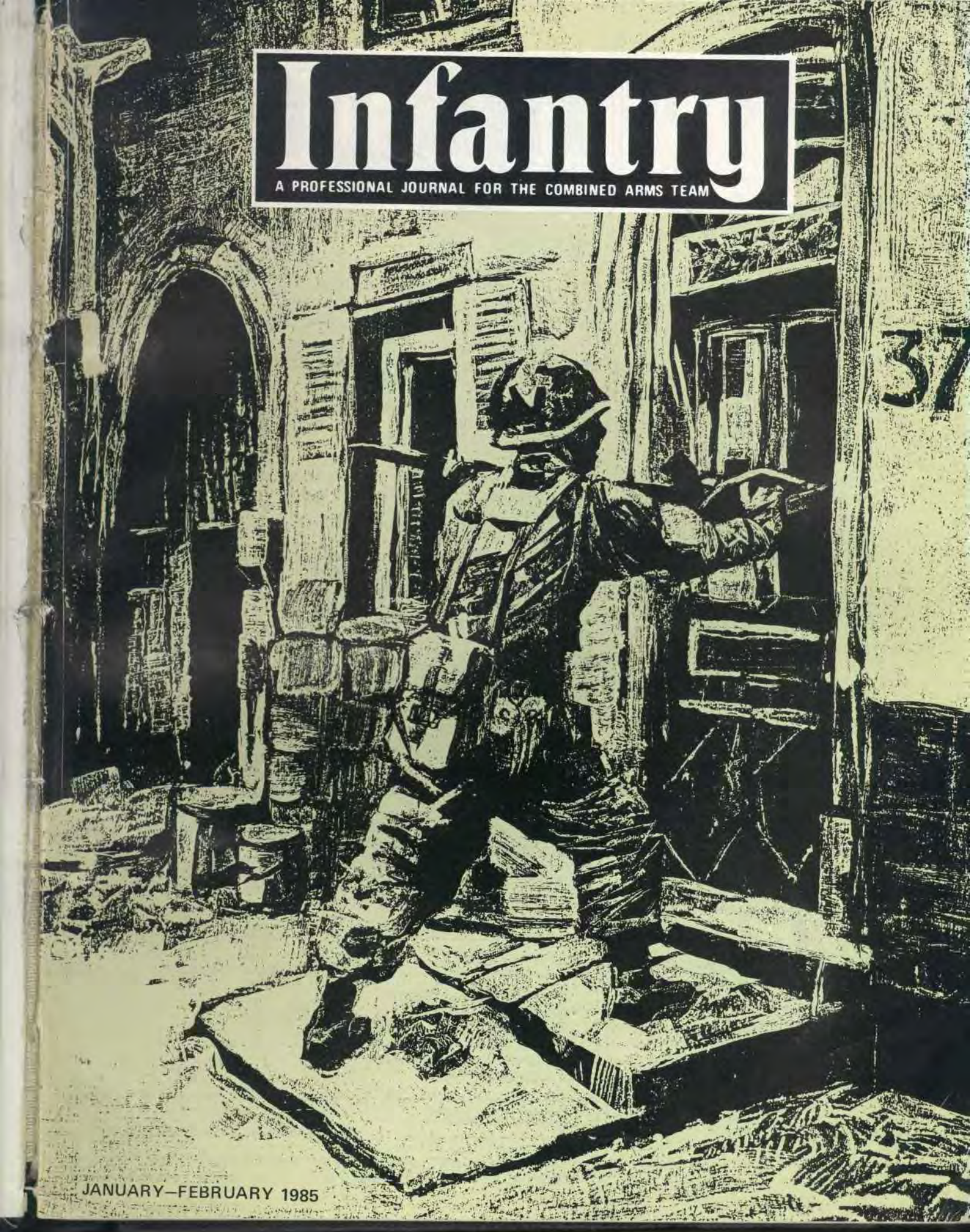
Infantry

A PROFESSIONAL JOURNAL FOR THE COMBINED ARMS TEAM



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Infantry

A PROFESSIONAL JOURNAL FOR THE COMBINED ARMS TEAM

January-February 1985 Volume 75, Number

ARTICLES

FORUM AND FEATURES

TRAINING NOTES

DEPARTMENTS

FRONT COVER

In the future we will not be able to avoid military operations in urban te
Therefore, we had better be ready for the battles we will have to fight th

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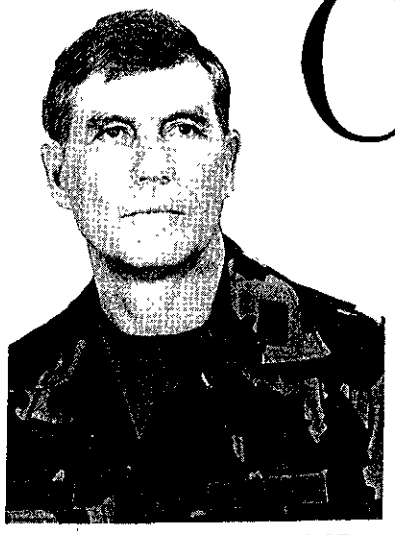


Commandant's NOTE

r General John W. Foss
Chief of Infantry

CURRICULUM CHANGES

e goal of the U. S. Army Infantry School is to produce the l's finest Infantrymen. To do this, in the face of changes in ment, doctrine, and force structure, we constantly ate our instructional and training programs and, if sary, revise them to keep them realistic and doctrinally cor- We have made several such curriculum revisions in the past nonths.

st, we have added a week to the Infantry Officer Basic se (IOBC), making it 17 weeks long. We did this so we l include more hands-on, field-oriented training. With this ge, more than 80 percent of the program of instruction is taught in a field environment.

e have also incorporated three innovative training ideas into . These ideas take the form of the Tactical Leadership se (TLC), the Maintenance Certification Program, and the nced Land Navigation Exercise, which includes a challeng- rienteering course.

I mentioned in my Note in the July-August 1984 issue of NTRY, the TLC gets training in leadership and tactical out of the classroom and into the field. The objectives of ourse are to teach the young officers how to train, how to , how to lead, and, most important, how to build a team. ie Maintenance Certification Program, on the other hand, ses the officers in IOBC to in-depth instruction in tenance operations and procedures so that they will be able eet the needs of Infantry units in the field. This program entrates on vehicles, weapons, NBC, and communications itenance.

ie Advanced Land Navigation Exercise, which is the third ir new training ideas for the IOBC, is designed to reinforce and navigation training that the young officers receive in course.

Ve have also made some changes in the Infantry Officer vanced Course (IOAC). Beginning this month, January 5, the course itself will be shortened from 26 to 20 weeks. Six those weeks will be devoted to a common core of subjects, ich all branch service schools will teach. The other fourteen eks will be devoted to instruction in related Infantry skills, to lude maintenance certification.

A number of officers from each IOAC will remain at Benning after they have completed the 20-week course to attend a follow-on course of instruction in which they will receive intensive hands-on training in a specific area related to their next assignment. Courses under consideration are light and heavy infantry operations courses, an infantry officer maintenance course, and the Bradley Commanders Course.

In addition to the changes listed above for both the IOBC and the IOAC, we are gradually adding to both courses instruction on the Bradley fighting vehicle. That instruction will focus on the tactical employment of the vehicle and on its maintenance aspects.

We have also revised the program of instruction for the Advanced Noncommissioned Officer Course (ANCOC). The POI now provides instruction on common Skill Level 4 Infantry training and on common core subjects that have been developed by the Sergeants Major Academy. It also includes the Tactical Leadership Course and maintenance certification.

The common core block of instruction for ANCOC has been developed to eliminate variations in the common skills that are taught at all of the branch service schools and to foster standardization through the universal application of uniform practices and procedures. Although the common core of subjects will need to be upgraded periodically, it now forms a solid base for ANCOC training in every school.

As in IOBC , the TLC and the maintenance certification program are worthwhile additions to the new ANCOC POI. Here, too, the emphasis is on developing high-quality soldiers. The TLC stresses leading, training, fighting, and teamwork, while the maintenance block of instruction concentrates on training our Infantry NCOs in the proper maintenance operations and procedures to meet the needs of our Infantry units in the field.

We at the Infantry School have an earnest and explicit agreement to initiate in these courses a developmental process that will give our graduates confidence in their own ability to perform at their best in combat. We take pride in the instruction and guidance that is passed along to the soldier here at Benning. And we eagerly accept and practice our responsibility to lead, develop, and inspire the Infantry leaders of tomorrow.

MARVELOUS INFANTRYMAN

Undoubtedly you have taken flak about the picture of that marvelous Infantryman on page 1 of your July-August 1984 issue. Sure, his ammo is dangling about and dragging the ground. It's wrong but it's Infantry, and I'm sure a good sergeant took care of this soon after.

But still, it's a great shot of the Infantryman we love and have seen countless times. This guy is tired, dirty, and grimy, but he has the swagger and the determined look of a winner.

The picture is a damn sight better than the staged "photo opportunities" that plague us.

H.T. FINCHER, JR.
COL, Infantry
USMOG/UNTSO
Jerusalem

DEFENDER RESPONDS

In the letters section of the September-October 1984 issue of INFANTRY (p. 50), Captains Michael Phipps and F.R. Hayse provide a critique of the tactics instruction in the Infantry Officer Advanced Course. While their letter is in the main a reasonable one, it is not without fault. Readers must remember, for one thing, that these captains were students in IOAC 4-83 — more than a year ago — and much has changed since then.

Having been in the Defense Branch of the Infantry School's Combined Arms and Tactics Department since June 1983, I can say that some of the faults cited in the Phipps-Hayse letter are simply not true. In the opening paragraphs the authors state that "the students are presented . . . a hypothetical scenario that seldom changes between operations." Just as in 1983, there are now no less than ten different scenarios ranging from defending Lawson Army Airfield on Fort Benning to defending the city of Columbus, Georgia, during a MOUT (military operations on urban terrain) exercise. Although a European location is the common thread in some classes, we also defend with a mechanized task force in Manchester, Georgia, one-half hour from Columbus. And a separate Korean scenario is presented now just as it was earlier.

Captains Phipps and Hayse also state that "in the scenario ... the higher 'commander's guidance' severely limits the student commander as to the options available." If they believe that a commander's intent (guidance) is a limitation, they're right. If they believe that a commander's intent inherently reduces their ability to think, they're wrong. Being "too audacious" is one thing; violating a commander's intent, without concurrent approval to do so, is quite another. (In fact, the latter could be fatal to the troops that these captains and others might lead one day.)

Since the authors' course, however, we in the School have made some of the changes they suggest in their letter. The students in IOAC now issue an oral operations order, one-on-one with an instructor, during a mechanized team tactical exercise without troops (TEWT).

Besides adding the oral order, we have reorganized the students into six-man staff groups, which, along with the instructor, "wargame" courses of action with other six-man staff groups. Each of these staff groups — put together with previous company commanders, other maneuver arm officers, and Allied officers spread throughout the class — works as a team and the members learn from each other as well as from the instructor.

We agree with Captains Phipps and Hayse that training on how to think is more important than on "what" to think. We base all our instruction on doctrine and then apply that doctrine against the ten scenarios in the defense block of instruction. The estimate of the situation is the most important factor in "how" we think: What's the process and how does it work here, in this particular location, this particular terrain?

We agree with the authors about getting rid of the "inane arguments concerning the placement of units or weapons." So we made a change to get the students off the CAMMS board (Computer-Assisted Map Maneuver System) and have them execute command, control, and communications during the CAMMS exercise as the commander and staff of a mechanized infantry/armor task force. The execution of a CAMMS exercise is now a high-stress, performance-oriented series of four hours of defensive exercises.

We do not, however, agree that the Allied students and exchange instructors should teach the "tactical adaptations and doctrine of their armies, not ours." There is only enough time and resources to get our own doctrine across to everyone. Students certainly can seek out our Allied friends and pick their brains for other views of how to do things; indeed they are encouraged to do so.

Currently, we test in much the same way the authors recommend, except that we do not have the students write and brief a five-paragraph field order as a final exam. (During company-level instruction, we do the oral order but do not subject a student to doing it in front of his peers.) While this is a

feasible idea for final testing, the authors admit that it "would require more time than is now allotted." I would make that "a lot more time." Only with more time and also more instructors would a final exam such as the one they propose be possible.

These two captains, even in their criticism, conclude by saying that "a great many U.S. Infantry captains are quite competent in small unit tactics." And the Infantry School is presently providing a course that is as performance-oriented as it can be in an effort to ensure that the U.S. Army Infantryman gets the best company commander possible.

RICHARD D. McCREIGHT
MAJ, Infantry
Fort Benning, Georgia

HISTORY AND TACTICS IN IOAC

I read with interest the article by Lieutenant Colonel Richard F. Timmons ["Junior Leader Proficiency," page 22] and the letter by Captains Michael Phipps and F.R. Hayse [page 50] commenting on training and tactics at the Infantry School in INFANTRY's September-October 1984 issue. Both emphasize the need to incorporate military history and the study of the art of war into the School's curriculum. The captains especially stress the use of examples from the eastern front in World War II. I agree completely and only regret that the authors did not check on the changes that have taken place since they attended the course before making their remarks.

We have recently made substantial advances in both areas. We now offer five hours of instruction on the Russo-German war and discuss the entire range of operations on the eastern front. (This can, of course, be no more than an introduction to that vast subject.) The Combined Arms and Tactics Department uses these hours as an introduction to its instruction on tactics, intelligence, and Soviet forces. We stress the scale of that war, its brutal nature, and the methods the Red Army used in that epic struggle. These classes emphasize the need to understand mobile warfare as practiced by Guderian, Manstein, Balck, and other German leaders. We further cite numerous ways in which the history of that war can be of use to modern officers. I have no doubt that the Infantry School leads the entire TRADOC school system on this point.

We also now require each student in the advanced course to write a lengthy research paper on any topic of his choosing related to military history or the art of war. Students must further read three books on military history chosen from a short list established specifically for our junior officers. This program introduces them to what we think are some of the basic professional studies and takes the first step in encouraging them to build their own professional libraries.

Finally, we use the class introducing the students to military history to emphasize (to both basic and advanced course students) the necessity of studying military history and the art of war as the only means of developing the type of judgment required by the AirLand battle doctrine. We outline the content of a good reading program for professional self-development, suggest some ideas on how to identify good journals and books, and provide numerous examples of the importance of military history. Some of these examples draw upon very recent developments within the School and within the TRADOC system.

We still need to infuse history into the tactical instruction even more than we do now, and a vigorous major effort is already under way in that area also. No program is perfect, of course, nor can a program satisfy everyone.

The authors cited earlier offer some very positive suggestions on the use and application of military history. In fact, they are so good that we have already adopted as many of them as is currently feasible.

DANIEL J. HUGHES
Historian
U.S. Army Infantry School

EXCELLENT ISSUE

Thank you for your excell
September-October 1984 issue. An e
tire issue devoted to leadership i
welcome sight. With the current tre
toward multi-contingency uni
leadership becomes the linchpin to
fective deployment.

The note about pushup deficienc
troubles me. A recent article in *Mi
tary Review* (March 1984) entitl
"REFORGER: Realistic Training f
the ARNG" also lists physical con
tioning as "among the most pressi
problems." All the scenarios I ha
seen, been told about, or dreamed
for a future war refer to a short a
physically demanding conflict (forg
mentally until it's all over). Add to th
the fact that the existing Reserve Co
ponents are probably the first and la
replacement or augmentation sour
for the Active Army and it makes f
frightening visions of exhausted so
diers too tired to fight at a critic
juncture in the course of the big battl

Forget about the mental? The que
tion raised about revising IOAC tac
cal training is interesting and is prob
ably still valid for IOBC as well. Ca
tain Maginnis's article ["Indepe
dence on the Modern Battlefield,"
page 29] answers this question in h
remark that "all of us . . . should en
courage our small-unit leaders to fin
new ways of building independence."
He goes on to say, "We should b
instrumental in getting them out o
garrison into the field to learn to kno
themselves, to face the challenge o
thinking for themselves, and to ex
pand their horizons beyond the unit'
borders."

IOAC is where the theory is taugh
to ensure uniformity of backgroun
throughout the Army. Personal initia
tive in reading historical tactics is iden
tical to the discipline necessary fo
physical readiness training. (Althoug
S.L.A. Marshall may have wanted t
teach Infantry leaders to think,
would hope that he meant that h
wanted to *encourage* them *to thin*
and *to do.)*

Lieutenant Colonel Robert
Friedrich's notes on NET ["NET,"

page 32] are welcome in that many more commanders will be faced with seemingly insurmountable tasks similar to his, but, as he says: "We learned many lessons. The most significant one was that good planning ... makes execution simpler."

And last but not least are Major Vernon W. Humphrey's comments on the National Training Center ["NTC: Command and Control," page 36]. It appears that we must take Colonel Friedrich's "lesson," combine it with Captain Maginnis's "suggestion," and hope that we passed our APRT — and that we do not face the enemy with a Befort Bayonet Replacement [see INFANTRY, May-June 1984, page 49].

I suggest to other readers that they re-read the entire issue and if possible also read the *Military Review* article cited here.

TERRY W. HARMON
CPT, Infantry, USAR
St. Louis, Missouri

IMPROVED M203

I am an antiarmor company commander in a mechanized infantry battalion where the 81mm mortar is sorely missed. Its absence leaves only one indirect (or semi-indirect) fire weapon in the inventory — the M203 grenade launcher. The M203 is an outstanding weapon. It is a suppressive fire weapon from the platform of the M113, an effective area fire weapon at longer ranges, and an accurate, close-quarter "knuckleduster" in the hands of a grenadier. Thus, the M203 can be used to separate enemy infantrymen from their carriers, to clear buildings, and to terminally discourage the most determined of snipers and machinegunners.

But I think it can be made even better. What if we combined an improved barrel and chamber, and a new quadrant and "flip-up" front sight? The weapon should then have an extended range to 600 meters, a flatter trajectory, and a better steel-on-target capability. We could call it the Magnum 203.

What are the possibilities for such a weapon?

First, the company commander could engage an area target such as dismounted infantry and APCs out beyond the maximum effective range of the M16 and in conjunction with the .50 caliber and 7.62mm machineguns to separate the infantry from their carriers and tanks and to destroy some of the vehicles in the process. With tight, inter-platoon fire control the commander could concentrate his Mag 203s and have a long-range "assault breaker" not unlike the old 81mm.

The Mag 203, with its increased explosive capability, would also be a bridge between the hand grenade and the rifleman's assault weapon in urban fighting. And it would be the equalizer in the hands of the four-man crew of the M901 ITV in the antiarmor company. The weapon could be used in conjunction with the smoke dischargers and the machinegun to break contact and suppress infantry attacks.

Finally, the infantry company could use the Mag 203 as an anti-helicopter weapon in addition to its attached Stinger teams. Several 40mm rounds fired into the path of a predatory HIND-D could definitely distract the pilot's attention.

The inevitable question is what the cost of the Mag 203 would be. The M203 would have to be modified, the operators would have to wear flak jackets to dissipate the recoil, and they would need more range training time. But the advantages of greater range and power would be worth the cost, whatever it was.

BO BARBOUR
CPT, Infantry
APO New York

MOBILE SCALE MODELS

The Fort Benning Field Unit of the Army Research Institute is investigating the use of 1/8-scale, radio-controlled tanks for infantry fighting vehicle training. Recent technological advances have made possible rediscovering old uses for miniaturized vehicles in a natural setting and developing new training strategies with them. In addition to their obvious use as mobile, reactive targets for gunnery training, the tanks can be used for tactical and leader skills training.

Although the use of scale models has a long history in military training, only a few articles or research reports discuss their uses. I would like to obtain information from people who have used mobile scaled models or who have ideas for using either static or mobile scaled models for training purposes.

My address is ARI-Ft Benning Field Unit, P.O. Box 2086, Fort Benning, Georgia 31905; and my AUTOVON number is 835-4513.

DR. JOHN C. MOREY
Research Psychologist

LRRP UNITS

The 3d Reconnaissance Company was formed to conduct the deep reconnaissance mission during REFORGER '82. At that time it was only a 21-man section under Company A, 3d Aviation Battalion (Combat), 3d Infantry Division. It was by no means the first long-range reconnaissance unit in the Army; the 9th Infantry Division Scout Company and the Michigan and Texas National Guard LRRP units preceded it. But it was the first unit of its type formed in USAREUR.

The work of this company and the other units like it has finally borne fruit in the formation of corps LRRP companies and divisional detachments under Division 86. The need for units of this type has been demonstrated over and over again in countless REFORGERs and by the use of Allied LRRPs to support U.S. corps.

The purpose of this letter is not to restate what has already been said in numerous articles about LRRPs but to discuss the decision to attach divisional LRRP detachments to the headquarters troops of the cavalry squadrons in both the heavy and the light divisions.

The need for specialized training and training resources for units of this type is of the utmost importance. Personnel in European LRRP teams have served from four to six years together. I believe the detachments that are now under division control would be better trained and manned if they were detachments of their respective corps LRRP companies.

This organization would offer many benefits:

- The LRRP detachments would be protected from being misused as they were misused in Vietnam.
- Their training would be significantly improved if it were consolidated at corps level. Training resources such as the International LRRP School in Weingarten and the numerous international exercises held by our allies could be a benefit to all the LRRP units in the Army.
- They would be part of an organization that was more oriented toward their needs and requirements.
- The quality of the personnel, either under a regimental or an additional skill indentifier system, could be better controlled.
- The divisional detachment would be able to call on a larger ogranization, and one similar to it, for logistical and communication support.
- Additional insertion assets would be available to the divisional detachments from corps level and higher.

But if things develop as they are now planned, the divisional LRRP assets may well die on the vine as the corps LRRP units absorb all the training assets and the high-quality personnel.

The major concern of the division commander is the loss of control of this detachment to the corps, along with its responsiveness to his requirements. This concern can be allayed by putting these detachments under the operational control of the division and by including the G-2/G-3 and the assistant division commander in the detachment commander's rating scheme.

Under the present concept of organization, these long-range reconnaissance units are in danger of being misused and inadequately supported. Now that we have this important asset back in the Army system, let's think through its proper position and role in that organization.

JOHN G. PROVOST
CPT, Infantry
3d Reconnaissance Company

KEVLAR HELMET GOOD

I was shocked to read in the letters section of your May-June 1984 issue the comments of Lieutenant Colonel Robert P. Kingsbury (page 50). These comments left me and other paratroopers shaking our heads. I will not waste time debunking his theories, but I will state one hardcore fact!

During the 82d Airborne Division's mission in Grenada in October 1983, an infantryman wearing the Kevlar helmet was shot point blank in the head by a Cuban armed with an AK47. I'm sure all of us in the Army know the ballistics of the AK round, and so too did the developers of the Kevlar helmet. That helmet harmlessly absorbed the massive AK round and that soldier, with a supply of aspirin, continued with his mission.

This particular helmet is now on display in the "Grenada Exhibit" in the 82d Division's museum. The round is sticking one quarter of the way outside the Kevlar, where all enemy head shots should be!

By comparison, the old steel pot can't stop a .22 Magnum much less an AK47 round.

DAVID C. CUSUMANO
PFC
Ft. Bragg, North Carolina

HISTORICAL ITEMS

The U.S. Army Center of Military History has received two requests for help in ascertaining the location of particular items. In order to ensure a thorough search for these items, we are asking for the assistance of your readers.

The United States Embassy Bonn, West Germany, has reque assistance in finding 23 medals once belonged to Field Marshal muth Von Moltke (1800-1891). available evidence indicates that medals disapppeared from the tional Archives and Records Servi Washington, D.C., some time tween 1945 and 1954.

In addition, Ms. Mina E. Wri Architectural Historian, Office of ministration, Executive Office of President, has requested assistanc locating 19 cannon that were loc at the present Old Executive Of Building in Washington from until they were removed from grounds in 1943.

Anyone who has any informa on these subjects (or who may ne list of the guns in question) may w to Chief, U.S. Army Center of M tary History, ATTN:: DAMH-HS Dr. Norman Cary, Washington, 20314-0200, or call Dr. Cary at (272-0310 or AUTOVON 285-0310

DAVID L. LEMON
COL, MPC
Chief, Historical Services Divisio

JODY, HQ STYLE

The following is in response to Jody calls in your May-June issue (p. 30):

HQs TROOP

I joined the Army to be a fighting man,
Now I'm in headquarters sitting on my ca
I shuffle papers to my left
It's not the same as a PLF,
I shuffle papers to my right
It's not as exciting as a fire fight.
Air conditioning and big old fans,
I got no calluses on my hands.
My uniform's clean and my boots shine b
I get to sleep most every night.
Up in the morning, go to work at 8
Get off at 4 'cuz I got a date.
In-box, out-box,
What will it be?
I'm a headquarters troop,
Just look at me.

MARKUS W. LEWIS
PFC
3d Ranger Company
Benning Ranger Division
Fort Benning, Georgia

APPLICATIONS ARE NOW BEING accepted for attendance at the U.S. Military Academy Preparatory School (USMAPS) for the academic year that begins in August 1985. The School, located at Fort Monmouth, New Jersey, prepares young enlisted men and women to compete for appointments to the Military Academy at West Point.

Each year more than 300 enlisted men and women undergo nearly ten months of training at the School. And while the major emphasis is placed on academics, the development of leadership traits, discipline, and physical conditioning are also stressed.

To qualify, a soldier must be a U.S. citizen, or be able to become one before 1 July 1985; be single and with no obligation to support a child or children; be medically qualified in accordance with Chapter 5, AR 40-501; not have reached his 21st birthday before 1 July 1985; be of high moral character; and have a good high school record and desire a military career.

Additional information may be obtained from AR 351-12; from the Commandant, USMA Prep School, Fort Monmouth, NJ 07703-5509; or from the School's Admissions Office at AUTOVON 992-1807.

THE ARMY CORRESPONDENCE Course Catalog, DA Pamphlet 351-20, is published every six months (January and June). It includes all courses and sub-courses administered by the Institute for Professional Development (IPD) at Fort Eustis, Virginia, and outlines the procedures and administrative functions that affect student enrollment. The pamphlet also includes the correspondence courses offered by Army schools that administer their programs independently of the IPD.

Active and retired military members of all branches of the service, foreign military personnel, Army National Guard and Army Reserve personnel, and DOD civilians are eligible to take these programs of instruction. Enlisted personnel may receive promotion points and Reserve Component officers may receive retirement points for successfully completing these courses. In addition, the IPD does issue diplomas and completion certificates.

The Infantry School currently has 21 programs of instruction in the correspondence course catalog. The new catalog that will appear this month (January 1985) will reflect several changes in those programs. Sixty new subcourses have been added to the curriculum to replace outdated ones.

Information on the Infantry POIs can be obtained from the ACCP Branch of the Infantry School, telephone commercial 404/545-7151 or AUTOVON 835-7151. Information on the other branches is available from the IPD, telephone commercial 804/878-3667 or AUTOVON 927-3667.

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

• **Night Vision Goggles, AN/PVS-7.** An effective low-cost system that will provide soldiers with a night vision capability is of particular interest to the Army. In 1980 the Army's Night Vision and Electro-Optics Laboratories developed two prototype low-cost night vision goggles; one was a cyclops version, the other a holographic one-tube version.

The Infantry Board evaluated the two versions using the AN/PVS-5 goggles as the standard. The Board's test results indicated that a combination of characteristics of the two prototypes demonstrated sufficient potential for further development. (See also INFANTRY, July-August 1984, pages 3-4.) In January 1982 Department of the Army approved a requirement for the Night Vision Goggle, AN/PVS-7, and the Infantry Board was designated the test agency.

The AN/PVS-7 is a monocular lightweight image intensification device that uses a single image intensification tube. Power is provided by any one of three types of internal batteries. The user can strap the device to his head and have his hands free to perform tasks, or he can hold it in his hands and use it as he would binoculars. An infrared light-emitting diode provides illumination for close-in tasks (as close as 10 inches) such as map reading. The AN/PVS-7 weighs 1.93 pounds; the AN/PVS-5 weighs 2.02 pounds.

The test was started in November 1983 but was suspended after a week of testing because intermittent interruptions in the electrical circuitry of the goggles were safety hazards during weapons firing and the driving of vehicles. The items were returned to the developer to be corrected.

Testing of the corrected items was resumed in May 1984 but was again suspended by the Board after only five nights because of numerous reliability failures.

In June 1984 the Army's Training and Doctrine Command directed that the test be terminated and that the AN/PVS-7 goggles be returned to the materiel developer.

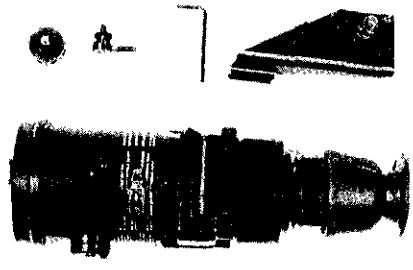
• **Improved Sniper Night Sights.**

INDEX

The 1984 index to INFANTRY has been prepared separately and is available to anyone who requests a copy. Please address your request to Editor, INFANTRY Magazine, Box 2005, Fort Benning, GA 31905-0605.

From information provided by the Army Marksmanship Unit and units in the field, the Infantry School determined that the night vision sight, individual served weapon, AN/PVS-4, is only marginally adequate as a sniper night sight because of its size, weight, and shifting reticle.

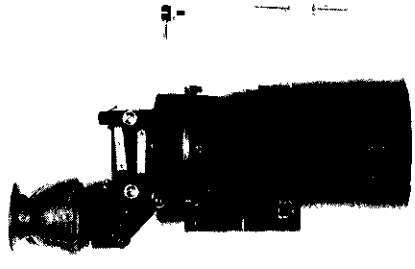
The Night Vision and Electro-Optics Laboratory (NVEOL) at Fort Belvoir indicated that two options



Sniper Weapon Sight (SWS-4)

were available in considering a new lightweight sniper night sight — to modify the AN/PVS-4 and to award a contract to a civilian corporation for the development of a new lightweight sight.

In July 1983 the Training and Doctrine Command approved a concept evaluation program test of an improved AN/PVS-4 and directed the Infantry Board to conduct a test. The test would compare the standard AN/PVS-2 and AN/PVS-4 sights with a modified AN/PVS-4 sight provided by NVEOL and a lightweight sniper night sight provided by a contractor.



New Lightweight Night Sight (NLNS)

The modified AN/PVS-4 used a 25mm scope rather than an 18mm scope, contained a baffled interior, and had a second-generation image intensifier tube. The new lightweight sniper night sight used an 18mm scope, a third-generation image intensifier tube, and an offset eyepiece. The sight was designed to provide a personnel target recognition capability out to 600 meters in clear air under moonlight conditions.

The test consisted of detecting and recognizing targets during a nonfiring phase and of firing at E-type silhouette targets during a hit probability phase. All night vision devices were mounted on M16A2 rifles. Targets during both phases were located at ranges of 300 to 1,000 meters from the test soldiers.

The Infantry School will use the data obtained during the test to determine the potential of the test sights to replace the current sights now being used by sniper personnel.

THE ARMY TRAINING BOARD has completed work on the FM 25 series on training (FM 25-1, -2, -3, -4), and these manuals are now being distributed to the field.

FM 25-1, Training, covers the philosophy and principles of training. It is intended for leaders at all levels.

FM 25-2, Unit Training Management, explains the Army training management process. It is intended for use by battalion commanders and above, and by the staff members of those organizations.

FM 25-3, Training in Units, provides the "how to" for the conduct of training. It is for leaders at the battalion level and below — the first-line trainers.

FM 25-4, How to Conduct Training Exercises, describes the conduct and use of training exercises to sustain skills. It is intended for use primarily by commanders and staff officers at battalion level and above.

These manuals are available from the Army's Publications Center in Baltimore, Maryland. DA Forms 12A should be updated to check block number 59, Techniques of Military Instruction.

THE FOLLOWING NEWS items were furnished by the National Infantry Museum:

The National Infantry Muse recently observed its 25th anniversa It had less than 200 artifacts when first opened, but has now grown to repository of more than 35,000 a facts, 2,600 firearms, and a large c lection of books, photographs, a documents. The Museum prides itse on its quarter of a century of service Fort Benning, the United States Infa try, and the United States Army.

A number of names have been ad ed to the plaques that list the thre time recipients of the Combat Infa try Badge. The names on the plaqu now total 255.

The Fourth Annual National Infa try Museum's five-mile run was great success. About 2,500 runne took part and nearly $13,000 wa raised for the Museum.

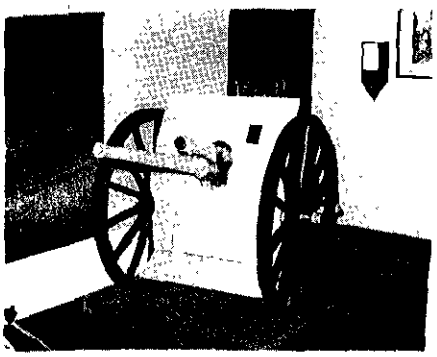
Volunteer tour guides are now o duty at the Museum on a regular bas to conduct guided tours for sma groups and interested individuals. T ensure proper scheduling, requests fo guided tours should be made well i advance of the anticipated visit.

Recently, the Museum conducted ceremony that saw the presentation o a historical marker by the Daughter of the American Colonists to com memorate the signing of the Treaty o Coweta by General James Oglethorp and the Creek Nation in 1739. The ac tual signing took place on what is now Fort Benning near Lawson Army Air Field.

Among the Museum's recent acqui sitions are a Royal Canadian Regi ment scarlet ceremonial dress uniform presented by Major David Bondurant, the Canadian liaison officer at the In fantry School; artifacts and memora bilia of the late Vietnam news corre spondent Charles Black, given by his widow; a rare Krag Jorgensen bayonet; a Revolutionary War folding fork and wooden canteen; an 1830 rifleman's coat; some Chinese Communist weapons; a Swedish submachinegun; World War II British paratrooper jump headgear; a World War I medical flag that belonged to a medical unit in the 28th Infantry Division; and a framed, captured Liberation Front flag that was taken in Saigon

during the Tet offensive of February 1968.

A rare 37mm cannon manufactured by the Bethlehem Steel Company for the French Govenment in 1917 was placed on exhibit recently. The weapon was used to provide close support to the infantry during World War I



and is one of only three such weapons known to be in existence today. It was orginally painted light blue to prevent heat absorption that might ignite ammunition before the gunner was ready to fire.

Another recently added exhibit is one about mechanized infantry. It includes a large oil painting of General George S. Patton, Jr., and a U.S. flag

made by some of the men of Company K, 260th Infantry Regiment to celebrate the German surrender in 1945.

The National Infantry Museum Society was formed at Fort Benning a number of years ago to help the Museum with financial and volunteer support. It 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, AUTOVON 835-2958 or commercial 404/545-2958.

THE FOLLOWING NEWS ITEMS were submitted by the Directorate of Combat Developments, USAIS:

• **Airborne and Air Assault Infantry Battalion Organizational Structure.** The present organization of our airborne and air assault infantry battalions recently has been examined with a view toward proposing possible modifications to meet Army of Excellence organizational designs. The examination's objective was to arrive at divisional end strengths of 13,500 soldiers for the airborne division and 15,000 soldiers for the air assault division without affecting the divisions' ability to accomplish their doctrinal missions. The new Infantry Division (Light) organization was used as a base case with the idea of standardizing all light infantry units while still making certain the airborne and air assault divisions had the means to perform their unique missions.

Several different proposals for battalion organizations were looked at and discussed. Some of the areas of discussion were a weapons squad for the rifle platoon that would have the platoon's machineguns and Dragons; a company mortar section that would have two 60mm mortars; the need for vehicles in the rifle company for the commander and for resupply purposes; and the number of platoons in the antiarmor company and their organization.

Smaller TOW platoons of four TOWs each with four or five platoons were favored over the present three-platoon organization, with each platoon having six TOWs. The merits of the improved 81mm mortars versus the 107mm mortars for the battalion's mortars received much consideration. The need for the scout platoon and the type of mobility for it (footmobile, motorcycles, fast attack vehicles, HMMWVs, or a combination of these) was examined on the basis of the types of missions the scout elements were expected to perform in each division.

Another area of great interest and study was the support platoon's organization, to include the need to keep mess and maintenance functions in the battalion rather than moving them to brigade headquarters as in the light infantry battalion. The numbers and types of vehicles that are necessary in the support platoon were also considered because of the airborne and air assault missions conducted by individual battalions.

The final decision on these various organizational structures will be forthcoming in the next few months.

• **Light Assault Weapon.** The need for a light assault weapon, or LAW, was first established in the late 1950s. The Army's experiences during both World War II and the Korean War demonstrated that the individual American soldier had no effective weapon at his disposal that he could use to engage and defeat an enemy armored target. Weapons such as the 2.36-inch rocket launcher ("Bazooka"), the 3.5-inch rocket launcher ("Super Bazooka"), the 57mm recoilless rifle, and the 75mm recoilless rifle were available at platoon and company level, but they were either heavy or not very effective, or both.

The production and fielding of a LAW began in the early 1960s. Originally fielded to replace the 3.5-inch rocket launcher, the LAW gave every soldier a much-needed short range, effective antiarmor weapon. It was about this same time that the Army fielded the 90mm recoilless rifle as a medium range antiarmor weapon. The LAW was never intended to replace the 90mm rifle, only to complement it.

The first LAW was a 66mm, self-contained, disposable weapon designed to be effective at ranges out to 200 meters. Many could be issued. In a

secondary role, the LAW was to be used as an assault weapon against bunkers and fortified positions.

The M72A1 LAW was a good system and, for the most part, performed as expected. But it had some problems that had to be corrected, some of which involved its reliability, accuracy, and range. Recognizing these problems, the Army began a program to improve the weapon. The result was the M72A2 LAW.

This weapon gave the infantryman an increased probability of hit, more reliability, and greater warhead performance. And although it is still in the Army's inventory today, it is not without its problems.

For this reason, the Army improved the M72A2 into the LAW's most current configuration, the M72A3. This latest version, with its shaped charge warhead, provides good penetration of rolled homogeneous armor (RHA), is lightweight and one-man portable, and is effective at ranges out to 200 meters.

The M72A3 is effective against the older Threat tanks such as the T54/55 and T62. Although the more current Threat tanks have been hardened to the point where it is not technically possible for a LAW to defeat them from the front, it can be used effectively against them if top, side, and rear shots are used. Thus, the primary target for the current and any future LAW will be lightly armored vehicles.

Recognizing that the M72A3 LAW, like the earlier versions, had certain shortcomings, the Army started a program in the 1970s to replace it. The program, called the Improved Light Antitank/Assault Weapon, or ILAW, hoped to develop a weapon that would defeat up to 14 inches of armor at ranges out to 300 meters. The weapon was to be light in weight and capable of being used anywhere in the world.

From 1975 until the fall of 1983 the VIPER was developed to meet the ILAW requirements. But during the summer of 1983, as the result of a test that evaluated the VIPER against other available lightweight antiarmor weapons, the Army decided to end the VIPER program and to continue testing the AT4, a Swedish-made weapon. At the same time, however, it was decided to improve the performance of the M72A3.

The AT4 weighs 14 pounds and is 39 inches long. It offers good penetration, range, and hit probability. It

The AT4

is not a free-flight rocket system like the M72A3; it is actually a recoilless rifle similar to the *Carl Gustaf*. (See INFANTRY, March-April 1984, pages 20-21.)

The M72A3 product improvement, or M72E4, is designed to increase the range, accuracy, and reliability of the current LAW. It will remain a lightweight system at about seven pounds.

In August 1985, a decision will be made either to continue the M72 series or to procure the AT4. But as with any concept in the combat developments area, the desire to provide the infantryman with the best available LAW will not end with the fielding of the M72E4 or the AT4. Research is already under way to determine how these weapons can be further improved to provide infantrymen with a better multipurpose system. Improvements in performance against bunkers and fortifications, while retaining or increasing the weapons' ability to defeat lightly armored vehicles, are being examined. Efforts will continue to insure that the infantryman is given the best possible LAW.

• **Improvements to the M113 Family of Vehicles.** As we near the 1990s, it has become apparent that the M113 family of vehicles requires upgrading. Today, the M113 cannot keep up with the Bradley fighting vehicle or with the M1 Abrams tank, and it does not h the same survival capability as Bradley.

Accordingly, a block modificat program has been developed to ov come these problems. First, a reliab ty improved selected equipm (RISE) power plant has been desig and tested. The key element is 275-horsepower engine that will g better power for operation both and off the road.

Armored external fuel cells ha been added as well as Kevlar sp liners. Both items have been tested a have demonstrated that they c reduce the probability of vehicu fires and provide increased crew pr tection against chemical energy w head attack.

The block modifications and t continuing product improvements the M113 will keep these vehicles " to fight" in the battles of the futur

• **Separate Infantry Brigade (Ligl (SIBL).** A separate light infantry b gade (SIBL) is now being designed fight the corps rear battle. It will ha three infantry battalions plus the nu ber of combat support and comb service support units needed to enab it to engage and defeat enemy incu sions into the corps rear area. For t moment, the SIBL will be a Reser Component unit, with one assigned each Army corps.

The brigade's infantry battalion modeled after airborne and air a sault battalions, will have three ri companies and an antiarmor co pany each. Each battalion will completely mobile — using HM MWVs — so that it can respo rapidly to an enemy incursion. T antiarmor company will have bo TOWs and light kinetic energy an armor weapons in the 25mm or 30m size.

Following DA approval, the Infa try School will become proponent f the SIBL in November 1985.

• **Mortars in Infantry Battalion** Two levels of mortars in infantry ba talions will be documented in TO during the next update. As a cons quence of recent Department of t Army decisions, a two-tube, six-m

lightweight company mortar system — 60mm — will be added to the light infantry division's rifle companies. Because these rifle companies have no organic vehicles, these mortar sections will be extremely austere. Fire control equipment will be limited to M19 plotting boards and M2 compasses.

Additionally, the general support mortar platoon will change from the 4.2-inch to the improved 81mm mortar. Its structure, personnel, and vehicles will remain as currently documented. This same mortar organization will also appear in the new air assault and airborne battalion TOEs.

The mechanized infantry battalion's mortar structure will remain as it is today with only six 4.2-inch mortars in general support. The 120mm mortar is expected to replace the 4.2-inch mortar in the future.

• **VIPRA.** In an attempt to improve the safety of marching and running troops, road guards, and police details particularly during periods of low visibility, the Infantry School will evaluate a new reflective system called Vest Individual Protective Reflective Adjustable (VIPRA).

The system consists of a bright yellow triangular vest with arm and leg bands. Early tests using bicyclists, runners, and military policemen indicated that the VIPRA is brighter and more comfortable than the current equipment.

•**Soviet Field Fortifications.** Soviet doctrine emphasizes the use of the natural conditions of an area and its terrain features to fight a battle more successfully. When a defensive position is occupied ahead of time as a result of direct contact with an enemy force, construction usually begins with the development of one- and two-man emplacements that are later connected by fighting and communication trenches. These defensive positions provide a continuous firing position along a combat front, a protected means of moving troops and supplies, and protection from enemy small arms, mortar, and artillery fire.

In defensive combat, one-man foxholes are dug when troops are to occupy and reinforce positions in a hurry. The one-man foxhole can initially be dug in one of three forms: prone, kneeling, or standing.

The multi-man position accommodates two or more men. Usually, a two-man position will have cover as well as firing positions for both men. Often, there will be a raised parapet and a firing step on at least one end. The raised parapet is usually constructed on the side nearest the enemy. The height of the raised portions of the parapet is about 24 inches, with firing ports made up of 12-inch high sections.

Emplacements for weapons and vehicles are constructed to protect them and their crews as much as possible, thereby enabling the crew members to more successfully fulfill their mission. One of these emplacements consists of a position for firing purposes, concealment or cover for the crew members, a ramp for entering and leaving, a parapet, and recesses for ammunition. Depending on the assigned mission of the terrain, the emplacements usually will be constructed with a limited field of fire. When the time, forces, means, and terrain allow, an emplacement that permits a circular field of fire is constructed next to the position with the limited field of fire. The decision on which type field of fire is to be constructed is made by the commander on the ground after a study of the terrain on which the position is to be located.

• **Drop Zone Assembly Aid System.** The Directorate is working on the development of a drop zone assembly aid system (DZAAS). It will consist of small, lightweight, electronic transmitters and receivers to help airborne forces assemble their personnel and key equipment more rapidly on drop zones.

The transmitters will be able to emit up to 25 separate electronic signals out to 1,500 meters. Those used to assemble personnel will be emplaced and activated at various assembly areas by the lead elements — pathfinders, advance parties, security parties, or the like — while those used to identify key equipment loads might be activated on board the aircraft by the loadmaster or after the drop by personnel already on the ground.

The lightweight (wrist type) receivers will be worn by designated personnel in the main assault force and will be activated as prescribed by the unit SOPs, either just before or just after landing. These receivers will guide the personnel off the DZ to their specific assembly areas or to the key equipment loads.

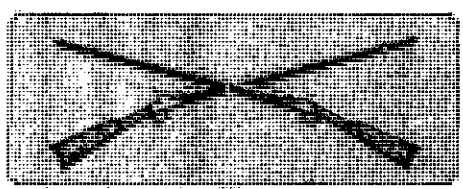
It is expected that each transmitter will weigh less than five pounds and that each receiver will weigh less than 8 ounces.

THE ARMY HAS AUTHORIZED its soldiers to wear the Vietnam-era jungle fatigues — the "hot weather uniform, OG 107." Until now, that uniform has been available only to soldiers at selected installations for optional wear. It is now being made available to military clothing sales stores for purchase and wear on all CONUS installations as a field or utility uniform until September 1986.

The uniform may be worn throughout the year whenever the local commander prescribes a field or utility uniform. It may not be worn when a specific uniform is required for wear during a ceremony, a formation, or a special occasion. And it may not be worn during off-duty time or during travel periods, although soldiers may wear it when going between their quarters and their duty stations.

Local commanders cannot require their soldiers to wear this uniform unless the uniforms are issued as an organizational item, but those commanders must offer their soldiers every opportunity to wear the uniform should they buy one.

Drill sergeants and others serving in an initial entry training unit are not authorized to wear this uniform.



LIEUTENANT COLONEL CLAYTON R. NEWELL

For centuries soldiers have studied the question of the best way to mix heavy and light forces on the battlefield. Recently, the question has taken on new significance in the U.S. Army. For example, the employment of mixed heavy and light forces in Europe is the subject of three articles in the July-August 1984 issue of INFANTRY (pages 10-22). These "heavy-light" articles, written by experienced infantrymen commanding at various levels in USAREUR (U.S. Army Europe), provide a preview of how those commanders might mix light infantry forces with their heavy forces.

Previously, however, the Army published its White Paper 1984, entitled *Light Infantry Divisions.* It contains the Army leadership's plan for the development of its new light infantry divisions. Surprisingly, though, a comparison of that plan with the apparent plans of the commanders who wrote the "heavy-light" articles reveals a significant difference in approach: The White Paper describes the characteristics, formation, manning, training, equipping, and sustaining of light infantry *divisions,* while the USAREUR commanders describe the tactical employment of light infantry *brigades* and *battalions.*

This difference is more than semantic. In the first of the three "heavy-light" articles, Lieutenant General John R. Galvin, VII Corps commander, begins his tactical discussions with the assumption that the corps commander will have the authority to break a light infantry division into smaller parts when it is deployed to Europe. The tactical scenarios in his article and the other two focus primarily on the employment of those smaller parts — the brigades and the battalions.

These tactical scenarios, all set in typical Central European terrain, employ light infantry to defend in close terrain such as urban areas and forests. Using light infantry in this manner frees the armor and mechanized infantry forces to engage the enemy in open terrain. And this approach is a proper one: While light infantry forces are not generally suited to stand and fight heavily armored forces in the open, once dug in they can hold close terrain indefinitely.

Emphasizing the advantages of light infantry in close terrain, however, argues against the light infantry division as it is described in the White Paper, because the close terrain of Central Europe is not all in one place so that it can be defended by light infantry divisions. It is scattered about, surrounded by open terrain, thereby lending itself to defense by brigades and smaller units. And the writers of the "heavy-light" articles accurately portray that situation.

The difference between the goal of the White Paper and the planned employment of light infantry units in Europe is one of organization. The question raised is not whether the Army needs light infantry but whether it needs light infantry *divisions.*

A recent article on Army force design, in fact, proposes that the brigade replace the division as the basic interchangeable part of the Army force structure. (See "FM 100-5: Conceptual Models and Force Design," by Majors James M. Dubik and James J. Montano, *Military Review,* July 1984, pp. 16-26.) The authors argue that by forming a variety of separate brigades the Army could tailor its divisions to specific missions and terrain better than is currently possible.In the case of light infantry employment, the tactical thinking in Europe, as represented by the INFANTRY articles, seems to support this proposal.

Using brigades and smaller units to augment the heavy forces stationed in Europe instead of committing light in-

fantry divisions as integral units is a sensible approach. But it will destroy the cohesiveness that is supposed to be an inherent part of the light infantry division as the White Paper describes it.

Light infantry can be effective in a European war, but if the commanders on the ground want to use it in pieces smaller than a division, then a better approach might be to build light infantry brigades in the first place. These brigades could then be employed as integral units in consonance with the plans of our USAREUR commanders. Certainly, light infantry brigades that were designed to fight independently would provide a stronger overall force than the same number of brigades trying to fight as pieces of a broken division.

In Army force design, form must follow function. When organizing new units such as light infantry, the first consideration must be its planned employment — its clearly defined role — on the battlefield. The innovative employment of infantry has always been the key to succes in battle. Its imaginative organization today could prevent time-wasting reorganization on the battlefield tomorrow.

Lieutenant Colonel Clayton R. Newell, an Infantry officer, is assigned to the U.S. Army Concepts Analysis Agency, where he works on force development studies. He has served in light infantry battalions in Vietnam and in a mechanized infantry division in Europe.

Heavy-Light Forces
Assessing the Challenge

JAMES B. MOTLEY

In the July-August 1984 issue of INFANTRY, Lieutenant General John R. Galvin, the VII Corps commander, presented an excellent discussion of the reinforcing missions that light infantry divisions might assume in the early phases of a mobilization to meet an impending Warsaw Pact attack in Europe. I would like to expand further on the issue of heavy-light forces. (Portions of this article will appear in a more detailed and comprehensive treatment of low-intensity conflict in a forthcoming issue of MILITARY REVIEW.)

Current U.S. defense policy and general-purpose force structure and modernization programs continue to focus heavily on a NATO contingency — a contingency that is increasingly inappropriate, given the global power shifts now under way and the newly identifiable threats now developing in other areas. A critical assessment of the political and military realities affecting international security reveals:

- The increasing frequency and intensity of terrorist incidents as a means of obtaining political goals.
- The armed forces of at least 36 countries — one in five of the world's nations — involved in military operations, more than 30 of which involve revolutionary or separatist insurgencies.
- Increasing Soviet-Cuban involvement in Central America.
- Little hope for the early cessation of the Iran-Iraq war.
- The continued Soviet occupation of Afghanistan and the buildup of Soviet forces along the Afghanistan-Pakistan border.

"The nature of warfare today is such that we cannot await the outbreak of hostilities before initiating suitable and necessary military preparations, especially in light of the military power other nations — particularly the Soviet Union — maintain in constant readiness."

John O. Marsh, Jr.
Secretary of the Army

It is evident then that the type of warfare the Army will face for the remainder of this century is unlikely to be the traditional NATO/Warsaw Pact scenario (World War II military operations but with more sophisticated technology). Rather, it is likely to involve the use of combat force at the lower end of the conflict spectrum. ("Low-intensity conflict" is the term currently in vogue to describe this range of activities. Other terms, often used synonymously, include "small or minor wars," "low-level violence," and "limited contingencies.") The Army will face many types of low-intensity challenges over the next decade. It must suffice here to say only that such military operations will be limited in scope, confined principally to the Third World, and directed toward accomplishing limited political-military goals.

The low-intensity battlefields of the

future, therefore, will require smaller, more flexible, and more strategically responsive Army forces — forces that are organized to respond to a broad spectrum of combat operations and a wide array of contingencies. Such forces must be equipped so that they can be sustained in regions where there are limited support facilities or no U.S. or allied bases.

Preparing for low-intensity conflict does not mean that the Army must forego military innovation and modernization. Technology and the military threat are growing too fast for that. It does require, however, that a more concerted effort be made to improve the Army's military capabilities for low-intensity conflict. Such an effort will require some shifting of resources, priorities, and emphasis (special operations are an excellent example) from the short, intensive, European-war scenario to power projection and Third World intervention capabilities. And these shifts must be made while continuing, and in some instances increasing, security assistance and arms transfers to critical U.S. allies and to Third World countries.

The various types of contingencies for which the Army must prepare — engaging an enemy at levels of conflict ranging from counterterrorist operations to full-scale conventional or nuclear war — will require forces of various sizes and capabilities.

PROGRESSIVELY *HEAVIER*

From the end of World War II, the Army's force structure became progressively heavier. There were several reasons why that was so:

- The need to counter the long-standing conventional force advantages of the Soviets and the other Warsaw Pact nations.
- The general trend toward mechanization and modernization.
- The shift in focus to the NATO battlefield in the post-Vietnam era.

Thus it has been difficult for the Army to design its doctrine and its light forces to respond to low-intensity conflict, because it has not been in the Army's fundamental interests to do so. After all, light infantry, Airborne, Ranger, and Special Forces units must compete for resources with major weapon programs. Now, for example, seven major new weapon systems — all of which are more suited to mid- and high-intensity conflict — are in the process of being introduced into the Army. The M1 Abrams tank, the Bradley fighting vehicle, the Apache attack helicopter the Blackhawk utility helicopter, the multiple-launch rocket system, the Patriot air defense missile system, and the Sergeant York division air defense gun.

Until recently, in fact, the traditional Army establishment has resisted the creation of additional forces to respond to the challenges of low-intensity conflict. At least four factors, however, have focused new attention on the importance of such forces. One is the steady proliferation of U.S. commitments throughout the Third World, which requires forces with greater strategic and tactical utility (a basic premise behind the creation of the light infantry division). A second factor is a principal conclusion of a report entitled "Strategic Requirements for the Army for the Year 2000" that low-intensity conflict — psychological warfare, high-technology terrorism, Soviet-supported revolutions, urban guerrilla warfare, and more conventional proxy wars — will constitute the greatest challenge to the Army during the 1990s. A third factor is the success of the light forces in the U.S. military operations in Grenada. The final factor that has focused attention on these forces is Secretary of Defense Caspar Weinberger's statement in his FY 1985 Annual Report to the Congress that "the high priority we have assigned to SOF (Special Operations Forces) revitalization reflects our recognition that low-level conflict . . . will pose the threat we are most likely to encounter throughout the end of this century."

Accordingly, the Army has initiated a number of changes designed to deal with the warfare of the future. These include the conversion of the 7th Infantry Division to the light infantry organization; the activation of a seventeenth active component division, which is to be based on the light division design; the addition of a third Ranger battalion; and the activation of a new Special Forces Group. The reassessment of the role of light forces is a step in the right direction, if the Army is to meet the challenges of the next decade.

CHALLENGES

The emerging international security environment requires Army forces that are capable of responding to unconventional challenges. In recent years, the Soviet Union's primary military activity in the Third World has been in the areas surrounding the U.S.S.R. — eastern Europe, the Middle East, Mongolia, and the Far East, and, most recently, Afghanistan. But Soviet achievements in the Third World for the foreseeable future are likely to be pursued farther and farther from the Soviet homeland and are likely to be pursued more assertively. Thus, a continual, detailed review of the Army's doctrine, its strategy, and its forces is required if the Army is to be prepared for situations that are likely to affect U.S. interests.

In sum, the Army's heavy-light force structuring needs to be thoughtfully and pragmatically assessed. United States political-military goals, the threat, a clear understanding and appreciation of military power, and the recognition of resource limitations must all be factored into the Army's calculations regarding the best mix of these heavy and light forces.

James B. Motley, *a retired Infantry colonel, is a* senior military analyst with the National Institute for Public Policy. During his 24 years of Army service, he had diverse command and operational experience with airborne, Special Forces, Ranger, airmobile, light infantry, and mechanized infantry. He has published extensively on the subjects of low-intensity conflict, Soviet studies, NATO affairs, and arms control.

Interoperability with Egyptian Forces

LIEUTENANT COLONEL WOLF D. KUTTER
MAJOR GLENN M. HARNED

In the NATO community, much progress has been made in the area of interoperability, or the ability of two armies to operate together on the modern battlefield. From the development of Standard NATO Agreements (STANAGs) to face-to-face coordination between partnership units at battalion level and below, procedures are largely in place to overcome national differences in organization, equipment, and doctrine. To a lesser degree, the same can be said of the interoperability procedures between United States and Republic of Korea (ROK) forces.

In the U.S. Central Command (CENTCOM) area, however, there is no established interoperability doctrine. As a result, the lessons learned in past exercises have been largely lost to all but those who originally learned them. When the 101st Airborne Division (Air Assault) deployed Task Force Desert Eagle (of which we were a part) to Egypt in August 1983 to participate in Exercise BRIGHT STAR 83, a major objective of the task force was to develop and document procedures for interoperability with the Egyptian armed forces.

Over the course of a three-week period that included extensive counterpart training and a four-day combined FTX, members of the task force developed rewarding relationships with elements of an Egyptian Army airborne brigade and with an Egyptian Air Force helicopter squadron. The foundation for these relationships was made up of four tenets:

- **Partnership.** We treated each other as professional equals. The Egyptians shared their desert expertise with us, we shared U.S. technology with them. And we mutually shared doctrine, tactics, and techniques.
- **Honesty.** Discussions between counterparts were open, frank, and honest. Within the bounds of hospitality and courtesy, nothing was held back.
- **Cooperation.** Problems and differences were resolved jointly to achieve mutual satisfaction. Because both parties had a sincere interest in cooperating to make the exercise a success, each was willing to compromise and to make concessions when necessary.
- **Hospitality.** Hospitality and reciprocity of gifts, including public praise, were found to be vital to success in the Middle East.

All of this is not to say that combined operations were easy. Significant differences exist between the military systems of the United States and Egypt. These differences often caused frustration and less than the best performance by both forces, usually because somebody had made an inaccurate assumption about how his counterpart would act in a given situation. We found several major differences during our visit, but we also found ways of working around most of them. We hope that our observations here concerning these differences will be of help to others who may deploy to Egypt in the future.

The Egyptians follow the Soviet doctrine of centralized decision making and are quite bureaucratic in their hierarchy. Rarely is a major decision made below brigade level, and staff decisions routinely require general officer approval before they can be acted upon. Highly structured operations schedules "drive the train"; even battalion commanders cannot modify them without the approval of higher headquarters. And once briefed to a higher Egyptian authority, a decision or an agreement is difficult to change.

Conversely, daily meetings are conducted to confirm the details of the next day's activities. Within an operations schedule, a battalion commander can decide how he will accomplish his mission. Such details, though, as uniform and equipment, reporting times and locations, movement times and routes are rarely pinned down until this meeting the day before the event, and there is no guarantee that subordinates will be informed of the decisions their superiors make at this meeting. If the operations schedule must be changed, of if some other decision is made that is outside the authority of the battalion commander, then the battalion commander must arrange a meeting with his brigade commander to secure his approval.

A similar process must be followed when dealing with an Egyptian staff. After an initial introductory meeting

with all parties present, there is a working session for action officers. Once the action officers reach some tentative agreements, several meetings are then held to secure approval of the plan. The senior Egyptian officer at each of these meetings approves those portions of the plan over which he has authority and then defers the remainder to his superior. The culmination of all this is a final meeting in which overall approval is given by an Egyptian general officer. This time-consuming process can be very frustrating for the U.S. officer who is accustomed to decentralized decision making with backbriefs to his superiors on how the operation will be conducted.

Americans also tend to be continually frustrated by the Egyptians' cultural time orientation, and Egyptians by the Americans' apparent obsession with punctuality. In the Middle East there is no cultural impetus to be on time. Egyptians may say they will arrive for a meeting "from nine o'clock" (meaning don't expect them before nine, but anytime thereafter) or they may say "between two and three o'clock." Exact times are not expected, or even important to them, and if something more pressing arises, they will simply not attend. But this difference should be expected and accepted as a cultural difference; it should not be taken as a personal affront.

When it comes to certain matters, however — matters such as air mission briefs, operations order briefs, and line of departure times, among others — every effort must be made to reinforce the idea that the appointed time must be met. It is also important for the Americans involved to be on time. For some reason, the Egyptians' tolerance for tardiness in themselves and others is not always extended to Americans. Perhaps this is because of our insistence on punctuality.

The Egyptians' small-unit light infantry tactics do not differ radically from our own. Their platoon and squad battle drill is similar to that in our own doctrine before we introduced overwatch. In our exercise, we cross-attached U.S. and Egyptian rifle platoons with only minor difficulties. Although this degree of cross-attachment proved to be an excellent way of developing interoperability procedures and learning each other's systems, during actual combat it would be cumbersome. (In wartime, cross-attachment should not occur below battalion level.)

MAPS

The Egyptians use Soviet graphics and prefer them to ours in the belief that they are simpler and do not clutter the map and also that they seem to convey a sense of dynamics that is missing from NATO graphics. Normally, the friendly force is depicted in red, the opposing force in blue. For a phased operation, however, the friendly force may be depicted in a different color for each phase. As in the Soviet system, maps are treated as classified intelligence documents and are not widely disseminated. Usually, the Egyptians draw their graphics directly on their maps, even at brigade level. (Acetate is extremely rare in the Egyptian Army and therefore makes a prized gift.)

The FM communication equipment of the U.S. and Egyptian forces will net (they use the AN/PRC77), but radio-telephone procedures and communication-electronics operation instructions (CEOI) are completely alien to each other. The Egyptians use only one FM net at battalion level, call each other by name over the radio, and employ fixed radio frequencies (at least in peacetime). They use AM single side band radios for long-range communications and also extend the range of their AN/PRC77s by laying a doublet antenna on the ground and transmitting.

They have no battalion tactical operations center as we know it. The Egyptian battalion commander is truly his own S-3. With one captain and two radio-telephone operators to assist him, he controls and employs the battalion. The system is effective for simple operations, but it quickly becomes overloaded and overextended. This weakness, worsened by the centralized decision-making process, would seem to be a distinct liability in a fast-paced war.

The Egyptian training system is completely different from ours, and this fact initially caused some problems during our counterpart training. In the Egyptian Army, as in the Soviet system, the battalion commander is expected to be an expert in every aspect of battalion operations. He trains his officers, who then train the soldiers.

In our exercise, therefore, the Egyptian officers insisted on being trained first by U.S. instructors, so that only they conducted formal training for their soldiers. (The use of the NCO as a trainer was virtually nonexistent.) The result was a three-phased counterpart training program that worked quite well. We used our officers and senior NCOs to train the Egyptian officers, but not before the U.S. officer had demonstrated to the Egyptian battalion commander what would be taught so that he could brief his officers before the formal training began. Once the officers had been trained, time was allotted for the Egyptian officers to teach their soldiers and drill them until they achieved an acceptable level of performance. This system worked best if the time sequencing of the three phases was confirmed at the meeting the day before.

Most of the Egyptian Army's field grade officers we encountered spoke and understood English to varying degrees. Even so, when speaking with Egyptian officers, we could not assume that the message received was the same one that was being transmitted, in either direction. It is best for the receiver in such a conversation to restate the important points in his own words so that the sender can confirm that his message has been understood.

We soon learned that certain English words had meanings to the Egyptians that were different from the usual English connotations. For example, to them "to make coopera-

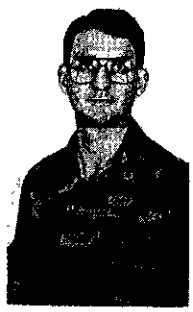
tion" means "to coordinate." "Demonstration" invariably means there will be VIPs present (brigadier general or higher), with no hands-on training to follow, and that refreshments will be served in a tent erected for officer-observers. "Tactical training" can be "without ammunition," with "false ammunition" (blanks), or with live ammunition.

The Egyptians admired our unit for its vigorous PT program. When we first arrived, our counterparts were concerned that we might not be acclimatized to the Egyptian summer. From the first road march, however, our soldiers met or exceeded any standard set by the Egyptians. (We gained a real psychological advantage because of our predeployment physical conditioning in the humid afternoon heat back at Fort Campbell.)

Another cultural difference arose in regard to the 13 female soldiers who deployed to Egypt as part of Task Force Desert Eagle. Given the subservient role of women in Middle Eastern culture, it is not surprising that they created quite a stir. The initial guidance given our advance party was that U.S. female soldiers, regardless of rank, would not speak to, or even look directly into the eyes of, any Egyptian man; that they would not wear shorts, even in PT formation; and other similar rules. This was clearly unacceptable, and the guidance was quickly revoked. Our Egyptian counterparts apparently had difficulty believing that our female soldiers were not camp followers. But by the end of the exercise — after much discussion and after the Egyptians had participated in night air assaults flown by both male and female Blackhawk pilots — the professional status of our female soldiers was understood (if not accepted as anything more than a cultural difference), at least by the Egyptian officers.

During BRIGHT STAR 83, the development of good will, mutual understanding, and interoperability procedures was just as important to the U.S. Army as the tactics we employed or the techniques our soldiers learned. Our leaders at all levels had to be flexible in their thinking and sensitive to the political and cultural implications of their words and actions. By all accounts, Task Force Desert Eagle succeeded, both tactically in the desert and politically in both nations. We hope whatever strides we made toward interoperability will help future CENTCOM elements that may deploy to the Middle East for combined operations and training.

Lieutenant Colonel Wolf D. Kutter commands the 4th Battalion, 187th Infantry, 101st Airborne Division (Air Assault), which as the 2d Battalion, 503d Infantry, provided the nucleus of Task Force Desert Eagle during BRIGHT STAR 83. He commanded a rifle company in Vietnam and is a graduate of the Armed Forces Staff College.



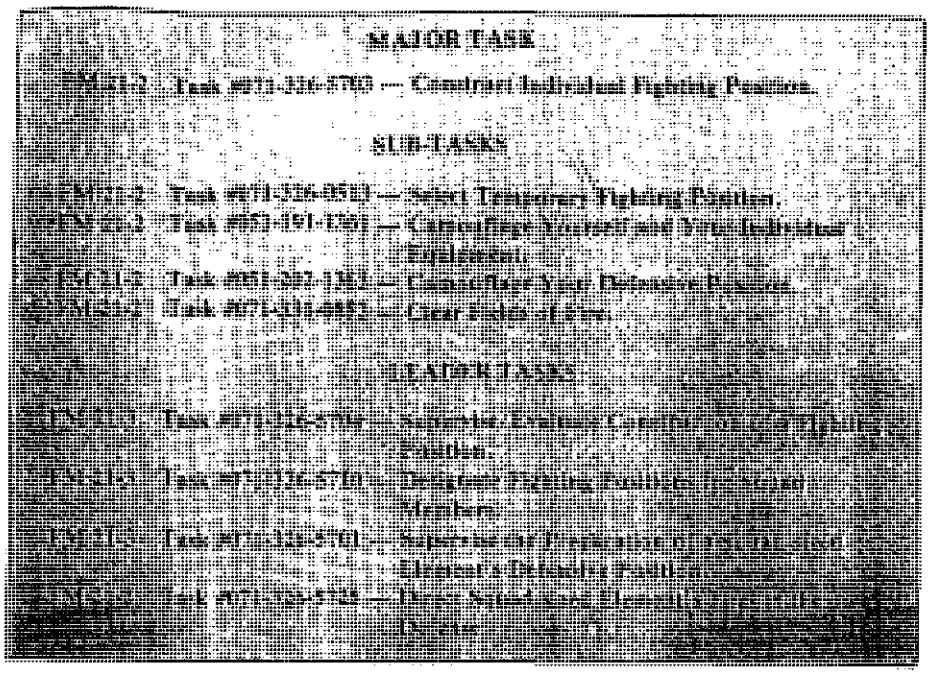
Major Glenn M. Harned, a 1972 ROTC graduate of the University of Pennsylvania, was S3 of Task Force Desert Eagle during BRIGHT STAR 83. His previous assignments include service with the 1st Cavalry Division at Fort Hood and the Special Forces Detachment (Airborne), Europe in Germany.

CAPTAIN TAMAS F. DREILINGER

The Battalion Training Management System (BTMS) is designed to simplify the training of every soldier, from individual skills through unit ARTEPs. To accomplish this mission, the system employs a multi-tiered system of teaching, with the immediate supervisor being responsible for the training of his subordinates.

The system is ideal for some units, those in which the senior trainer, at one time or another, has done the jobs of his subordinates. But while most infantry company first sergeants have been squad leaders and platoon sergeants, few PAC supervisors have ever been chaplain's assistants.

Not long ago, I served for 14 months as commander of a headquarters troop in an air cavalry squadron. During that time, I faced some of the pitfalls of implementing BTMS in a headquarters outfit. (There were 22 separate MOSs in the troop, many with a density of only one or two.) The very nature of a headquarters complicates the challenge, because the desires of the company commander and the first sergeant must be balanced with the operational needs of the various staff agencies as they implement the battalion commander's guidance.


MAJOR TASK

SUB-TASKS

LEADER TASKS

Perhaps the solution I developed will be useful to others who find themselves in command of a headquarters outfit.

First, Soldier's Manual tasks can be divided into two broad categories: common skills and MOS specific skills. Time was the major stumbling block I encountered in trying to see that my soldiers were trained in both. I had no doubt that my soldiers spent a full duty day working at their jobs and that they were receiving MOS training in the process. Fortunately, I found it easy to convince the heads of the staff sections that some specific Soldier's Manual tasks related to each soldier's daily duties. In fact, we dedicated two hours each week to training in those tasks, with the tasks for each section determined by the section heads. Each section provided my training NCO with a quarterly training schedule showing the tasks, by MOS and skill level, that were to be taught during a particular quarter. There was enough flexibility in this arrangement for change — if my first sergeant noticed that leave forms were not being prepared properly, for example, additional training in that area could be programmed in the allotted time.

But my efforts to set aside duty time for training the soldiers in common skills were met with less than total enthusiasm. Mandatory training, formations, equipment maintenance periods, and weapon qualification already disrupted the day-to-day functioning of the staff sections and caused a great deal of overtime. This left no time for any additional training. Yet my major duty was to ensure the combat readiness of every soldier. I soon realized, after studying the common task manuals, Field Manuals 21-2 and 21-3, that most of the tasks were simple to teach and easy to learn. In fact a soldier could teach himself many of them. From that, we developed our task-of-the-day program.

The idea behind this program was just that simple: Each soldier would study the task selected for his skill level for any given day and demonstrate proficiency in the task to his immediate supervisor before the close of business. My first sergeant and I would quiz the soldiers and their supervisors on the subject matter to see that they were complying. After six months of this system, the troop would conduct a military stakes test. In this test the soldiers would have to demonstrate their proficiency in previously scheduled tasks at different stations in the round-robin event.

After I was satisfied that most of the soldiers could do the assigned tasks, the training moved to a more structured, one-hour-per-week demonstration of tasks that required more preparation. Accordingly, our task-of-the-week was intended to evaluate a soldier's performance as well as his first line supervisor's abilities to ensure satisfactory performance. Each of our 13 staff agencies had a specific one-hour block of time during which the section as a whole demonstrated their knowledge of the subject matter to the first sergeant or me. The soldiers would already have been taught the associated sub-tasks; the session itself was designed as the diagnostic "hands on" evaluation of performance. (The accompanying outline may serve to clarify the system.)

A soldier, having been instructed on the major task and the associated subtasks, would demonstrate proficiency in those tasks during the session, in the context of an established scenario. In my role as the commander, I would evaluate not only the soldier but also the supervisor in his performance of the leader tasks. The scenario itself was "real-world," complete with a mission and situation, and this enabled a soldier to understand how each task was woven with the others to accomplish the mission. The training site was easy to set up, and the training itself was simple to conduct and evaluate.

With any system, the proof of its success or failure lies in the performance of duties under actual conditions. The performance of the soldiers on their skill qualification tests and the performance of the troop during three field training exercises indicated to both the soldier and his chain of command that the task-of-the-day program was a success. The training objective was met using realistic, hands-on training, without robbing the staff agencies of valuable time and energy.

Captain Tamas F. Dreilinger, an Armor officer, is assigned to the 101st Airborne Division (Air Assault). He previously served with the 4th Battalion, 7th Cavalry, in Korea and with the 194th Armor Brigade. He holds a master's degree from the University of Southern California.

The Invasion of afghanistan

CAPTAIN DAVID F. McDERMOTT

The Soviet invasion of Afghanistan in December 1979 was well planned and ruthlessly executed. Soviet airborne units quickly consolidated their hold on the capital city of Kabul and moved swiftly to seize and occupy key government administration and communication centers. Simultaneously, Soviet ground force divisions, operating from secured assembly areas and with air cover, surged across the border along widely separated axes of advance. As these divisions penetrated deep into Afghan territory, the Soviet airborne forces moved toward them to link up and divide the country in two. A series of psychological and covert operations had subverted and neutralized potential resistance to the Soviet forces. Within a month, the Soviets occupied the country's major population centers, crushed civilian opposition, and installed a puppet regime.

It is not surprising that the invasion, which saw the employment of massive combined arms forces, succeeded so well, because the Soviet military forces had been well organized and trained for such an operation. After all, the successful invasion of Czechoslovakia in 1968 had been remarkably similar. The invasion of Afghanistan is now history, having been only the beginning rather than the end of an arduous guerrilla war. But it illustrates the extent to which the Soviet High Command attempts to integrate both political and military considerations into what has been described as a "lightning surgical thrust."

Soviet interest in Afghanistan dates back to the 19th century when Russia, as well as Great Britain, engaged in what has been called the "Great Game." There has been considerable speculation about why the Soviets decided to invade Afghanistan in 1979. One commentator has suggested that part of the Soviets' motivation lay in their fear that Moscow's grip on a nearby ally was weakening in the wake of Afghan rebel (Mujahideen) successes in the field. The Soviets also feared that the subversive influence of Islamic fundamentalist victories in Afghanistan might spread across the international border into the predominantly Islamic Soviet Central Asian Republics. (Indeed, in March 1984 there was a report that an airstrip at Pyandzh in the Soviet Union — one that was being used to support helicopters operating against targets in Afghanistan — had been attacked by Mujahideen using rockets and mortars. Before that incident, Mujahideen agit-prop teams had crossed regularly into the Soviet Union from Afghanistan to proselytize for their cause among Soviet Moslems there.)

As part of the pre-invasion preparations, General I. Pavlovsky visited Afghanistan between August and October 1979, and his mission was most likely to gather intelligence. If so, he may have received a significant amount of assistance from Soviet military and civilian advisors already based in Afghanistan. By September 1979 there were about 4,000 Soviet military advisors there. Regular Soviet military units, some equipped with Hind-D attack helicopters, had also made their presence

increasingly felt in Afghanistan. Soviet advisers, in fact, often flew combat missions in aircraft bearing Afghan Air Force markings.

Complementing this effort was the role of Soviet civilian advisors. One source has stated that as early as April 1978 "a considerable number of non-military Soviet Central Asians (had been) sent to Afghanistan ... to service the new round of U.S.S.R.-Afghanistan contacts." These advisors had assumed responsible positions in the upper echelons of Afghanistan's government apparatus, and these positions had enabled them to address key Afghan social, political, and cultural issues. Coincidentally, this influx of civilian advisors peaked in November 1979, one month before the invasion, with the appointment of a new Soviet Ambassador to Afghanistan, Fikat Tabeev, an ethnic Tatar — and a Soviet Muslim. (This same source, however, discounts any involvement on the part of Soviet Central Asians in military operations prior to the December 1979 invasion.)

Despite a body of on-the-scene advisors, and despite the Soviets' experience in fighting Central Asian Islamic guerrillas (during the 1920s and 1930s), the Soviet leadership apparently did not have senior experts who were well-versed in the intricacies of Afghanistan and its tribes. It has been suggested that because of this deficiency the Soviets had misjudged the degree of resistance they would meet, especially in the rural areas, both during and after the invasion. If so, it was a deficiency that has cost them dearly since 1979.

During a visit to Moscow on 13 September 1979, the then-Afghan president Mohammed Taraki, met with Soviet officials who tried to persuade him to either demote or dismiss his prime minister, Hafizullah Amin. Amin, a hardliner in the Afghan government, had alienated much of the Afghan population through his brutal and repressive policies. Additionally, Taraki was warned by his Soviet hosts that Amin was plotting his overthrow, and following this meeting, Soviet officials arranged a meeting between Taraki and Babrak Karmal, another Afghan opponent of Amin.

It is quite possible that the Soviet Union, as a result of this latter meeting, committed itself to organizing or supporting an anti-Amin coup originally scheduled to take place on 14-15 September 1979. The purpose of the coup would have been to eliminate Amin and then to establish a more moderate coalition government led by Taraki and Karmal. To support this coup, the Soviet Union deployed a number of regular military formations along the Soviet-Afghan border and sent a 400-man airborne contingent to the strategically vital Bagram air force base 40 miles north of Kabul. For reasons that are uncertain, however, Amin struck first. On 14 September Taraki was attacked and wounded in the Darulaman presidential palace just outside Kabul. When he died of his wounds three days later, Amin became president.

The circumstances surrounding the abortive coup attempt are still a mystery. It has been alleged that the Soviet ambassador at the time, A. Puzanov, had been involved in an attempt to assassinate Amin, but the extent of that involvement is unclear. In any event, the Soviet Union apparently decided to accept the outcome at least for the time being, while it intensified preparations for an invasion.

In late November or early December, the Soviet Politbureau sent First Deputy Minister of the Interior, Lieutenant General Viktor Paputin, to Kabul. Officially, his mission was to advise Amin on matters affecting counterinsurgency and internal security, possibly even to provide Amin with personal protection. Actually, Paputin's purpose was to establish contacts with opponents of Amin's government, particularly if they happened to be supporters of Karmal. While this was occurring, Soviet divisions were being mobilized in Turkmenistan with reservists being called to active duty. At the field headquarters of the 40th Army located in the Soviet Union at Termez, a satellite communication (SATCOM) link had been established to enable the Soviet First Deputy Defense Minister, Marshal Sergei Sokolov, to plan and direct the invasion while remaining in close contact with Moscow. (Considering the extremely sensitive nature of the entire operation, it is quite likely that KGB Government Signal Troops rather than the Soviet Army's Signal and Radio-Technical Troops manned and operated the SATCOM link.)

SECURED ROADS

By mid-December, preparations were almost completed, but Soviet planners wanted to ensure that several strategically important road networks had been secured before they proceeded with the invasion. The principal road net that was essential to the operation's success was the "beltway" extending from Termez across the border into Afghanistan and then southward through the 8,000-foot high Salang Pass to Kabul (see map). From Kabul, this road net stretched westward through Farah and Herat, swinging northward toward Kushka and finally terminating at Mazar-i-Sharif near the Soviet border. To secure these roads, the Soviets dispatched advance elements of airborne units to Afghanistan before the invasion.

On 3 and 4 December the number of Soviet military transport flights into the air base at Bagram tripled. On 8 and 9 December a full strength airborne battalion, reportedly equipped with BMDs and artillery, was airlifted into Bagram. From there, it started to move north to seize and occupy the high ground in the vicinity of the Salang Pass. Simultaneously, several smaller airborne units were airlifted into the Kabul International Airport itself.

On 21 December a Soviet airborne regiment landed at Bagram and secured its hold on the entire airfield. At the same time, up to six ground force divisions were reported to be in place along the Soviet-Afghan border in the Turkestan and Central Asian Military districts.

One final factor had to be dealt with — the Afghan

armed forces. At the time, those forces numbered 100,000, most of them assigned to the army. Equipped with 500 T54/55 and 100 T62 tanks, the Afghan Army consisted of ten infantry divisions, three understrength armored divisions, three independent infantry brigades (variously referred to as commando, mountain, or paratroop brigades or regiments), and one artillery brigade, all of which were organized into three corps commands.

The 1st Afghan Corps had its headquarters in Kabul itself while the 2d and 3d Corps were headquartered in Kandahar and Paktia Provinces, respectively. The 10,000-man Afghan Air Force had 170 combat aircraft, mostly older models (35 MIG-21s, 80 MIG-17s, 24 SU-7s, 30 IL-28s, and 45 helicopters of various makes) and one air defense division. To the Soviets, this formidable force, despite its mediocre performance in the field against the Mujahideen, would have to be neutralized quickly and efficiently.

Accounts of the deception measures employed by Soviet advisors to the Afghan Army do much to dispel the conventional stereotype of the Soviet officer as lacking in initiative and imagination. The tactics they employed, in fact, demonstrate a high degree of cunning and resourcefulness. For example, two Afghan armored divisions (one of which was stationed in Kabul) were disarmed when their Soviet advisors convinced their counterparts in the divisions that it was necessary for them to conduct an inventory of the division's ammunition stocks and antitank weapons. This meant off-loading the ammunition that was stored in the tanks. Additionally, electrical storage batteries "had" to be removed for winterizing while some tanks "had" to be turned over to depot maintenance so that "defects" could be corrected.

It has also been reported that in some units the Soviets persuaded the Afghans to turn in their weapons on the pretext that they were about to be re-equipped with new weapons coming from the Soviet Union. While some Afghan units were confined to their barracks, others, especially those in Kabul, were sent into the countryside to fight the Mujahideen. The coup de grace, however, was a reception the Soviets held in Kabul to honor prominent Afghan army officers; once the reception began, none of these officers were allowed to leave.

The invasion began in full force on 24 December with an airlift of advance parties from the 103d and 104th Airborne Divisions into Bagram. At the same time and continuing through 26 December, a massive airlift of 280 to 300 military transport sorties landed the main body of the 105th Guards Airborne Division at the Kabul International Airport. The round-the-clock airlift primarily involved transport aircraft landing at ten-minute intervals — IL-76 CANDIDs (cargo capacity 90,000 pounds), AN-12 CUBs (cargo capacity 44,000 pounds), and a limited number of AN-22 COCKs (cargo capacity 160,000 pounds). In the latter stages of this airlift, the transports took sporadic sniper fire from rebel-held positions around the Kabul airport, and at least one transport aircraft, an AN-12, crashed on landing because small arms fire had damaged important flight instruments or injured the crew. (All the crewmen died in the crash and the aircraft was left badly damaged with its cockpit burned out.)

A number of IL-76s participating in the airlift had *Aeroflot* markings even though *Aeroflot* had officially cancelled regular flights into Kabul until the airlift had peaked. Older model AN-26 CURLs (cargo capacity 12,100 pounds) assisted the airlift, but only on a restricted basis. Even obsolescent AN-2 biplanes participated, serving as spotter aircraft for MI-24 HIND-D attack helicopters. Once the airlift had tapered off, regular *Aeroflot* service into Kabul resumed with all of the airline's aircraft bearing the legend "Official Olympic Carrier." Interestingly, the East German airline, *Interflug,* which had not previously conducted flights into Kabul, also participated in the early phases of the airlift. (It has been alleged that this airline, rather than *Aeroflot,* carried KGB agents from Poland and East Germany into Afghanistan.) For air cover, the airlift into Kabul received air support from MIG-23s based in Karshi and MIG-21s from Kerki, both located in the Soviet Union.

While the 105th Guards Airborne Division was consolidating its hold on the Kabul airport in preparation for a move against vital government centers, four Soviet divisions moved across the Soviet-Afghan border along two major axes. The first echelon consisted of the 360th Motorized Rifle Division (MRD) and the 357th MRD; while the 201st MRD and the 66th MRD were in the second echelon. The 360th and 201st MRDs crossed from Termez into Afghanistan using a pontoon bridge built across the Amu Darya River. Capturing the airbases at Mazar-i-Sharif and Kunduz, they moved toward Kabul with the mission of linking up with the paratroopers who had moved north from Kabul earlier to secure the Salang Pass and the tunnel through which these divisions had to move. The 357th and 66th MRDs crossed the border at Kushka and occupied the Shindad and Herat airbases. The fact that both echelons consisted of only two divisions was probably the result of a restricted road net that

could not accommodate a broader deployment.

The Afghan Army put up only sporadic resistance to these invading forces. Most of the Afghan Air Force, however, defected to the Soviets, and by early January 1980 Afghan pilots were flying training missions under Soviet ground control. The most notable anti-Soviet resistance on the part of the Afghan Army was that by the 8th Infantry Division, which successfully fought the Soviet forces until 5 January 1980, during which time it suffered 2,000 killed. For the most part, though, the Afghan Army suffered mass desertions, many to go home, others to the Mujahideen with their weapons and equipment. On 10 January 1980 this wave of desertions peaked when an entire Afghan division joined the rebels in Kandahar.

AIRLIFT COMPLETE

By 27 December the Soviet airlift into Kabul was virtually complete with two full regiments belonging to the 105th Guards Airborne Division plus support units deployed on the ground, a total of 5,000 men. That evening, Soviet paratroopers equipped with BMD airborne infantry fighting vehicles and backed by ASU-85 85mm air-transportable armored self-propelled assault guns moved into Kabul itself to secure critical points in the city. Other airborne units, similarly equipped, moved to surround the Darulaman Palace. At Paputin's insistence, Amin had withdrawn here a few days earlier along with trusted aides and some of his bodyguards.

The Soviet assault on the presidential palace and Amin's subsequent death have raised many interesting questions about that evening in Kabul. Apparently, the Soviet forces in Kabul had the mission of deposing Amin and installing Karmal, who had been in exile in Czechoslovakia following Taraki's death, as the new president. Before the assault, Paputin once again met with Amin to try to persuade him either to step down from power or to issue a formal request for Soviet intervention in Afghanistan. What immediately followed is still unclear. Apparently, Amin refused to do either, and during the ensuing argument one of his bodyguards shot and killed Paputin. At 1930 on 27 December, Soviet troops began their attack on the palace, which was defended by an Afghan tank regiment.

Although most reports say that Soviet paratroopers participated in the action, one source, based on defector reports, tells a different story. According to this version, Soviet *Spetsnaz* troops led by a specially trained KGB assault group stormed the palace. This KGB unit, disguised in Afghan army uniforms and equipped with military vehicles bearing Afghan markings, killed Amin, his family, and several of his most important advisors. But during the confusion of the attack, the Soviet commander of this unit, a Colonel Bayerenov, the head of the KGB's terrorist training school, was inadvertently shot and killed by his own troops.

While this attack was taking place, pre-recorded radio broadcasts by Babrak Karmal were beamed into Afghanistan from the 40th Army headquarters as part of a disinformation campaign. These broadcasts, from a station identifying itself as Radio Kabul, announced the fall of Amin's government and requested Soviet military assistance in stabilizing the situation in the country. Similar broadcasts were made once Soviet troops had actually seized Radio Kabul. (Ironically, Karmal himself *did not return to Afghanistan until* four days after Amin's death.) Since Soviet troops had destroyed or occupied all of the radio, telephone, and telegraph facilities in Kabul, communications between the capital city and the outside world were controlled by Soviet signal and radio-technical troops.

Despite the apparent success of the coup itself, the timing of Amin's death was a diplomatic disaster for the Soviets. If Amin could have been persuaded to step down in favor of the more compliant Karmal, a request by Karmal for Soviet intervention would have provided some legitimacy to the invasion. As things turned out, Amin's death was viewed as an assassination by an occupying military force.

LINK UP

Once the airborne units had seized control of the important facilities in Kabul, they moved northward mounted on BMDs with the mission of linking up with the advance elements of the 360th MRD, which were moving south from Termez. This maneuver caught rebel forces operating against the Termez-Kabul road in a pincer movement from which they had to withdraw or risk annihilation.

As the Soviets moved into the countryside to secure their lines of communication, they encountered stiffening resistance. In the northeastern portion of Afghanistan, approximately 5,000 Soviet troops became heavily involved in fighting for Feyzabad, Eshkashem, and Zibak in Badakhshan Province. Similar fighting broke out in the mountains north of Kabul and in the Logar Valley to the south of it. Additional fighting soon occurred in Paktia Province and along the road to Jalalabad.

By the middle of January 1980 the airlift had slowed its pace. The 40th Army field headquarters (minus its SATCOM terminals) had been relocated to Bagram air base. Also, two more divisions, the 54th MRD in the northwest and the 16th MRD in the northeast, entered Afghanistan. In an attempt to cover its move into Afghanistan, the 54th MRD left some dummy equipment at its previous location at Kizyl-Arvat near the Iranian border. By the end of January the Soviets had a force of seven divisions along with elements of two others (the 103d and 104th Airborne Divisions) in Afghanistan for a total of 90,000 men. The 6th MRD was reportedly preparing to enter Afghanistan while specialist units (communications, engineers, maintenance, for example) were being

transferred in from East Germany, Poland, Czechoslovakia, and Hungary. This move has been assessed as being one that was designed to replace conscript and reservist formations that were leaving Afghanistan for a variety of reasons — the most notorious being fraternization between Soviet Central Asian troops and the Islamic population of Afghanistan.

The exact nature of the role of Soviet Central Asian troops during the invasion of Afghanistan has been a matter of controversy for some time. One source has stated that these troops (primarily Tadjiks, Uzbeks, and Turkomens) formed the bulk of the invasion force, although the officers involved were overwhelmingly European Soviets. If this is true, then as another report notes, the use of soldiers with the same ethnic, cultural, and religious ties as the target population represented a departure from past Soviet political-military policy. (Such a policy has attempted to avoid the use of non-Russian soldiers in operations designed to project Soviet power abroad in situations where they might have some type of rapport with the population of the invaded nation.)

The same report coneludes that Central Asians were deployed to Afghanistan for three primary reasons: Since Central Asians generally man construction and support units in the Soviet Army, their presence in the military districts where the divisions were mobilized provided Soviet planners with a readily available manpower resource base, particularly for the establishment of a logistics and support infrastructure in Afghanistan; ethnic Slavic troops were not readily available to fill out understrength units mobilized in the Central Asian military districts; and the use of Central Asian troops may have been a propaganda ploy to weaken grass-roots resistance among the Afghan population.

As a propaganda ploy, the use of Central Asian troops was a failure since many of them openly fraternized with Afghan civilians. Many European-officered Soviet units manned by Central Asian troops had severe disciplinary problems. One incident, an extreme one at that, states that during January 1980 "all the personnel of a Soviet combat brigade [sic] were executed for refusing to fight fellow Moslems in Afghanistan."

The performance of Soviet Central Asian troops in Afghanistan has led to apprehension within Soviet leadership ranks that pro-Afghan, fundamentalist Islamic, nationalistic, and anti-Soviet ideologies could spread into the Soviet Union itself. For this reason, and the fact that the initial logistical support effort had been completed, most of the Central Asian troops were withdrawn from Afghanistan by February 1980, although some may still be deployed in Afghanistan for purposes of installation security and convoy duty. Similarly, certain elite paratroop and *Spetsnaz* units may contain Central Asians who have been selected for their political reliability.

Despite this and other setbacks, the Soviets have continued to ruthlessly prosecute the war in Afghanistan against the Mujahideen. For the Soviets, nothing less than a totally favorable political settlement, possibly followed by troop withdrawals, seems to be acceptable. For now, the Soviet Union is prepared to settle for a long, drawn-out conflict in Afghanistan so long as its level of military commitment in that country remains manageable and does not significantly interfere with its commitments elsewhere. Its overall strategy involves the pacification, however brutal, of one region of the country at a time, in much the same manner as the Czarist regimes conquered the Central Asian tribes during the 19th century. The Mujahideen, for their part, have continued to resist the invaders and now discuss more frequently taking the war across the border into the Soviet Union itself. Their ultimate objective, in some instances, is the creation of conditions for a *jihad* — a holy war — among the Muslim population of the Soviet Central Asian Republics.

The Soviet invasion of Afghanistan was a unique development in that it was the first time in the post-World War II era that the Soviet Union had overtly invaded a sovereign nation not already under its tutelage.

For all that has been and can be said about the fighting qualities and the effectiveness of the Soviet armed forces, the invasion of Afghanistan underscores the Soviets' willingness to use force in pursuit of their objectives, military or political. And this is a lesson the West cannot afford to ignore. Neither can the West afford to ignore the military lessons of Afghanistan, whether at the strategic, operational, or tactical level, because they provide deep insights into the Soviet theory and practice of war.

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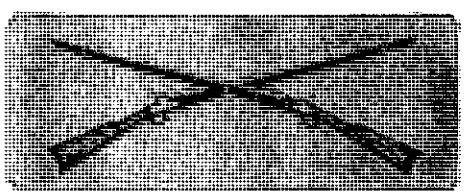

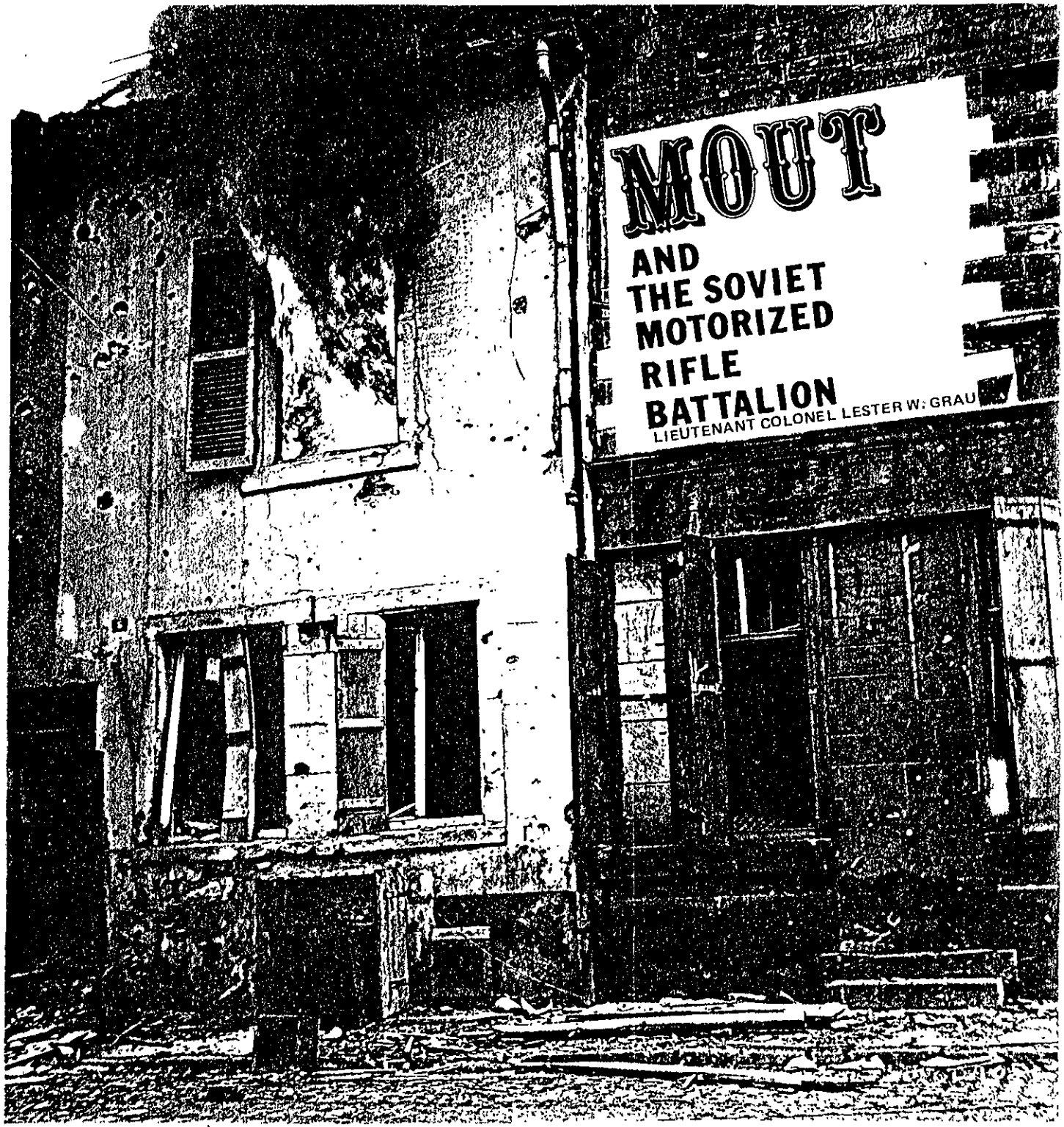

After a decade of neglecting the subject of military operations in urban terrain (MOUT), the Soviets have recently begun to emphasize it again. The September 1982 issue of *Voyennyy Vestnik* (a combined arms magazine serving officers at company, battalion, and regimental levels) was devoted to the subject. And it is clear from these articles and others that infantrymen in the United States Army also need to be aware of the MOUT tactics of the Soviet motorized rifle battalion.

Combat operations on urban terrain in the past have usually been characterized by limited advances, limited visibility, and marked increases in logistical requirements. Since these characteristics are the antithesis of modern, fast-paced mobile warfare, most commanders would now prefer to avoid such combat and to bypass urban terrain whenever possible. If warfare should break out in western Europe between NATO and the Warsaw Pact nations, however, neither side will be able to avoid combat on urban terrain.

The terrain of western Europe is dominated by cities that have expanded since 1945 to connect with the suburbs of other cities, and these form significant

obstacles to the free movement of military forces. The Soviets' military doctrine stresses the achievement of a speedy victory in war —a doctrine they can adhere to only if they conduct and maintain a rapid, surprise thrust deep into their enemy's territory to neutralize his armies and paralyze his economy. Such an assault, of course, would be slowed considerably by towns and cities — particularly in cases where operational surprise had not been achieved and the enemy had had a chance to deploy his forces and to convert built-up areas into strongpoints.

It would be comforting for us to assume that any future land battle in the Federal Republic of Germany (FRG) would be fought on the rolling, fairly vacant, northern plains. Unfortunately, all of the logical invasion routes through the FRG pass through several major cities and population belts. Even the smaller towns and villages create terrain obstacles that frequently cannot be bypassed. Indeed, in the average U.S. brigade sector in Germany today there are approximately 25 villages, each with a population of 3,000 or less, and the average distance between these villages is only three and one-half kilometers. The road networks that connect these population centers would have to be used and it would be impossible to bypass many of them. Indeed, the Soviets may deliberately use "urban hugging tactics" to reduce their vulnerability to NATO nuclear strikes.

In short, it is clear that any future war in western Europe will not be conducted solely on rolling plains with 3,000-meter kill shots considered to be normal. And the Soviets realize this as well as we do. Even in 1971, Soviet General-Major Shovkolovich wrote that there were "one or two large cities for every 200-300 square kilometers," and that "in the course of an advance, forces will have to fight to seize a city every 40-60 kilometers." He also understood the importance of these cities to the economical and political life of the country and their consequent military importance in any future conflict.

The Soviets classify built-up areas in various ways — by shape, population, and perimeter. The relative importance of such areas is determined by their size, economic and political life, and location, and by the characteristics of their buildings. By Soviet definitions, a "large" city contains 100,000 or more inhabitants and has a perimeter of more than 25 kilometers; an "average" city has between 50,000 and 100,000 inhabitants with a perimeter of 12 to 25 kilometers; and a "small" city has fewer than 50,000 inhabitants and a perimeter of less than 15 kilometers. The Soviets further classify built-up areas by street patterns. (They classify actions against towns and villages as actions against strongpoints.)

The Soviets see nuclear weapons as being ideal for destroying built-up areas that can be bypassed and for destroying a town's economic potential. But they recognize, too, that the built-up area then becomes a massive obstacle to any future maneuvering they may need to do. Furthermore, economic, political, or tactical considerations may militate against the employment of nuclear weapons against built-up areas. Soviet commanders, therefore, may attempt to bypass, blockade, suppress or seize built-up areas.

A Soviet division that is advancing to contact or exploiting a breakthrough can be expected to deploy an advance security detachment of its advance guard. This detachment normally will consist of a motorized rifle battalion reinforced with an artillery battalion, a tank company, an engineer platoon, and an antiaircraft detachment. The advance security detachment normally will be employed 20 to 30 kilometers in front of its parent unit. If the enemy is retreating, the advance security detachment will try to advance on a route parallel to the retreat and attack the enemy to keep him from withdrawing into a built-up area. If the enemy is retreating in good order and is in sizable strength, the advance guard will try to overtake him and, instead of attacking, seize and occupy the undefended perimeter of an adjacent built-up area and prepare to defend it against the enemy's entry. In either instance, this tactic will allow the division to engage the enemy in open terrain. If the enemy is already in the built-up area, the Soviet division's advance security detachment can be given the mission of seizing all or part of that area.

Soviet tactics and U.S. tactics are similar for conducting operations in built-up areas in that both consider a hasty and a deliberate attack. Only the implementation of the two types of attack varies.

HASTY ATTACK

In trying to seize a built-up area, the Soviets prefer to attack from the march, or immediately after enveloping the built-up area. This kind of attack is a rapid movement designed to achieve tactical surprise and to seize an undefended or a lightly defended area. The attackers try to avoid costly house-to-house fighting and to seize critical areas and installations within the built-up area.

A motorized rifle battalion that is involved in an attack from the march may be from the advance security detachment, the advance guard, the first or second echelon, or even the reserve, but most probably, it will be from the advance security detachment battalion. Although this battalion will usually attack as part of its regiment, it may be given an independent mission.

The regimental reconnaissance BRDMs and motorcycle elements will approach the built-up area and try to draw fire to determine the strength and the positions of the enemy. If this fails, the reconnaissance elements will advance until they come under effective fire, and then they will try to determine where the enemy's flanks are. Artillery strikes will be used against discovered positions on the edge of the built-up area. The lead motorized rifle platoon of the advance party that usually precedes the battalion will assault any discovered defensive positions to gain more information and to serve as a point unit to attract the defender's attention and fire. (The advance party itself normally consists of a motorized rifle com-

pany, an attached artillery battery, a tank platoon, and antitank, engineer, and chemical detachments.)

The regimental commander will then decide whether to envelop the area or take it by a frontal and flanking attack. The attack will be launched as rapidly as possible to achieve tactical surprise. The urban area will be sealed off (by ground, airborne, or airmobile forces) to prevent the enemy's withdrawal or reinforcement.

The regimental commander will then direct his advance detachment to move rapidly into the city and to capture and hold the important objectives until the main forces arrive. Short artillery strikes of five to twenty minutes in duration may be delivered on discovered positions as the attacking tank-infantry team moves into position.

Following the seizure of strongpoints on the edge of the built-up area, Soviet infantry and tanks will attempt to advance rapidly along the streets to seize important objectives within the built-up area. Dismounted infantry will follow a tank platoon (or a self-propelled artillery platoon) wedge in which one tank (or howitzer) moves down the center of the street to provide mutual fire support. Normally a squad of infantry will follow each tank (or howitzer), hugging the sides of the buildings and delivering small arms fire on the windows of buildings on the opposite side of the street. BMPs or BTRs may follow this force to provide additional firepower.

In case of weak resistance, infantry mounted on either tanks, personnel carriers, or trucks will speed along the

streets, firing on the move, to reach and seize the important objectives. Once the important structures and thoroughfares have been seized, pockets of resistance can be pinned down and bypassed, to be eliminated by follow-up forces.

DELIBERATE ATTACK

If the attack from the march should fail, any areas already seized will be consolidated and preparations for a deliberate attack will begin.

The deliberate attack is characterized by detailed planning, thorough reconnaissance, isolation of the urban area, intensive artillery preparation, and the use of assault detachments (battalion strength) and assault groups (company strength).

The motorized rifle battalion is the basic unit for the urban battle. A battalion will normally attack along several parallel streets with a frontage of 400 to 600 meters (the width of two or three city blocks) and will normally have an initial objective of one or two blocks in depth. Ordinarily, the battalion will be assigned a direction of advance instead of subsequent objectives, and will normally attack in a single echelon; a second battalion may be in a second echelon to exploit any successful breaching operations. A company will normally attack in two echelons.

The battalion commander will control his attack in several ways: He will use detailed planning; identifiable, timed phase lines; and (because of the decreased reliability of radios in urban terrain) messengers and wire communications. In addition, he will position his command post well forward (normally within 200 meters of his forward positions).

The assault units usually will be organized into assault groups (each of which is capable of independent action). These assault groups will consist of one or more attacking elements (a motorized rifle platoon reinforced with a tank platoon, for example); a covering and consolidation element (a motorized rifle squad or platoon with antitank guns, grenade launchers, and medium mortars); a fire support element (artillery and heavy mortars); and an obstacle-clearing party (combat engineers and mine-sweeping tanks). A small reserve of one or two motorized rifle squads may be withheld to influence the action during the course of the attack. Chemical warfare and flamethrower personnel will be attached as needed.

Artillery preparation is vital to the success of a deliberate attack on urban terrain. Contrary to U.S. doctrine, up to 40 percent of Soviet artillery may be employed in direct fire roles; self-propelled artillery may even lead the assaults by serving as armor. Artillery will be attached down to motorized rifle platoon level. Short, heavy preparatory fires (five to twenty minutes in duration) will be delivered to disrupt the enemy defenses, but care will be taken to avoid creating excessive rubble on the major thoroughfares. Under the cover of artillery and tank fire, the combat engineers will clear passages in the enemy's obstacles with mine-clearing tanks, explosives, bulldozers, grapples and winching gear, direct fire (including BM-21 multiple rocket launchers), breaching teams, and vehicular ramming.

Attacking troops will assault under the cover of artillery and smoke. When the assault group is within 150 meters of its objective, direct and indirect supporting fires will be shifted to the rear and the flanks of the buildings under attack. The riflemen will assault using automatic fire and hand grenades. The accompanying engineers will use explosives to clear positions.

Once the objective has been seized, it will immediately be prepared for defense against counterattack and used to support actions against neighboring buildings. Engineers will clear mines and booby traps from buildings and bring up defensive materials. Buildings on street corners or those that command large, open areas will be turned into strongpoints.

Finally, it should be noted that, when possible, the battalion will push its attack along streets to seize objectives and bypass pockets of resistance. These pockets of resistance will be dealt with by follow-up forces.

The Soviets in World War II suffered extremely heavy losses in their infantry and armor forces during their fighting in built-up areas, and they expect to take such losses in future urban engagements as well. They expect a battalion, for example, to suffer 70 percent losses before being relieved.

Our own Field Manual 90-10, Military Operations on Urbanized Terrain (MOUT), provides excellent guidance for meeting and defeating Warsaw Pact forces in urban combat. We infantrymen would do well to study that manual and to become as proficient in this type of warfare as we are in high-speed mechanized warfare. If we can't avoid combat in cities, and we probably can't, then we'd better be ready for the battles that we may have to fight there.

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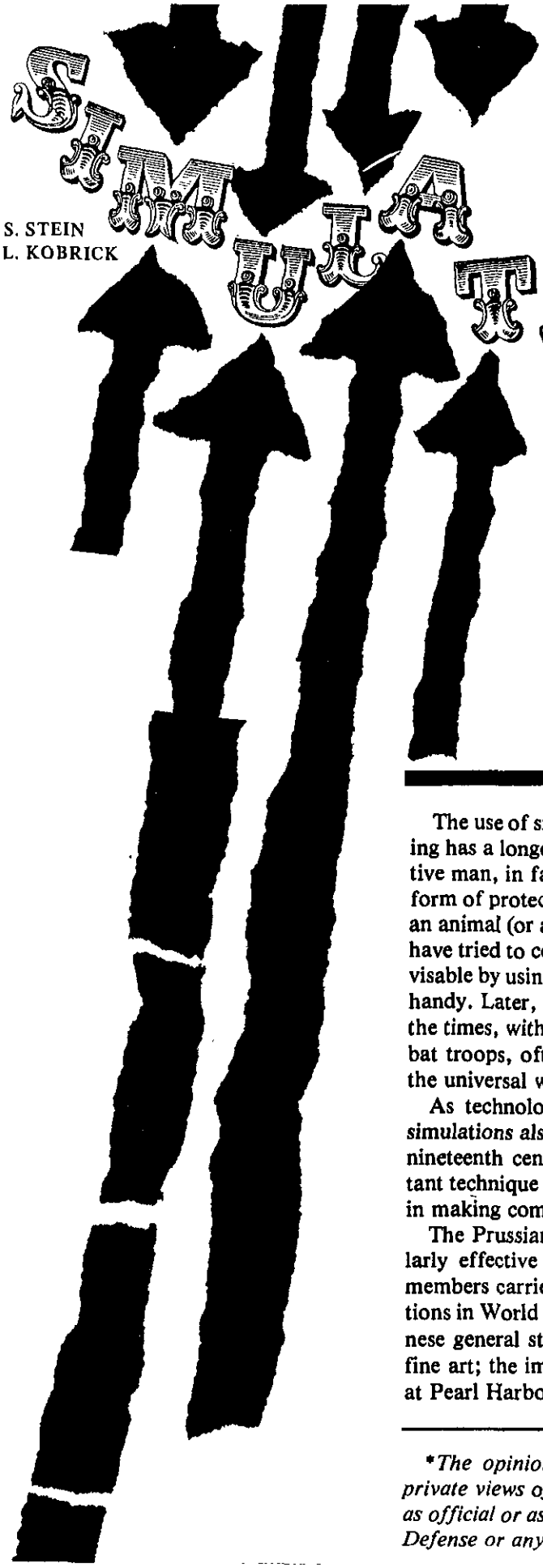

EARL S. STEIN
JOHN L. KOBRICK

SIMULATIONS a brief history

The use of simulations in military operations and training has a longer history than many people realize. Primitive man, in fact, probably used simulated weapons as a form of protection: An unarmed caveman, threatened by an animal (or a stronger, more aggressive caveman), may have tried to convince his opponent that attack was inadvisable by using a stick to simulate the axe he did not have handy. Later, after the advent of firearms, the armies of the times, with only enough weapons to equip their combat troops, often trained their new troops using, again, the universal weapon simulator — the stick.

As technology and the magnitude of warfare grew, simulations also grew in size and complexity. During the nineteenth century, wargaming developed as an important technique for use in command and staff training and in making command decisions.*

The Prussian general staff, for example, was particularly effective in using wargaming techniques, and its members carried their skills into German military operations in World War I. And in the ensuing years, the Japanese general staff developed wargame simulation into a fine art; the immense success won by the Japanese navy at Pearl Harbor in December 1941 was due partly to the

*The opinions and assertions in this article are the private views of the authors and are not to be construed as official or as reflecting the views of the Department of Defense or any element of it.

meticulous planning and wargaming the naval staffs had conducted before the attack.

Traditional wargaming such as this can be viewed as a low-technology form of simulation that involves boards, player pieces, and detailed rules. It focuses on planning and decision-making but does not require the kinds of physical coordination that are characteristic of the high-technology systems that came along later.

These high-technology systems have their roots in the advent of aviation in the early part of the twentieth century. During the build-up for World War I, the frequency of fatalities in flight training had made clear the need for better training techniques, and out of this need, primitive flight simulators evolved.

World War I vintage flight simulation was a low-technology affair at best, in which simulators were constructed from the materials at hand — in many cases little more than a stick and a chair. Still, such crude simulations as these must have helped in some way — probably by reducing the death and destruction that was then occurring in primary flight training. Otherwise, Army Air Corps trainers probably would have given up on simulations, and it is fortunate that they did not. Simulation for training has had to keep abreast of aviation technology ever since.

During the post-World War I period this technology resulted in the design of the first truly sophisticated trainer, the Link I. This device, affectionately nicknamed "the box," incorporated pilot information displays and a basic movement platform, which would respond to the pilot's control actions and then provide feedback on the results of those actions. The Link I was the forerunner of a long line of flight simulators. The more recent of these have also been used to conduct research dealing with the relationships between people and machines and also with person-to-person performance in a crew or team operation.

Before and during World War II the German Army used an assessment center concept to evaluate its leaders and officer candidates. The assessment center performed personnel evaluations using a unique blend of traditional psychological assessment tools, such as paper-and-pencil tests, and a series of situational exercises, or mini-simulations.

In similar fashion, the U.S. Army Office of Strategic Services (OSS) in 1942 established an assessment center in Virginia at a location it called Station S. There, a staff of psychologists and psychiatrists was given the job of developing tests that could be used to select OSS agents for overseas duty. The Army hoped that an assessment center model could produce a valid and reliable method for predicting the success of OSS agents, but the criteria for evaluating success were never properly defined. (In a book the OSS assessment center staff wrote later, they admitted that the validity of their predictions was difficult to determine since many of the agents who had passed successfully through the test program at Station S never returned from their assignments overseas.)

Since that time, the U.S. Army has continued to experiment with assessment centers and mini-simulations. The so-called Leader Reaction Course, which is now run at many Army service schools, was modeled after the OSS version. In this course young officers and NCOs are given a problem to solve in a limited time using a given set of resources and people — getting a squad of soldiers across a stream, for example. Performance on such a problem is usually measured on a rating scale administered by one rater, although many assessment center simulations use multiple raters to improve the reliability of the results.

The Army operated an assessment research center at Fort McClellan in the 1960s and also one at Fort Benning from 1972 to 1974. The center at Fort Benning was organized as a pilot research project sponsored by the Infantry School and supported by the Army Research Institute for the Behavorial Sciences (ARI). It was operated primarily by and for infantrymen, and although these infantry personnel knew very little about measuring behavior, they did have much to offer toward the development of simulations. In the Army tradition of making do with whatever was available, these infantry assessors designed simulations for a wide variety of tasks ranging from administration to leadership in field combat and developed role-playing exercises and group decision-making situations. (It is important to note that other allied military forces, particularly the Israeli and British Armies, have become interested in assessment simulations. The British, in fact, now screen all of their enlistees before assigning them to specialized training. They also use their assessment centers to select candidates for the National Military College at Sandhurst.)

Although the Army's work with assessment centers did not produce models for making long-term predictions, it did do much to support the use of simulations for training purposes. Besides flight simulation, which still plays a major role in the training of Army aviators, the Army has created a series of varied simulations. Over the past 15 years, for example, the Combined Arms Training and Development Agency (CATRADA) at Fort Leavenworth, Kansas, developed an entire family of war games. These war games, referred to as battle simulations, run the gamut from squad to brigade level.

Although much of the research done with battle simulations has focused on decision-making for leaders and on inter-staff communication, these simulations also offer a fertile ground for evaluating the effect of various stresses on battalion and brigade commanders and staff officers. The behavior of the participants in such simulations, in fact, mirrors quite well what they would be doing in actual field tactical operations centers.

ENGAGEMENT SIMULATIONS

When it comes to field training itself, historically it has been conducted much like the childhood game of Cops

Soldiers from the 1st Battalion, 28th Infantry, prepare for MILES training in the field.

and Robbers — "Bang-bang, you're dead." In the 1970s, however, the Army began to change its field training programs to include the use of a simulation system that was based more on casualty assessment. This system was designed to teach small units to perform combat operations in a relatively realistic environment without the obvious hazards of actual warfare. A group of these simulations became known by the generic term *engagement simulation* (ES). The first ES, called SCOPES — Squad Combat Operations Exercise (Simulated) — was developed by a joint working group that included combat veterans as well as psychologists.

Such engagement simulation exercises differed from field training exercises (FTXs) in the way casualties were assessed and in the way this assessment influenced troop motivation. Instead of using umpires who made arbitrary judgments concerning simulated life and death conditions, ES employed a complex system of controllers, radio communications, telescopic sights, and identification numbers for the personnel involved in the exercise. The basic concept underlying this low-technology simulation was that if an infantryman could be seen, he could be killed. Thus, every soldier wore an identification number derived from a set of key numbers assigned randomly to the opposing forces. If an enemy soldier could read an identification number through a low-power telescopic sight and then fire his weapon, the soldier wearing that number was considered killed in action. (The controller with the soldier's unit received the message by radio from his counterpart on the opposing force and informed the soldier of his demise.)

Exercises such as these were quite popular with the soldiers; the commanders of units involved in the development of ES reported that during the exercises both disciplinary problems and AWOL rates declined. This may have been because of increased motivation or identification and involvement with the exercise, or it may have been because of the sheer novelty of the ES program.

In either case, ES was destined to grow in use and application until it expanded beyond infantry units to include armor units and combined arms teams. SCOPES eventually was retitled "Realtrain," and artillery and air defense models were also created and tested. In the course of these developments, it became clear that the largest unit a manual control system could handle was a company or a company team and that even this was barely achievable.

LASERS

Technology caught up with ES in the mid-to-late 1970s when the Combat Developments Experimentation Command (CDEC) developed an instrumented range at Fort Hunter Liggett, California. In this system, casualty assessment was based on the use of lasers instead of bullets. All the soldiers and the weapon platforms (tanks, APCs) were equipped with "eye-safe" lasers and associated detectors. If any detector was struck by a laser from the opposing force, a computer determined whether the contact was to be considered a destruction, a hit with disability, or a near miss. This instrumented range kept track of the location of every major weapon system and vehicle that was taking part in the exercise and made it possible to conduct detailed after-action reviews. This system, therefore, had considerable research potential. Position location, or "ground truth" information, could be stored in the computer; in addition, every engagement could be recorded and stored on a time-based storage medium. (CDEC has used this range extensively since that time and still employs it for systems and concept research.)

Laser technology also made it possible to use ES to support exercises for units larger than a company or a company team. TRADOC began the development of laser applications to training systems in the 1970s and ex-

panded the technology to include portable laser training systems for use at home stations. Collectively, these became known as the Multiple Integrated Laser Engagement System (MILES).

The National Training Center (NTC) at Fort Irwin, California, now makes the most sophisticated use of combat simulations in the Army, including MILES. The Center not only uses the latest ES technology, it also features a permanent opposing force that performs military operations based on Warsaw Pact tactics. Each combat battalion in the U.S. Army is sent to the NTC periodically so that its soldiers can experience the reality of desert combat without also experiencing its hazards. The level of realism and stress at the NTC is considerably higher than that of anything else units are ever exposed to, short of actual combat.

The potential uses of simulation in training and research are many and diverse. The main advantage of using simulation techniques are lower costs, greater control, and safer conditions. Cost is a particularly relevant factor, as is the wear and tear on operational systems.

At the same time, safety is an ethical consideration as well as a practical one. Simulation provides an opportunity for creating situations that are critical to training but that contain no actual hazard. ES can create, for example, the sights, sounds and, some have claimed, even the feel of battle without the dangers of real combat.

As for research, simulation can offer the researcher a wide variety of techniques and can give him greater control of the experiment. The level of control the experimenter maintains over the test conditions in simulation gives him many opportunities to measure behavior that he would not otherwise have. Computer simulations also make automated data collection possible.

But all of this raises the issue of simulation fidelity. It is an oversimplification to say that *fidelity* is synonymous with *realism*. Ideally, a high fidelity simulation should give the participants the sense of "being there" to the extent that they feel they are a part of the system being simulated. This is not to say that to be useful every simulation must have perfect fidelity. The level of fidelity in simulation is always a trade-off between cost and expediency; with enough money and time, just about any system known to man can probably be simulated.

Accordingly, the importance of simulation as a research tool must be kept in perspective. It is, after all, only a means to an end, not an end in itself. An effective simulation must place human participants in a realistic situation or an operational environment in which they can perform their actual duties. Their actions in that environment will be a function both of what they bring with them (skill, knowledge, ability, motivation) and of the contingencies the situation itself establishes. But by balancing the fidelity required to get the job done with the operating cost of achieving that fidelity, researchers and trainers can create settings in which participants are motivated and allowed to perform their tasks much as they would in the real world. The relevance and applicability of the results to Army operations will continue to speak for themselves.

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John L. Kobrick is a research psychologist assigned to the U.S. Army Research Institute of Environmental Medicine. He previously served with the Army Quartermaster Corps Climatic Research Laboratory and the U.S. Army Natick Research and Development Command. In all, he has completed 31 years of research on soldier performance for the Army. He holds a PhD degree from Pennsylvania State University.

TRAINING NOTES

The Weaponeer and Marksmanship

JOEL D. SCHENDEL

The Weaponeer, a training device that simulates the live-fire conditions of the M16A1 rifle, can be a valuable resource, or it can be a detriment to effective marksmanship training. It all depends on how the device is used. And there are some problems with the way it is now being used.

The Fort Benning Field Unit of the Army Research Institute (ARI) has been doing research on marksmanship for several years. A major product of this research is the current basic rifle marksmanship (BRM) program of instruction. BRM training now includes more feedback, better instructor training, and better supporting materials. This research has also led to the development of an advanced rifle marksmanship program as well as to guidelines for conducting unit marksmanship training. (Articles summarizing major portions of this research appeared in the July-August and September-October 1981 issues of INFANTRY.)

Although the original Weaponeer, rather than the current one, was used in this research, I believe my observations here are still valid and that my recommendations will help trainers make the most of the time their soldiers spend on the device. (The views expressed are my own.)

The Weaponeer is a stand-alone rifle marksmanship simulator that uses a non-restorable M16A1 rifle. The rifle's recoil is simulated by the operation of a recoil rod that attaches to the barrel of the rifle, and the sound of the rifle is transmitted through earphones.

Contrary to appearances, the Weaponeer does not use a laser to register hits or misses. It uses infrared light from a light-emitting diode on the target to activate a sensor that is mounted on the rifle barrel. When the rifle is aimed and fired, this sensing system provides precise information about target acquisition and shot location. (This information is then processed by a computer in the console.) The Weaponeer has a memory for recording up to 32 accurately simulated shot impacts and a printer for providing a printout of all shots on the selected targets.

A video display shows the shooter's aiming point, which appears as a dot or ball of light. The screen also displays the selected target and the location of hits and misses. Two unique features of the video display are the "replay" and the "each shot" controls. When activated, the "replay" feature shows the movement of the rifle during the three seconds before firing, while the "each shot" feature displays not only the location of each shot but also the order in which the shots were fired. The video display also includes such information as the number of hits on the target, the number of misses, the late shots (fired after the target has dropped), and the total number of shots fired.

The Weaponeer contains four targets: a scaled, 25-meter zeroing target; a scaled, 100-meter E-silhouette target (kneeling man target); and two scaled, 250-meter E-silhouette targets. The scaled, 25-meter zeroing target shows a scaled, 250-meter E-silhouette target with superimposed grid lines, like those on the Army's current 25-meter live-fire zeroing target.

The targets are presented one at a time, but they can be activated singly or in automated sequence by buttons on the Weaponeer's control panel or remote control box. The silhouette targets can be programmed to fall when hit by means of the "kill" button. Exposure time can be varied from 1 to 30 seconds for the scaled, 100-meter target and from 2 to 30 seconds for the scaled, 250-meter targets. The targets can also be set for continuous presentation. Firing pads used with the Weaponeer enable the firer to shoot from any position.

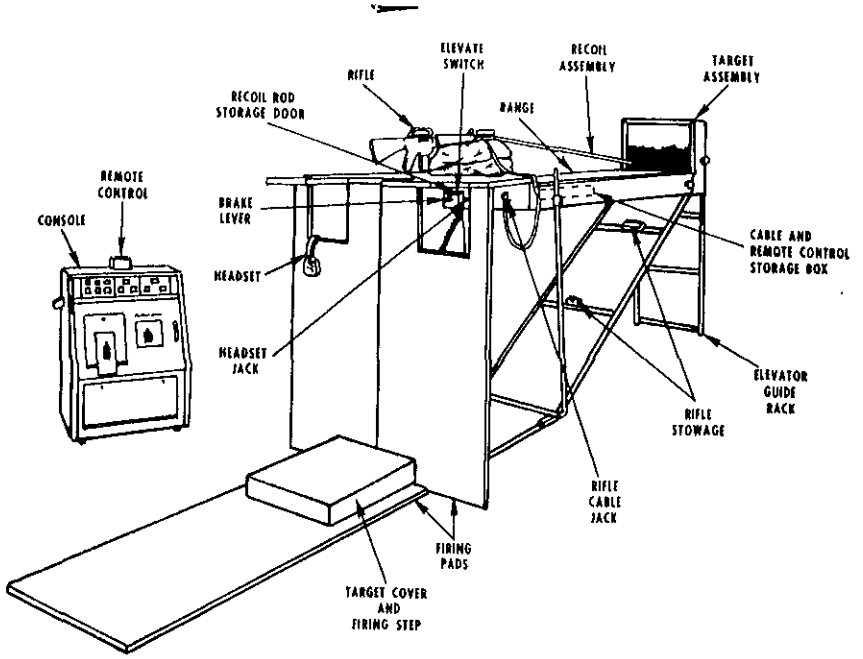
The first problem in the use of the Weaponeer is that there is a limited supply of the devices and a high demand for them. The Army now has about 45 Weaponeers distributed among 21 installations throughout the world. At Fort Benning, for example, during BRM training alone, the demand for the Weaponeer is so great that only the worst shooters can be allowed to use it. Even then, these shooters are rarely permitted to spend more than a few minutes on it.

Although the Army plans to buy a total of 220 Weaponeers (including those already in the system and some designated for use by its Reserve Components), these additional devices probably will not alleviate the supply problem. In fact, as more soldiers are exposed to the Weaponeer, the demand is likely to increase accordingly. Thus, the only way to alleviate the problem — apart from continuing to buy more and more Weaponeers — is to develop more efficient approaches to using the ones that are available.

One of the reasons for the excessive demand on the device is that trainers and commanders alike have greeted the Weaponeer with favorable attitudes and high expectations. Although these attitudes and expectations are welcome signs of the Weaponeer's acceptance, they have also contributed to a considerable amount of over-reliance on the device as a cure-all for shooting problems.

This over-reliance has had at least three negative side effects. First, it has led to the neglect of other, more traditional forms of marksmanship training that could be helpful to the problem shooter. Second, those who would otherwise be providing this training have begun to use the Weaponeer as a crutch — if a soldier cannot shoot, they send him to the Weaponeer. (Obviously, solving a soldier's shooting problems is not as simple as that.) Finally, over-reliance inflates the demand for the Weaponeer, and soldiers sometimes stand in line for long periods waiting to use it. This waiting time is usually unproductive.

The third problem with the Weaponeer is the lack of a standardized set of procedures for its use. With no guidelines to follow, instructors are put in a learn-as-you-go situation. Most try to make the best of it, but with no tested and established guidelines for using the device and with a high rate of turnover among instructors, inefficient and counterproductive procedures are frequently used.



Weaponeer set up for use in foxhole supported position.

There are several ways of alleviating these problems:

The Weaponeer should be used continuously. The Weaponeer is a limited resource, and that limited resource is being wasted any time it is allowed to sit idle when troops are around.

The Weaponeer should be used for diagnosis. The task of diagnosis is to identify the sources of the various problems soldiers have with shooting. Diagnosis is therefore a necessary first step toward remedying these problems.

One of the reasons the Weaponeer is so valuable as a diagnostic device is that it eliminates most of the errors caused by the rifle, the ammunition, and the environmental conditions (wind, for example). This makes it easy to trace shooting problems back to the shooter himself. A second reason is that the features on the Weaponeer, most notably the replay feature, can provide more information about a soldier's shooting problems than is now available through any other means. Through these features, most violations of the fundamentals of marksmanship can be detected.

While problems can be diagnosed quickly and effectively with the Weaponeer, ARI's research indicates that these problems cannot be remedied with it — at least not quickly and effectively enough to warrant using the device in this manner. In one experiment, for example, the live-fire performance (rounds to zero) of initial entry soldiers who had received various types and amounts of instruction on the Weaponeer was compared with the performance of a group of initial entry soldiers who had received no instruction on the device. Overall, each soldier in the former groups received an average of about seven minutes of individual instruction and fired an average of about nine shots on the device. The results showed that these soldiers performed no better than those who did not receive the instruction.

Even if it were possible to solve a soldier's shooting problems in, say, 30 to 60 minutes, it probably would not make sense — in most cases, at least —

to use the device as a remedial trainer. If each soldier were given only 10 minutes on the device, it would take 5 Weaponeers and 8 hours to "remediate" a company of 240 soldiers. Even with 10 Weaponeers, each soldier's remedial training time would be only 20 minutes.

Given the limited supply of Weaponeers, this same point could be made in regard to the use of the device as a substitute for live-fire training. One soldier's training will almost always come at the expense of another's. Then, too, the Weaponeer was not designed to serve as a substitute for live fire. Anyone who has fired the Weaponeer knows it does not produce the same sensations as live fire does. In short, the Weaponeer is an excellent supplement to live fire but can never totally replace it.

Instead, after their problems have been diagnosed, soldiers should be assigned to dry fire remedial training exercises that are designed to correct their individual shooting problems. Dry fire can be quite effective when it is done with the help of a good instructor, and it is cost effective. This way, resources are not wasted in efforts to conduct training on the Weaponeer that can and should be conducted elsewhere. In addition, instructors can concentrate their efforts in the areas where soldiers need help the most.

The Weaponeer should be used early in BRM training. If the Weaponeer is used in the early stages of BRM training, shooting problems can be detected and eliminated before they develop into bad habits, which are not easy to change. Shooting problems can be corrected quickly at that time because the soldiers have repeated opportunities for practice and feedback. If these problems are identified later in BRM training, the soldiers may not be able to correct them before they attempt to qualify.

As an illustration, ARI recently examined the effect of varying amounts and types of Weaponeer training on the record fire performance of permanent party soldiers. These soldiers fired up to 128 rounds on the Weaponeer, with feedback, 24 to 48 hours before firing record fire. While the Weaponeer training had a clearly beneficial effect on the soldiers' performance on the Weaponeer, it had no apparent effect on their performance at record fire. Given this result, it would seem far wiser to use the Weaponeer to diagnose the shooting problems of many soldiers early in their training than to attempt to upgrade the existing skills of only a few soldiers immediately before record fire.

The Weaponeer should be used in the prone, unsupported position as well as in the foxhole supported position. BRM training emphasizes both firing positions, but virtually all diagnosis with the Weaponeer is now being conducted in the foxhole supported position. (This position is seen as having first priority because it is easier to learn and is the position from which soldiers zero their rifles.) Data from two separate experiments, however, strongly suggest that firing from the prone position involves skills only weakly related to those involved in firing from the foxhole. In other words, a soldier who shoots well from the foxhole supported position may or may not shoot well from the prone unsupported position and vice versa. Since half the rounds in record fire are fired from the prone unsupported position, it would be beneficial to use the Weaponeer to diagnose firers in that position, too, preferably after they begin showing signs of mastering the foxhole supported position.

Trainers should keep track of soldiers who have shooting problems. Once a soldier has been diagnosed as having shooting problems, an effort should be made to keep track of his progress from one period to the next. Some feel that when the poor BRM performer eventually zeros, his shooting problems are solved. But they are mistaken. Unless weak shooters are identified early and helped throughout the program, chances are they will still have problems when they attempt to qualify.

The Weaponeer also may provide needed support to unit marksmanship training, particularly since live fire ranges are often either inadequate or unavailable. This is especially true in Europe where there is a scarcity of certified outdoor range facilities that can be used to satisfy both marksmanship training and record fire requirements. Typically, Army Reserve and Army National Guard units also must bear time and cost burdens because of the need to transport troops to remote training locations and billet them there.

One potential use of the Weaponeer at the unit level is for sustainment training. The problem is that there is no compelling evidence to support the Weaponeer's training value for sustainment. Again, our research indicates that training on the Weaponeer improves performance on the device itself but not on the live fire range. Other research in which individual soldiers improved after receiving Weaponeer training leaves it unclear whether these gains resulted from the training itself or from other factors, such as more or better individualized instruction.

Most feel that the device does have training value, but our data suggest that if the Weaponeer is going to have an appreciable effect on unit marksmanship performance, the amount of training must be quite extensive. Since most installations do not have enough Weaponeers to provide this extensive training to every soldier who needs it, we recommend that when a device becomes available for use in unit training it should be used for diagnosis. Once a soldier's shooting problems have been diagnosed, he can then be given remedial training exercises *off* the Weaponeer that are tailored to his specific needs. (If time allows, the Weaponeer can also be used following dry fire to help determine whether a soldier's shooting problems have, in fact, have been solved.)

Another way the Weaponeer can be used in units is to help commanders predict which of their soldiers will qualify and which will fail when they go for record fire. In one experiment, for example, soldiers fired a "surrogate" record fire scenario on the Weaponeer (not the Weaponeer's pre-

programmed "random raise scenario") 24 to 48 hours before their actual record fire. Of the 48 soldiers tested, 73 percent passed it when it was predicted they would pass or failed when it was predicted they would fail. Nineteen percent passed when it was predicted they would fail, and, most significantly, only 8 percent failed when it was predicted they would pass. The use of the device for prediction is not foolproof, of course, and it may be difficult for unit commanders to schedule the use of the device over extended periods for testing purposes. But it is an option for the commander who may feel he has no options.

Used in this way, the Weaponeer may at least be able to identify weak shooters before they go to record fire so that they can be given remedial training. As an alternative, their performance on the Weaponeer might be used as a substitute for some record fire, which should result in significant savings in time and money. (ARI is now in the process of preparing a report that will provide specific information on how to conduct "surrogate" record fire testing on the Weaponeer. And a more complete discussion on the use of Weaponeer is presented in ARI Research Product 82-08, *Guidelines for Use of Weaponeer During Basic Rifle Marksmanship Training,* by J.D. Schendel and G.P. Williams.)

Thus, research indicates that if the Weaponeer is used as suggested here, and not misused, it can be a valuable resource both during BRM training and later in unit marksmanship training programs.

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CAPTAIN WILLIAM D. PHILLIPS

The Light Leaders Course now being conducted at Fort Benning was developed in conjunction with the conversion last year of the 7th Infantry Division to the new light division organization. Once that division's training has been completed, the other divisions that are being activated or converted to that organization will also be trained.

The course was designed as a way to increase the infantry skills of company leaders in the areas of leadership, training instruction, and tactical battle drill. In addition, it emphasizes the development of unit cohesiveness, teamwork, and professionalism. The "spirit of light infantry," which flavors the course, helps produce a tough, aggressive, and smart infantry leader — one who has confidence in his abilities, his training, and his men, as well as in the ability of light infantry units to fight and win on the battlefield.

The course is 28 days long and includes an average of 16 hours of training per day. Although the course is taught by members of the York Branch, Benning Ranger Division of the U.S. Army Ranger Department, it is not a Ranger school — it is a leadership course, and one that is unique in the Army's formal education system.

Each class is made up of the company chain of command, from commander through team leader, of three rifle companies from one battalion. (Under its TOE, each light infantry battalion has three rifle companies and a headquarters company.) The three company cadres are formed into student platoons for training, with the leadership positions rotated daily. (The students wear their regular insignia of rank, however, and the formal chain of command of each company is still responsible for all non-training administration and control for that company.)

During the course, the three company commanders work as part of the course staff to plan and present instruction and training. And because the Light Leaders Course uses a train-the-trainer approach, more than half of the formal instruction and training is prepared and presented by members of the class. All members of the student company, in fact, participate in the training and are evaluated by Ranger instructors on their leadership, motivation, supervision, and communication, as well as on their tactical application of the subject matter.

The subject matter is divided into three groups: core subjects, METT-T training, and tactical battle drills (which culminate in a situational training exercise). The core subjects are the individual soldier skills and leadership skills soldiers must have to perform squad collective tasks and battle drills — marksmanship, physical training, hand-to-hand combat, and troop-leading procedures, for example.

The METT-T training includes tasks that each leader must overcome his fears to perform — such as small-

boat operations, helicopter rappelling, and helocasting. (These are things people in TOE units seldom do.)

But the true meat of the course is the tactical battle drill portion, which is taught in two phases — the drills themselves and the students' presentation of them to their fellow students.

A tactical battle drill is that portion of a collective task that can be learned by rote, a standard technique or procedure that, after repetitive training, becomes spontaneous and instinctive. Such a drill also relates to the direct employment of weapons by more than one person for the destruction of enemy personnel and equipment.

The collective tasks in tactical battle drills are more elaborate than the individual tasks but less so than an ARTEP mission or task. A squad performing an area reconnaissance, for example, must also be able to perform a passage and re-entry of lines, fast movement, crossing of danger areas, and actions at the objective. These subcollective tasks are taught as tactical battle drills.

As an example, the tactical battle drills involved in the ARTEP mission of conducting a raid are the tasks of breaching wire obstacles, clearing a trenchline, and knocking out a bunker. The individual skills needed to conduct these drills are rifle marksmanship, movement techniques, personnel camouflage, and securing and searching prisoners.

During the first phase of tactical battle drill training (Days 13-15), the students are taught 24 battle drills along with the necessary preparations for teaching them to others, including training aids and aggressors.

The class is divided into four groups, each containing several students from each company. Each group receives instruction on 6 of the 24 battle drills. The students are trained on the actions of each squad position in each drill, from squad leader through assault or security team to machinegunner. Then all the members of the composite squad for each drill practice it until they fully understand how each step of the drill is conducted and why. (There is no set time limit for a drill — it continues until the squad meets a set standard.)

There are four days between the two phases. During these four days, each student prepares to present to his regular squad two of the six drills he has learned.

The second phase begins on Day 18 and lasts for seven days. Each day, three battle drills are taught by the students to their squads, and at night patrol-base operations are conducted by other students. The students are evaluated by York Team instructors on how well they take charge of the unit; the motivation of the squad members to conduct the training; their supervision and on-the-spot corrections; their communication of instructions and concepts to the unit; and the conduct of the techniques of each tactical battle drill. Each evening, the next day's student instructors must review their subjects and practice their presentations.

The tactical battle drills fall into three categories: offensive, control, and defensive, as shown on the accompanying chart. The fact that most of these drills are offensive ones reflects the offensive spirit of the light infantry, whose leaders must be prepared to take the initiative and perform boldly and aggressively.

The control drills are those that a unit must be able to do if it is to survive and sustain itself in combat — fieldcraft and common sense knowledge of dismounted patrolling. (More defensive drills may be added in the future.)

Within several of the drills, groupings of similar drills — called drill sets — are taught. Because they have a similar effect on the student squad and require the same aggressor and terrain support, these drill sets complement the overall concept of smart, economical training.

Although several of the tactical battle drills listed on the chart are ARTEP missions, the tasks that squads or teams conduct are pure battle drills. A platoon raid, for example, is an ARTEP mission, but the missions of the three squads in the course are to perform the three distinctive subcollective tasks of a security team, a support team, and an assault team. Each of the squads is instructed as a unit on each of the three tasks and on the responsibilities of each special team and each individual soldier before they rotate to one of the other tasks. In this way the ARTEP missions to conduct a raid, a reconnaissance, and an ambush (among others) are taught as tactical battle drills.

On Day 24, the students are taught how to rig the A21 containers that will be used to deliver their resupply of rations, water, and ammunition the next day. The students also enter a concentrated planning phase for the follow-on situational training exercise (STX), which begins with a tactical helicopter movement at dawn, followed by an air resupply and a force augmentation by Air Force C130 aircraft.

During the remaining two and a half

TACTICAL BATTLE DRILLS

Offensive

- Breach wire obstacles
- Breach a minefield
- Knock out bunkers
- Clear a trenchline
- Conduct a raid
- Movement techniques/danger areas
- Zone reconnaissance
- Area reconnaissance
- Conduct antiarmor ambush
- Conduct hasty ambush
- Enter and clear buildings (MOUT)
- Fire and movement
- Tactical air movement by helicopter
- Conduct vehicle movement

Control

- Establish patrol base/hide position
- Passage and re-entry of friendly lines
- Conduct aerial resupply
- Conduct a linkup
- Actions at rally points

Defensive

- Squad fire control (live fire)
- Target acquisition
- Establish hasty defense
- Establish/remove hasty minefield
- React to enemy contact/ambush/break contact

days of the course, the students conduct all of the 24 battle drills as portions of ARTEP missions. Working from fire team through company level, the students conduct reconnaissance, ambush, and raid missions as well as exfiltrations, linkups, and reentries of friendly forward lines. The student patrols are evaluated throughout the exereise to the same standards (and on the same evaluation forms) the patrolling teams of the Ranger Department use for Ranger students.

The Light Leaders Course has had a significant effect on the 7th Infantry Division's preparations for conducting the Light Fighters Course at Fort Ord. The two courses have parallel objectives and a parallel construction. The *Light Leaders Course is the* foundation for training the trainers and for instilling the tactics and the abilities soldiers need to become skilled, tough, aggressive, and smart light infantrymen. The Light Fighters Course is the medium through which this knowledge and spirit is transmitted to the soldiers. The spirit of the light infantry is thus spread from the Rangers through the division's leaders and on to its soldiers. The divisions that follow the 7th in this training process should find it equally beneficial when they convert to the light infantry organization.

Captain William D. Phillips, a 1975 ROTC graduate of the University of Tennessee, is chief of the York Branch of the Ranger Department. He formerly served as an infantry platoon leader and a heavy mortar platoon leader in Germany and as a rifle company commander in the 101st Airborne Division (Air Assault).

Training May Not Be the Answer

CAPTAIN JACK H. CAGE

If you have ever used a training program to solve a performance problem, you may have wasted your time. Training is not always the answer. A short story will illustrate:

A young lieutenant reporting to a battalion in Germany naturally wanted to command a platoon but a command position was not available. His battalion commander assigned him instead as battalion safety officer, but made a deal with him: "Lieutenant, I have a terrible problem with accidents in the battalion. I fired the last safety officer because he couldn't reduce the accident rate. If you *can,* you'll get your platoon." The lieutenant agreed and charged out on his crusade.

During the next few days, he asked several soldiers about the previous safety officer's approach. The reports were consistent: Day after day, the officer had held classes on vehicle operation, weapon safety, and so on. In essence, the relieved officer had seen the problem as one he could solve with training; he had tried to *train* the battalion to be safe. He had given so many classes, in fact, that they had become the number one gripe in the unit. Besides that, he had deluged the battalion with posters, handouts, and wallet-sized cards with safety mottoes on them. He had even moved demolished automobiles into the area to emphasize the results of careless driving. Unfortunately, the battalion's safety record plummeted, as did the officer's standing in the battalion.

What did the new lieutenant do? After determining that the unit's soldiers *knew how* to prevent accidents, he assembled the battalion and said: "By now you've probably heard that the accident rate in our battalion is way too high. And you already know how to prevent accidents, so I won't stand up here and tell you about that. But if the accident rate decreases, I won't hold any more safety classes, and we'll hold a battalion cook-out every month the rate decreases." Interestingly enough, from then on the battalion had the lowest accident record in the division. And the lieutenant got his platoon.

This tale highlights three important aspects of human performance:

- Training is an appropriate solution to a performance problem *only* when the soldiers need more information or new skills. It is a waste of time and effort when they already have the required knowledge.
- You can use pointed questions, as this lieutenant did, to identify the extent of a performance problem and to determine whether training is needed.
- Linking incentives to soldiers'

performance can effectively modify or maintain the performance you want from them.

Perhaps we need to go back at this point and define exactly what a performance problem is. The term refers to any situation in which an individual's or a group's actual and desired performances don't match. Unfortunately, we see examples all the time. In the story about the safety officer, the desired performance of the soldiers in the battalion was much different from their actual performance, and the lieutenant's mission was to reduce that difference. There are many other examples: A commander sets a standard of 250 points on the Army Physical Readiness Test, but 30 percent of the company fail to reach it; a staff officer is assigned the mission of completing a report, but he submits the report two days late.

How do you know when you have a performance problem in your unit? First, listen to the people around you. If you hear people saying that your soldiers just aren't doing what they should be doing; that they have a lousy attitude; that the unit has too many AWOLs; or that a training program is needed to teach a specific task, these are tip-offs that something is wrong. If you follow them up, you'll probably find a performance problem lurking in the shadows.

The following questions can help you focus your analysis of the situation:

- What exactly do I want, and what am I getting now?
- Where is the discrepancy?
- When does the discrepancy show up?
- To what extent does the problem exist?
- What are the sources of my information? Are they reliable? Is the information valid?
- What's the worst thing that can happen if I do nothing? Can I live with it? (Obviously, if it isn't broken, don't fix it!)

Once you have thoroughly and accurately answered these questions, you should have a precise description of your problem. The next step is to remove that discrepancy between what is and what should be. But how do you do this?

First, people perform for a combination of two reasons. They perform because they have certain skills that enable them to do so. A soldier can prevent an accident, for example, by following a set of procedures he learned in school. But people also perform because of the incentives or rewards associated with their performance. Soldiers may have the necessary skills to prevent an accident but do not use those skills for various reasons — perhaps because they think their buddies will harass them if they follow the prescribed procedures or because they want to get back at their squad leader somehow.

CENTRAL QUESTION

The central question to ask, then, is whether they know *how* (have the skills) to perform to standard. That is, *could* they perform if their lives depended on the result? If your answer is a strong "No," then training is a necessary step toward solving your problem. If the answer is "Yes," however (they could perform if it really mattered to them), then training won't fix the problem, because something is apparently lacking in the environment in which the soldiers work. Their performance, therefore, must be tied to some incentives before it will change.

The basic idea here is rather simple — human behavior is controlled by its consequences. One type of consequence is often called a reinforcer. A reinforcer is anything that causes an increase in the behavior that preceded it. And, as most of us know, reinforcers can be either positive or negative. A positive reinforcer can be a letter of commendation, a medal, or merely an "atta boy," and each can bring about an increased frequency of a desired action.

The new safety officer of the battalion in Germany, for example, made battalion cook-outs contingent on lowering the accident rate. In this case, the prospect of attending a cook-out was rewarding or reinforcing to the soldiers. Furthermore, the lieutenant used the reward to maintain the safe performance.

A negative reinforcer, on the other hand, also increases the frequency of an action because people try to escape from it or avoid it. Our young lieutenant used this, too. He tied safety classes to safe performance — his promise to remove something painful, more safety briefings — caused the soldiers to increase their safe behavior.

Punishment can also decrease undesirable behavior. Punishment can consist of anything soldiers do not like, of course. A soldier might be punished with additional duty for driving too fast, for example; the punishment, hopefully, will cause him to stop the undesirable behavior — speeding.

The lieutenant realized that training has its limitations and that it is sometimes inappropriate. He also understood that people perform not only because they have certain skills but because their performance is linked to certain incentives. His first question was "Could they perform if their lives depended upon it?" Since in this case the answer was "Yes," all the training in the world would not have improved the safety rate. It was the change in the incentives associated with operating safely that made the soldiers' behavior matter to them. The result was a lower accident rate, and a happier lieutenant.

So, if your soldiers are not performing well in certain tasks, look before you leap on the training bandwagon. There may be other, more appropriate ways to nip your performance problems in the bud.

Captain Jack H. Cage, an infantry officer, is an associate professor of behavioral sciences and leadership at the U.S. Military Academy, from which he was commissioned in 1975. He has served in several command and staff assignments and has previously published articles in INFANTRY.

MILES

LIEUTENANT COLONEL JOHN M. LeMOYNE
CAPTAIN MARK VAN DRIE
SERGEANT FIRST CLASS LARRY M. SLUDER, JR.

Imagine being able to conduct training that is challenging, fun, inexpensive, and easily implemented —and training that does all of the following:

- Exercises basic infantry skills.
- Develops small-unit leadership.
- Improves squad cohesion and teamwork.
- Builds physical fitness.

And imagine that this training takes only ten minutes!

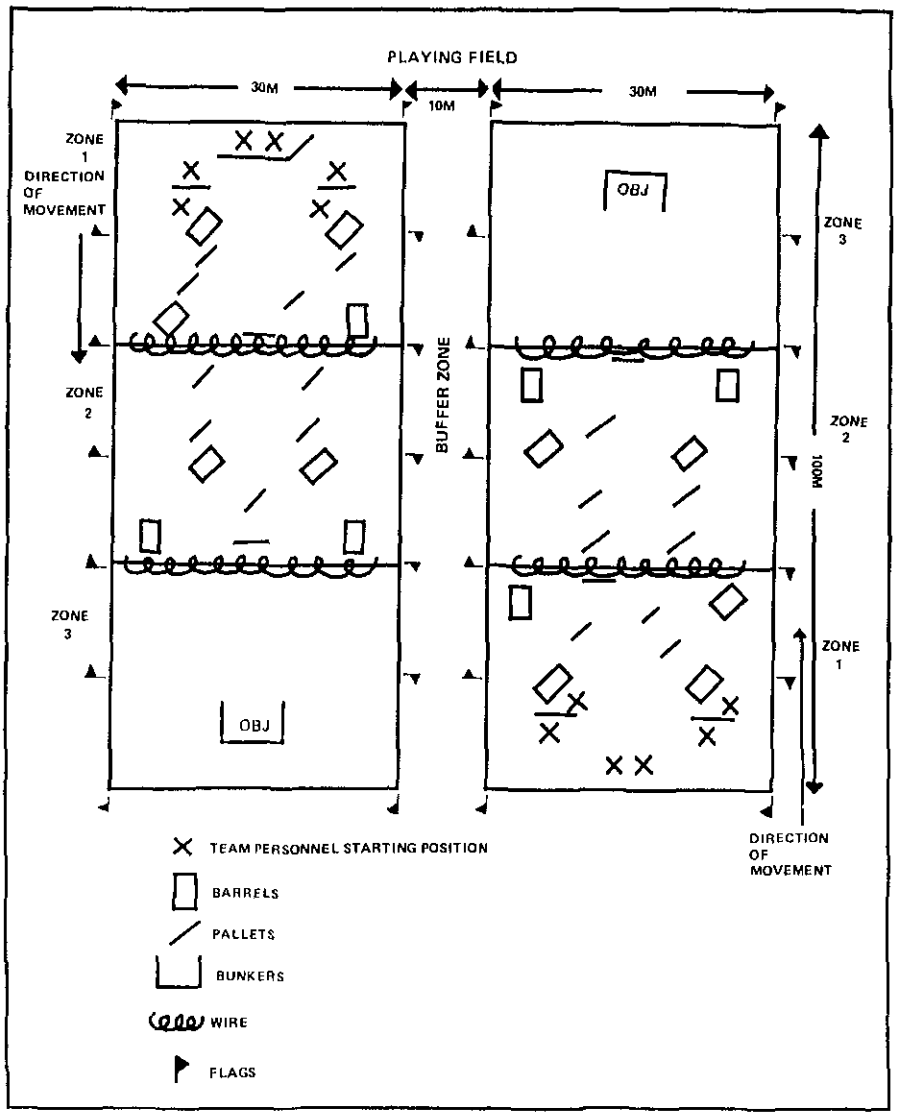
Soldiers in the 3d (Marne) Infantry Division don't have to imagine such training; their units are accomplishing all of this and more.

The Commanding General of the 3d Division, Major General Howard G. Crowell, Jr., challenged the division's units to develop a small-unit competition that incorporated the use of the Multiple Integrated Laser Engagement System (MILES) and one that could easily be implemented throughout the division. The implied task was to pack as much training value as possible into the competition. The soldiers of the 2d Battalion, 30th Infantry, responded to the challenge and created what is now called the "MILES Game."

The MILES Games is a squad-against-squad competition that combines the tried and true fire and movement tactics of the infantry with the training value of MILES. It was specifically designed to train soldiers in the use of individual movement techniques to improve their chances of surviving on the battlefield. But, as it turned out, the game does more than that —all of those things listed above, in fact.

The game can be conducted in any open area with dimensions of approximately 100 meters by 70 meters. The playing field, as laid out by the 3d Division, consists of two lanes, each 30 meters wide and 100 meters long, with a 10-meter buffer zone between them (see sketch).

Each lane has an enemy bunker, two wire obstacles, and a series of identical emplacements, which are designed to provide cover and concealment for the competing squads. The obstacles and emplacements can be created from such easy-to-find items



Obstacles and emplacements provide cover and impede or facilitate movement.

as 55-gallon drums, concertina wire, sandbags, pallets, railroad ties, and logs. (The placement of obstacles and cover can be left to the discretion of the controllers, so long as it is the same for both lanes.) The bunkers are five sandbags wide, four deep, and five high. Markings, obstacles, and bunkers are emplaced as shown in the flag sets is the easiest way to mark the field boundaries and the buffer zone, but engineer tape, rope, lime, or other materials can also be used.) The lack of cover in Zone 3 requires the intelligent use of smoke and covering fire.

In the interest of teamwork and cohesion, the game was designed for two teams, each consisting of members of the same squad. The actual team size in the 3d Division is six soldiers —the number in a Bradley's dismount element. The other squad members observe from the sidelines; their "during-action reviews" add peer pressure to the game, and at the same time these members gain from the experience of watching the action.

The soldiers carry standard infantry equipment for realism — including load-bearing equipment, protective masks, and body armor — and wear MILES laser detector suspenders and helmet bands. Each team carries five practice hand grenades, one M60 machinegun, and five M16A1 rifles. All the weapons are equipped with blank adapters and MILES transmitters, which *have been boresighted.* (Extra MILES equipment is kept available to replace unserviceable items.) Binoculars, squad radios, rifle bipods, and M60 accessories can also be used at a squad leader's discretion. Four hundred rounds of blank machinegun ammunition, 200 rounds of blank rifle ammunition, and one smoke grenade are issued to each squad.

The teams begin the game with their soldiers in the prone position behind obstacles at opposite ends of the field. (Or they can start from inside BFVs or APCs at each end of the field.) A blast from an artillery simulator signals the start of the game, and the soldiers may immediately begin moving and firing, shooting at the "enemy" along the way. The object is for them to move down their team's half of the field and throw or roll as many of their grenades as they can into the bunker at the far end while sustaining as few casualties as possible. (They can use smoke to conceal their advance.) At the same time, they must try to prevent the other team from accomplishing the same mission. After ten minutes, the end of the game is signalled by a blast from another artillery simulator. (A detailed list of rules is shown in the accompanying chart.)

Three soldiers are delegated to serve as umpires, although it is possible to conduct the game with two. (Platoon leaders and platoon sergeants are best suited for this duty, because they are, after all, the teachers and trainers of the squads.) The duties of the umpires are to start and stop the competition; to see that the rules are adhered to; to test the MILES equipment; to determine the winner; and to conduct after-action reviews. The umpires must have MILES controller guns.

The game is scored as follows:

- One point for each soldier who remains "alive" on the friendly side of the first wire obstacle.
- Two points for each "live" soldier who has crossed the first wire obstacle.
- Three points for each "live" soldier who has crossed the second wire obstacle.
- Five points for each grenade that is exploded *in* the enemy bunker.

Note that a team earns more points for getting a grenade inside the opposing force bunker than for keeping one of its soldiers alive. This represents the weight assigned to the accomplishment of the mission versus the preservation of the force. In combat, both are important, of course, but mission accomplishment is paramount. In the MILES Game itself, this disparity in point value is the motivating factor that pushes soldiers out from behind their cover toward the opposing bunker.

In addition to the points awarded, points are also taken away for certain violations of the rules. One penalty point is deducted for each of the following:

- Any activity by a "dead" soldier — talking, shooting, passing ammunition forward.
- Throwing a smoke grenade into enemy territory.
- Going outside the boundaries or into the buffer zone.
- Tampering with MILES equipment —removing batteries, for example. (The umpires must check the "live" soldiers before, during, and after the game with their controllers' guns to make sure the individual MILES equipment is operating the

Rules for MILES Game

- **Squad leaders may allocate ammunition and grenades in whatever way they deem necessary before the game starts.**
- **Soldiers may have magazines inserted and weapons loaded before the starting signal.**
- **Soldiers must remain on their half of the field of play at all times. (Soldiers who leave their half of the field of play, by moving either across the sidelines or the rear boundary of the end zone or into the buffer zone, will be "killed" by an umpire with his controller gun.)**
- **M16 MILES transmitters may be set on either semi-automatic or automatic, as a squad leader deems necessary.**
- **Ammunition and grenades may be reallocated within a team during the game. Ammunition and grenades may be taken from "killed" soldiers.**
- **If a machinegunner is "killed," any other soldier on the team may take his place and operate the weapon.**
- **When a soldier becomes a casualty, he must remove his helmet and remain in place. He may not communicate with his team through gestures or any other actions. If a soldier violates these instructions, an umpire will "kill" the nearest member of the soldier's team.**
- **"Killed" soldiers are allowed to observe the action.**
- **Casualties may not fire weapons or throw grenades, but grenades thrown by soldiers who become casualties in the act of throwing the grenades will count.**
- **A soldier may throw or roll the smoke grenade anywhere in his team's half of the field or in the buffer zone. A smoke grenade that is thrown or rolled across the buffer zone into the other team's half of the field will cause the thrower's team to lose one point.**

way it should.)

In case of a tie score, the squad with the most ammunition on hand is declared the winner. When the game is over, an after-action review is conducted in the buffer zone.

(Experience has shown that it is best to run the exercise three times for each pair of squads —the best two out of three games yields a true winner, and this allows for such variations as wind direction, sunlight, and slope of field.)

What the MILES Game has done is to give the division a way to involve an entire unit in an inexpensive training exercise. In addition, with the use of the MILES equipment, the leaders and trainers are free to concentrate on their soldiers' combat skills rather than on such technicalities as determining casualties or assessing the effectiveness of fire and smoke. The soldiers who participate in the game obviously enjoy themselves and try hard to win; and this kind of challenge and competition is vital to any good training exercise.

The game is also physically demanding, for it helps develop the specific kind of physical fitness an infantryman needs most in combat —the ability to move short distances from position to position in a series of sprints, dives, rolls, and crawls.

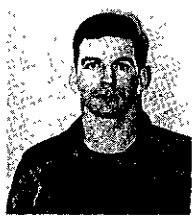
Another advantage of the game is that it requires good marksmanship, just as combat does. To successfully engage fast-moving targets, fleetingly glimpsed while his head is down, a soldier must be able to hit what he is aiming at. Soldiers who place the selector switch on full automatic soon find themselves out of ammunition and with few "casualties" to show for it. (One platoon sergeant observing the game commented, "There's no way you can play 'John Wayne' with this system. Those who try the old Hollywood approach soon find they are no longer in the game.")

One thing that squad leaders have to learn in the game is how to communicate with and control the members of their team under fire. Observations of several squads competing in the game have shown that most squad leaders know how to organize their team to accomplish the mission and how to control their soldiers. The problem is that few of them can control their soldiers and stay "alive" at the same time. The leaders who continually dash back and forth and raise up to shoot are invariably among the early casualties.

One winning squad leader said that he positioned himself near the center front of his team because "it was more important that I be able to personally see the enemy and be positioned where everyone in the team could see me than to be positioned where I could watch everyone in the team." An old lesson relearned! Squad leaders who position themselves to the rear of the team often have their soldiers "get away" from them —at least far enough away that they cannot hear their squad leader and he cannot use visual signals without exposing himself to enemy fire. So leading from the front is a key to success.

The MILES Game, as it was designed and is being conducted in the 3d Infantry Division, is laid out here in the hope that it will be just as valuable to other units. But this is only the basic approach. The terrain and the obstacles can be varied; other weapons and ammunition can be used; and the size of the teams can be changed. Or the game can be played at night, even in MOPP 4! The variations are almost endless. But however it is played, the MILES Game produces good training —and it doesn't require a lot of time or money.

Lieutenant Colonel John M. LeMoyne is commander of the 2d Battalion, 30th Infantry. He has served in numerous infantry assignments including the command of a rifle company in Vietnam and service with the 82d Airborne Division and the 2d Battalion, 75th Infantry (Ranger).



Captain Mark Van Drie, a 1977 graduate of the United States Military Academy, has served as rifle platoon leader, executive officer, scout platoon leader, company commander, and brigade and battalion staff officer. *He has completed the Infantry Officer Advanced Course.*

Sergeant First Class Larry M. Sluder, Jr., is a rifle platoon sergeant in the 2d Battalion, 30th Infantry. He has served as an infantry team leader, squad leader, training NCO, and company supply sergeant. He has completed the Advanced Noncommissioned Officer Course.

Protective Clothing Carrier

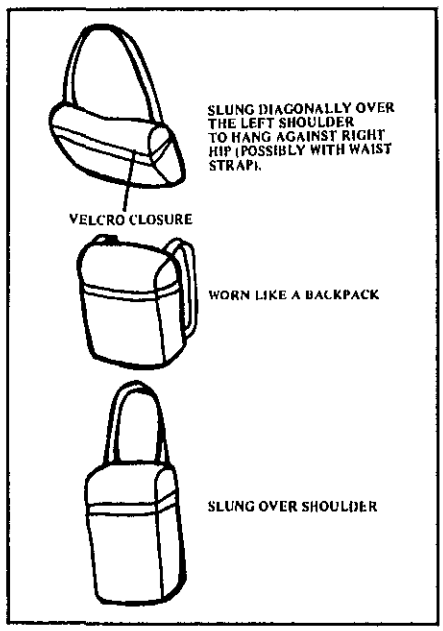
CAPTAIN LEE F. DUFFY

Chemical agents are the most psychologically devasting and physically horrible weapons known to mankind. Artillery-delivered chemical munitions can saturate a large area within seconds. To survive in a chemical environment, therefore, a soldier must have protection readily available. The required technology is on hand to provide this protection, and the equipment has been issued to units. Unfortunately, this equipment is often treated as just another item to be packed away in a rucksack and stashed back at the patrol base or stowed in a personnel carrier or truck until instructions are issued to increase MOPP (mission-oriented protective posture). If this attitude continues, we may find ourselves, as an army, caught with our "chemical" pants down in the opening battle of any future war.

All of us, as leaders, understand the need for chemical clothing, yet we allow our soldiers (and ourselves) to stand around or ride around on our simulated battlefields without protection from the very weapon the Soviet bloc nations diligently plan to employ.

When I was a mechanized infantry company commander, I felt at times that this was a deficiency in my unit's operational capability and survivability. On too many occasions, I saw the members of a squad, when ordered to suit up, dive to the bottom of a carrier to search for their rucksacks, and then to search again within the rucksack to find each of the required items of clothing. Valuable time was lost before they were able to don the protection they would need to stay alive and continue the mission.

One might say that the carrier should be better organized. But this is not always possible, considering that ten men ride and operate in a vehicle that has an interior space equal to that of a Volkswagen van. In a space already full of ammunition and equipment, each man may not always know where his own rucksack is in the pile.



The options currently available to a soldier are not totally satisfactory. Wearing the clothing all the time is, of course, not practical, especially during warm weather. Even when a new lightweight protective suit is fielded, constant wear would shorten its life significantly. And the rucksack, even the medium ALCE issued to most infantry units, is too bulky for a soldier to keep with him all the time. Besides, items other than the chemical gear must also be put in the rucksack.

Another option is for a soldier to carry a separate waterproof bag or even a laundry bag with the chemical clothing in it, but such a bag has obvious drawbacks as well, such as being bulky and difficult to carry.

In addition, dismounted or light infantry operations create numerous situations in which an infantryman must travel light — reconnaissance patrols, observation posts, and antitank ambushes, for example.

What is needed, then, is a small carrying bag made of lightweight cloth and similar in design to an enlarged ammunition bandolier. Several possible designs are shown in the accompanying illustration.

The protective mask itself is a standard and integral part of the field uniform in the Army today, but this is only one component of a system. Carrying it without the rest of the protective clothing is analogous to carrying a handset without a radio.

Chemical protective clothing must become as much a part of the field uniform as the protective mask is now if the soldier is to have the protection his overgarment was designed to give him.

Captain Lee F. Duffy is now on ROTC duty at Princeton University. A 1974 ROTC graduate of Northeast Louisiana University, he holds a master's degree from the University of Southern California. He has served in Special Forces Europe and in the 24th Infantry Division.

ENLISTED CAREER NOTES

STABILIZATION

The term *stabilization* means, of course, that a soldier has assignment stability. But if the process of identifying and requesting the stabilization of a soldier is not done according to the proper procedures, it can cause confusion and frustration in the control and management system.

Let's take, just as an example, the duty position of first sergeant. A commander does not stabilize a soldier in that position just by putting him behind the first sergeant's desk.

AR 614-5, paragraph 2-11, Computing Stabilized Tours, states that "Stabilized tour lengths will be computed from the initial duty reporting date to the installation, or to the organization, *whichever comes first.*" This means, obviously, that if a soldier has just been assigned to an installation and his first assigned duty position is as a first sergeant, then his MILPO updates the Enlisted Master File (EMF) by a SIDPERS input. This input will code the stabilization into effect. For soldiers assigned to CONUS, their DA Form 2A (Personnel Qualification Record) will show an AEA code of "V," followed by a year-month date reflecting the end of the stabilization.

Commanders and individual soldiers must be responsible for seeing that this important stabilization occurs. They can verify that it has been recorded on the EMF by ordering a copy of the soldier's DA Form 2A a couple of months after the stabilization is supposed to have been initiated. If it has not been recorded, then immediate corrective action can be taken.

But what about a soldier who has been on an installation for a while and who has served in one or more duty positions before being assigned as a first sergeant?

AR 614-5, paragraph 2-11, continues: "Exceptions will be handled on a case-by-case basis. Requests for exception will be forwarded to the appropriate addresses in Appendix B." This simply means that if a soldier's first duty position at an installation was not as a first sergeant, then his command must *request* the stabilization from HQDA. The stabilization, if favorably considered, will then be authorized by DA. The initiation of a SIDPERS input alone will not accomplish the mission.

FIRST SERGEANT SQI

To award the first sergeant SQI (Skill Qualification Identifier), a commander must follow the procedures outlined in AR 614-200, paragraph 8-66 (c), Eligibility for award of first sergeant SQI. This paragraph states: "The commander awarding the SQI will send information to MILPERCEN for entry on the EMF (AR 640-2-1 and procedure 2-58, DA Pamphlet 600-8-2). Copies of orders awarding SQI 'M' and DA Forms 2A and 2-1 will be forwarded to HQDA (DAPC-EPK-I) for inclusion in the soldier's Career Management Individual File (CMIF). A copy of all correspondence will be retained in the soldier's MPRG."

(If practical, the outside of the envelope should be marked with the pay grade and MOS of the soldier involved. This speeds distribution to the team that will respond to the soldier's request.)

TOLL-FREE EPMD NUMBER

A new 24-hour commercial toll-free telephone number is now available for enlisted soldiers to use in calling the Information and Assistance Office at the Enlisted Personnel Management Directorate at MILPERCEN.

Soldiers who need personnel assistance, such as contacting their assignment managers or other related matters, can now call 1-800-255-9411.

NEW PROMOTION POLICY

Since October 1984, unit commanders have new, simpler administrative procedures to follow when promoting their soldiers to CPL/SP4. The new policy in no way constitutes automatic advancement, however. Commanders must continue to make conscious decisions on which of their soldiers are fully qualified.

The new promotion authorization, developed to ease the workload on MILPOs and units, has the following key elements:

- All PFCs with three months in grade are eligible for advancement to CPL/SP4 at 24 months' time-in-service without any percentage restrictions (as it now stands). Soldiers must still be recommended by their commanders and must otherwise meet eligibility criteria.
- The Defense Department restriction that no more than 20 percent of the assigned CPLs/SP4s may have fewer than 24 months' time-in-service remains in effect.
- Promotion orders are not required for advancement. Instead, unit commanders will advance their soldiers to CPL/SP4 using a DA Form 4187 until an automated promotion instrument is fielded. The SIDPERS Enlisted Promotion Report can still be used to identify soldiers who are eligible for advancement.
- Early this year, MILPERCEN officials will field a modified version of

the SIDPERS report that will enable commanders to select soldiers for advancement at the 24-month point simply by checking a block "yes" or "no." For these advancements, neither orders nor a DA Form 4187 will be required.

Until instructions for preparing the DA Form 4187 are available, commanders have the authority to modify the PFC format outlined in Procedure No. 14-5 of DA Pamphlet 600-8-1.

FREE OMPF COPY

A soldier no longer has to visit the Army's Enlisted Records and Evaluation Center (EREC) at Fort Benjamin Harrison, Indiana, to find out what's in his Official Master Personnel File (OMPF). Since the Army converted the paper OMPF to microfiche, a soldier may obtain a free copy of his file for review at his home station.

All he has to do is write to Commander, USAEREC, ATTN: PCRE-RF-I, Fort Benjamin Harrison, IN 46249-5301. Each request should include the soldier's complete Social Security Number, name, return address, and signature. It takes about 20 days to process requests.

All soldiers are advised to request a free copy once a year to ensure that their files are accurate, and NCOs in zones of consideration for DA selection boards should ask for one at least four months before the board is scheduled to convene.

Soldiers can still visit EREC offices at Fort Benjamin Harrison, of course, to review their OMPFs, but they must make appointments by calling AUTOVON 699-3361 or commercial (317) 542-3361.

ARMY NEEDS LINGUISTS

The Army's language program offers soldiers a variety of jobs in different career fields and in many locations. To qualify, a soldier must meet the following requirements:

- Must have earned a high school diploma or its GED equivalent.
- Must have a standard score of 45 or higher on the High School Level GED Test 1 and 2 if he graduated from a non-English-speaking high school.
- Must earn a Defense Language Aptitude Battery (DLAB) score of 85 for Dutch, French, Italian, Norwegian, Portuguese, Spanish, and Swedish, and all dialects of these languages.
- Must have a DLAB score of 89 for languages other than those listed above.
- Must have an interim or final security clearance of Secret.
- Must have a physical profile serial of 1 in the "S" factor (psychiatric) and a minimum hearing acuity of 2 in each ear in the "H" factor.
- Must have a score of 95 or higher on the Skill Technical (ST) aptitude area of the ASVAB or AFCT, or on the GT aptitude area of the ACB if tested before May 1973.
- Must have completed Basic Combat Training and Advanced Individual Training before entering language training.
- Must be eligible for reenlistment according to the requirements listed in AR 601-280, Army Reenlistment Program.
- Must not be serving on an enlistment for which he has received an enlistment bonus or a selective reenlistment bonus.

A soldier who is selected for language training must also waive any unfulfilled enlistment or reenlistment commitments. (See AR 601-210, Regular Army and Army Reserve Enlistment Program, or AR 601-280 for details.) He will incur a service obligation as outlined in AR 614-200, Selection of Enlisted Soldiers for Training.

The current DA Circular in the 350 series (Language Training for Enlisted Personnel) contains schedules for this training including starting and ending dates, MOS, grade, and programmed unit of assignment. The circular is updated annually.

Soldiers who are interested in pursuing careers in foreign languages should visit their local MILPOs.

NEW EQUIPMENT TRAINING

MILPERCEN has established procedures for reclassifying, reassigning, and stabilizing soldiers who undergo New Equipment Training (NET) and earn a new MOS or ASI.

To qualify for NET, a soldier must not have a separation action pending or an approved reenlistment option that will cause his reassignment to a location where he cannot use the training. He must meet reclassification criteria for the NET MOS as specified in AR 611-201 and must not have received assignment instructions to a non-NET unit.

The local MILPO will report the new MOS or ASI for which a soldier is undergoing NET through SIDPERS to MILPERCEN 60 days before the training begins. This will ensure that the soldier's newly acquired skill shows up in the automated personnel system. It will also ensure that the soldier is subsequently reassigned to units where his skill can be used.

Soldiers will be stabilized from 60 days before NET through 60 days after NET. The MILPO establishes the stabilization period by adjusting each soldier's AEA code or DEROS. (The stabilization policy applies only to soldiers who are actually undergoing NET; it does not apply to other support personnel in the unit.)

At the beginning of the NET stabilization period, the NET unit will compile a roster of the soldiers scheduled for training and send it through the MILPO to the appropriate MILPERCEN career branch. When the training is completed, the unit commander will certify the training roster and send a copy of it back to MILPERCEN through MILPO.

Soldiers who do not complete NET will revert to the MOS they held previously. The MILPO will then terminate the stabilization period and delete from their new assignments any soldiers who were on assignment instructions in a NET MOS or ASI.

More information is available from MILPERCEN, DAPC-EPZ-H, AUTOVON 221-8090 or 221-8091.

OFFICERS CAREER NOTES

CVI/VI PROCEDURES

More officers in the other-than-regular-Army (OTRA) category are now requesting Conditional Voluntary Indefinite (CVI) or Voluntary Indefinite (VI) status. A change to AR 135-215 (Officer Records of Service on Active Duty) will therefore be required so that the necessary strength limits can be maintained more easily.

The new system will require the establishment of a centralized board that is responsible for the qualitative management of the officer corps. The proposed process outlined here will use centralized screening to review the CVI/VI applications of all OTRA officers who ask for career status.

Applicants for both CVI and VI status will be evaluated by a single-panel board. The board will include an appropriate minority member, a woman, and a Reserve Component member, and the board president will be at least a colonel.

The board will select only those applicants who have the potential to serve 20 years of active Federal service and whose manner of performance is competitive with that of their contemporaries. An officer whose manner of performance represents a promotion risk will not be selected.

Before submitting a request for CVI status, OTRA officers must complete at least two years of active Federal service. They will be scheduled to attend an advanced course only after their CVI status has been determined.

Applications for CVI status will include recommendations from the officer's chain of command and will be forwarded so as to arrive at the officer's career management division not later than his 27th month of AFCS. Each officer must state on his application that he understands that he may have to accept a branch transfer in exchange for continued active duty, and he will list three branch preferences in case a transfer becomes mandatory. If he wants to be voluntarily transferred to another branch, he must also state this on his application.

Because all CVI-approved officers will be identified automatically by computer, no formal application is required for VI. OTRA officers will be considered before they complete eight years of AFCS. The centralized board will vote on each officer's file for VI when he has had seven and one-half years of AFCS.

All officers who are approved for VI status will be allowed to remain in the Army until selected for promotion to major and integrated into the Regular Army, unless they are separated sooner under other appropriate regulations.

At the VI point, the Army hopes to have succeeded in balancing all branch strengths. If basic branch shortages still remain, however, it may be necessary to transfer more officers from over-strength specialties to the under-strength ones. In such cases, every effort will be made to assess the effect of such a move on each officer's career. Additionally, every effort will be made to make branch transfers on a voluntary basis, preferably selecting those officers who have had the most experience in the new branch.

All officers who have already been approved for CVI/VI will continue on active duty under the old criteria.

The proponent for AR 135-215 is MILPERCEN, ATTN: DAPC-OPP-M. The point of contact for questions is the Personnel Actions Branch, Combat Arms Division, AUTOVON 221-0146/0147 or commercial (202) 325-0146/0147.

DOUGHBOY AWARD

The Distinguished Doughboy Award is presented each year to an individual who has been instrumental in improving the morale and welfare of the Infantryman.

The award, established in 1980, is a brass-plated, World War I doughboy helmet mounted on a walnut base that is decorated with crossed rifles. Past recipients of the award are Bob Hope, H. Ross Perot, Bill Mauldin, Major General Aubrey S. Newman, and Senator John G. Tower.

Traditionally, the Doughboy Award is presented annually at the National Infantry Ball, and Infantry Branch, MILPERCEN is now accepting nominations for the 1985 award. The 1985 ball is scheduled for 9 November in Washington, D.C.

Any Army Infantryman may nominate a candidate for the award, keeping in mind the following criteria:

- The award is presented to an individual, not to an organization, in recognition of that person's direct efforts to aid the Infantryman.
- The award cannot be presented posthumously except when the recipient dies after he has been selected.
- The award *cannot* be given to active duty military members, to civilian executives who are active in the defense establishment, or anyone who is directly involved in or affiliated with an organization that has defense industry contracts.
- The recipient does not have to be present to accept the award.
- The final selection is made by the Commander of the U.S. Army Infantry Center and School at Fort Benning.

Nominations should be submitted to HQ MILPERCEN, ATTN: DAPC-OPE-I (CPT Sittnick), 200

Stovall Street, Alexandria, VA 22332-0400 as soon as possible.

PREFERENCE STATEMENT

The Preference Statement (DA Form 483) is your most important link with your assignment officer, and you reduce your chance of going where you want to go when you do not see that there is a current statement in your file. (Currently, about 60 percent of the files managed in Infantry Branch do not contain a current preference statement.)

Because of the volume of requirements and the number of Infantry officers, the everyday job of making assignments is quite demanding and time sensitive. The assignment officer, using computer rosters, must identify the most available and best qualified officers to consider for a specific position. Once he has done this, the first document he consults in an officer's file is his preference statement.

If you have a current and detailed preference statement in your file, your assignment officer immediately knows several things about you:

- What position you now hold.
- What you want to do next (professional and personal considerations).
- How to get in touch with you (home and duty telephone numbers).
- Something about your family (personal data).

The reverse side of the preference statement form explains how to fill it out, but here are a few tips:

Under the section entitled "MACOM/Activity/Location," list as many locations as you prefer. Do *not* limit your selection to three locations just because three spaces are provided on the form. This is particularly important if your first three choices are Forts Carson, Lewis, and Ord. This is not to say that you should not request these locations, but because many other Infantrymen also request them, you need to give the assignment officer more flexibility in making your assignment.

Under "Duty Assignment," include Army priority assignment choices (ARMR, ROTC, USMA, USAREC, and DA Staff) as well as the traditional Infantry assignments. If it is your turn for an assignment away from troops and you have failed to state a clear preference, you are taking a chance on being assigned without regard to your wishes. Many Infantrymen would prefer, for example, a three-year assignment teaching or developing doctrine at the Infantry School to a three-year ROTC assignment, and assignment officers need to know this. Even though your assignment officer always tries to consult you before making an assignment, your location or duty requirement may make it impossible for him to reach you.

Under "Professional Development Comments," list your career aspirations. For example, if you are interested in a battalion or company command, as most Infantry officers are, request assignments that will improve your chances of getting one. Also include any comments that you consider pertinent to managing your career.

Under "Personal Considerations," list any personal problems that you want your assignment officer to consider. If you have a legitimate personal hardship, ask for a compassionate assignment in accordance with AR 614-100, or apply for the Exceptional Family Membership Program.

The timely submission of your preference statement is absolutely essential. As a general rule, if you want an overseas tour, your preference statement should reach MILPERCEN nine months before the desired reporting date and for a CONUS assignment, six months before.

It is suggested that the statements be submitted at these times:

- When the Personnel Qualification Record (DA Form 2-1) is initially prepared.
- About 9 to 12 months before the completion of an overseas tour or a stabilized tour within CONUS.
- Within 60 days before beginning a course of instruction at a CONUS service school on a PCS, at a civilian institution, or in a training with industry program.
- Nine months before completing an initial utilization tour and at any time thereafter when preferences change (if you are a commissioned officer who has received his graduate degree through a full-time Army program that requires a utilization tour).

If you obtained a degree from another source (on your own or before you were commissioned), you are also invited to indicate such preferences. After studying DA Pamphlet 600-3 (Commissioned Officer Professional Development and Utilization), with Changes 1-3, specify in Item 12 of the form where you want a reutilization tour. This statement should include the type of assignment you prefer (personnel management, procurement, R and D staff officer, for example) and, if you know them, the agencies or headquarters to which you would like to be assigned periodically throughout your remaining years of service.

It is recommended that you keep a copy of your most recent preference statement so you will know what your assignment officer has in front of him as he tries to find you an appropriate assignment.

Infantry officers should forward their preference statements to HQDA, USAMILPERCEN, DAPC-OPE-I, Alexandria, VA 22332-0400.

OPMS STUDY RESULTS

Over the next three to five years, the Army's top leaders will direct the implementation of recommendations from a recently completed study of the Officer Personnel Management System. (OPMS is the system by which an Army officer's entire career, including professional development and duty assignments, is managed by the Army either at The Pentagon or at field operating agencies.)

The study focused on the active duty commissioned officers managed by MILPERCEN's Officer Personnel Management Directorate, but also

reviewed the special branches, the Reserve Components, and warrant officers.

The changes the group recommended will affect the management structure of all specialties, accession/separation, command, the quantity and quality of officers, the role of female officers, and the specialty proponent's role in OPMS.

The highlight of the study was the group's recommendation that the following major modifications be made to the dual-specialty system:

- Permit multiple career patterns to meet Army needs.
- Set up functional area designation windows for combat arms, combat support, and combat service support officers at different points to meet branch needs and Army requirements.
- Manage, develop, and promote officers by branch and/or functional area.
- Transfer some officers at their third and eighth years of service to other branches to support Army requirements.
- Identify officer professional development needs on orders to the gaining command.
- Develop a centralized Officer Personnel Mangement System for the U.S. Army Reserve.

The group's recommended changes concerning all specialties were:

- Expand the latitude for specialty coding, but centrally control the procedures for changing authorization documents.
- Set up rank-ordered coding for branch immaterial positions.
- Require the branch proponents to concur or non-concur in any changes to positions involving their branch or functional areas in any table-of-organization or table-of-distribution-and-allowances organization.
- Have all changes in branch or functional area approved at Headquarters, DA.
- Have HQDA issue specific instructions to the major Army commands and to the proponents to conduct a definitive and detailed review of authorization documents to identify and code all branch immaterial positions and recode all remaining positions.
- Adhere to special coding procedures for battalion staff positions, as directed by the Army's Chief of Staff.

In the area of accession and separation, the group recommended that the system do the following:

- Access officers at a steady rate annually.
- Improve precommissioning quality and objectives.
- Develop tough, centralized standards for "voluntary indefinite" duty.
- Carry out "selective early retirement" and submit legislation to allow reconsideration after two years.
- Conduct a joint-service/DOD review of the Defense Officer Personnel Management Act (DOPMA) once the results of all current officer-personnel-related studies are known.

On the subject of command, the Army has directed the following changes on the basis of the group's recommendations:

- Starting with the Fiscal Year 1986 lieutenant colonel and colonel command boards (which met in the Fall of 1984), no more than 10 percent of the available commands in each grade can be filled from the first-year eligibles. The remainder will be filled from the second, third, and fourth-plus years of eligibility without constraints.
- Beginning with the 1984 board for 1986 command, a three-panel board will be used for each of the combat arms, combat support, and combat service support command selections.
- No first-year eligibles will be placed on the alternate list.
- The current policy on centralized selection, slating, and list-publication will be continued wherever possible. Assignments of promotable majors and promotable lieutenant colonels who have been selected for command will ensure that they have been promoted before they assume command.
- In the future, basic training battalions and brigades will be commanded by Infantry officers.

On the matter of distributing officers in terms of both quantity and quality, the study group called for:

- Reducing the nominative process to meet the current policy of equal distribution of quality (matching individual qualifications to job requirements without concern for "promotion potential").
- Distributing officers by branch and functional area.
- Managing and developing officers in their branch and functional area through training and utilization in areas of concentration.

Noting that the specialty proponent must play a more central role in the OPMS operation, the group recommended that the Army do the following:

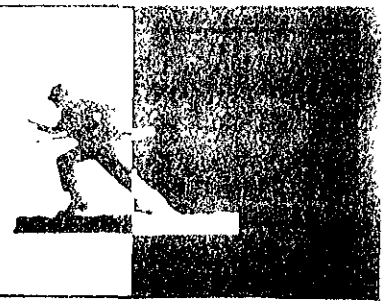
- Revise AR 600-3 to require, not just advise, proponents to complete their assigned responsibilities.
- Establish and resource a "standardized proponent cell" to integrate proponent responsibilities for each branch.
- Designate the commandant or director of each branch school as branch proponent.
- Designate a proponent for each functional area and skill.
- Clearly outline career paths and opportunities for command, overseas assignment, and civil schooling.

The group deferred further study of the warrant officer corps to a specially chartered group that is expected to issue its findings in the summer of 1985. And all issues and recommendations on education and training were directed for further study to the Professional Development of Officers Study Group.

Noting that each approved recommendation has a realistic time line for completion, Army personnel officials also point out that "grandfathering" provisions will be necessary in many areas. Procedures have been or will be developed to safeguard certain year groups, branches, and other specific groups of officers against significant disadvantage from these changes.

The OPMS Study Group's findings and recommendations are discussed more fully in the September-October 1984 issue of "Commander's Call."

BOOK REVIEWS



The office of the U.S. Superintendent of Documents again has told us about a number of its new publications, two of which are reprints:

• OMAHA BEACHHEAD (S/N 008-029-00128-4. 1984 Reprint. 176 Pages. $8.50). This publication first appeared in 1945 as part of the Chief of Military History's "American Forces in Action" series. It concentrates on the planning and preparations for the landings on OMAHA Beach on 6 June 1944, the landings themselves, and the subsequent seven days of fighting to secure the beachhead.

• ST. LO (S/N 008-029-00127-6. 1984 Reprint. 136 Pages. $8.50). The original publication, which appeared in 1946, was also one of the "American Forces in Action" series. It covers the period 7-19 July 1944, the period that saw the most intense hedgerow fighting in Normandy. The narrative concentrates on the activities of the U.S. XIX Corps and concludes with the capture of St. Lo by units of the 29th Division.

• CHEMICAL WARFARE (S/N 008-020-00996-2. 1984. 16 Pages. $1.25). This publication explains why the U.S. chemical defense and chemical weapons modernization programs are so important to the nation's security.

• GRENADA DOCUMENTS: AN OVERVIEW AND SELECTION (S/N 008-000-00408-1. 1984. 884 Pages. $19.00). This publication contains an introduction to the documents that were captured during the 1983 Grenada operations and selections from them. The documents — primary sources — record the evolution of a communist state.

• HISTORY, FROM AMERICA'S BEGINNING TO THE SPACE FRONTIER (Catalog S-704, 1984. Free for the asking). Posters, books, photopaks, and pamphlets — 59 items all told — are described in this recently issued catalog. Item prices range from $2.75 to $142.00.

All of these publications may be purchased from the U.S. Government Printing Office, Department MK, Washington, D.C. 20401.

Here are several interesting and informative books from other publishing houses:

• CAEN: ANVIL OF VICTORY. By Alexander McKee (St. Martin's Press, 1984. 40th Anniversary Reissue. 368 Pages. $16.95). This book first appeared in 1964 under the title *Last Round Against Rommel.* It has not only been reissued (to mark the 40th anniversary of the Normandy landings), it has also been revised to include certain information that has come to light during the past 20 years. The author concentrates on telling the story of the fighting that took place in the British Second Army's area; his story is liberally laced with personal accounts of the events as seen by British, Canadian, and German soldiers and by the French inhabitants of the area. He concludes his story with the clearing of the Falaise pocket during the last week of August 1944.

• HISTORY OF THE MILITIA AND THE NATIONAL GUARD. By John K. Mahon (Macmillan, 1983. 374 Pages. $20.75). The author is a well-known military historian with a long list of published books and articles to his credit. In this book, another in the distinguished series called "The Macmillan Wars of the United States," the author has given us a detailed, authoritative history of "America's irregular army," beginning with the colonial militia. Massachusetts in 1642 was the first colony to create a unit as large as a regiment. The present National Guard, of course, grew out of the volunteer portion of the colonial militia. Mahon praises — and criticizes — but concludes that the National Guard today could "become more important than ever before." In fact, a reader would have to say that he comes down squarely on the National Guard's side.

• THE 1985 MILITARY HISTORY CALENDAR. By Raymond R. Lyman (Paladin Press, 1984. $8.95). Each date on this unique calendar features a military event that occurred between 1793 and 1983 along with short biographies of important military personages. Each month of the year is devoted to a particular subject — war in the trenches 1914-1918, for instance, and Korea 1950. This would make an excellent gift for a military history buff.

• FIGHTING ARMIES. Three volumes. Edited by Richard A. Gabriel (Greenwood Press, 1983. Volume I, 286 Pages, $35.00; Volume II, 224 Pages, $35.00; Volume III, 320 Pages, $35.00. All three volumes, $95.00). These volumes contain a "combat assessment" of 32 of the world's armies. Each assessment has been prepared by a knowledgable essayist who knows well the area of the world about which he writes. The editor, who is well-known in U.S. military circles for his criticisms of the U.S. Army's performance in Vietnam, collaborates with other writers to assess the armies of the U.S., the Soviet Union, Jordan, and Australia. He still does not think much of the U.S. Army and continues to denigrate its officer corps. Although he admits that the Soviet Army's officer and noncommissioned officer corps rate poorly, he still feels that the Soviet Army is "unmatched by any army in the world today." If read with care, this series can be a useful reference tool.

• THE MILITARY BALANCE,

1984-1985 (The International Institute for Strategic Studies, 1984. 159 Pages. $14.00, Softbound). This annual, a quanitative and authoritative assessment of the military establishments and defense expenditures of countries throughout the world, examines the facts of military power as they appeared on 1 July 1984. As usual, there is no attempt to compare one country's military capacity against others. Overall, the Institute finds that while the armed forces of the world in general are still being modernized, that process is proceeding at a slower pace than in previous years. Overall, this publication remains one of the best of its kind.

Here are a number of other publications you should find interesting:

A TIME FOR TRUMPETS: THE UNTOLD STORY OF THE BATTLE OF THE BULGE. By Charles B. MacDonald (Morrow, 1984. 712 Pages. $19.95). Reviewed by Major General Albert H. Smith, Jr., United States Army, Retired.

From one of our most distinguished World War II historians — and a survivor of the fighting — you would expect another military classic. You get that and a lot more in Charles MacDonald's latest book. For example, today's professional soldiers and history buffs will appreciate the U.S. regimental and battalion organization charts so clearly presented on page 629 as well as the order of battle details on pages 630-655. Throughout the volume, too, many good sketch maps help the reader follow the action.

MacDonald is a master at describing the situation at Supreme Allied Headquarters and then quickly focusing down on small units fighting the battle. He tells of Hitler's dream of splitting the ultra-capitalist and ultra-Marxist states. A great victory on the western front, Hitler declared, would "bring down this artificial coalition with a crash." Also portrayed are the senior generals on both sides, as they plan their strategies and react to crises on the battlefield.

Today's soldiers can learn valuable lessons as the text follows small unit leaders, good and bad, into the heat of that 1944-1945 conflict. American ingenuity and initiative often carried the day, and gallant deeds by individual soldiers then still make us feel proud.

The author spent five years and made five lengthy trips through the area to make certain he could tell his story accurately from both the U.S. and German viewpoints. And he has.

Regretfully, the final offensive phases of the Battle of the Bulge are missing. Except for a comprehensive summation, the book ends at Houffalize, Belgium, as the First U.S. Army attacking from the north meets the Third U.S. Army attacking from the south, thereby sealing off the German penetration. Worthy of inclusion in a final chapter would have been the XVIII Airborne Corps' advance east through waist deep snow during the last ten days of January and the early days of February 1945.

This book is a World War II classic, though, a must addition to any professional military library. Our 1985 platoon, company, and battalion commanders should thank Charles MacDonald for providing many good war stories to pass on to the troops.

BATTLE OF THE BULGE — THEN AND NOW. By Jean Paul Pallud (Bill Dean Books, 1984. 532 Pages. $49.95).

For any veteran of the Battle of the Bulge, or for anyone interested in the military history of World War II, this should be an enthralling book. It certainly serves as a splendid complement to the MacDonald book reviewed above. The author's "then and now" approach — a trademark of the British magazine AFTER THE BATTLE, for which he works — is particularly effective. He claims that his book provides "the first correct identification of both the locations and the units shown in most of the illustrations, and this applies particularly to the pictures of German origin."

The bulk of the narrative recounts the operations of the German units; most of the Allied actions are told in the captions that accompany the more than 1,000 photographs and other illustrations. Of particular interest is the author's description of the "battlefield today" — the numerous memorials and museums that dot the area over which the fighting raged some 40 years ago.

This is a most notable addition to the literature of World War II. Don't miss it.

JANE'S INFANTRY WEAPONS, 1984-85. Tenth Edition, Edited by Ian V. Hogg (Jane's Publishing, 1984. 957 Pages. $125.00).

Ian Hogg has put together for his publisher another outstanding volume in Jane's continuing series on the world's infantry weapons — from revolvers and pistols to antiaircraft and antitank weapons — to include data on body armor, electronics and optics, training aids and simulators, and national inventories.

Hogg's foreword is not particularly lengthy, but it is replete with pithy comments, a Hogg trademark. He devotes most of the few pages to the "observation of the present and forecasting of the future." (It does seem, though, that the U.S. pistol program is moving at a faster pace than Hogg anticipated.)

There is no better weapon reference book on the market. Once again, Ian Hogg and his staff are to be congratulated for turning out a fine product.

TOUCHED WITH FIRE. By John Wheeler (Franklin Watts, 1984. 213 Pages. $16.95). Reviewed by Nicholas Sellers, Radnor, Pennsylvania.

John Wheeler has written a remarkable book. It does not revive any stale debate on the Vietnam War or the drifting policies of the Johnson administration. Nor does Wheeler indulge in bitter recriminations against the "protest generation," the negativist subculture that so briefly dominated American society in the early 1970s.

Instead, the theme of this book is wholly positive. Wheeler looks at the present status of the Vietnam veteran and how he has emerged from the

shadows of prejudice of 15 years earlier to take his place in society. Wheeler sees the veteran who was "touched with fire" not as someone maimed but as a stronger and more valuable member of the society that had so recently tried to reject him.

Wheeler is a West Point graduate who served in Vietnam in 1969, at the very height of the war. Leaving the service in 1971, he went to Yale Law School and achieved that intellectual *summum bonum*, editorship of the *Law Review*. He is now special counsel to the chairman of the Securities and Exchange Commission in Washington. He was chairman of the board of the Vietnam Veterans Memorial in Washington, and serves now as director of the President's Vietnam Veterans' Leadership Program. He has written extensively, including an earlier book, *The Wounded Generation: America After Vietnam*.

The book that is under review here is really in three parts. The first looks at the war and the soldier's world; the second part reviews American society and its attitudes in the 1960s and 1970s. The third part examines the Vietnam veteran's place in society today. This latter part is the substance of the book, and it presents a strong and optimistic view. Wheeler sees the veteran as a person whose wartime experiences make him a better member of society, one who is now gaining a belated acceptance and proving himself among his peers.

One of the most appealing qualities of John Wheeler's book is his understanding of and sympathy for the young soldier who did his duty and was so ill paid. Although separated from the service, Wheeler continues to show that sense of responsibility that is expected of the professional military leader. At the same time, it is remarkable that he is so restrained and even-tempered throughout. This very restraint serves only to emphasize his larger themes.

Certainly there are indications that the prejudice against the soldier who served in an unpopular war may have abated. But there is equally strong contrary evidence — as in the views espoused by present antimilitary spokesmen — that the soldier is still disfavored. We therefore need all the more a strong voice such as John Wheeler's to set the balance right.

ARMS TRANSFERS UNDER NIXON: A POLICY ANALYSIS. By Lewis Sorley (The University of Kentucky Press, 1983. 231 Pages. $22.00). Reviewed by Doctor Joe P. Dunn, Converse College.

It has become conventional wisdom to criticize arms transfers as a cause of regional instability and war. A 1977 Council on Foreign Relations report, for example, charged that the U.S. extended excessive arms sales to countries peripheral to American security.

Lewis Sorley, a former intelligence officer, policy planner, and student of public policy, disagrees. In this study of Nixon policy, he argues that arms transfer may have been the single most effective means of conducting the administration's foreign policy.

Sorley points out that the bulk of arms in the period went to the Middle East and to western Europe, hardly areas peripheral to American concerns. His book concentrates primarily on the Middle East where most of the arms went, where the most dramatic policy changes occurred, and where, he asserts, the most spectacular successes were achieved. These included the extraction of the Egyptians from the Soviet sphere, the improvement of the peace process between Israel and its neighbors, the restriction of Soviet influence in the region, and the building of Iran and Saudi Arabia into forces of stability in the area. Of course, not all of these "successes" were lasting.

While the book is a bit superficial, and I am not totally convinced by the argument, it is an interesting study and I recommend it to the professional soldier.

FIVE TRAGIC HOURS: THE BATTLE OF FRANKLIN. By James Lee McDonough and Thomas L. Connelly (University of Tennessee Press, 1983. 217 Pages.) Reviewed by Major Don Rightmyer, United States Air Force.

The war was drawing steadily to a close. Sherman's march for Atlanta and the sea was well under way and the only Confederate force that stood near the Union advance was John Bell Hood's army. Rather than force a confrontation near Atlanta, though, Hood struck out toward the northwest in a fateful drive for Nashville. The result was one of the last climactic battles of the Civil War, the death of six generals, and the South's loss of all hope in the western theater.

This interesting story is an excellent joint project by two accomplished historians who have also produced noteworthy independent studies on the Army of Tennessee and its campaigns. This work upholds their established reputations for excellence in Civil War history.

McDonough and Connelly don't just unfold the movements and events leading up to the battle of Franklin. Their analysis of Hood and his actions borrows from psychological history and provides an interesting insight into Hood's possible motives in relentlessly pushing the attack against the Union entrenchments at Franklin. A shining young officer at the war's outset, Hood had suffered serious wounds in earlier battles and had lost much of the glamour that had previously surrounded him. According to the authors, Hood was almost hellbent on making the Franklin attack regardless of the outcome or cost in lives in the apparent hope that it would help regain some of his lost glory.

This book reflects the good research and analysis that one would expect from these two authors. It is well-written military history and a good coverage of a little known but savagely fought battle.

AMERICANS AS PROCONSULS: UNITED STATES MILITARY GOVERNMENT IN GERMANY AND JAPAN, 1944-1952. Edited by

Robert Wolfe (Southern Illinois University Press, 1984. 563 Pages. $27.50.) Reviewed by Lieutenant Colonel John C. Spence III, United States Army Reserve.

This documentary record of the post-war occupation of Germany and Japan is the result of a symposium conducted at the Smithsonian Institution in May 1977. It includes the papers presented and the transcripts of panel discussions that examined in detail the formulation and implementation of U.S. occupation policy in these nations. Significantly, the participant-historians examined the long-range consequences of the post-war occupation as it influenced subsequent U.S. diplomatic and military policy. The areas of interest to both the historian and the contemporary civil affairs specialist include educational reform, industrial reorganization, prosecution of war crimes, and press censorship.

It is worthy of note that many of the participants in the symposium had served in active duty roles in the post-war occupation period and had later achieved academic distinction as professional historians and social scientists.

Thus, the great value of this book is that the historical insights come from true military historians, many of whom had first-hand, personal experience. Military historians will find interesting the long-range development of U.S. occupation policy as it affected Germany. Such planning, which included the establishment of a Civil Affairs School at the University of Virginia, began long before the surrender of Germany in 1945.

This book has considerable contemporary value and can serve as an excellent reference book for the officer assigned to G-5 (civil affairs) on a division staff. Of greater importance is the fact that civil affairs is an important staff responsibility that cannot be overlooked or ignored.

ON WINGS OF EAGLES. By Ken Follett (Morrow, 1983. 442 Pages. $16.95). Reviewed by Captain Bryan Evans III, United States Army.

Ken Follet's book is not about a raid, although it is about a rescue mission. It is, more importantly, a book about leadership and perseverence in the face of adversity. In this capacity it also serves as a fitting epitaph for one man — Colonel Arthur D. "Bull" Simons.

Several months before the American embassy in Iran was taken over by militant Iranian students, two top executives from the EDS Corporation, a U.S. electronics firm with contracts in Iran, were jailed by Iranian officials under false pretenses. H. Ross Perot, owner and president of the corporation, pushed his resources to the limits to find a legal solution to this dilemma. He wanted his people freed and returned to the United States.

Unable to achieve this, and the effort never ceased, Perot decided to take a more direct approach — a rescue mission. And in keeping with his personal belief of getting the best man for the job and then letting him do it, Perot felt there was only one man qualified to plan, train, and lead the effort, the recently retired "Bull" Simons.

The book is important because it provides us with the characters of two men whose principles, and whose devotion to those principles, ruled their actions. Both Perot and Simons were devoted to their friends, their families, and their duty, but Simons in particular is depicted as a man with a purpose — to rescue people.

Overall, this is a well-written, well-illustrated publication. It may not be what some expect, expecially from Ken Follett, but remember that "Eagles don't flock — you have to

find them one at a time." This is a book about leadership, and good leaders can be hard to find.

TRIUMPHANT FOX. By Samuel W. Mitcham, Jr. (Stein and Day, 1984. 224 Pages. $18.95). Reviewed by Captain John C. Edgecomb, United States Army.

This is the author's third book about Erwin Rommel. Here he concentrates on Rommel's life up to 31 December 1941, but deals almost exclusively with Rommel and his battles in North Africa in 1941.

This is an in-depth and detailed account of Rommel's 1941 battles, and Mitcham is meticulous in depicting Rommel's strategy and personal thoughts, the available German intelligence, and the actual conduct of each battle. The author also pays adequate attention to the British side. Through this combination, Mitcham not only presents Rommel's failures and successes, but also his personal strengths and weaknesses.

This well-written book quickly develops and maintains the reader's interest throughout. Mitcham also makes use of numerous battle diagrams and strength charts to buttress his narrative, a feature often missing in similar books. It is highly recommended reading for the professional infantryman.

RECENT AND RECOMMENDED

INDUSTRIAL CAPACITY AND DEFENSE PLANNING. Edited by Lee D. Olvey, Henry A. Leonard, and Bruce E. Arlinghaus. Lexington Books, 1983. 169 Pages. $19.95.

MEDIEVAL MILITARY DRESS, 1066-1500. By Christopher Rothero. Sterling, 1984. 153 Pages. $12.95.

THE DEMANDS OF HUMANITY: ARMY MEDICAL DISASTER RELIEF. By Gaines M. Foster. U.S. Army Center of Military History. For sale by the U.S. Government Printing Office. S/N 008-029-00124-1. 1983. 188 Pages. $5.00.

THE ENCYCLOPEDIA OF DRUG ABUSE. By Robert O'Brien and Sidney Cohen. Facts on File, 1984. 396 Pages. $40.00.

SOVIET MILITARY THINKING. Edited by Derek Leehaert. Allen and Unwin, 1981. 300 Pages. $14.95.

CURRENT MILITARY LITERATURE. Volume 2, Numbers 1 and 2. Edited by J.I.H. Owen. The Military Press, 1984. 119 Pages.

MARKET-GARDEN CORRIDOR. By Tonie and Valmai Holt. Holt's Battlefield Guides. *David and Charles, 1984. 64 Pages. $4.95, Softbound.*

SECURITY AND ARMS CONTROL: THE SEARCH FOR A MORE STABLE PEACE. Revised September 1984. United States Department of State, Bureau of Public Affairs, 1984. 76 Pages, Softbound.

HOW DEMOCRACIES PERISH. By Jean-Francois Revel. Doubleday, 1984. 376 Pages. $17.95.

THE WORLD WAR II QUIZ AND FACT BOOK, VOLUME 2. By Timothy B. Benford. Harper and Row, 1984. 246 Pages. $8.95, Softbound.

U.S. GOVERNMENT BOOKS, *Catalog* Number R-4, Volume 2, Number 3. U.S. Government Printing Office, 1984. 56 Pages, Softbound. Free for the asking.

REINHARD HEYDRICH. By Edouard Calic. Translated by Lowell Bair. Morrow, 1984. 272 Pages. $15.95.

IDEAS AND WEAPONS. By I.B. Holley, Jr. New Imprint by the Office of Air Force History, 1983. 222 Pages. For sale by the U.S. Government Printing Office.

PUTTING UP WITH THE RUSSIANS. By Edward Crankshaw. Viking, 1984. 269 Pages. $17.95.

CORPORATE COMBAT: THE APPLICATION OF MILITARY STRATEGY AND TACTICS TO BUSINESS COMPETITION. By William E. Peacock. Facts on File, 1984. 169 Pages. $15.95.

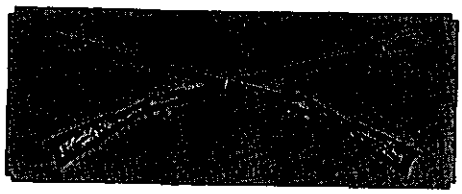
INTO THE MOUTH OF THE CAT: THE STORY OF LANCE SIJAN, HERO OF VIETNAM. By Malcolm McConnell. Norton, 1984. 253 Pages. $13.95.

WINGS OF WAR. By Laddie Lucas. Macmillan, 1984. 416 Pages. $19.95.

THE SECRET ARMY. By Bor-Komorowski. First U.S. Edition. The Battery Press, 1984. 407 Pages. $18.95.

SPITFIRE: A TEST PILOT'S STORY. By Jeffrey Quill. University of Washington Press, 1984. 332 Pages. $19.95.

AN ILLUSTRATED GUIDE TO THE MODERN U.S. ARMY. Edited by Richard O'Neill. ARCO, 1984. 160 Pages. $9.95.



From The Editor

1985 INFANTRY CONFERENCE

The 1985 Infantry Conference will be held at Fort Benning during the period 23-26 April 1985. All members of the Infantry Association are invited to attend. Many of the sessions this year will be open to all attendees, and there will be enough space at these open sessions to accommodate all who want to attend. A formal agenda is now being developed, and an Association luncheon is being planned.

Infantry Association members who would like to attend the Conference are asked to contact the editor of INFANTRY as soon as possible. They will be sent copies of the formal agenda and information on the availability of housing, as well as other information of a general nature.

HOT LINE

The Infantry School maintains a hot line for military callers for around-the-clock contact with the field. If you have a general question, or a question dealing specifically with the Army Training and Evaluation Program (ARTEP), or if you have something of an immediate nature to pass on, the number to call is AUTOVON 835-7693, commercial 404/545-7693.

If you have a lengthy question or comment, please send it in writing to Commandant, USAIS, ATTN: ATSH-SE, Fort Benning, GA 31905-5452

BACK COVER:
Soldiers of the 4th Battalion (Airborne), 325th Infantry, assigned to the Southern European Task Force, conduct MOUT training.