammer assaults. All of Longstreet's battles except Fredericksburg and Antietam were offensive in nature.

There is no doubt that Jackson is one of the greatest military figures in American history, but if he had been a 20th century U.S. officer he probably would have been relieved. He was successful in only two of his first five campaigns, and that kind of record is no longer tolerated.

On Henry House Hill on 21 July 1861, Jackson became "Stonewall" when his brigade made a gritty stand that was instrumental in the Confederate victory at the first battle of Manassas. Jackson emerged from this amateurish engagement the most famous of any of the combat leaders involved. This was followed, however, by the fiasco of the Romney campaign in the winter of 1861. Jackson's small army in the western Virginia mountains was plagued by poor logistics, brutal weather, tactical fumbling, and a near mutiny by some of the officers and troops.

Again, disaster was close at hand for Jackson when he was defeated at Kernstown, Virginia, on 23 March 1862. Although the vaunted "Stonewall" Brigade was broken in this action, President Abraham Lincoln diverted strong reinforcements intended for George McClellan's Army of the Potomac and sent them to the Shenandoah Valley to contain Jackson. This proved to be a decisive move in that a two-pronged Union drive on Richmond at that time—one south from Fredericksburg and the other east up the York and James River Peninsula—would have been disastrous to the Confederate Army of Northern Virginia. As it was, without the diverted reinforcements, the drive south from Fredericksburg never materialized. But the stage was now set for the campaign that would win for Jackson his reputation as a tactical genius.

During a brief period in May and June 1862, his two-division separate command marched up and down the Shenandoah Valley defeating three separate Federal armies in half a dozen major engagements. His Valley campaign was a masterpiece of maneuver and offensive tactics.

But Jackson soon demonstrated his other side—his lethargy and inconsistency. In late June, Lee ordered Jackson's army to join him in front of Richmond where McClellan's huge army was threatening the Confederate capital.

The Seven Days' Battle (26 June to 1 July 1862) was fought in an area just east of Richmond. Although strategically this was considered a Confederate victory, Lee's new Army of Northern Virginia was plagued by tactical errors and poor coordination. Time and time again—at Mechanicsville, Games Mill, Frazier's Farm, Malvern Hill—Jackson, upon whom Lee depended heavily, failed to move quickly enough.

With Jackson's cooperation, a large part of the Union army might have been surrounded and destroyed. Without it, on 2 July McClellan was able to withdraw his forces to the James River, thus ending the campaign. The threat to Richmond was gone, but Lee had been tactically outmaneuvered and had lost 20,000 men. In short, Jackson had inexplicably performed badly after his superb showing in the Valley.

CONFIDENCE

Still, neither Jefferson Davis nor Lee lost confidence in the hero of the Valley. Jackson performed brilliantly in the next three campaigns although he did, at times, suffer slight mental lapses. (It is significant to recall that in these three battles that led to Chancellorsville, Jackson deployed his troops in defensive actions.)

After Richmond, the next threat to the Confederates in Virginia was Major General John Pope's Union Army of Virginia, which was threatening the railhead of Gordonsville on the upper Rappahannock River.

At this point, Lee reorganized his army into the configuration that it would retain for the next year. Longstreet was given half the army and Jackson the other. (On 6 November 1862, these commands would become the First and Second Corps respectively.) In early August 1862, Jackson's command was sent west to engage Pope while Longstreet stayed near Richmond to watch McClellan. (McClellan's troops did not totally evacuate the Peninsula until September.)

Jackson was in peak form during the next month. He defeated a Federal force at Cedar Mountain on 9 August, then began a tremendous flank march around Pope's right flank along the Rappahannock. After destroying the Union supply base at Manassas Junction, he withdrew to a strong defensive position near Groveton, where Pope assaulted him for three days (28-30 August). Jackson held long enough for Longstreet's corps to crush the Union forces on the last day of the battle.

This was the only other campaign in which Jackson drove his men as quickly as he had in the Valley. More importantly, it was here that he demonstrated his proficiency in the defense. In this and his next two engagements, at Antietam and Fredericksburg, "Stonewall" would live up to his name with stubborn tenacity. He said, "My troops may fail to take a position, but are never driven from one." (This is a fact that few historians emphasize.)

Jackson was one of the first modern era combat leaders to use defense in depth. At Fredericksburg on 13 December 1862, Antietam on 17 September 1862, and Second Manassas (29-30 August 1862), Jackson used three defensive lines of battle. In each of these battles, when his front line was pene-

trated, he was able to plug the gap with a secondary line or with his reserves. During this period, his only "failure" was his delay in capturing Harper's Ferry during the Antietam campaign. He was two days late in doing so and just managed to join Lee before McClellan struck the Army of Northern Virginia. This delay might have been more serious than it turned out to be. While the Army of the Potomac could have attacked Lee as early as the 15th (the day Harper's Ferry was taken), McClellan did not attack until the 17th and thus allowed the Confederate Army to concentrate.

In late April 1863, Major General Joseph Hooker split his huge Army of the Potomac and sent three corps northwest to cross the Rappahannock and Rapidan Rivers and flank Lee's impregnable position on the heights south of Fredericksburg. By 30 April the maneuver wing of Hooker's army had moved virtually undetected onto the Confederate left flank at the small crossroads named Chancellorsville. The main body meanwhile threatened Lee at Fredericksburg.

At this point, Hooker strangely became conservative and ordered his right wing to "dig in" in the tangled underbrush known locally as "the Wilderness." He sent for all but his Sixth Corps to join him at Chancellorsville. Lee had only 55,000 troops available in six divisions. (Longstreet, with two divisions, was operating in southeastern Virginia at the time.) Leaving one division to watch the Union Sixth Corps at Fredericksburg, Lee sent two other divisions to meet Hooker and fix him in position. Lee wisely had Jackson's corps follow as one large body to exploit any opening Hooker might offer.

The Confederate lead elements found five Union Corps dug in around Chancellorsville. However, J.E.B. Stuart, Lee's cavalry commander, reported on the evening of 1 May that Hooker's right flank was "in the air." Lee, *not* Jackson, then decided to split his already separated army and strike the Union force in the flank. Jackson was to march three divisions around the Federal right and try to cut Hooker's units off from the Rapidan crossings. Jackson told Lee he would start his movement at 0400, 2 May.

DELAY

The dramatic assault on the Union Eleventh Corps by Jackson's men and the flank march are well documented and will not be reiterated here. What historians do not detail, though, is that Jackson did not start his march until 0730, three and one-half hours after the proposed departure time. As a result, the assault did not begin until 1715. There cannot be much doubt that the Confederates, even against the stout Union resistance, would have gained much more ground, possibly capturing the Rapidan fords, if darkness had not set in around 1930. Those three hours of lost daylight may have saved Hooker from complete destruction, and may have cost Jackson his life: As he returned from a reconnaissance in the dark, he was shot and mortally wounded by his own troops who mistook him for the enemy. He died of his wounds on 10 May 1863.

Fifty-two days later at a town called Gettysburg, his replacement, Lieutenant General "Dick" Ewell, hesitated in

front of a crucial hill. Many, including Lee, felt that Jackson would have taken that hill and that as a result the war might have ended differently. This is certainly possible. These same people seem to forget, however, that exactly one year earlier, Jackson had hesitated in front of Richmond. If he had not, Lee's invasion of Pennsylvania may not have been necessary.

Even so, few Civil War actions come close to the genius of Jackson's Second Manassas or Valley campaigns, and no one would want to deny him that credit. But Longstreet's performance in those years is also worthy of note. He was more consistent and at times quicker on the march than Jackson. And although he did favor the tactical defense, he could also hit as hard as any in the assault.

At First Manassas, then a brigadier general, Longstreet performed quite well but was not heavily engaged. His first major battle was on the peninsula at Williamsburg on 5 May 1862. In a spirited assault as a division commander and a major general, he gave the leading elements of McClellan's army quite a jolt. After Williamsburg, his division covered itself and him with glory with its savage but uncoordinated assaults at Fair Oaks, Gaines Mill, and Frazier's Farm. Lee was quite impressed with "Old Pete" Longstreet's tactical ability after the Seven Days' Battle and gave him command of half of the Army of Northern Virginia.

At Second Manassas, Longstreet delivered one of the most devastating assaults of the war. On 29 August 1862, Pope's Union army was attacking Jackson's corps that was posted in an unfinished railway cut near the old Bull Run battlefield. Longstreet's 30,000 troops moved rapidly through the Bull Run mountains and linked up with Jackson's men on the same day. They were squarely on Pope's left flank. Because of a poor reconnaissance effort, the Union commander never fully realized this danger. Although Lee wanted Longstreet to attack on the 29th or early on the 30th, Longstreet recommended patience. Allowing the Federal troops to exhaust themselves in frontal assaults against Jackson, Longstreet surged forward and crushed the Union's left flank on the afternoon of the 30th. Pope's army retired to the northeast, thus ending the battle.

After Second Manassas, Longstreet, by then a lieutenant general, fought his only two real defensive battles. At Antietam most of his troops were used as local reserves for Jackson's line, which was assaulted unmercifully on 17 September 1862. Although he was not able to demonstrate his overall tactical ability, he constantly took command of numerous small-unit actions throughout the day while fearlessly exposing himself to enemy fire. (It was here that Lee called him "My Old War Horse.")

Just as Jackson was remembered for his stand on Henry House Hill, Longstreet gained his reputation as a tough defender at Fredericksburg on 13 December 1862. Observing the open plains that Major General Ambrose Burnside's Army of the Potomac would have to cross to attack his corps on Marye's Heights, Longstreet stated bluntly, "If the entire Union army comes across there, I will kill them all."

As if to test him, three Federal corps marched toward Marye's Heights on that mid-December day. Longstreet was true to his word—9,000 valiant Yankees fell in front of the

now famous Heights. None of them came within 30 meters of Longstreet's main line.

The First Corps commander spent the spring of 1863 in southeastern Virginia and missed the battle of Chancellorsville. But up the road Little Round Top, Devil's Den, the Wheatfield, and Cemetery Ridge awaited him in the peaceful Pennsylvania countryside.

MYTHS

Even today, few people really understand the actual details of the Battle of Gettysburg. One of the chief misconceptions concerns the role that Longstreet and his corps played in the engagement. *Four of the most prominent myths are that Lee ordered Longstreet to attack the Union left at dawn on 2 July; that Longstreet delayed unduly during the march into an assault position on the second day of battle; that Lee ordered the Round Tops captured; and that "Old Pete" did not control his units well at Gettysburg.*

The mysterious "sunrise attack order," as one historian terms it, has never been found in any official Confederate records. Pendleton, Lee's artillery chief, later claimed he had heard Lee issue that order. But Pendleton, along with Early and others, had a running battle after the war with Longstreet, and their accusations are questionable at best.

Most historians now agree, however, that Lee did not decide on a definite plan for Gettysburg until 1000 or 1100 hours on 2 July. This thesis is documented by a simple examination of the Confederate troop dispositions at dawn on the second day. Two divisions of Longstreet's First Corps, led by John B. Hood and LaFayette McLaws, were three miles behind the main Confederate positions and had been marching all night. The other First Corps division, George E. Pickett's, was still 25 miles to the west of Chambersburg, while E.M. Law's brigade of Hood's division was 25 miles away at New Guilford.

In other words, Longstreet had only seven of his eleven brigades to take into action early on the 2d. On the other hand, A.P. Hill's Third Corps and Richard S. Ewell's Second Corps had 11 fresh brigades actually in position at dawn. If Lee had wanted an early attack, then Hill and Ewell would have had to deliver it. With six divisions already facing Major General George Meade's Army of the Potomac, it would have made no sense for Longstreet to force march into unfamiliar terrain to lead the assault at dawn.

Lee did not seriously consider taking action until Hood and McLaws were in the field and in a position to strike Meade a crippling blow. At about 1000 hours, the Confederate commander ordered his First Corps to move south and assault the Union left and rear. A vital point that has to be addressed here is that Lee felt the main enemy force was on Cemetery and Culp's Hills facing north. His plan, therefore, was for Longstreet to advance northeast up the Emmitsburg Road. Hill would support him while Ewell demonstrated against the two hills.

The problem with Lee's plan was that the actual Union line was in a "fishhook" configuration extending south to

Little Round Top, and if the First Corps forces had paralleled the Emmitsburg Road before 1500 hours, they would have been flanked by the Federal forces on Cemetery Ridge.

At 1500 hours, Major General Dan Sickles moved his veteran Union Third Corps off Cemetery Ridge and Little Round Top and advanced westward toward the high ground around the Peach Orchard. So, contrary to popular notion, Longstreet, *not Lee, lined McLaws and Hood up facing Little Round Top so as to strike Sickles' exposed troops.* Lee's original plan could not work with Sickles blocking the way. Longstreet, accordingly, sent his men after Little Round Top and Cemetery Ridge instead of Cemetery Hill.

Five hours after Lee ordered Longstreet to attack, the First Corps struck. (Because of the delay, Law's brigade was able to join Longstreet.) This "delay" has been blamed on the "Dutch" slowness of Longstreet. Douglas Southall Freeman, the noted Civil War historian, even suggests that he was sulking. This is a ridiculous assumption. In reality, two orders issued by Lee caused the lapse of time between the order and its execution.

The first order Lee gave was that the First Corps was not to move until the route of march had been scouted by a Captain S.R. Johnson. Captain Johnson did not report to Longstreet until almost 1400, whereupon Hood and McLaws began to move. Lee's second order was that the column was to stay concealed during the march. When the lead elements reached Black Horse Tavern, Captain Johnson saw that if it continued it would be exposed to the view of a Union signal station on Little Round Top. In strict obedience to Lee's orders, therefore, Longstreet ordered his corps to turn around and use a more concealed route.

As for the contention that Longstreet did not control his units well in the attack on the 2d, nothing could be further from the truth. No two divisions in United States military history fought harder or were more competently led than were Hood's and McLaws' on 2 July 1863. These 14,000 Confederates assaulted almost 30,000 Federals. They captured the Peach Orchard, the Wheatfield, and Devil's Den, and came within a hair's breadth of taking Little Round Top and southern Cemetery Ridge as well. Longstreet's *en echelon* assault (a maneuver in which one brigade at a time attacks and probes for a weak spot) shattered the Union Third Corps and enveloped seven brigades from the Second and Fifth Corps in the Wheatfield area.

REALITY

The reality is that it would have been virtually impossible to break the Federal left. In fact, Meade shifted more than half of his army to meet those two divisions.

This left only five fresh brigades and the remnants of the shattered First and Eleventh Corps (17,000 men) to oppose Lee's remaining six divisions of 40,000 troops. But these Confederates either attacked in an uncoordinated fashion or remained inactive. This was Lee's opportunity to break Meade's line, but the sheer weight of numbers meant Longstreet's men were to be sacrificed. *(They suffered better than*

50 percent casualties.) But Hill's and Ewell's weak efforts meant that the sacrifice was to be in vain. Pickett's charge and repulse inevitably followed on 3 July 1863.

Despite his disgust at the failure at Gettysburg, Longstreet still had two great battles left. When Jefferson Davis decided to reinforce Lieutenant General Braxton Bragg's Army of Tennessee, Lee sent his "War Horse" with Hood's and McLaws' divisions to northern Georgia. These veterans arrived by rail just in time to play a crucial role in the battle of Chickamauga on 19 and 20 September 1863. The "slow" and "defense oriented" Longstreet launched an all-out assault that shattered the Union center and sent half of the Army of the Cumberland fleeing toward Chattanooga. After Longstreet's only real failure of the war—his failure to capture Knoxville in November 1863—his troops rejoined Lee in Virginia.

GRANT

In the spring of 1864, the Army of the Potomac was poised above the Rapidan preparing for its last campaign. This time it would be led by Lieutenant General U.S. Grant. Lee's decimated but still formidable Army of Northern Virginia awaited Grant in the vicinity of Orange. Grant finally moved on 4 May into the same wilderness where Hooker had met disaster a year earlier. Ewell's and Hill's corps were closer to the southward line of Grant's march than was Longstreet's command, so Lee met Grant's men with these two corps while "Old Pete" marched hard for the field. Fighting raged on 5 May about five miles west of Chancellorsville.

Grant was like no other commander Lee had faced before, though, and the hardened Union veterans launched heavy assaults time and time again. On the morning of the 6th, A.P. Hill's corps was shattered by a massive push by Major General Winfield Hancock's Union Second Corps. As these Federals victoriously advanced, they were stunned by one of the most timely counterthrusts of the war.

By forced marching and double-timing all day on the 5th and through the night, the First Corps arrived and attacked just as Hancock's men had become somewhat disorganized in their advance. The Federals fell back, but Longstreet, in a brilliant tactical move, sent a flanking force through an unfinished railway cut, and that force caved in Hancock's left. As Longstreet and a few members of his staff rode forward, shots rang out and Longstreet went down, shot by his own men in generally the same area where Jackson had met the same fate a year earlier.

But the "War Horse" recovered and rejoined the army on 19 October 1864. He commanded his corps and the Richmond defenses until 2 April 1865 when Grant's all-out attack at Petersburg forced Lee to retreat to Appomattox. Longstreet's corps went with Lee, and to the end "Old Pete" opposed surrender.

In comparing Longstreet and Jackson, no one would deny that Jackson was a true military genius who excelled in independent missions. Few Civil War actions even approach the genius of Jackson's Second Manassas and Valley cam-

paigns. But objective historians should analyze the mediocre along with the superb. Although one historian likened him and his flank march at Chancellorsville to Frederick the Great and his victory at Leuthen, Chancellorsville was Lee's victory, not Jackson's. (In fact, by starting his flank march late, "Stonewall" may have cost the Confederates a chance at a total victory.)

Longstreet was also a great military leader. Within the confines of an army, it would be difficult to find a finer corps commander. So why has he been either falsely characterized or generally ignored? For one thing, Longstreet became a Republican after the war and was therefore branded a traitor by Southern writers. The chief reason, though, was the Confederate defeat at Gettysburg.

After the Confederate fiasco there, everyone was looking for scapegoats whose actions might explain the defeat. Although Stuart, Ewell, and A.P. Hill received their share of the criticism, much of the weight was placed on Longstreet's shoulders. This was all part of an effort after the war to exonerate Lee of any mistakes or tactical errors. (Even today, to blame Lee for a defeat is sure to bring many angry cries.) The tragedy of this is, however, that Longstreet's performance at Gettysburg was far superior to that of the other Confederate commanders, including Lee.

As Donald Bridgman Sanger states in his biography of James Longstreet:

Without possessing the strategic ability of either Jackson or Lee, [Longstreet] was, I believe, superior to both in battle leadership and in an appreciation of tactical values. He knew instinctively the exact moment for the counterstroke. Defensively, he was, as Grant said, Lee's best general, and the crushing effect of his well-timed assaults at Second Manassas, Chickamauga, and the Wilderness are eloquent testimonials of his skills on the offensive. He was the best fighting general in the armies of the Confederacy and the best corps commander, north or south.

Sanger's statement is a bit strong, of course; some would bring up the names of George Thomas, Winfield Hancock, and John Reynolds as corps commanders to rival Longstreet. Such debates are likely to continue.

But it is high time Longstreet's name was at least mentioned in the same breath as Jackson's. And high time the empty shelves alongside the only two Longstreet biographies were filled with more objective accounts of his accomplishments.



Captain Michael A. Philpps is an Infantry officer serving with the 7th Infantry Division at Fort Ord. He is a student of the Civil War and a graduate of Johns Hopkins University. He has served as a rifle platoon leader and company executive officer in the 82d Airborne Division and the 3d U.S. Infantry (The Old Guard). He has had two previous articles published in *INFANTRY*, "McPherson's Ridge: A Study of a Meeting Engagement" (January-February 1984) and "A Forgotten War" (November-December 1984).

TRAINING NOTES



Law of War Training A Practical Program

CAPTAIN FREDERIC L. BORCH III

Training the individual soldier in the law of war is more important today than ever. Casualties on the modern battlefield could eliminate a unit's existing leadership quickly and turn a young infantry private into a platoon sergeant or First Sergeant in a matter of days. As a leader, this soldier would then become responsible for the conduct of his subordinates.

In addition, the politically sensitive nature of future conflict means that each individual soldier, not just unit leaders, must know his rights and obligations under the Hague and Geneva Conventions if he is to protect himself, his unit, and our nation.

Unfortunately, our law of war training all too often is dull and uninteresting and usually takes the form of classroom lecture. Yet, just as infantry training cannot be taught completely in a classroom, so law of war instruction is inadequate without field training. Leaders at all levels, therefore, in conducting their law of war training programs, must integrate garrison with field training and must find practical ways to organize it.

A good way to conduct law of war training for soldiers in garrison is to begin with a 90-minute period of instruction featuring 50 minutes of excerpts from the 1980 Australian film *Breaker Morant*, followed by a 30-minute lecture

and a 10-minute question-and-answer period.

This film is based on a true incident that occurred in 1901 during the Boer War in South Africa, the first modern war in which a regular army (the British) was confronted with a guerrilla force that wore no uniforms and was therefore indistinguishable from the rest of the population. Faced with this nearly invisible enemy, the British developed several combat units that used, as far as possible, the same tactics. The film deals with one of these units, the Bushveldt Carbineers, and the court-martial of three of its officers for sanctioning the execution of prisoners of war.

RESPONSIBILITY

The movie is an outstanding teaching tool because it directly addresses the moral responsibility of a soldier in modern warfare: Should he simply obey orders — in *Breaker Morant*, an oral order from higher headquarters not to take prisoners of war—or does he bear a degree of personal responsibility for the execution of these orders?

For teaching purposes, the issue can be addressed squarely by presenting video tape segments from the film that mix

scenes showing the killing of prisoners with the subsequent court-martial of the responsible officers. The result is a thought-provoking story on film that heightens a soldier's interest in the role of the law in war; it certainly captures his attention.

(I recommend the following excerpts, in the order stated: the execution by firing squad of Lieutenants Morant and Handcock; the death of Captain Hunt; the execution of Boer PW Visser for wearing a British khaki uniform; the court of inquiry including testimony of Sergeant Major Drummond, Captain Taylor, and Captain Robinson; the Boer attack on the fort; the trial of Lieutenants Morant, Handcock, and Wilton; the murder of Reverend Hesse; the closing argument at the trial of Major Thomas. The credit for using *Breaker Morant* as a teaching tool belongs to Major Robert Higginbotham, who first used these film excerpts while serving as an instructor at the U.S. Army Infantry School, Fort Benning, Georgia.)

Army Regulation 350-216, which implements the Department of Defense Law of War Program, requires in part that law of war instruction stress a soldier's rights and obligations regarding enemy soldiers, civilians, and property; his own rights and duties as a prisoner of war (PW); and the consequence of mistreating

civilians and PWs.

These required subjects can be presented in the 30-minute lecture that follows the film excerpts, and the excerpts themselves can be used to illustrate important legal points. For example, Lieutenant Morant's order to his men to execute Boer PWs can be used to demonstrate the illegality of a superior's command, the duty of a combat soldier to disobey it, the requirement for that soldier to report the shooting of PWs as a war crime, and the punishment he may suffer if he violates this law of war.

POIs

Law of war training that does not require a specially trained instructor can be implemented during regular unit garrison training periods by using programs of instruction (POIs) prepared for this purpose. Thus, one POI could consist of a written lecture 10 to 12 minutes long (with references to army regulations, field manuals, and training circulars) and a scenario in which several soldiers are used as actors.

For example, a POI on the status of enemy wounded and medical personnel first should have a short lecture on the applicable Geneva Convention. The scenario can then have two armed enemy soldiers wearing armbands with a red crescent on a white background carrying a litter on which an unarmed enemy soldier is lying. The soldiers being trained must recognize the emblem displayed as indicating a medically trained person. Furthermore, the soldiers must know that enemy medical personnel are not to be harmed as long as they are recovering the wounded and not trying to gain a tactical advantage.

The best POI is keyed to its audience. An in-garrison POI program to be presented to medical personnel, for example, should focus on items of particular relevance to them. An in-garrison POI for paratroopers, on the other hand, should focus more on the treatment of enemy civilians and property. A POI should be designed to permit training anywhere and anytime, particularly so that it can be used in inclement weather.

Law of war instruction to be given in

a field situation must also be tailored to the combat unit being instructed and must be as realistic as possible. A medical aidman in an infantry company, for example, needs to know that he can carry a weapon, use it in self-defense, and use it in the defense of the wounded or sick in his charge. Useful field training might be designed around this recognition that a medical aidman does not lose his special status under the law of war merely because he defends himself against an enemy who attacks him or the sick and wounded in his care.

A practical example in law of war training is the instruction that was given to the 4th Battalion (Airborne), 325th Infantry Regiment (4/325 ABCT), during its March 1984 field exercises in the town of Bonnland, Federal Republic of Germany. Bonnland is an actual town in Bavaria, but now depopulated and used by the German Army (*Bundeswehr*) for training in urban warfare. This urban area is ideal for law of war instruction, because in close combat a soldier is more likely to be confronted with capturing enemy personnel and processing them to the rear or to be taken as a PW himself. In either situation, the teaching is focused on the Geneva Convention relating to prisoners of war.

EXAMPLE

The instruction in Bonnland was given to each of the six company-sized units in the 4/325 ABCT. Using the battalion legal clerk and four other soldiers as actors, the instructor began a practical exercise with a short lecture that underscored the point that each man who seeks a career as an infantryman will probably be faced with a situation in which he will take enemy soldiers prisoner. The five soldiers were used as demonstrators to show how captured enemy personnel should be treated in accordance with the Geneva Convention. For instance, the legal clerk and a second soldier played the roles of U.S. personnel who had just captured three enemy combatants. While one soldier covered them, the other disarmed the enemy soldiers. Because basic training for an infantryman emphasizes

the five S's when dealing with PWs — Search, Silence, Segregate, Safeguard, Speed to the Rear — these were also incorporated in the training. Additionally, the instructor emphasized that protective equipment (helmet, protective mask, first aid pouch) may not be seized, nor may items of a personal or sentimental nature (rings, watches, family letters and photographs) be taken, except that an item of value, such as currency, may be taken if so ordered by an officer and if a receipt is given to the PW.

WEAPONS

Weapons can be seized, of course, such as rifles, pistols, and knives, but even ball point pens and keys can be dangerous, so they too should be confiscated. Items of interest to military intelligence (maps, plans, operation orders) definitely should be taken.

In demonstrating search techniques, the soldiers were taught to first have the enemy soldiers assume one of two positions — on their hands and knees, or "spread-eagled" against a wall. Actually, any method is acceptable as long as the proper security is maintained. The training emphasized the fact that the soldiers searching the enemy must never be in the line of fire between an enemy PW and the covering friendly soldier.

The demonstration concluded with the reminder that a soldier has a duty to shield PWs from ongoing hostilities while moving them to the rear and that there are limitations on interrogating PWs (they need give only their name, rank, service number, and date of birth).

Two soldiers from the audience were then chosen at random to search and disarm the remaining two demonstrators. To heighten realism, a switchblade was hidden in either the helmet liner or boot of the "enemy" soldier. This weapon usually was not found during the initial search, and its disclosure later illustrated the need for the soldiers to be thorough in their searches.

After this hands-on training, a short lecture (15 or 20 minutes) was presented on the rights and duties of a U.S. soldier who is captured by the enemy. Included in this lecture was a discussion of the

Code of Conduct, its applicability to U.S. personnel in captivity, and its importance to morale and discipline. Additionally, the audience was reminded that criminal sanctions under the Uniform Code of Military Justice apply to a PW who aids the enemy or acts to the detriment of his fellow PWs.

Leaders at all levels need to demand law of war training for their units that combines classroom instruction and field

training. An integrated program of such training will make the Hague and Geneva Conventions more meaningful for the individual soldier. A film such as *Breaker Morant* can address the moral responsibility of the combatant in modern warfare. Hands-on law of war instruction, like the training at Bonmland, will capture attention and heighten interest. The result will be a soldier who recognizes that law does have a place in war.



Captain Frederic L. Borch III developed this training program while serving as Judge Advocate to the 4th Battalion (Airborne), 325th Regiment (Battalion Combat Team) in Italy. He holds a law degree from the University of North Carolina (Chapel Hill) and a Master of Laws degree from the University of Brussels, Belgium.

The M203 in Urban Fighting

CAPTAIN CHRISTOPHER E. ALLEN

During training for military operations in urban terrain, infantry commanders soon realize how isolated small units can become when they are engaged in an urban fight. As a platoon disappears down a side street or a squad enters a building, the leaders of those small units face the challenge of accomplishing their missions without being in the familiar line of sight or range of voice control of a senior commander.

Urban terrain magnifies the importance of strong squads built around aggressive fire teams manned by proficient, confident soldiers. The company commander who neither trains nor trusts his squads to seize the initiative when they are isolated from their parent units will fail to control the momentum of an urban fight.

Accordingly, sections, squads, and platoons must become self-reliant in urban combat, and a company commander must take the responsibility for training his combat teams to fight independently and win even in the absence of external support. A part of this training should be specifically designed to make sure his combat team members are fully profi-

cient with the weapons they have. A commander cannot afford to accept anything less than a professionally trained soldier on each key weapon system in his unit.

One of the most versatile weapons a platoon has, but one that is often wasted, is the M203 grenade launcher. If a unit's grenadiers are properly trained, a fire team can lob a grenade into a room or basement aperture from 150 meters, or cause casualties and create shock in an enemy unit moving down a city street at a range of more than 350 meters. Since a rifle platoon can mass six grenade launchers in support of an assaulting squad, a well-trained small unit can forge its own success in the absence of indirect fire or armor support. Unfortunately, platoons lose many opportunities to use the M203 in city fighting because the average street width is less than the arming distance of the round, or because tall fences or walls that permit observation of a potential target obstruct its engagement with the 40mm grenade. In these situations, the grenadiers do not realize that there is a method—though an unorthodox one—that they can use to employ their weapons effectively. This method

is a simple revival of the high angle fire technique used with the M79, as outlined in FM 23-31. With it, what was once deadspace can be made into a kill zone.

Given some exposure to this technique, grenadiers and small unit leaders soon realize that the M203 is essentially a 40mm mortar that is capable of engaging targets high above ground—roof-top snipers, for example, while a clearing team bounds into a building. It can also be fired from a defilade position behind a wall at a known target using range card data.

While this method is far from perfect, in the hands of a trained gunner it does increase the fighting efficiency of the small unit, not only in urban combat but in many conventional situations as well.

Teaching the high angle firing technique does not cost much in the way of time and resources. In fact, it can be part of a unit's concurrent training program when it undergoes its standard M203 range qualification. This training should be taught in two phases, the first of which should be used to introduce the concept and its potential uses and to explain a simple elevation technique for controlling range.

This technique is similar to the marked sling method used with the M79 and shown in the manual. It consists of a weighted string attached to the right side of the front sling swivel (as shown in the photograph) to help a gunner achieve



the proper high angle for the desired ranges. At various pre-marked points the weighted string will hang in a particular relationship to the butt of the weapon. The table gives a fairly accurate estimate of the angle of elevation for various ranges and the distance the string should hang out from the butt of the weapon to achieve that angle.

After a gunner gets the feel of this kind of firing, the weighted string, while still desirable, will no longer be necessary.

The second phase of instruction should be conducted at the firing line so the soldiers can experiment under close supervision. The most effective round to use for this firing is a smoke streamer round from the M696-M701 series. Each gunner should be allowed 10 smoke rounds.

A smoke streamer provides an advantage over TPT rounds in that soldiers can visualize the trajectory of each shot and can adjust for the proper point of impact. (Because of the near perpendicular angle of incidence at the target surface, TPT marking powder does not splash well and is therefore difficult to identify.) With the smoke round, most new gunners can come within five meters of the target with the first four rounds. Accuracy greatly increases with the amount of experimentation each gunner does.

Subsequent sustainment training can be accomplished with ten smoke rounds being allowed each gunner when the unit conducts its M203 qualification firing. Leaders should also make a point of showing their grenadiers when this technique could be used during training exercises in the field and during MOUT exercises.

Here are a few points to bear in mind with M203 high angle fire:

- Because of the potential for error with the M203 in high angle firing, soldiers in training should be closely monitored. At ranges of less than 200 meters, small movements of the weapon produce great decreases in range.

- The time of flight for the projectile

RANGE	ELEVATION	STRING DISTANCE
0 M	90°	-2"
50 M	85°	+ 1/2"
100 M	81°	+2"
200 M	69°	+6"
300 M	58°	+14"
400 M	41°	+19"

is between 10 and 14 seconds. This increases a round's exposure to wind vectors, which affect range and deflection more than when it is fired at a low trajectory. For this reason, a round should not be used for training at less than 150 meters.

- The maximum ordinate of flight is about 150 meters. Shots can be made on top of or over 15-story buildings with angles of as little as 75 degrees. With taller buildings, however, there is a risk of an overhead burst that might endanger friendly troops.

When used for high angle firing, the M203 should be considered a supplementary technique that increases the flexibility and self-sufficiency of small units in urban terrain. Becoming proficient with this technique should be a challenge to the grenadier who wants to be a professional with the M203. By exposing his grenadiers to this method, a company commander can increase the capability and fighting power of his unit.

Captain Christopher E. Allen is a 1980 graduate of the United States Military Academy. When he prepared this article, he was serving in the 3d battalion, 6th Infantry, Berlin Brigade. He has since completed the Infantry Officer Advanced Course.

Live Fire Exercises

CAPTAIN GARY A. BRACHT

The commander's and platoon leader's orders had been issued, rehearsals conducted, and final coordinations completed. As the time to cross the line of departure approached, last minute weapon checks were conducted. At the

attack position, the order was quickly passed to lock and load. There were no blank adapters or dummy demolitions. Instead, each soldier had been issued his basic load of ball ammunition. The M203 gunners' ammunition vests bulged with

40mm target practice and smoke rounds. The attached engineer squad members carried their satchel charges and Bangalore torpedoes. The 90mm recoilless rifle gunners and assistant gunners arranged their flechette rounds to be readily

available when they were needed.

This infantry company team was preparing for a live fire deliberate attack against an "enemy" with extensive wire obstacles and prepared defensive positions. The attack was to be a graded exercise for the unit based on the standards in ARTEP 7-15. Once contact was made with the "enemy" force, it would take an hour for the company to secure its objective. The company team would open multiple lanes through the wire obstacles and destroy several bunker complexes while conducting continuous fire and maneuver.

This training event was only one of many similar live fire exercises that my company in Alaska conducted, exercises that ranged from squad to company level. The exercises substantially increased the confidence of the individuals and leaders in themselves and in the unit. This was especially noticeable in the trust they showed for their fellow soldiers and their equipment.

The procedures used to conduct exercises such as these are not exotic, and they do not require much more coordination by a company commander and the battalion S-3 than any other training event requires. Particular items do deserve special attention, though.

Individual training and leader training must be conducted regularly before a live fire exercise begins. If the soldiers have difficulties in conducting ARTEP and individual tasks with blank ammunition, they will gain little from the additional pressure of firing live ammunition and will usually waste precious resources (time, ammunition, and training areas) as well. Too, any units that are to be attached for the live fire exercises must work with the supported unit on a continuing basis. If this coordination is conducted in all training events, mutual trust and confidence are established at the outset.

Preparing a training plan for a live fire exercise begins when a commander selects the ARTEP task he wants to accomplish—movement to contact and hasty attack, deliberate attack, defense, antiarmor ambush, or a raid. Once the commander has identified the task, and any supplemental tasks, his chief planner then must review the range regula-

EVENT	TIME
Approval of scenario, safety fan, and safety plan	6-8 weeks prior
Request support and attached personnel	Per unit SOP
Movement to assembly area	0800-1100 (the same day of the live fire)
Ammunition arrives at assembly area	0900
Safety personnel posted at key spots	1000
Unit arrives at assembly area and conducts final rehearsals	1100-1230
Ammunition issued to soldiers	1230-1330
Safety briefing to chain of command	1330-1345
Range sweep by assistant safety officer in OH-58	1330-1345
Range opened in "dry" status	1345
Unit crosses line of departure	1400
Range opened in "hot" status*	1415
First contact with "enemy" forces (LP/OPs)	1430-1445
Seizure and occupation of objective	1530-1600
After-action review and ammunition shakedown	1615-1630
Movement to next training site or to garrison	1630

* An alternate time can be identified if events prevent opening the range at the established time. Concurrent training can be used to make up the time difference.

Table 1

tions for his post. He may find, for example, that several weapon systems cannot be used in offensive operations because of their dud-producing capability. After reviewing the regulations, he selects a site or "lane."

Safety personnel must be stationed at every key road intersection that leads into the safety fan and maneuver area. As an added safety measure, if possible, an OH-58 helicopter with an assistant safety officer can operate above the area to reduce the number of safety personnel needed on the ground. The OH-58 can also conduct a final safety check to spot anyone who may have accidentally entered the maneuver or impact areas.

A senior safety officer should be with the unit conducting the live fire exercise to monitor it and to see that it stays within the designated maneuver area and oriented on the impact area. He should carry an FM radio to monitor the post's range control frequency. If range control requires a cease-fire, the safety officer can immediately notify the commander in person to check his fires. He should also carry red pyrotechnics for use as backup emergency signals in case a cease-fire is required. (This is especially important if the live fire is conducted during periods of limited visibility.)

The rest of the safety tasks for the range should be handled by the existing

chain of command of the maneuver unit, and if those people do their jobs right, safety will be no problem. To the uninitiated, this policy may seem reckless, but it works very well, and reduces the number of safety personnel required on the range.

The safety fan for the range must extend beyond the maximum range of the weapon systems being fired during the exercise. The left and right limits should be wide enough to avoid having to place "barber pole" markers to identify the sectors. (These markers detract from the realism of the objective.) The approval of the safety fan also must include approval of the air space above the range; some ranges, for example, may have air corridors above them that are used by military and civilian aircraft.

The objective for a live fire exercise can be as elaborate as the planner wants to make it. For instance, the engineers can design and emplace Soviet style trenches, obstacles, and bunkers. "Enemy personnel" can be simulated by "E type" silhouette targets dressed in Class X fatigues with balloons pinned to their chests. A broken balloon can then represent a kill of the target. Property disposal vehicles, towed on long ropes or cables, can be used as moving targets for a unit in an antiarmor ambush.

Electrically fired demolitions can be

TYPE	Co movement to contact/hasty attack	Pit personnel ambush	Pit antiarmor ambush	Co deliberate attack	Co defense	Squad raid
5.56 ball	3000	2000	1500	5000	3000	600
5.56 tracer	200	50	50	200	200	20
7.62 4:1 mix	2400	800	800	2400	2400	400
40mm practice	200	40	40	300	200	15
40mm smoke	80	10	10	80	20	4
35mm LAW subcal	20	0	6	20	20	0
90mm HEAT/Dragon	0	0	4/2	0	12/4	0
90mm Flechette	18	4	2	18	12	0
Claymore	0	4	4	0	18	0
C-4/TNT (pounds)	5-10	0	0	10	0	2
Smoke grenade various colors	18	4	4	18	10	4
Red Star and smoke	2	2	2	2	2	2
Star cluster/40mm cluster various colors	6	6	6	6	6	2
81mm HE	0	0	0	0	20	0
81mm WP	0	0	0	0	10	0
81mm Illum	0	0	0	0	10	0
Hand grenade simulators	50	10	0	70	0	10
Bangalore torpedoes	2	0	0	3	0	0
Satchel charges	2	0	0	3	0	0

Note: 100-man company (light infantry); 25-man platoon; 8-man squad (includes attached machinegun).

Table 2

placed on an objective. When fired by the safety officer in conjunction with "preparatory fires" on the objective, they can represent incoming artillery rounds. (A word of caution: the firing leads to the demolitions should be buried at least six inches deep, otherwise suppressive fire on the objective can cut the firing leads and result not only in demolition misfires but also in needless cease-fires while the misfired demolitions are fixed.)

ALLOW FOR DELAYS

As with all operations, the planner must allow enough time on the range for unanticipated delays (such as ammunition that is late in arriving or weather conditions that unexpectedly close ranges). If the unit coordinates with range control personnel for several specific periods of "hot" times on the range

(usually one-half to one and one-half hours) with the rest of the range time identified as "dry" time, all operations can be accomplished even with some unexpected problems. (A sample time schedule is shown in Table 1.)

For company level operations, the company executive officer or battalion S-3 should be responsible for setting up the objective. This keeps the company commander from wargaming the objective before the actual event. In fact, for the maximum training benefit, none of the leaders should see the objective before the live fire exercise is actually conducted. If they do, they lose the training benefit of having to assess the situation and issue fragmentary orders based on the actual conditions.

To add training benefit and realism, soldiers should be required to lock and load their weapons when they leave the attack position (if not sooner), as they would do in an actual combat area.

Once a unit completes an exercise, the unit leaders should conduct an after-action review along with the safety officer. Only with an effective critique or review does a live fire exercise become a valuable training tool and not a John Wayne shoot-'em-up. I have learned several common lessons from these reviews:

- Soldiers are initially reluctant to conduct fire and maneuver when live rounds are being fired, but this reluctance disappears after one or two live fire exercises.
- Fire control measures and fire discipline require constant attention and emphasis.
- Leaders initially try to shout over the sounds of the firing instead of moving to the person they need to talk to. Soldiers must look to their leaders for hand and arm signals, and radio-telephone operators must keep their handsets at their ears if they expect to hear any radio transmissions.
- Platoon leaders have to make sure they control the fires of their crew-served weapons, and squad leaders have to direct the fire of their LAWs and organic weapons.

Although ammunition expenditures may have to be modified because of local situations, my company used the ammunition shown in Table 2 for various live fire exercises. These amounts would be used for a fairly difficult objective or operation. For a simpler scenario, these amounts could be reduced by 25 to 40 percent.

When live fire exercises are included as a part of a commander's training plan, a unit's confidence, morale, and willingness to close with and destroy the enemy is greatly improved. The techniques I've described are not new, but they offer a way for leaders to truly test their units before the ultimate assessment of combat must be made.



Captain Gary A. Bracht is Assistant Professor of Military Science at the University of Wisconsin - Oshkosh. He is a 1976 ROTC graduate of Gonzaga University and has served in various infantry assignments at Fort Carson and in Alaska.

Mounted Land Navigation

LIEUTENANT RICHARD THOMAS

A platoon leader in Europe encounters tremendous obstacles and limitations with respect to the availability and adequacy of military training areas. His resources expand considerably, though, when he looks around and examines the training potential of his surroundings. (Sometimes the same applies as well to platoon leaders serving in other areas of the world.)

As the scout platoon leader of my battalion in northern Germany, I found that training in certain tasks and skills had been neglected for lack of maneuver areas. I needed a field problem that would train and test the platoon's soldiers in all the tasks in which they were deficient.

I found that although northern Germany does not have many military maneuver areas, as the least populated part of West Germany it does have many roads and trails that interlace its small villages and its wooded and farming areas. I felt that these features would be ideal for training in mounted land navigation and therefore determined that this would be the main focus of my field problem.

As it turned out, the exercise became more than just a way of training the troops (and myself). It evolved into a means of assessing the performance of my squad and section leaders as well, for they too would find themselves under the pressure of completing numerous tasks in a field environment that was not familiar to them.

The problem I developed did not require much in the way of equipment—four jeeps, 15 coffee cans (readily available from the dining facility), some 5" by 8" blank index cards, some acetate to weatherproof the cards, and a good map of the maneuver area.

I first made a map reconnaissance to find 15 objectives or points that would be useful in training (such as bridges and rivers). I then scouted the area personally and developed a number of tasks that an individual soldier could accomplish at each objective. These tasks were diversified so as to provide training in several different military skills.

The tasks were then printed on the index cards and the cards covered with acetate so that they could be placed in coffee cans at each of the 15 points the day before the scheduled field problem. (They could also be used again, in other field problems or by other platoon leaders.)

TRAINING COURSE

I then set up a training course with the 15 points, which were often up to 20 kilometers apart, so that each of the four jeeps, each carrying four soldiers, could reach them and the soldiers could accomplish all the required tasks at a rate of at least five points a day. This would enable the entire platoon to cycle through all 15 points of the course in the allotted three days of the problem. At each objective the final task on the card directed each jeep to the next point.

To control and monitor the individual jeeps, I planned to man a command jeep to which the soldiers would have to call in all tasks upon their completion. I would therefore be able to monitor the entire course and grade all the tasks immediately and give the soldiers prompt feedback on their progress in mastering the required skills.

Squad leaders or section leaders (or both) rode in the jeeps to be on-the-spot trainers and to evaluate the weaknesses

of their own squads or sections. From that, they could then determine the areas in which further training would be needed in the future.

The tasks varied at the 15 points. Initially, the troops were given an encoded eight-digit grid from the CEOI, which, when decoded, would direct them to their first point. When they found that point on the map, they proceeded to the objective and, once there, called in the location to the command vehicle. In reporting in, they used the CEOI with specific set and period to decode or encode the eight-digit grid, depending on the task instructions on the card they found at the point.

One index card, for example, gave a soldier these instructions and tasks:

You see to your south at 1,000 meters, six enemy vehicles on line:

- *Identify the vehicles.* (A vehicle identification card would be attached to the back of the task card.)
- *Report.* (Spot report using SOPs.)
- *Call for fire and/or call for attack helicopter.*
- *Identify type of unit that is following.*
Your next location will be Set 32 Period 4 MC BDMUAWBA.

Other tasks included classifying bridges or rivers. At one objective, two simulated mines had been buried, and the troops had to use a mine sweeper to remove them.

These are just a few examples of the tasks given the soldiers. By the time he completed the entire 15-point course, each soldier had received training in the following military skills:

- Mounted land navigation (day and night).
- Radio procedures.
- Use of the CEOI.
- Call for fire.

- Vehicle and aircraft identification.
- OPFOR organization.
- Use of platoon SOPs (various reporting/requesting methods: NBC 1, spot, MEDEVAC, maintenance, and the like).
- Squad level training such as the use of mine sweepers, decontamination procedures, and similar activities.
- Jeep driving.

This training exercise was extremely successful. First of all, the soldiers were eager to be off post, training in a new and unfamiliar area. And the uniqueness of the field maneuver served to motivate them to participate willingly in the tasks at each objective.

As the field problem progressed, tasks were added or made more complex. A soldier calling in would be asked, for example, to call for MEDEVAC because one of his men had been hit by sniper fire. This required that he authenticate using the CEOI. The pressure applied in such situations served to make the tasks and the mission more realistic for the soldiers. At the same time, their con-

tact with actual structures—bridges and rivers—enabled the soldiers to conceptualize better and to better understand and retain what they had learned.

During the exercise, the section and squad leaders were surprised to find that the soldiers who had seemed adept and well-trained from their classroom instruction had actually proved to be less than prepared to deal effectively with actual field situations.

As each day of training passed, though, a marked improvement was observed in the way the tasks were being accomplished, and the soldiers seemed to realize that this was the type of terrain that they might actually have to navigate over and defend in the event war came to the area.

Often during the exercise, the squad and section leaders had also found themselves lacking in expertise, and in several cases had to refer to field manuals for instruction and verification.

The kind of training described here is not unique to northern Germany or to

a scout platoon. By applying imagination and initiative, any platoon leader can adapt it to meet his own needs and missions. More to the point, any platoon leader can develop and implement other training that will stimulate and tax not only his troops but himself as well. All he has to do is look around him and use what is available. All platoon leaders must be inventive and creative and must use their existing resources to the fullest so that today's soldier can be tactically prepared for the mission at hand.



Lieutenant Richard Thomas is a company executive officer in the 4th Battalion, 41st Infantry Regiment, 2d Armored Division (Forward), where he previously served as the scout platoon leader. A 1983 ROTC graduate of Colorado State University, he has completed the Airborne and Ranger courses and earned the Expert Infantryman Badge.

Hand and Arm Signals in the ROK Army

MASTER SERGEANT RAYMOND E. BRINKMAN

Throughout the history of warfare, success on the battlefield has been directly related to the timeliness and accuracy of orders and instructions. In the heat of battle, a small unit leader's ability to control weapon fire and direct the movement of soldiers to key positions at the critical time could determine the success or failure of a mission.

With today's electrical communications systems, all leaders have the ability to issue timely instructions and report battlefield situations as they occur. As important as these systems are on today's battlefield, however, there is evidence

that the U.S. infantryman has come to rely too heavily upon them. The fact is that there are situations and circumstances in which they fall short of the ideal. A case can be made therefore for augmenting, supplementing, and in some instances, replacing radio and telephone communications with hand and arm signals—particularly in infantry squad and platoon operations.

Visual signaling offers many advantages. It is direct and timely, and it reduces the possibility of misunderstanding. Unlike voice commands, visual signaling is not affected by battlefield

sounds, nor does it violate noise discipline when a unit is near enemy positions. During periods of limited visibility and obscurity, it can be supplemented by voice commands.

Recently, I have had an opportunity to observe units of the Republic of Korea (ROK) Army during their tactical training. The ROK Army places a great deal of emphasis on hand and arm signals and conducts intensive training on their use. A look at this training may help to refocus our own attention in that direction.

A comparison of the U.S. and ROK Army manuals that address hand and arm

signals reveals more similarities than differences. In comparing relative proficiency in visual signaling, however, the ROK Army units far exceed the "acceptable" levels found in U.S. units. This disparity can be attributed partly to the differences in emphasis. U.S. Army infantry squads and platoons rely most heavily upon electrical voice communications, while the ROK Army infantry places its primary emphasis upon visual signals. The seriousness with which the ROK Army approaches visual signaling is illustrated by the fact that its small infantry units are required to operate with a reduced allotment of radios.

The real key to the South Koreans' proficiency in visual signaling is the development of individual skills and teamwork through repetition.

In gathering information for this article, I observed two battalions of a ROK Army division in training. One of these battalions is responsible for the division's squad leaders training course. During this eight-week course, the soldiers receive a one-hour block of instruction on the use of hand and arm signals. These soldiers then get practical experience and master visual signaling skills after normal duty hours. As a prerequisite to graduation, the students must demonstrate their proficiency in the use of 39 hand and arm signals, and also their ability to teach these signals to other soldiers and lead them in executing the signals.

During my visit to this unit, a platoon in its eighth week of training demonstrated its proficiency. Each soldier wore a numbered vest designating his respective duty position and the corresponding position in the various formations. The student platoon leader briefed the platoon and explained and demonstrated the signals to be used; then the platoon members repeated the signals and executed the movements. The platoon leader initiated all the commands, while the platoon sergeant relayed them to the squad leaders.

Thirty different signals were used to direct the unit into virtually every established infantry platoon tactical formation. In addition, signals were used to command the platoon in a series of dismounted drill movements including platoon formations at normal, close, and double interval; open and closed ranks; facing



Student platoon leader directs platoon into a tactical formation.

movements; and marching. The unit's precision and responsiveness were impressive throughout the 20-minute demonstration, and the soldiers relied totally upon visual nonvocal signaling.

I also watched an infantry platoon negotiate a platoon attack course. While in the assembly area, the platoon leader and platoon sergeant rehearsed the platoon in the signals to be used in the exercise. During the rehearsal, the entire unit watched a demonstration of the signals and then executed them. On the course, visual commands for movement and fire control were supplemented with voice commands, but primarily to initiate actions previously signaled visually.

At no time was there any evidence of hesitation or confusion. Each soldier made a conscious effort to choose a concealed position that would afford him a direct view of his leader. All the soldiers exhibited individual initiative in adjusting their positions to maintain visual contact with the leader and to provide a clear view of their assigned sector. It was evident that these soldiers had been trained to alternate their attention between the leader, the adjacent friendly positions, and the enemy. As a result, maneuver and fire control were coordinated and synchronized.

The key to effectiveness and proficiency in hand and arm signaling is the mastery of individual skills, coupled with

teamwork. The ROK Army soldiers I observed had clearly achieved these goals.

If our Army's senior leaders increased the emphasis on visual signaling, and if junior leaders mastered the individual and collective skills, our small units could be substantially more combat effective. (The recent change in EIB qualification requirements is a small but positive step toward focusing attention on the use of hand and arm signals.)

In order to achieve the level of expertise demonstrated by the ROK soldiers, our units would have to conduct repetitive drills just as the South Koreans do. But repetition need not be boring. Imaginative, innovative leaders could vary training sites and the type and sequence of commands used. They could also instill a competitive team spirit to offset the potential for boredom.

In addition, our leaders would have to make a conscious effort to modify the current reliance upon vocal and electrical communications.

All kinds of communication—vocal, electrical, and visual—have their roles in small unit operations; each should be employed to capitalize upon its particular advantage in a given situation.

Master Sergeant Raymond E. Brinkman is assigned to the Joint U.S. Military Assistance Group in Korea. He previously served as a First Sergeant in Germany and as a drill sergeant at Fort Jackson.

ENLISTED CAREER NOTES



INFANTRY ANCOC

Noncommissioned officers who have been selected to attend the Maneuver Combat Arms Infantry NCO Advanced Course (ANCOC) will be scheduled to attend one of the Fiscal Year 1986 classes. The schedule for the rest of the FY 86 is as follows:

NUMBER	START	END
2-86	5 Jan 86	18 Mar 86
3-86	23 Mar 86	3 Jun 86
4-86	8 Jun 86	19 Aug 86
5-86	24 Aug 86	4 Nov 86

This 10-week course, held at the U.S. Army Infantry School at Fort Benning, Georgia, is for members of the Active Army or the Reserve Components in the rank of SSG with not more than 17 years of service. Applicants must be qualified in MOS 11B, 11C, 11H, or 11M and must have ten months or more of active duty service remaining upon completion of the course. They must also have Confidential (Interim) security clearances.

All students receive training in common subjects such as leadership, training management, maintenance, and communications. Then the 11Bs study tactical doctrine, military operations in urban terrain, Dragon employment, patrolling, and offensive, defensive and retrograde operations; the 11Cs take mechanical and tactical training on mortars, forward observer and fire direction center procedures, and field training exercises; and the 11Hs operational training and tactical employment of TOWs, offensive and defensive operations, and military operations in urban terrain.

Applicants are selected by DA and MILPOs are notified of the students' attendance dates 60 to 90 days before the class is scheduled to begin. The individual students are also notified by letter through their units.

Any NCO who is on the selection list but has already completed either the resi-

dent or the nonresident ANCOC should do two things to correct the situation: First, mail a copy of his diploma or course completion certificate to DA, MILPERCEN, DAPC-EPK-I (ANCOC), 2461 Eisenhower Avenue, Alexandria, VA 22331; then update his records to reflect ANCOC completion.

At the time they report, students *must* have the following in their possession:

- 20 copies of TDY or PCS orders and amendments as appropriate.
- Copy of hazardous duty orders if currently on jump status.
- Copy of legible DA Form 2A and 2-1.
- Copy of DA Form 31 with provision for leave after course completion, if applicable.
- Copies of limited medical profiles.
- Copy of over-40 physical examinations completed and posted to medical records. (Anyone who reports to Fort Benning without it will be sent back to his installation.)
- Copy of Pinch Test/Skin Fold Test if student has been granted an adjusted weight in accordance with AR 600-9.
- Finance and health/dental records for students attending TDY enroute. (Students on TDY and return status need not bring finance records.)
- Two pairs prescription eyeglasses, if needed.
- Money enough to cover \$6.00 per day for separate rations and rooms for 10-week period.

Further information is available in DA Pamphlet 351-4 (16 July 85) or from SFC Calanni or Mrs. Stinson at AUTOVON 221-9425/9166; commercial (202) 325-9425/9166.

ROTC SCHOLARSHIPS

The Army Reserve Officer Training Corps (ROTC) gives active duty Army enlisted soldiers an opportunity to com-

pete for college scholarships.

Two hundred of these scholarships were available this past year, but only 144 were awarded. One reason more soldiers were not selected is that they submitted incomplete applications.

To be eligible for a scholarship under this program, a soldier must meet the following criteria:

- Be a U.S. citizen.
 - Be at least 17 years of age before the award becomes effective.
 - Be under 25 years of age on 30 June of the year in which he is to be commissioned. (Soldiers can be granted up to a four-year extension to this limit.)
 - Have completed one year of active duty before his discharge for enrollment at a selected college.
 - Have received a score of 115 or higher on the GT aptitude area of the Army Classification Battery.
 - Have completed one year of study in an approved baccalaureate degree program with three remaining for a three-year scholarship, or have completed two years of college with two remaining for a two-year scholarship.
 - Be accepted at an institution offering Army ROTC. (It is the individual's responsibility to gain acceptance to the college or university.)
 - Have at least a 2.0 grade point average on a 4.0 grading scale for college work completed.
 - Score at least 60 points on each event of the APRT.
 - Receive a favorable recommendation from his commander and a favorable endorsement by a field grade officer.
 - Have a favorable National Agency Check and/or Entrance National Agency Check.
 - Be medically qualified for the ROTC scholarship program.
 - Be of good moral character, have leadership potential, and be willing to support and defend the United States.
- These Army ROTC scholarships pay

tion, fees, and a flat rate for textbooks, supplies, and equipment, as well as other educational expenses. Additionally, scholarship winners are paid a monthly allowance of \$100 for up to 10 months a year and are also paid for attending a six-week summer advanced camp. Enlisted scholarship winners may also receive the G.I. Bill or VEAP benefits they earned while on active duty.

After commissioning, scholarship graduates will have an eight-year commitment to the Army. They can fulfill this obligation by serving from two to four years on active duty followed by service in the National Guard or Army Reserve. Or they can serve eight years in the National Guard or Army Reserve, following an active duty period of three to six months to attend an Officer Basic Course.

The deadline for requesting applications for these active duty scholarships is 15 March 1986. Completed applications should be sent to Army ROTC Scholarships (AD), HQ TRADOC, Fort Monroe, VA 23651 in time to arrive by 1 April 1986.

Additional information is available at local Education Centers.

DATE OF RANK AND DATE OF PROMOTION

Some mid-grade enlisted soldiers apparently misunderstand the difference between date of rank and effective date of promotion. As a result, the Army Board for Correction of Military Records receives many requests to change effective date to the dates of rank.

A soldier's date of rank is normally established in the month before his effective date of promotion, usually the first day of the month.

This earlier date of rank is to the

soldier's advantage. It often makes him eligible for promotion to the next rank earlier than if these two dates were the same.

Any soldier who has been promoted later than he thinks he should have been may send a written request on DD Form 149 to have his effective date changed to the one that would have been established if he had been promoted on time.

Soldiers can prevent late promotions by keeping track of their own promotion points. If a soldier suspects that he has met the promotion cut-off score but has not received orders by the first of the appropriate month, he should check with his personnel office.

FIRST SERGEANT COURSE

Infantry Branch at MILPERCEN gets a limited number of allocations to send NCOs to the First Sergeant Course at Fort Bliss, Texas. Here is the course schedule for the rest of Fiscal Year 1986:

NUMBER	START	END
2-86	6 Jan 86	27 Feb 86
3-86	3 Mar 86	24 Apr 86
4-86	28 Apr 86	19 Jun 86
5-86	7 Jul 86	28 Aug 86
6-86	2 Sep 86	23 Oct 86

This eight-week course is designed to provide training on selected tasks that are considered critical to the position of First Sergeant. Major subject areas include military studies, leadership and human relations, resource management, unit administration, and physical training and appearance. Emphasis throughout the course is on the inherent and assigned duties, authority, and responsibility of the First Sergeant today.

Active Army or Reserve Component NCOs may attend if they meet the follow-

ing criteria: They must be in the ranks of SFC/PSG or MSG/1SG; must have been selected for the position of First Sergeant or have less than one year of total experience as a unit First Sergeant; and must be recommended by their commanders and command sergeant majors. The course incurs a nine-month service obligation.

In addition, these NCOs must meet the height and weight standards of AR 600-9. Those who exceed the screening table maximum must bring with them to the course a certificate of maximum allowable weight. Those who are over 40 years of age must bring with them medical clearance to participate in physical training.

NCOs who are on orders to go to or return from Korea are eligible to attend on a TDY basis enroute. These should contact SFC Paulk or SFC Calanni at AUTOVON 221-9166/9425.

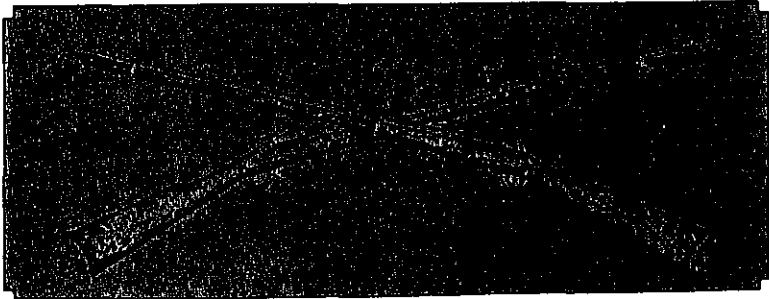
OCS ENCOURAGED

All soldiers are encouraged to apply for the Officer Candidate School (OCS) program.

The following is the proposed OCS schedule for the rest of Fiscal Year 1986:

CLASS	REPORT/CLOSE	APPLICATIONS	
		DUE AT DA	NLT
3-86	4 May-12 Aug 86	1 Feb 86	
4-86	13 Jul-21 Oct 86	1 Feb 86	
5-86	7 Sep-18 Dec 86	1 Jun 86	

Soldiers who are assigned to COHORT units may apply for OCS, but if they are selected they will not attend until they have been released from their COHORT units. Their unit commanders must advise DA by endorsement that they are attached to a COHORT unit and must state their release dates.



OFFICERS CAREER NOTES



BRANCH CHIEF'S NOTES

As I begin my tour in MILPERCEN, I look forward to serving Infantry officers, the Army's finest.

The Infantry is in the process of evolutionary changes in terms of both force structure and equipment. The dynamics of the new light infantry divisions, the Ranger regiment, the Bradley fighting vehicle, improved weaponry, CAS³, COHORT, regimental affiliation, and others affect us all.

These are challenges to the Infantry officer and to us in Infantry Branch, since the Infantry of the future will require well-trained, broad-based officers capable of serving in various kinds of units on battlefields of varying intensity. In spite of these challenges to personnel management, we in Infantry Branch are committed to treating Infantry officers as proven professionals, not as spare parts.

To meet both the needs of the Army and the professional development of each officer, we need your help and understanding.

We need your help in making sure you have a current preference statement at Infantry Branch with clear, realistic goals and also in periodically updating your ORB and official photo. Your assignment officer can then better serve the Army's requirements and your personal and professional aspirations.

We need your understanding when it comes time to discuss future assignments; we can't assign you where the Army does not have requirements, nor can Infantry officers serve their entire careers with troops. We must, however, assign Infantry officers to meet the needs of the Army while maintaining an equitable assignment system to keep all officers competitive for promotion. No matter what your assignment may be, the best advice I can give you is to do the best you can—you are serving in and representing the Army.

Call us at Infantry Branch whenever

you have a problem. Our AUTOVON numbers appear with our photos elsewhere in these notes. (For commercial calls, use Area Code 202 with the prefix 325.)

We look forward to the challenges that face us in the future and pledge that Infantry Branch will continue to provide the best possible personnel service to you, the best Infantry officer corps in the world.

LTC THEODORE REID

FUNCTIONAL AREA MANAGEMENT

As a result of revisions in the Officer Personnel Management System (OPMS), most additional specialties are now called functional areas. These functional areas are managed by a separate functional area branch in each officer career management division at MILPERCEN.

The Functional Area Management Branch in the Combat Arms Division is responsible for functional areas 18 (Special Operations), 46 (Public Affairs), 48 (Foreign Area Officer), 50 (Force Development), 54 (Operations, Plans, and Training), and 99 (Combat Developments).

The branch in the Combat Support Arms Division is responsible for functional areas 49 (Operations Research/Systems Analysis), 52 (Nuclear Weapons), and 53 (Systems Automation).

The branch in the Combat Service Support Division is responsible for functional areas 41 (Personnel Management), 45 (Comptroller), 47 (Permanent Faculty), 51 (Research and Development), and 97 (Procurement). Additionally, skills 6T (Materiel Acquisition Management) and 4L (Club Management) will also be controlled by the new branch.

The mission of the branches is to

manage, develop, and assign officers designated in their respective functional areas. This realignment is designed to improve the Army's ability to meet its requirements in the functional areas and to provide a home for those who single-track.

As careers develop, some officers will single-track within their branch, others will double-track in branch and functional area assignments, and some will single-track in a functional area.

There will be no immediate change to the current management of most officers. Branch assignment officers will assign, develop, and manage careers in much the same way they do now, but the officers who are presently single-tracked in a functional area will be controlled by the new functional area management branches.

RELEASE FROM ACTIVE DUTY

Some U.S. Army Reserve (USAR) officers have been incorrectly advised to resign instead of asking for release from active duty.

USAR officers who have not completed their original six-year military service obligations are not eligible to resign. They must request release from active duty and serve the rest of the time in the USAR. (For officers who began active duty after 1 June 1984, the military service obligation is eight years.)

Officers who have completed their obligations may either resign or request release from active duty. Those who want to retain their commissions, however, and serve in the USAR must request release instead. Otherwise they relinquish their commissions and sever all ties with the Army.

Regular Army officers who want to be released from active duty must resign their RA commissions. If they have not completed their six- or eight-year obli-

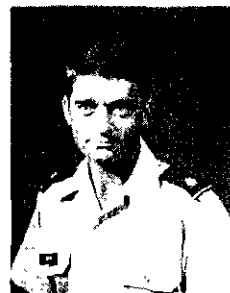
INFANTRY BRANCH TEAM



MAJ(P) Lars Larson
Branch XO/LTC, Functional Area
221-0209/7823



LTC Theodore Reid
Infantry Branch Chief
221-0317/7823



MAJ Chris Brown
LTC, SC 11, CMD, ROTC
221-0318/7823



MAJ Flynn Andrew
MAJ, SC 11
221-0318/7823



CPT Jack Gardner
MAJ, Functional Area
221-0318/7823



MAJ Mike Van Buskirk
LTC, Functional Area 54
221-0317/0318



CPT Steve Sittnick
MAJ/CPT, Functional Area 54
221-0317/0318



CPT Dan French
CPT, Branch Away from Troops
221-0317/7823



CPT Frank Wiercinski
CPT, Post-IOAC, CMD
221-0207/0317



CPT Rob Johnson
CPT, Functional Area
221-0207/0208



CPT Ken Curley
LTs, SC 11
221-0207/0209



Miss Pam Mays
LTs Accessions
221-0207/0208



CPT Mike Robinson
Ft. Benning Liaison
835-3611/3714

gations, they must accept appointment in the USAR.

RA officers who have completed their obligations and want to retain USAR commissions must request appointments in the USAR, to be effective when they resign.

Local USAR representatives can provide details on participation in the U.S. Army Reserve.

CORRECTION ON CAS³

The note on CAS³ scheduling that appeared in the September-October 1985 issue of INFANTRY (page 47) needs to be corrected:

First, all officers in Year Group 1979 or later (*not* 1977) must attend CAS³ between their sixth and ninth years of active Federal commissioned service.

Second, those who attend on a TDY and return basis must have chain of command approval, followed by notification to their major commands (*not* MILPERCEN) for scheduling of class dates.

The schedule shown with that note has also been revised as follows:

CLASS	START	CLOSE
1-86	8 Oct 85	12 Dec 85
2-86	8 Jan 86	12 Mar 86
3-86	23 Jan 86	26 Mar 86
4-86	17 Mar 86	16 May 86
5-86	31 Mar 86	30 May 86
6-86	21 May 86	23 Jul 86
7-86	5 Jun 86	6 Aug 86
8-86	28 Jul 86	26 Sep 86
9-86	11 Aug 86	10 Oct 86

CVI/VI SELECTION

A Conditional Voluntary Indefinite (CVI) selection board convenes each quarter at MILPERCEN to review the files of USAR lieutenants with two and one-half years of service. This board determines which lieutenants will remain on active duty and which will be reassigned to the Reserve Components when their active duty obligations have been served.

A second board determines which officers must be transferred to under-

strength branches. Branch transfers will take place when an officer is promoted to captain.

Under the new system, officers will apply for Voluntary Indefinite (VI) status after they have completed seven years of service. A board will again review their files to determine whether they should be retained, transferred to understrength branches, or released from active duty.

Officers whose VI applications are approved will be retained on active duty until they are integrated into the Regular Army on promotion to major. If their applications for VI are disapproved, they will be released from active duty when they have completed their service obligations.

For more information on CVI and VI boards, contact DAPC-OPP-M, AUTOVON 221-7680.

IOAC AND IOBC SCHEDULES

In the July-August 1985 issue of INFANTRY, page 48, we published the then-current proposed schedule of IOAC and IOBC classes for Fiscal Year 1986. Since then, this proposed schedule has been revised. Anyone who would like a copy of the latest schedule may write to INFANTRY, P.O. Box 2005, Fort Benning, GA 31905-0605; or call AUTOVON 835-2350, commercial (404) 545-2350.

MATERIEL ACQUISITION MANAGERS

The Army's Materiel Acquisition Management (MAM) Program identifies captains in their sixth through eighth years of service who will be trained and assigned as materiel acquisition managers.

Their work may include project management, procurement and production of weapons and equipment systems, or research and development.

Officers may apply directly to their career branch, or they may be nominated for the MAM Program. A MILPERCEN board meets three or four times a year to select the best-qualified applicants.

To qualify, an officer must:

- Have at least five and one-half years of service.
- Be qualified in an OPMD-managed branch (Combat Arms, Combat Support, or Combat Service Support).
- Hold a degree (bachelor's or higher) from a civilian institution, preferably in science, engineering, or business administration.
- Hold one of the 14 acquisition specialties listed in Chapter 101, DA Pamphlet 600-3 (Commissioned Officer Professional Development and Utilization). Officers who have not yet been assigned an acquisition specialty must request early designation of an additional specialty (ADSPEC).
- Demonstrate potential for advancement in the field of materiel acquisition management.

Officers who are selected for the MAM Program will receive the additional skill identifier (ASI) of 6T and may eventually be certified as Army materiel acquisition managers.

For more information, see DA Pamphlet 600-3, Chapter 101, or contact DAPC-OPA-C, AUTOVON 221-0417 or the professional development officer in your career branch.

RA OATH REQUIRED

Reserve officers on active duty who are selected for promotion to major are eligible for integration into the Regular Army, but they must execute the RA oath as part of the process.

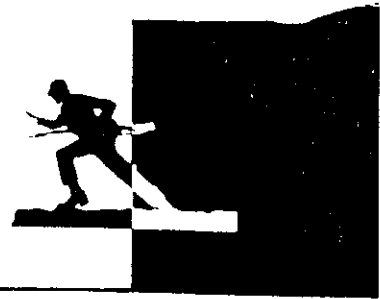
After RA appointments are approved (usually several months after a promotion list is released), MILPERCEN sends appointment orders and instructions for administering the oath to all MILPOs.

Officers may execute the oath no earlier than the effective date of their promotion to major, or may decline in writing. The MILPO will send the oath to MILPERCEN, where the Officer Master File will be updated to show that the officer has RA status.

RA integration is not automatic; it requires action by both the MILPO and the officer. Officers should keep a copy of the RA oath in their personal files.

For more information, contact DAPC-OPP-P, AUTOVON 221-0596.

BOOK REVIEWS



The official U.S. Army history of the Vietnam War is now being published by the Army's Center of Military History. The series of some 20 books, to be published over a period of 10 years, will include the Army's involvement from its early advisory years to 1973, when the last U.S. combat troops left Vietnam.

Illustrations, maps, charts, and photographs will be featured throughout the series. Each volume will include a comprehensive index covering personal names, military titles, geographic locations, major Army functions, and commands down to division level. Special books will focus on the massive logistical support of the war, its pioneering technologies, Vietnamization, intelligence, and communications.

All of these books will be sold by the U.S. Government Printing Office. If you would like timely announcements of each volume's publication (as well as notices of new military history books from all of the armed services), send your name and address to the Superintendent of Documents, Mail Stop: MK, Washington, D.C. 20401, and ask to be put on Priority Announcement List N-534.

Recently, Jane's Publishing sent us three of its latest updated reference publications, each in a series recognized by most specialists as being the best of its kind. The three are:

• **JANE'S INFANTRY WEAPONS**, 1985-86. 11th Edition. Edited by Ian V. Hogg. 960 Pages. \$125.00. As usual, Ian Hogg's foreword is a pleasure to read, the glossary of terms is most useful, the addenda add much useful information, and the table titled "National Inventories" makes a nice ready reference for determining which country is using what equipment. The book has six major subdivisions: point target weapons (pistols and revolvers, submachineguns, rifles, shotguns, machineguns, cannon, ammunition); area weapons (grenades and grenade launchers, riot control muni-

tions, pyrotechnics, flamethrowers, mortars, mortar fire control, support rocket launchers); antiaircraft and antitank weapons; electronics and optics; training aids and simulators; and body armor. The alphabetical index is also most useful and helps guide a reader through the book's hundreds of fact-filled pages.

• **JANE'S MILITARY VEHICLES AND GROUND SUPPORT EQUIPMENT**, 1985. Sixth Edition. Edited by Christopher F. Foss and Terry J. Gander. 919 Pages. \$125.00. There are a number of notable differences between this and the previous edition of the same name: 140 new entries, more than 600 new illustrations, and 40 more pages. The editors attribute this to the fact that "over the last year, the overall market has been enlarged not by an increase in the number of new items of equipment but by the number of nations involved in the production and marketing of such equipment." Their foreword is directed to this point as they discuss what some of the more important nations are offering. The book, in addition to a glossary, an addenda, and an index, has ten major subdivisions: armored engineer vehicles, recovery vehicles and equipment, bridging systems, mine warfare equipment, transport equipment, construction equipment, demolition equipment, field fortification and related emplacement equipment, NBC equipment, and miscellaneous equipment (such as assault boats and raiding craft, barbed wire systems, and camouflage equipment and decoys).

• **JANE'S MILITARY COMMUNICATIONS**, 1985. Sixth Edition. Edited by R. J. Raggett. 914 Pages. \$125.00. With the increasing attention highly placed military leaders are paying to the means of command, control, communications, and intelligence in the NATO countries, this particular volume offers the professional infantryman much useful information on what has become a rather complicated and technical field

but one in which he must prepare himself if he is to succeed on a future battlefield. The editor points out that the time has come for both the military man and the industrialist to refrain from being "seduced by technology" and "to produce co-ordinated systems that will work effectively one with another, and, importantly, co-exist with the very considerable existing inventory." He feels that "there has been a lot of waste of financial and technical resources in pursuit of technological perfection" and that "in too many cases this has either resulted in equipment or systems being abandoned because they would be too costly, or in programmes suffering long and costly delays as the engineers fall at the hurdles in the journey from the development laboratory to the working product." To him, "the pursuit of technological perfection is like looking for the end of a rainbow — you never find it." This book, like the others, has an index and addenda, but it also has four appendixes. It has two major subdivisions: equipment (radio communications, line communications, and the like) and systems.

All three of these books are outstanding reference works and should be in every library frequented by military personnel.

Many other excellent publications continue to come our way from many different publishing houses. Here are a number of the most recent ones we have received:

• **MONTGOMERY IN EUROPE**, 1943-1945. By Richard Lamb (Franklin Watts, 1984. 472 Pages. \$18.95). The author is a British journalist and broadcaster. He served in various staff positions with the British Eighth Army in Italy. Like most British writers who have tackled the Montgomery story, Lamb, too, defends his man against all comers and places him head and shoulders above everyone else who commanded at the highest echelons during the war. In rais-

ing Montgomery to such an exalted position, Lamb denigrates all other commanders, and this, unfortunately, destroys much of his and his book's credibility.

- **THE MIDDLE EAST MILITARY BALANCE**, 1984. Edited by Mark Heller, Dov Tamari, and Zeev Eytan (Westview Press, 1985. 316 Pages. \$35.00). This publication, produced by the Jaffee Center for Strategic Studies at Tel Aviv University, contains the findings and assessments of the Center's research staff. It is the second in a series, the first being a 1983 version. It has four parts: a review and assessment of the possible consequences of the major strategic developments in the area from the fall of 1982 to the spring of 1984; a data base of regional military forces as of July 1984; an analysis of the most important subregional balances; and an updated group of reference materials—summary tables, glossary of weapons, maps, and abbreviations. This is, overall, an excellent reference book.

- **OUTPOSTS OF THE WAR FOR EMPIRE**. By Charles Morse Stotz (University of Pittsburgh Press, 1985. 203 Pages. \$34.95). This is a big, beautiful, and authoritative volume, a project of the Historical Society of Western Pennsylvania. The author, a noted architectural historian, not only describes in considerable detail 24 forts built by the French, the English, and the colonists in Maryland, Virginia, and Pennsylvania between 1749 and 1764, but also tells of the events during those years that decided the ownership of the American continent. In his perspective drawings, Stotz allows a reader to see the most important forts as they were originally constructed, while in his narrative he tells how the soldiers who occupied those forts lived on the American frontier in the mid-18th century. This is an absolutely fascinating work, and the publisher must be congratulated for the book's layout and design.

- **ROOTS OF STRATEGY**. Edited by T. R. Phillips (Stackpole Books, 1985. 448 Pages. \$13.45, Softbound). This book is a reprint of an earlier work that was first printed in 1940. It is considered a *military classic*, but has not been available, except through used book

sources, for more than 20 years. This is the first time it has been reprinted in a softcover edition, and it contains, as did the original book, five of the most influential military writings of all times—by Sun Tzu, Vegetius, Maurice de Saxe, Frederick the Great, and Napoleon. It should be in every infantryman's personal library and should be read and studied before being placed on the shelf.

- **ON INFANTRY**. By John A. English (Praeger, 1984. 265 Pages). In 1981 the author, a serving Canadian infantry officer, published his well received book titled *A Perspective on Infantry*. This new book is a softbound version of the 1981 publication, with revisions seemingly restricted to updating the bibliography. This, too, is a book that professional infantrymen should own, read, and study if they do not already own a copy of the 1981 edition.

- **THE SECOND WORLD WAR: A PHOTOGRAPHIC HISTORY** (Larousse, 1985. 335 Pages. \$29.95). Every piece of graphic art in this book is in full color, which makes it an attractive and unique photographic history. And each piece of art is part of the book's main story because there is no narrative as such. The story of the war is told through the clear, concise captions. The main entries, after a series of beautifully done maps, are presented alphabetically and range from the Afrika Korps to Zhukov. First published in France in 1984, the book was translated into English by Angela M. Wootton and John Bailie.

- **WAR IN PEACE: CONVENTIONAL AND GUERRILLA WARFARE SINCE 1945**. Updated Edition. Consulting Editor, Sir Robert Thompson (Harmony Books, 1985. 336 Pages \$25.00). This recently published version of the original 1981 publication contains three new chapters, an update of two others, and 24 more pages. Nine military historians join Sir Robert Thompson, a world authority on guerrilla warfare, in presenting accounts of 28 wars, revolutions, and acts of international terrorism that have occurred since the end of World War II. The accounts vary in length, depending on the activity under discussion, but each is supplemented with photographs, full-color maps, and charts. Infantrymen should find this a most in-

teresting and informative book.

- **INSIDE THE VICIOUS HEART: AMERICANS AND THE LIBERATION OF NAZI CONCENTRATION CAMPS**. By Robert H. Abzug (Oxford University Press, 1985. 171 Pages. \$16.95). Allied soldiers liberating Buchenwald, Dachau, Belsen, and other concentration camps in 1945 came face to face with the human ruins of the Nazi system of slave labor and genocide. This book captures the shock of that discovery by telling the story of the camp liberations as U.S. soldiers and other eyewitnesses actually experienced them.

- **HITLER'S ROCKET SITES**. By Philip Henshall (St. Martin's Press, 1985. 205 Pages. \$24.95). The author describes the development of the V1 and V2 rockets by the Germans and gives the results of his comprehensive investigation of the sites that were built to store, service, and launch the rockets. He finds strong evidence that the Germans intended to use nuclear or chemical warheads against Britain.

The Combat Studies Institute of the Army's Command and General Staff College at Fort Leavenworth has also sent us a number of its recent publications, all of which we recommend strongly to our professional infantry readers:

- **CHEMICAL WARFARE IN WORLD WAR I: THE AMERICAN EXPERIENCE, 1917-1918**. By Major Charles E. Heller (Leavenworth Papers No. 10, September 1984. USGPO S/N 008-020-01014-6. 116 Pages, \$4.50, Softbound).

- **TOWARDS COMBINED ARMS WARFARE: A SURVEY OF TACTICS, DOCTRINE, AND ORGANIZATION IN THE 20th CENTURY**. By Captain Jonathan M. House (Research Survey No. 2, 1984. 231 Pages, Softbound).

- **RAPID DEPLOYMENT LOGISTICS: LEBANON, 1958**. By Lieutenant Colonel Gary H. Wade (Research Survey No. 3, 1984. 115 Pages, Softbound).

- **THE SOVIET AIRBORNE EXPERIENCE**. By Lieutenant Colonel David M. Glantz (Research Survey No. 4, 1984. 211 Pages, Softbound).

We would also call your attention to an excellent reference work that has been around for a few years, but is still one

of the best of its kind. It is:

• **UNITED STATES ARMY UNIT HISTORIES: A REFERENCE AND BIBLIOGRAPHY.** Compiled by James T. Controvich (MA/AH Publishing, 1983, 591 Pages. \$51.00). This work would never win any awards for layout and design, but it doesn't have to—it is far more important for what it is rather than for what it is not. For example, it is not just a bibliography of unit histories. It has separate chapters on unit lineages, campaign participation credits, organic units, orders of battle, and the names of the commanders of division and larger units constituted in the U.S. Army during the 20th century. It also contains information about the National Guard organization, the Women's Army Corps, and camps and forts. The index is most helpful.

Finally, the Government Printing Office has announced the reprinting of three of the volumes in the Army's official World War II series. They are:

• **THE ARDENNES: BATTLE OF THE BULGE.** By Hugh M. Cole (OCMH, 1965, Reprinted 1983. S/N 008-029-00069-5. 720 Pages. \$21.00).

• **GUADALCANAL: THE FIRST OFFENSIVE.** By John Miller, Jr. (OCMH, 1950, Reprinted 1984. S/N 008-029-00067-9. 414 Pages. \$20.00).

• **THE LAST OFFENSIVE.** By Charles B. MacDonald (OCMH, 1974, Reprinted 1984. S/N 008-029-00087-3. 552 Pages. \$25.50).

Here are reviews of a number of other books we thought you might find interesting:

PLATOON LEADER. by James R. McDonough (Presidio Press, 1985. 212 Pages. \$15.95). Reviewed by John Lucas, Knoxville, Tennessee.

Jim McDonough has written a superb book about leadership in combat. Although he disclaims any purpose other than to tell the story of a U.S. Army platoon leader in combat, his book is more than just a war story. It is a book about the U.S. soldier, about the difficulties and frustrations he often faced in Vietnam, particularly when fighting in populated areas. It is about small unit tactics; it is about an infantry leader's efforts to conquer his own fears and to control the fears

of his men; it is about an officer's need to balance somewhat contradictory goals—the welfare of his men and the accomplishment of his tactical mission.

Lieutenant McDonough went to war about as well prepared as anyone could be. His four years at West Point had been followed in quick succession by airborne, Ranger, and jungle warfare schools, and then by six months with the 82d Airborne Division. Even so, as he would quickly come to learn, he was not yet "socialized to the ways of war." That would come only with experience.

He joined the 173d Airborne Brigade in 1970 when that unit had a "pacification" mission—the name was deceptively unwarlike. His understrength platoon was assigned the mission of protecting a "strategic hamlet," Troung Lam in Binh Dinh province. He had hardly assumed command when he was faced with a variety of challenges and choices that would have tested the mettle of even an experienced combat leader. But they made clear to him what most experienced infantry leaders know—that the most difficult task a combat leader has is not coordinating firepower or maneuvering a unit under fire, it is gaining the respect and confidence of his men and establishing a discipline and spirit that will lead to combat effectiveness. Some of McDonough's solutions were "by the book," but others, it is fair to say, will never be officially condoned by the Infantry School.

As McDonough makes clear, combat is filled with contradictions, and combat in Vietnam had more than its fair share. Life and death dilemmas were part of the everyday fare. Although the correct answers may come easily to the academicians and editorialists, they come with agonizing difficulty to a 24-year old platoon leader who may have to carry the bloodied and shattered remains of his decisions to a medical evacuation helicopter.

To McDonough, the combat leader's most difficult task may be that of retaining his and his men's humanity without compromising the success of their military mission. Their mission, of course, was to kill the enemy. Killing the enemy, in fact, was not just their mission—it was central to their existence.

But as others have learned, it is all too easy to come to enjoy it.

This book is the only one yet published by a professional officer about his experiences in Vietnam at the small unit level.

It therefore presents a much more balanced picture of the average American soldier than previous books whose authors appeared to be more interested in shocking, dramatizing, or fabricating to suit their own purposes. It is a book that every combat arms leader should read.

CONTEMPORARY ISSUES IN LEADERSHIP. Edited by William E. Rosenbach and Robert L. Taylor (Westview Press, 1984. \$35.00). Reviewed by Colonel George G. Eddy, United States Army Retired.

In this book, the editors, both assigned to the Air Force Academy at one time, have collected 28 leadership articles and arranged them under five headings. Eleven of these articles, or 39 percent of this book, were reprinted previously in their other 1984 book, *Military Leadership: In Pursuit of Excellence*. The authors lost the race in that pursuit, and they have lost further ground here.

A reader gets off to a bad start immediately with the book's Foreword, in which David Campbell of the Center of Creative Leadership first declares that leadership cannot be defined adequately and subsequently offers this definition: "Any action that focuses resources toward a beneficial end." This is certainly not reassuring, when it is buttressed by the fact that some of the book's authors "even argue that leadership is irrelevant."

Although this book claims to be "a comprehensive review of the phenomenon of leadership," it is much less than that. In fact, it is one of those collections of articles that seem so much in vogue today, collections that add up to little and should be avoided.

IMAGE AND REALITY: THE MAKING OF THE GERMAN OFFICER, 1921-1933. By David N. Spires (Greenwood Press, 1984. 260 Pages. \$29.95).

Reviewed by Daniel J. Hughes, Fort Leavenworth, Kansas.

In this important new study, David Spires examines the efforts of the *Reichswehr* to create and maintain an effective officer corps within the restrictions imposed by the Versailles Treaty. Although the *Reichswehr* never resolved the conflict inherent in its dual tasks of preparing for immediate national defense and of establishing an expandable cadre army, it did produce an efficient and highly professional officer corps.

Historians and others will find a wealth of basic information on officer selection, training, and promotion. As Spires concludes, the effectiveness of the system, which was a combination of the Army's imperial heritage and the lessons of World War I, is beyond dispute at the tactical and operational levels.

Several broad trends emerge clearly. The *Reichswehr* never sacrificed quality for quantity. It maintained the traditional Prussian/German maxim that having no officers was preferable to filling slots with poor ones. Officer training emphasized flexibility, personal development, and tactical knowledge. Candidates for schools had to take rigorous examinations, because piles of efficiency reports were insufficient evidence of knowledge and potential for higher command and staff positions. Combat readiness and considerations of the threat, rather than bureaucratic guidelines, dominated both training and personnel programs.

A few words of caution are in order. The limited size of the samples deprives the author's statistical information of credibility. Spires, however, recognizes this and uses the data cautiously.

A second problem is the dominance of the experiences of a few Bavarian officers. The author relies on them because their records survive in some volume. Fortunately, Spires exercises good judgment and places these experiences in a broader framework where possible. As a result, the notes and lists of sources are good bibliographic guides to the available literature.

Leaders responsible for officer selection, training, and promotion in our own Army ought to have a look at this book. It takes a rightful place alongside the more pointed works of Trevor

Dupuy and Martin van Creveld in suggesting areas where military history might be considered in the formulation of policy. Many junior officers as well would profit by reading this short book, which has only 130 pages of text. It partially answers many questions currently being raised by students in the infantry officers advanced course at Fort Benning.

THE GRENADA PAPERS. Edited by Paul Seabury and Walter A. McDougall (Institute for Contemporary Studies, 1984. 346 Pages. \$8.59, Softbound). Reviewed by Colonel James B. Motley, United States Army Retired.

Here is a collection of documents, released through the U.S. Information Agency, that dramatically chronicle the internal affairs of the People's Revolutionary Government of Grenada (PRG) from its creation in 1979 to its termination in 1983. The collection provides detailed insights into the inmost character of the Marxist-Leninist communist system.

Prior to the U.S. military operations in Grenada, few Americans were aware of the intricate web of Soviet-bloc treaties and agreements in which the PRG had become entwined, or of the long-term strategies of the New Jewel Regime (NJR). As these documents show, by the time of the U.S. rescue mission the NJR had entered into agreements with the Soviet Union, Vietnam, Czechoslovakia, North Korea, Cuba, and East Germany for sophisticated military equipment and technical logistical assistance. Although many of the supplies had been delivered, many more were to come.

Moreover, the NJR had developed, based on Soviet aid, an ambitious program for its army that would have placed 15 to 25 percent of the entire Grenadian population under arms, thereby giving Grenada the largest army in proportion to population in the world.

The documents are organized in sections under eight headings. Each section includes a brief introductory survey and, with the exception of two sections, each individual document is accompanied by prefatory comments. A number of pho-

tographs are included in the section that discusses Soviet and Soviet-bloc activities.

These documents should dispel any lingering doubts or illusions about the extent to which the Soviet Union and its proxies were attempting to establish a strategic outpost in Grenada. They also serve as a useful reminder of the Soviet Union's expansionist aims and demonstrate vividly that even a tiny island like Grenada, given its geographical position, can constitute a threat to the security of the United States.

WAR IN SPACE. By James Canan (Harper and Row, 1982. 186 Pages. \$13.95). Reviewed by Lieutenant Roy F. Houchin, United States Air Force.

James Canan is a Pentagon correspondent for *Business Week* magazine and uses his unique position to construct a narrative about this country's growth and development of high technology defense hardware for use in space. Canan details the purpose, function, and cost of U.S. defense technology—and the subsequent Soviet actions and reactions—from the Eisenhower administration through the first years of the Reagan administration. His unpretentious but dramatic prose defines the many differences in ideology, politics, and budget matters these administrations, Congress, the Pentagon, and NASA have ushered into existence.

For the reader interested in tomorrow's "high ground" of battle, Canan's book can give some valuable insights into the problems and costs. While much of tomorrow's weaponry and tactics are classified, Canan does present several interesting and fascinating avenues U.S. technology might take to meet the continuing Soviet threat. His book is well worth reading as we enter a new era of space exploration.

A BATTLEFIELD ATLAS OF THE CIVIL WAR. By Craig L. Symonds. Cartography by William J. Clipson. Second Edition, 1st Printing (Nautical and Aviation Publishing Company, 1985. 128 Pages. \$15.95). Reviewed by

Captain Michael A. Phipps, United States Army.

The first edition of this book appeared in 1983. This second edition is quite similar, although its graphics are slightly different—and better—and the paper-stock is not the same. There are also a few more maps in it.

A truly detailed battlefield atlas of the Civil War is too much to hope for, unfortunately. With the possible exception of the *West Point Atlas of the Civil War*, there has never been a definitive cartographical study of the war.

Symonds' book contains very general battle and campaign maps, although they are quite clear and professionally done. An instructor at the U.S. Naval Academy, Symonds says that the book "originated with my students. Frustrated in their efforts to follow my chalkboard maneuvers in the classroom, they asked if I could pass out sketches of the campaigns. This volume is the result."

For what Symonds intended, the result indeed is a competent overview of the Civil War. Certainly no new ground is broken. In all, 43 battles and campaigns are examined, with each action usually containing one map and one page of text. Few of the maps show units below the corps level.

The volume's strength lies in the fact that Symonds eloquently sums up the movements of the armies in a relatively

few words, something that other authors have not been able to do. However, there are a number of inaccuracies in the text, particularly when Symonds writes about the battle of Gettysburg. He perpetuates the myths of "the search for shoes" and "Longstreet's slowness"; the charge of the 1st Minnesota is out of sequence; the arrival time and placement of Sedgwick's corps is confused; and 8,000 casualties are added to the true Confederate figure.

Readers who want to own a brief, concise atlas and history of the Civil War may find Symonds' book an economical alternative to others. Those who seek a definitive work should realize that this book is not it.

SAC: A PRIMER OF MODERN STRATEGIC AIRPOWER. By Bill Yenne (Presidio Press, 1985. 138 Pages. \$10.95). Reviewed by Lieutenant Colonel Jack Mudie, United States Air Force Retired.

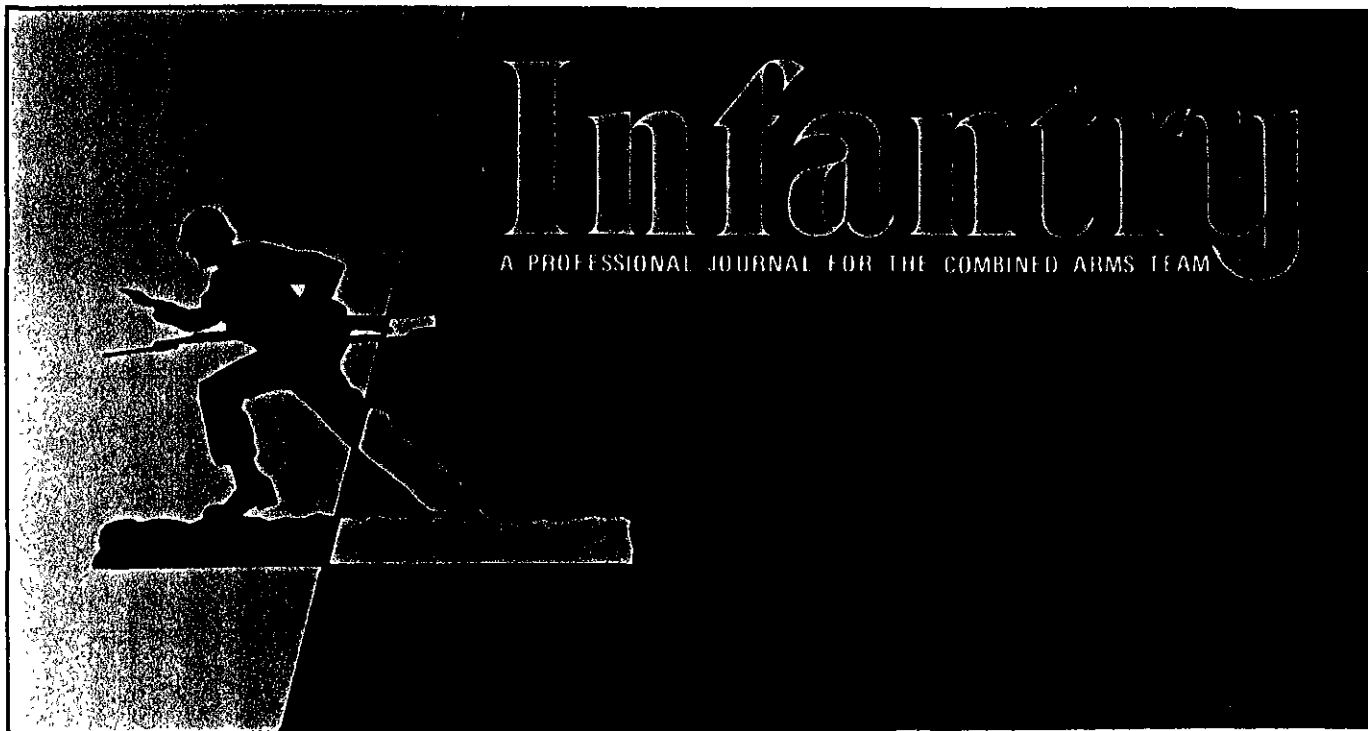
Webster's dictionary defines "primer" as an elementary textbook, and author Yenne's subtitle for this compact, well written, well illustrated book is right on the mark. This short but comprehensive history of the Strategic Air Command (SAC) covers its mission, leaders, weapons, and personnel from its establishment in 1946 to its present-day operation of two-thirds of our strategic Triad—

bombers, and ground-and sea-launched intercontinental missiles.

SAC's mission always has been to be prepared to conduct long-range offensive and reconnaissance operations in any part of the world. Initially, it was the only military force in the world with nuclear weapons. The deterrence of war—both nuclear and conventional—was the name of the game and SAC's motto, "Peace Is Our Profession," was and remains an anomaly to those military men with the "it ain't much of a war but it's the only one we've got" mentality.

Deterrence—at least the conventional kind—failed in Korea and Vietnam, and SAC found itself attacking tactical targets with iron bombs while tactical aircraft pecked away at the strategic ones, particularly during the war in Southeast Asia. The B-52 Arc Light strikes against the North Vietnamese and Viet Cong in South Vietnam, although an aberration that probably had airpower pioneers gnashing their teeth, were eagerly and gratefully welcomed by U.S. infantrymen, especially during the siege of the Khe Sanh.

When SAC was finally used properly in conjunction with supporting TAC and carrier aircraft against strategic targets in the Hanoi-Haiphong area during Linebacker II in late 1972—the so-called "Christmas Bombing Campaign" 18-29 December—the long deadlock at the



Paris peace talks abruptly ended and the North Vietnamese finally came to terms. (Tragically, they subsequently violated these terms with impunity.) While no claim is made that the proper use of SAC could have successfully terminated the Vietnam War many years sooner, "these facts," as Henry Kissinger is quoted as saying, "have to be analyzed by each person for himself."

The section on Linebacker II should be of the most interest to readers. The clear charts of the B-52 attack routes to the Hanoi target area are exceptionally well done, and the lengthy quotations from participating planners, commanders, and crew members paint a vivid picture of those historic missions, which cost 15 B-52s and 11 other aircraft. (For a more detailed account of the "Christmas Bombing Campaign," *Linebacker II: A View from the Rock* is highly recommended. It is available from the U.S. Government Printing Office.)

Yenne includes information on the "other SACs"—Britain's RAF Bomber Command (now defunct), France's *Armee de l'air Commandement des Forces Aeriennes Strategique* (Strategic Air Command), and the Soviet Union's *Dal'naya Aviatsiya* (Long-Range Aviation). He concludes with a recapitulation of arms control efforts from the early 19th century to the current START effort.

There are a few errors in this book that could and should have been corrected before publication. But it is still a good reference for the infantrymen seeking basic information about a unique military organization that is less well-known and publicized today than in its celebrated days of the 1950s and 1960s.

RECENT AND RECOMMENDED

THE ARMY GETS AN AIR FORCE. By Frederic A. Bergerson. Johns Hopkins, 1980. 216 Pages.

A FEW GREAT CAPTAINS. By DeWitt S. Copp. Doubleday, 1980. 531 Pages. \$17.50.

REPORT OF THE CHEMICAL WARFARE REVIEW COMMISSION. Government Printing Office, 1985. S/N 008-000-00430-7. 124 Pages. \$2.75, Softbound.

WEBSTER'S AMERICAN MILITARY BIOGRAPHIES. Edited by Robert McHenry. A Reprint. Dover Publications, 1985. 548 Pages. \$11.95, Softbound.

THE WAR MANAGERS. By Douglas Kinnard. A Reprint. Avery Publishing Group, 1985. 226 Pages. \$9.95, Softbound.

THE LAW ENFORCEMENT HANDBOOK. By Desmond Rowland and James Bailey. Facts on File, 1985. 304 Pages. \$12.95, Softbound.

THE MESSIAH AND THE MANDARINS: MAO TSE-TUNG AND THE IRONIES OF POWER. By Dennis Bloodworth. Atheneum, 1982. 331 Pages. \$15.95.

PATTON: THE MAN BEHIND THE LEGEND, 1885-1945. By Martin Blumenson. William Morrow and Company, 1985. 171 Pages. \$17.95.

HANDBUCH FOR SOLDATEN IM DIENST DER VEREINTEN NATIONEN. Truppen-dienst-Taschenbuch, Band 29. Vienna: Verlag Carl Ueberreuter, 1985. 191 Pages. oS 80, Softbound.

PILLBOXES: A STUDY OF U.K. DEFENSES, 1940. By Henry Wills. David and Charles, 1985. 98 Pages. \$25.00.

REQUIEM FOR BATTLESHIP YAMATO. By Yoshida Mitsuru. Translation and Introduction by Richard H. Minear. University of Washington Press, 1985. 204 Pages. \$16.95.

BIBLIOGRAPHY OF SOVIET INTELLIGENCE AND SECURITY SERVICES. By Raymond G. Rocca and John J. Dziak. Westview Press, 1985. 203 Pages. Softbound.

PREVENTING NUCLEAR WAR: A REALISTIC APPROACH. By Barry M. Blechman. Indiana University Press, 1985. 197 Pages. \$17.50, Softbound.

U.S. ARMY SPECIAL FORCES, 1952-1984. By Gordon Rottman. Illustrated by Ron Volstad. Elite Series No. 4. Osprey, 1985. 64 Pages. \$9.95.

VIKINGS. By Ian Heath. Illustrated by Angus McBride. Elite Series No. 3. Osprey, 1985. 64 Pages. \$9.95.

FLAK JACKETS: 20th CENTURY MILITARY BODY ARMOR. By Simon Dunstan. Illustrated by Ron Volstad. Men-at-Arms Series No. 157. Osprey, 1985. 40 Pages. \$7.95.

IWO JIMA: LEGACY OF VALOR. By Bill D. Ross. The Vanguard Press, 1985. 376 Pages.

MODERN WARFARE. By the Marshall Cavendish Editorial Board. ARCO, 1985. 249 Pages. \$19.95

FIGHTING KNIVES: AN ILLUSTRATED GUIDE TO FIGHTING KNIVES AND MILITARY SURVIVAL WEAPONS OF THE WORLD. By Frederick J. Stephens. ARCO, 1985. 127 Pages. \$11.95, Softbound.

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

Check Here If Gift Subscription. Name of Donor:

Infantry

A PROFESSIONAL JOURNAL FOR THE COMBINED ARMS TEAM

\$19.00 2 YEARS
 \$10.00 1 YEAR

CASH
 BILL ME
 NEW
 RENEWAL
 CHANGE OF ADDRESS

Foreign (non-APO) subscribers add \$3.00 per year for postage.

INFANTRY MAGAZINE

BOX 2005, FT. BENNING, GEORGIA 31905

SEND INFANTRY MAGAZINE TO THIS ADDRESS — PLEASE PRINT

RANK NAME SSAN

UNIT OR STREET ADDRESS

APO OR CITY STATE OR COUNTRY ZIP

ACTIVE USAR NG RETIRED CADET CIVILIAN

YOUR PERMANENT ADDRESS

STREET ADDRESS

CITY STATE OR COUNTRY ZIP

From The Editor

65th YEAR

With this issue, we mark the end of our 65th year of publication. Overall, it was a good year. We received many nice comments about the articles we published, and our various departments attracted a lot of favorable attention.

Unfortunately, we did not do as well on the subscription side of the house, despite holding our prices at the 1980 levels. (Not many magazines can say that.) Many Infantrymen seem to believe we are fully supported by appropriated funds and therefore are in the same category as field manuals, training circulars, and the like—that we are, in effect, free for the asking, or taking.

That is an erroneous belief. Our appropriated funds for publishing are quite limited and our free distribution of copies is tightly controlled. While we do send free copies to Infantry units and certain staff agencies in the Active Army and the Reserve Components for use by everyone in those units and staff agencies, we cannot—and do not—give free copies to individuals. We expect them to buy their own personal subscriptions.

We have been in the subscription business since we started publishing in 1921. Today, a number of our subscribers, in this country and abroad, have been with us for many years, through the good times and the bad. We thank them from the bottom of our hearts.

But we are disappointed that so many professional Infantrymen apparently do not think it worth their while to subscribe to their own professional publication. We feel we offer a professional product that can be of great value to Infantrymen everywhere who read it with care.

We would remind our readers, too, that a paid subscription to this, their professional journal brings with it membership in the Infantry Association. The Association was started in 1982 at Fort Benning to rekindle the Infantry spirit and to acknowledge, recognize, and promote the camaraderie of the Infantry.

This coming year, then, we ask all Infantrymen to consider subscribing to their journal. We don't think they will be disappointed.

GIFT SUBSCRIPTIONS

This year, for the first time in many years, we are pleased to offer a special rate for one-year gift subscriptions. (Sorry, this offer does not apply to two-year gift subscriptions.) The special rate is \$9.00 for six issues, which is a saving of \$1.00 from the cost of a new subscription. To become effective, the subscription must be intended for someone other than the requestor, and the request must be clearly marked with the words "Gift Subscription." Full payment must accompany each request. This offer ends 31 January 1986.

We will send an appropriate gift announcement to the individual for whom the subscription is being entered.

HAPPY HOLIDAYS!

