JULY–AUGUST 1985

Infantry

A PROFESSIONAL JOURNAL FOR THE COMBINED ARMS TEAM

A Department of the Army Publication

65th Year

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July-August 1985 Volume 75, Number 4

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The Bradley and its on-board weapons form a complex mechanic system, but the Infantry is beginning to master its new fighting vehic

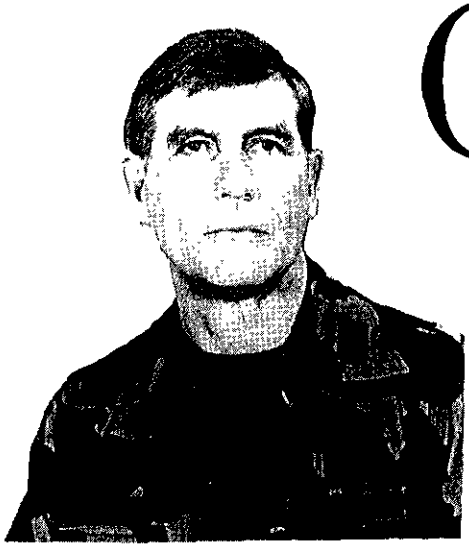
INFANTRY: Published bimonthly at the United States Army Infantry School (Building 4), it provides current information on infantry organization, weapons, equipment, tactics, and techniques. It also includes relevant historical articles and serves as a forum for professional ideas. Unless otherwise stated,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

SUBSCRIPTIONS: One year, $10.00; two years, $19.00. Single copy, $2.50. A foreign (non APO) subscriber must add $3.00 per year for postage on each subscription. Payment must be made either by United States currency, by international money order, or by a check or draft drawn on a bank in the United States. One-year subscriptions are not refundable. Two-year subscriptions are refundable, but service and handling charges will be deducted. The expiration date of a subscription is shown in the first four-digit number on the address label's first line (the first two digits indicate the month, the last two digits, the year). Please notify your postmaster and INFANTRY promptly of any change of address.

CORRESPONDENCE: Address all correspondence to Editor, INFANTRY Magazine, Box 2005, Fort Benning, Georgia 31905-0605. Please furnish complete return address. Queries are answered promptly. Manuscripts are acknowledged within 30 days. Telephones: Editorial Office – 404-544-4951 (AUTOVON 784 4951), Business Office – 404/545-5997 (AUTOVON 835-5997).

POSTMASTER: Second-class postage paid at Columbus, Georgia and at Pensacola, Florida. Send Form 3579 to Circulation Department, INFANTRY Magazine, Box 2005, Fort Benning, Georgia 31905-0605. For forwarding to a member of the U.S. military services, see Section 158.4, Postal Service Manual. U.S. Postal Service Publication Number: 370630. ISSN: 0019-9532

USAIS



Commandant's NOTE

Major General John W. Foss
Chief of Infantry

BRADLEY ORGANIZATION AND TACTICS

The Bradley Fighting Vehicle (BFV) has been in the field for two years. Eight Bradley battalions are now operational, and two more will receive their vehicles this year. We are beginning to build up a base of experience among soldiers, NCOs, and officers who have served in Bradley units, and this experience is helping us to update our tactics and fine tune the way we organize our squads, platoons, and companies.

Although the original tactics and organization have served us well, we have now gained insights that allow us to refine our earlier approach. Our latest doctrinal changes have been incorporated into FC 7-7J, The Mechanized Infantry Platoon and Squad (Bradley), which was distributed to the field in April. This FC was published to get evolving Bradley tactics to the field quickly pending the publication of FM 7-7J through the Army's AG publication system.

Several key problems have now been solved:

- The basic level of tactics for Bradley infantry is the platoon. Once the rifle teams have dismounted, the platoon is the lowest level at which the rifle teams and fighting vehicles interact.
- Drills have been integrated with tactics. Drills are the norm at squad level.
- The platoon leader's gunner, formerly a sergeant, has been upgraded to a staff sergeant master gunner, thus adding technical expertise to the platoon for the mounted fight and improving the platoon's ability to train itself in the complex skills of Bradley gunnery.
- The roles of key leaders in the platoon — the platoon leader, platoon sergeant, and squad leader — have been clearly defined for both the mounted and the dismounted fight. The platoon moves and fights mounted whenever possible. When the entire platoon is mounted, it fights as a single force under the control of the platoon leader.
- Normally, the platoon moves as a unit. The platoon leader selects the platoon route, the unit formation, and the distance between vehicles. The platoon sergeant maintains station on the platoon leader's vehicle. The other two vehicles orient on the platoon leader and platoon sergeant, respectively. The common term for this role is "wingman." When the platoon moves independently of the company, the platoon leader may conduct movement by bounds and use his and the platoon sergeant's vehicles to form the two pairs. Their wingmen will make up the second vehicle of each pair and will always move and orient on them.
- When the tactical situation requires the platoon leader to dismount his platoon, he dismounts and exercises overall control over the platoon while moving with the dismounted element, because the dismounted action is usually the most critical. He is accompanied by the squad leaders, who assist him in controlling the dismounted fight. The platoon leader ensures that the Bradleys, under the direct control of the platoon sergeant, fight in relation to the dismounted element.
- In the case of a hasty dismount, a situation that will be common on the mechanized battlefield, the platoon leader will not have time to carefully analyze all of the factors of METT-T. Since speed of reaction is critical if the momentum of the fight is to be maintained, drills must replace the METT-T analysis.
- In a more deliberate situation where time is avail-

able for an estimate based on the factors of METT-T, the platoon leader may organize his unit as he deems appropriate. Leaders may be positioned to accommodate a particular situation, and the organization of the mounted and dismounted elements can be different from that used in a hasty dismount situation.

• Regardless of whether the dismount is hasty or deliberate, the platoon leader retains overall control of the platoon.

• The capabilities of the 25mm gun now allow the Bradley and the dismounted infantry to fight when up to 2,000 meters apart, but always in relation to each other. This will occur in offensive situations when infantry dismounts to attack or clear an area while the vehicles overwatch, and in the defense when Bradleys may fight offset from dismounted platoons to take advantage of terrain conditions that make the most of their long range weapons. When separated from their Bradleys, the dismounted infantry will continue to fight in relation to the vehicles by remaining within range of their 25mm guns.

• Bradley gunnery, as outlined in FM 23-1, is based on a realistic evaluation of the crew and platoon gunnery skills required to win on the AirLand battlefield. Gunnery requirements reflect the threat that crews and platoons can expect to encounter. Crew qualification precedes platoon qualification, and both require the attainment of high standards of individual and collective skills. The doctrinal changes have precipitated a requirement to train additional gunners and vehicle commanders. This must be factored into the unit's gunnery and training programs and must receive command attention. A squad exercise will be included in the gunnery programs.

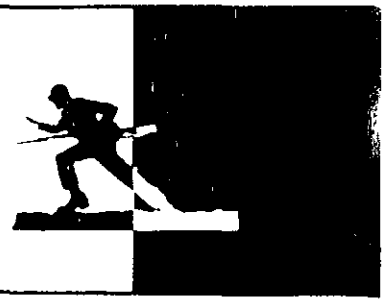
The Infantry is beginning to master its new fighting vehicle. Soldiers are quickly developing an understanding of the complicated equipment systems of the Bradley, and leaders are learning not only the mechanics of how the vehicle works but the tactics of how the infantrymen and the vehicle work together. Units equipped with the Bradley have made tremendous progress toward achieving high standards in gunnery and tactics, thus realizing the Bradley's full potential.

Many challenges still remain. The Bradley and its on-board weapons form a complex mechanical system. The young leader at squad and platoon level is hard-pressed to master both the vehicle and the associated mounted combat skills while simultaneously mastering dismounted tactics. The challenge facing units is to balance their training on mounted and dismounted skills. The training of the Bradley rifle teams must place a premium on their intelligent employment as well as on their synchronization with the vehicle element during the fight.

Clearly, the Bradley platoon is the greatest training challenge for the infantry. We need to keep in mind that infantry will dismount to do the things infantry has always done on the battlefield — take and hold ground. So we need our dismount skills as well as the new fighting vehicle skills of the Bradley.

I think we can do all these things, but it will be tough. The use of drills as outlined in FC 7-21B will help, as will the publication of FM 7-7J. The new doctrine places greater emphasis on the indirect approach to tactics. We must not timidly wait to see if the doctrine works — we must use the doctrine and make it work. If problems with the doctrine become apparent, and some will, tell your chain of command about them and give us your possible solutions.

INFANTRY LETTERS



TRADITIONS

I must commend you and your staff on your outstanding March-April 1985 issue. Two articles especially impressed me.

Major Dwight B. Dickson, Jr., offers a brilliant concept for preserving the history and tradition of our infantry regiments ("Our Infantry Heritage," p. 18). In fact, it is the most elegant solution I have seen to the emotionally wrenching question of which regiments will live and which will die.

Units are not merely numbers to attach to a TO&E: They are links that join our brothers in arms of the past and our descendants who may serve in those same units in the future. The 7th Cavalry, the 16th Infantry, and the 5th Artillery, for example, are not just abstractions or convenient designations (like the "Maintenance Department" at Sears). These names and designations speak of deeds and the men who performed them. They serve as reminders and help present members of the regiments to act accordingly so as not to tarnish those memories.

Tradition is inextricably tied to the armed forces; without tradition and ceremony we are little more than an armed mob. The lack of a past, or the loss of one, is a terrible burden for any person or organization. (As members of the 1st Battalion, 182d Infantry, Massachusetts Army National Guard, are proud to remind you, their regiment is the oldest English-speaking regiment in the world.)

In short, Major Dickson's proposal should be adopted forthwith by direct order of the Chief of Staff.

The other article that impressed me was Brigadier Richard E. Simpkin's "Command from the Bottom Up" (p. 34), which shows a way to eliminate excessive instructions and over-supervision. It allows our junior leaders (at whatever level) to develop their own styles of leadership and to make mistakes in peacetime instead of in combat. This gives them a flexibility with which to deal with alterations in plans. And the goal of making "every Infantryman a Ranger" expresses the philosophy very well.

LARRY A. ALTERSITZ
MAJ, Field Artillery
New Jersey National Guard
Woodbury, New Jersey

COMMENTS, PLEASE

I am an assistant operations sergeant for a Reserve medical battalion and would like to solicit a response from your readers to a problem I consider major.

My last annual training period included a battalion headquarters and three supporting companies, all medical. We arrived in our tactical area at 0800, installed a 292 to a radio mounted in one of the vehicles, and proceeded to run land lines.

There were only four people in our communications section — one manning the radio, one setting up the radio in the TOC, and two running land lines to supporting units and inside the headquarters area. These last two were also responsible for running a line through four miles of wooded mountainous terrain and across two roads to a MAG drop.

Meanwhile, our supporting companies were set up (including sleeping tents) and waiting for us to hook up to their land lines. Our headquarters area was also set up (including sleeping tents) with a permanent perimeter by 1600. Our communications section worked until midnight and had to get up at 0400 the next day because the MAG drop was dead.

The after-action report on this training cited our communications section for inefficiency.

Looking back, I can see how this situation could have been avoided:

The battalion headquarters could have tasked subordinate units for help since the communications section was at less than half strength. The people who were setting up tents (except for the TOC) could have been pulled off those details and assigned to the communications section. In addition, the MAG drop should have been checked before soldiers were ordered to run four miles of wire to it.

I feel that communications are more important than a permanent perimeter in the first few days of set-up, because it is critical that units be able to coordinate their actions.

Besides, if we had met more than a squad of aggressors during this period, we would have suffered severe casualties and could not have pinpointed the breakthrough or called for help.

I would welcome any comments on what I feel should be a priority to communications above all else. I have a selfish motive behind requesting comments: I don't want to go through something like this again.

EDWARD A. BEDNAR
P.O. Box 97
Piney Fork, Ohio 43941

BAYONET STILL NEEDED

The Befort Bayonet Replacement Debate has sparked a lot of sincere emotion on both sides. We may therefore be onto a timely subject whose merits ought to be played out as far as they go.

There are several points that I believe still should be made:

• When ammunition is gone and malfunctions occur, more weapons will be thrown away if the lack of a bayonet turns them into useless, dangerous deadweight.

• If both sides run out of ammunition in a firefight, the side that still has bayonets will effect the surrender of the other.

• Training has always taught that the very sight of bayonets on the weapons of advancing riflemen terrorizes the enemy. Justified or not, this means that any weapon that reduces the enemy's will to stand fast ought to be included in our inventory.

• More prisoners will be shot if they have to be guarded with either rifle fire or nothing.

• It is impossible to guard prisoners of war silently without the bayonet; and it might be unacceptable to try to stop a runaway with rifle fire in the midst of a crowd.

It is important that these points be made, because several inaccurate and unfortunate statements have been made about this crude-but-never-obsolete weapon. (INFANTRY's letters are *influential* beyond anyone's imagination, and since these advocates of the extinction of the bayonet have had their say, all other points should be covered, too.)

Incidentally, let's hope for Befort's sake that George S. Patton, Jr., is not on CQ at the Pearly Gates when he tries to turn in his pass to that Great Barracks in the Sky.

SAMUEL F. ROYALL
2d Division (1961-1964)
Williamsburg, Virginia

CALFEX RESOURCES

I read the article "CALFEX: Tactical Training with a Purpose," by Captains E.J. Nusbaum and John T. Robinson (INFANTRY, March-April 1985, p. 42) with great interest, because I am S-3 of a division artillery (3d Armored Division) preparing for our own CALFEX support at Grafenwoehr, Germany.

I've supported this kind of live fire exercise before, and I agree with the authors that the maneuver soldier derives from such exercises a great appreciation for the effects of each of the complimentary weapon systems, and also that maneuver leaders do gain experience planning and controlling them.

What the article fails to mention, though — and something I think is just as important — is the sense of timing the maneuver commander gains in synchronizing his maneuver elements with artillery, mortars, attack helicopters, and tactical air support. The CALFEX is the only kind of exercise I know of in which that kind of leadership and team training can be employed effectively in a live fire mode. Until MILES technology is dramatically improved to include those indirect fire systems, the CALFEX will remain the best way to conduct such training.

I have just a couple of words of advice for anyone who is planning to conduct such an exercise for the first time. Artillery training ammunition is very constrained now in comparison to 1982 when the men of the 1st Battalion, 18th Infantry conducted their exercise. The 414 rounds of artillery HE that was fired in that exercise represents about 10 percent of an artillery battalion's present annual allocation. If a CALFEX exercise were conducted for every battalion in the division, it would consume the entire annual allocation of HE for one 155mm battalion.

At Grafenwoehr, safety constraints also require the artillery men to use "canned data" when shooting at a single target location from the same firing point using the same deflection, time and quadrant setting for all rounds fired.

There are also other constraints, one being that, in order for the ground troops to see impact of the rounds, a 200-meter height of burst must be achieved on the upward trajectory of the projectile. This means that all of those CALFEX rounds must be fired with time fuzes, which are in even shorter supply than HE. From the point of view of the battery commander, whose mission it is to train his cannoneers to proficiency, the training value of a CALFEX diminishes in about the same proportion that ammunition expenditures increase.

For that reason, I think it is unfortunate that the Army's new STRAC (Standards in Training Commission) allocations do not include training ammunition for CALFEXs. Until that omission is remedied, however, it is imperative that CALFEX requirements be identified at the beginning of each fiscal year so that a reasonable amount of artillery ammunition can be programmed for all maneuver companies or troops in the division.

Right now, the annual STRAC allocation of artillery HE is about 4,200 rounds per battalion. I believe a total of 34 rounds of HE can reasonably be devoted for each maneuver team without seriously degrading the training of cannoneers — 8 rounds for high-burst registration; 2 rounds for subsequent meteorological check; 12 rounds for two-battery volleys in the attack phase by day; and 12 rounds for two-battery volleys in the defense at night.

Assuming 12 company teams in a brigade, an annual CALFEX for the entire brigade would require 408 HE rounds — just under 10 percent of the 155mm battalion's annual STRAC allocation. Each artillery battalion commander would have to determine what trade-offs he had to make in his own training to provide that much ammunition. (Incidentally, if platoon volleys are fired instead of battery volleys, more flexibility is provided for additional artillery engagements, shifting of fires, or refires.)

Finally, the article does not mention the usefulness of a CALFEX for training FISTs and FSOs. They need to develop the same sense of timing and synchronization that the maneuver commander learns, because the maneuver commander in the heat of battle will sometimes have to delegate the integration of indirect fires to these Redlegs anyway.

Therefore, all of us who make up the combined arms team have a stake

in CALFEX training. So let's beef up the STRAC to provide resources for these valuable exercises.

FREDERICK S. BERRY
MAJ, Field Artillery

BATTLE INCIDENTS

I am looking for information on battle incidents (personal or official accounts) in which the carefully aimed fire of one or two riflemen played a crucial role in the outcome. I also seek accounts of military encounters in which the pistol played an important part.

I ask readers who respond to include the date of the incident, unit identification data, their comments on the marksmanship training they received (including any before entering military service) and their views on the comparative value of area fire and aimed fire, and of full automatic spray fire and controlled fire (one, two, or three shots).

My address is The Scribe Press, P.O. Box 368, San Rafael, CA 94915; telephone (415) 456-4198.

F.L. GREAVES

LONG RANGE SURVEILLANCE UNITS

In the letters section of the January-February 1985 issue of INFANTRY (page 5), Captain John Provost stressed the need for LRRPs (long-range reconnaissance patrols) and disagreed with the decision to place the LRRP detachments under the control of the cavalry squadrons in the light and heavy divisions.

First, the term LRRP is now outdated. The current title in the AOE structure is "long-range surveillance units" (LRSU). The corps has a 186-man long-range surveillance company (LRSC) and the division, a 41-man long-range surveillance detachment (LRSD).

I totally disagreed with the logic and arguments Captain Provost presents in his letter. He says that the LRSD would receive better logistical and communications support from corps, that unit training would be improved, that the quality of soldiers would be better controlled, and that the detachments would have access to more international training exercises.

Within our divisions, the experts on reporting human intelligence (HUMINT) on the enemy have been the cavalry/reconnaissance squadrons. Assigning these dynamic detachments of highly trained, long-range, footmobile, reconnaissance experts to the squadrons will improve their ability to accomplish their missions in the divisions' area of interest. In regard to passing battlefield information, the link between the G-2 and the cavalry/reconnaissance squadron has always been direct. Under the AOE structures, it will continue to be direct.

Under the cavalry/reconnaissance squadron the combined arms and integrated training of the LRSD should be better. The squadron's main missions are reconnaissance and security, and the LRSD's mission is to report intelligence. The units are unquestionably linked. As part of the combat aviation brigade, the reconnaissance squadron and the LRSD have the full-time support of that headquarters. It has not only superb logistical and communications support, but also an organic means of rapid insertion and extraction.

High-quality personnel are now joining the LRSD in the 7th Infantry Division (Light) and have already established their importance and demonstrated their capabilities during recent large-scale CPXs. The current TOE/MTOE best serves the "unit of command" principle of war by placing the LRSDs under the squadron commander's control. There he can incorporate them into his BTMS program and develop the employment and "how to fight" tactics for the entire squadron.

LRSUs are now projected to attend a long range surveillance course that is being developed by the Infantry School (with the input of the other concerned schools and branches). This course will teach the foundation of LRSU tactics and techniques. The skills and knowledge the LRSDs bring back from this course will become an integral part of the squadron's reconnaissance training program.

Certainly the G-2 and G-3 will continue to plan and coordinate all of the division's intelligence and electronic warfare assets and their missions, but the reconnaissance squadron's personnel need to be under one comander. Corps long-range surveillance companies are important, but leave our long-range surveillance detachment where it belongs — in the cavalry/reconnaissance squadron.

I am proud of the combined arms mix in the squadron, and the LRSD is one of the best assets we have. It is where it can do its job best. Captain Provost can rest assured that in the 7th Infantry Division (Light), the long-range surveillance detachment will never die on the vine!

R. DENNIS KERR
LTC, Aviation
2d Squadron, 10th Cavalry
Fort Ord, California

We welcome letters from our readers and print as many of them as we can. Sometimes it takes a while before we find room for them. But keep writing on topics of interest to our readers, and we'll do our best to get your letters in, sooner or later.

FALL OF ITALY 1943

I am completing research for a book and am trying to reach people for interviews and information concerning the fall and occupation of Italy in and after 1943.

I would appreciate hearing from all former soldiers who were involved in occupying towns and cities in Italy after 1943. I am most interested in conducting interviews, but letters, diaries, or other accounts would also be helpful.

My address is 496 N. 19th Street, Philadelphia, PA 19130.

JOSEPH R. DeMARCO

INFANTRY NEWS

THE U.S. ARMY MARKSMANSHIP UNIT at Fort Benning is asking soldiers in the rank of staff sergeant and below who have had competitive shooting experience with a rifle, pistol, or shotgun to apply for assignment to the Unit.

Applicants should be highly motivated and have a winning spirit, a clean civilian and military record, and proper military appearance. To apply, interested soldiers are asked to send a resume of their shooting experience, including scores from matches, if available; a recent photo; and a copy of their DA Forms 2 and 2-1 to the Commander, USAMU, Fort Benning, GA 31905.

FOR ALMOST A YEAR, the Infantry Center has been working on a program that will rekindle an awareness, a pride, and an esprit de corps regarding the Infantry, its regiments with their officers and men, and the history they share.

As an outward and visible sign of that effort, the Center has now established a Trophy Room within the main officers club at Fort Benning and has renamed the club's half-century-old ballroom the Regimental Hall. When completed, the Hall will feature the flags of distinguished infantry regiments, while stained glass windows will depict the shoulder patches of 24 infantry divisions. Crests or shields of some 100 regiments also will be painted, carved, or preserved in stained glass in this special area at the Home of the Infantry.

Additionally, portraits of distinguished military leaders will serve to remind today's infantrymen of their heritage.

The Infantry Center would like your thoughts and suggestions on this project. For example, which regiments and divisions should be honored? Which distinguished military leaders should be represented? Why have these units or individuals earned a special place in the Regimental Hall? The Center also would appreciate information on the location of regimental colors and other artifacts that might be exhibited at Fort Benning.

Comments, suggestions, ideas, and recommendations concerning the Regimental Hall should be addressed to the Directorate of Plans, Training, and Mobilization, ATTN: Director, National Infantry Museum, Fort Benning, GA 31905.

THE U.S. ARMY Infantry Board submitted the following news items:

• **Bradley Infantry Fighting Vehicle: Gowen South.** The Infantry Board recently tested several programs of instruction (POIs) that involved the use of training devices for certain BIFV sustainment gunnery training events.

Four POIs were evaluated with four BIFV crews assigned to each POI. Each POI consisted of a preliminary gunnery exercise, a vehicle team subcaliber exercise (VTSE), a vehicle team combat exercise (VTCE), and a squad combat qualification exercise (SCQE). One of the evaluated POIs was used as a control POI and was designated the Baseline POI. The Baseline POI crews used the actual BIFV and live ammunition to fire the VTSE, VTCE, and SCQE events. For the VTSE, these crews used the Reavis subcaliber device mounted on the BIFV and 5.56mm ammunition.

The other three POIs substituted training devices for the VTSE and VTCE events and did not use any live fire during those events. Three training devices were evaluated: the Unit Conduct of Fire Trainer (UCOFT), the Precision Gunnery System (PGS), and the Bradley Gunnery and Missile Target System (BGMTS). Each of these three training devices provided the test crews — Bradley commander and gunner — with 25mm, 7.62mm, and TOW weapon systems engagements.

The UCOFT POI crews were trained on the device at the contractor's facility in Florida. The UCOFT consisted of a crew station, an instructor and operator station, a crew briefing station, and a computer system. The UCOFT provided both visual and printed performance results.

The PGS POI crews used the actual vehicle with the PGS training device on a range. The PGS consisted of an eye-safe laser firing unit mounted on the vehicle's 25mm gun and hit-recording detection modules mounted on full scale targets. The PGS provided printed performance results.

The BGMTS POI crews used the actual BIFV and the BGMTS training device inside a large building. The device consisted of a rear projection screen unit, a moving and stationary target control console, and a line-of-sight firing unit for each turret sight. The BGMTS did not provide visual or printed performance data.

For their preliminary gunnery training, the crews that were going to use the training devices employed the table top Video Disc Gunnery Simulator (VIGS), which consisted of a gunner's console, a video disc player, and a floppy disc drive. The VIGS provided visual performance results. The Baseline POI crews used an actual vehicle and conducted standard turret manipulation exercises for their preliminary gunnery training.

After all of the test crews had completed the preliminary gunnery exercise, the VTSE, and the VTCE they conducted a live fire SCQE using

actual vehicles and full caliber ammunition for all of the on-board weapon systems.

The SCQE performance results of the crews that had used the training devices were then compared to the performance results of the Baseline POI crews.

The test results will be used by the Infantry Board to develop the best possible training strategies and to begin the actions needed to develop or obtain the appropriate training devices.

• **Simulated Tank Antiarmor Gunnery System — Dragon (STAGS-D).** The Dragon launch effects trainer (LET) was type classified standard in 1975. At the time, it was recognized that the trainer did not fully satisfy the Army's need for a Dragon training system. The training and materiel development communities agreed that any second-generation training system should provide simulation of the Dragon missile in both launch and flight characteristics. But since no agreement could be reached on the specific functions required in the flight simulator portion of the system, a decision was made to develop a separate launch simulator — the Launch Environment Simulator (LES) — while efforts continued to develop a workable flight simulator.

An exploratory program that began in 1980 has resulted in the development of the STAGS-D, which consists of an instructor station and a student station. The instructor station has video displays that show aiming errors and sight pictures, a sound system to generate missile and other battlefield noises, a keyboard to enter commands and other data, and a printer to provide hard copies of selected information.

The student station has a simulated Dragon weapon system and a terrain table station with three target tracks. The simulated weapon system provides the noise, blast, and weight shift that would occur in an actual missile launch. A missile's flight and target strike are simulated in the gunner's sight, and the tracking run can be replayed for the gunner and the instructor.

The Board conducted an operational test of the STAGS-D from August through November 1984. More than 250 Fort Benning initial entry soldiers who were attending the regularly scheduled Dragon gunner qualification course took part in this test, which compared the training effectiveness of three alternative qualification programs.

Each program used a different type or combination of training devices. One used the STAGS-D, another a combination of STAGS-D and LES, and the third, a combination of LET and LES. The results were compared on the basis of live fire first round hit probability and gunner qualification score correlation with live fire hit probability.

The Infantry School and the Project Manager for Training Devices will use the test results to formulate a recommendation for a development assistance in-process review.

• **Remote Sensing Chemical Agent Alarm (RSCAAL) XM21.** The history of the XM21 RSCAAL dates back to 1954 when the possibility of detecting toxic gases by natural radiant energy was first suggested through research by military contractors. But it was not until the 1970s that the technology for a sensor and signal processor had matured to the point of being practical.

The XM21 RSCAAL is a manportable, passive infrared detection and alarm system that is designed to detect nerve agent clouds up to five kilometers away.

It consists of a tripod-mounted detector powered by a thermoelectric generator (TEG), which can be set up and operated by soldiers who have not had extensive training with the alarm. It can also give a company-sized unit an unattended warning capability for 12 hours.

The operator positions the detector to scan a 60-degree horizontal arc that is centered on the prevailing upwind direction and reorients it when the prevailing wind changes. If a toxic agent cloud is detected, the RSCAAL gives both a visual and an audible signal to warn personnel to take protective measures.

The detector is an infrared radiation measurement device that includes an infrared sensor, a signal processor, and a cryogenic cooler. It is 19.25 inches long, 17.25 inches wide, and 12.25 inches high and weighs 50.5 pounds. It is carried in a transit case that weighs an additional 50 pounds; the base is 30 inches long, 30 inches wide, and 20.5 inches high. The tripod with case weighs 16 pounds and can be extended from 30 inches to 46.75 inches in height. The TEG measures 16.5 inches by 9 inches, weighs 40.25 pounds with fuel, and provides 28 volts of direct current. The total weight of the system is 156.75 pounds.

The XM21 RSCAAL was tested at Fort Benning from January through March 1985 in a simulated tactical NBC environment against standards established by the Chemical School. Six soldiers, who were serving as designated operators in support of an infantry company, moved, set up, operated, and serviced the alarm. Sulphur hexaflouride was used to simulate a nerve agent to test the alarm's detection and warning functions while contaminants such as smoke and exhaust fumes were used to test for false detections and detection degradation. Functional performance, human factors, safety, reliability, and maintainability data were collected throughout the test.

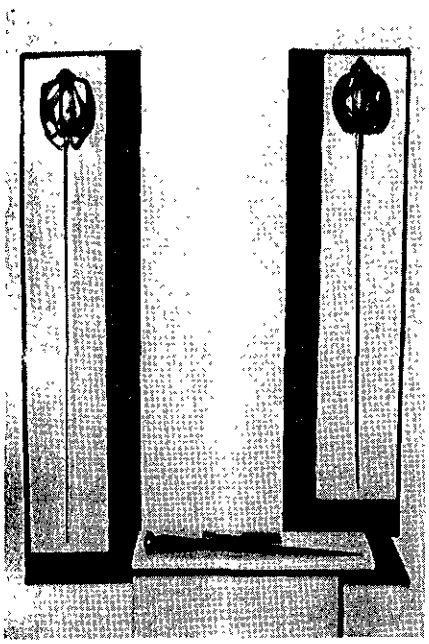
The results of the test will be used by the Chemical School to make decisions regarding the full-scale development of this system.

THE NATIONAL INFANTRY MUSEUM has given us the following notes of interest:

Among the special exhibits at the National Infantry Museum recently was one that recognized the 40th anniversary of Victory in Europe (VE)-Day. Another special exhibit was shown at the Scottish festival held in Shellman, Georgia, to commemorate the Battle of Culloden. This exhibit, which includes 16th century Scottish weapons and accoutrements, is now on display in the Museum itself.

The accompanying photograph shows some of the weapons that are included in this particular exhibit.

A special retreat ceremony honoring the 63d Infantry Division was held



recently at the museum. The Division's association presented to the Museum a stained glass panel depicting the division's shoulder patch. (If other division associations are interested in having their units represented in this way, their spokesmen should contact the Director of the Museum.)

The Museum has on loan uniform items that belonged to German Field Marshal Erwin Rommel. A tunic, hat, and goggles that belonged to him were loaned by the Panzer Museum Munster through an arrangement made by Lieutenant Colonel F. Schulz, the German representative at the Infantry School. Also recently added to the Museum's German collection is a display of World War II German airborne uniforms, equipment, and insignia.

Other interesting acquisitions for the Museum's ever growing collection of military artifacts are a German fire police tunic, dress bayonet, sword with scabbard, metal Nazi eagle, and Labor Service flag; U.S. Civil War period badges; a shooting medal awarded during the mid-1840s during the war with Mexico; the jump knife issued to Colonel Edward H. Lahti in January 1943 when the 511th Parachute Infantry Regiment was being organized and which he carried throughout World War II on New Guinea, Leyte, Luzon, Japan; military items that had belonged to Major General (Retired) Numa A. Watson; and military uniform items donated by Major General (Retired) Albert H. Smith, Jr., who also gave the Museum a set of Brigadier General stars that had belonged to Brigadier General George A. Taylor. (As a Colonel, Taylor commanded the 16th Infantry Regiment, 1st Infantry Division, on 6 June 1944 at Omaha Beach.)

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

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

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

• **Physiological and Psychological Effects of NBC and Extended Operations (P^2NBC^2 — Infantry Testing.** P^2NBC^2 is a major Army study project that concentrates on conducting extended operations in a contaminated environment. It is expected to:

• Provide a commander with planning factors and decision-making criteria.

• Provide a commander with ways to extend both individual and crew endurance and performance.

• Provide a commander with indicators of significant performance degradation.

• Provide implications and insight on how we should fight.

As part of the P^2NBC^2 program, the Infantry School has planned a two-phase test in conjunction with the Infantry Board. Phase I, which took place in June 1985, established the baseline performance data for BIFV crewmen operating in a static environment.

Phase II, which will take place in September 1985, will evaluate BIFV squads, mounted and dismounted, in a 72-hour ARTEP scenario. Medical instrumentation has been provided by the Medical Research and Development Command to capture the physiological and psychological stress indicators.

The results of this testing program will be combined with information collected from an extensive review of the existing literature and assembled into a chapter of a draft field circular that is expected to be published in late September by the Combined Arms Center.

Testing in Fiscal Year 1986 will examine training and doctrinal fixes that were identified in the Fiscal Year 1985 testing program. Further testing will examine mortar, antiarmor, and scout operations, as well as light infantry, air assault, and airborne operations.

• **DLTOE Infantry Battalion (Airborne).** A draft living table of organization and equipment (DLTOE) was recently developed as a proposed replacement for the current TOE for an airborne battalion. The proposed changes revolve around three issues: modernization, standardization, and force reduction. (These changes are to take place without detracting from the capability of an airborne battalion to perform its mission.)

The modernization issue includes integrating newly developed equipment into a unit.

For example, some of the new equipment includes the HMMWV as a replacement for the M151 quarter-ton trucks and the M561 Gamma Goats; SINCGARS will replace the current AN/VRC-12 family of radios; and the position locating and reporting system (PLRS) will be added.

On the matter of standardization, under the Army of Excellence (AOE) organizational designs, units with similar missions will be organized under similar TOEs. Thus, while the

current airborne battalion is organized under a TOE that calls for 11-man squads, the DLTOE being developed will call for a nine-man squad. Other similarities between types of battalions will call for the standardized organization of a battalion into a headquarters and headquarters company, three rifle companies and one antiarmor company.

And in an Army-wide attempt to standardize personnel and equipment, conceptual packages have been developed by the various MOS-proponent schools to be used in the new TOEs. Examples of these packages include a medical modular package and a field feeding package.

The third goal of the DLTOE that is being developed is force reduction. A major contributor in this issue is the nine-man squad. A zero growth philosophy is also being used to develop vehicle requirements for the airborne battalion.

The DLTOE, when approved by Department of the Army, will become the living TOE for the airborne battalion.

• **The M249 Machinegun.** The Infantry School is constantly searching for ways to increase the infantryman's firepower while decreasing his load. One way of doing this may be to issue the M249 as a machinegun instead of as a squad automatic weapon. If used as a machinegun, the M249 could be issued with a traversing and elevation mechanism, a tripod, a spare barrel, and additional ammunition. The interesting thing about this proposal is that with the M249 machinegun, a crew could carry twice the amount of ammunition it now carries and still carry less weight.

Despite some earlier reports, the M249's accuracy is comparable to that of the M60 machinegun. A test conducted by the Infantry Board in September and October 1984 confirmed this. (See INFANTRY, March-April 1985, page 9.)

The M249 is also an extremely reliable weapon. And because it fires the same ammunition as most of a platoon's other weapons, the unit's logistical burden would be lessened.

Tests have shown that the M855 bullet fired by the M249 has greater penetration power against hard targets — such as steel and aluminum — than the M80 ball ammunition fired by the M60, although it has slightly less penetration power against wood.

A decision to field the M249 as a machinegun is expected to be made soon.

• **Alaskan Theater Defense Division.** The 6th Infantry Division will be a theater defense division. Stationed in Alaska and built from the 172d Infantry Brigade, it will be uniquely structured and equipped to operate in a cold weather environment and to perform Alaskan defense missions. Currently, it is expected that the division will have one airborne battalion and eight light infantry battalions.

Although the 6th Infantry Division will be based on the light infantry division's operational concepts, it will have certain capabilities not found in any other unit in the Active Army.

Final force design recommendations were presented by proponent service schools in mid-May 1985 at the Combined Arms Center, Fort Leavenworth.

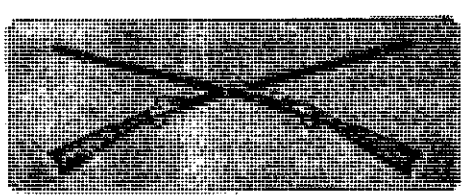
• **The "Enhanced" M16A2.** The Army expects to receive its first M16A2 rifles in 1986. The M16A2 is much more reliable, accurate, and durable than the M16A1. To take full advantage of the new rifle's capabilities, however, a program has begun to "enhance" the M16A2 before it reaches the field. The program's goal is to give the infantryman a weapon he can aim more easily and therefore more accurately.

The "enhanced" program is currently investigating the possibility of removing the familiar carrying handle from the rifle's upper receiver; in its place a mounting mechanism would be integrated into the receiver. With this system, an optical sight of some kind would be mounted to give a soldier a single point of aim. Thus, once he had properly zeroed the sight, he would need only to place the reticle in the sight on his target; he would not have to worry about a proper sight picture or sight alignment. Studies and tests are being conducted to determine the type of optical sight that is best suited for a combat rifle. Among the sights being considered are rifle scopes and reflex sights.

Additionally, night vision devices would be mounted on the mounting mechanism instead of to the carrying handle, thereby allowing a firer to assume a proper firing position when he used night vision devices.

An added benefit of this mounting concept is that once the optical sight or limited visibility device was zeroed to a rifle, it could be removed and replaced later without having to be zeroed again. In addition, because the concept visualizes a single point of aim, all firers would have the same zero, and a sight would not have to be re-zeroed if a weapon changed hands.

Other issues associated with the "enhanced" program, but not necessarily tied to it, include changing the magazine to a more reliable plastic type. Consideration is also being given to developing a muzzle blast compensator to help reduce or eliminate muzzle climb when a soldier fires three-round bursts.



Three Kinds of Infantry

COLONEL HUBA WASS de CZEGE

In his article "Thinking About Light Infantry" in INFANTRY (November-December 1984, p. 19), Lieutenant Colonel Jack English does an excellent job of illuminating the history of light infantry and the dilemmas of modern mechanized infantry. His conclusion is that (aside from highly specialized types) there ought to be two distinct kinds of infantry: the "in-house infantry" of armor forces and "line infantry trained in light infantry skills." While I agree with the concept of "in-house infantry" for armor forces, I do not agree that one type of infantry can do both "line infantry" and "light infantry" tasks.

Infantry missions cover a wide functional range. Because of this, I believe we need three basic kinds of infantry today.

- We need infantry whose primary mission is to support the advance of the tank. Let's call this *armored* infantry.
- We need infantry whose primary mission is to hold ground and to take fortified or infantry-defended positions. Let's call this *regular* infantry.
- We need infantry that is strategically, operationally, and tactically highly mobile using Army or Air Force aircraft and that can fight highly mobile tactical engagements in difficult terrain. Let's call this *light* infantry. (Light infantry may have several variants, such as air assault and airborne.)

But what does each type do in carrying out these missions?

ARMORED INFANTRY

Armored infantry orients on the advance and protection of the main battle tank. It keeps up with the fastest tanks, gets through close terrain safely, overwatches and secures tanks during movement, clears mines and obstacles in the path of the tanks, and in static positions provides close-in security and protection for the tanks from dismounted infantry, especially at night.

Armored infantry fights either mounted or dismounted. It accompanies tanks and overwatches them on the move or during temporary halts. It watches for and suppresses infantry equipped with antitank weapons. It dismounts to clear chokepoints in close terrain; it clears road blocks; and it assists in clearing minefields. Since tank formations are primarily oriented toward the offense, even when they are performing a defensive role, so are armored infantry units.

In the defense, armored infantry rarely digs in extensively. It provides close-in protection for tanks in static positions and supports tanks in counterattacks and in movements between positions. It complements the fires of tank guns in the defense of a position against a combined arms threat and concentrates on taking out key soft targets. It also emplaces road blocks and minefields.

What equipment does armored infantry need to do these tasks? It needs a carrier that has mobility equal to that of the tank. It needs a long-range standoff armor-killing missile system to provide overwatch to moving tanks. It needs a cannon system that can kill non-tank threats to tanks such as other carriers, attack helicopters, and dismounted infantry. It needs to carry mines and other obstacle-creating devices, including pioneer tools. The Bradley Infantry Fighting Vehicle can do this job quite well. (A more heavily armored vehicle would be nice to have in the future, though.) The vehicle should be at least partially protected from the heavy machineguns and automatic cannons (up to 40mm) that are likely to be mounted on equivalent Soviet vehicles.

REGULAR INFANTRY

Regular infantry often supports tanks at the operation level but is *supported by* tanks in its tactical level

tasks within an operational scheme. It holds key terrain in a defensive framework that may otherwise be dynamic in nature.

In any battle in Europe, it would fortify and defend towns and villages. Its offensive tasks may include taking heavily fortified positions that must be taken by infantry assault. It would follow and support leading armored formations by reducing bypassed pockets of resistance, keeping lines of communication open, and passing through armor units to clear stiff resistance from well-organized defenses to break the armor free to continue the attack.

To increase its tactical and operational mobility and to carry the array of heavy equipment it needs to do its job, regular infantry rides. But it fights dismounted — *always*. In the defense, the regular infantry is uniquely suited to move rapidly to a piece of ground that must be held and occupy it. And it can in short order turn that ground into a fortress that the enemy will have to either bypass or invest. (Operationally and tactically, the trick is in deciding where and when to hold ground, where and when to give up ground and where and when to strike a counterblow. Any operational or tactical defense is a combination of these. Regular infantry is best at holding ground; armored infantry is best at supporting the tank in the dynamic elements of the defense.)

In the attack, the regular infantry may create the initial penetration to break the armor formations free. To do so, it may have to assault fortified positions to take key terrain and root out other enemy infantry that might otherwise deny passage to our tank formations. It may then hold or widen the shoulders of a penetration to make sure the tank force is not cut off.

Some regular infantry may be detailed to follow and support tank heavy forces. This means that, if necessary, it fights to keep the lines of supply of the tank force open by defending against flank attacks and makes it possible to keep the forward units moving rapidly by bypassing strongpoints that are then either reduced or contained by the follow-on forces.

When an attacking tank force meets organized resistance it cannot overcome, regular infantry is passed through to break the armor free again. There will also be times in the attack when regular infantry will be asked to quickly seize, occupy, and defend key terrain on a flank to protect the overall force.

One characteristic that clearly distinguishes regular infantry is its ability to move to a key piece of terrain quick-

ly with the paraphernalia it needs to turn that terrain into a fortress and, once there, to be able to do so in a short time. The other characteristic that clearly distinguishes regular infantry is its ability to rapidly reduce fortified positions and well-organized antitank defenses that have been prepared in depth.

The regular infantry is not necessarily a low technology force — it is not necessarily less dependent on equipment than armored infantry. It just needs a different kind of equipment for a different purpose. The vehicle it uses must get it from one point to another quickly, safely, cheaply, and comfortably. That vehicle must carry at least a full-sized squad and a lot of gear — the heavy tools of the regular infantryman's trade.

These tools are heavy automatic weapons with range and penetrating power, antitank weapons that can be fired from bunkers, mechanical tools (to aid in digging in and building fortifications quickly), mine-dispensing systems, mechanical trenchers, chain saws, demolitions (to clear fields of fire), camouflage systems, concertina wire, night sights, chemical protective gear, flamethrowers, "bunker-busting" weapons, and so on.

The M113, a "stretch" M113, or any number of wheeled carriers now available can provide protected mobility for the regular infantry. This vehicle would be used for travel to the vicinity of the battle and as a "mobile arms room." The mobility and protection the regular infantry needs may be provided in the future by lighter vehicles that have great cross-country load-carrying capacity, that require less fuel, and that are relatively inexpensive. The money saved ought to be spent on the mission-essential equipment the regular infantryman needs to root out the enemy in the attack and to rapidly create unassailable defensive positions. Regular infantry battalions would benefit from having an organic combat engineer platoon appropriately equipped to create or reduce both obstacles and fortifications.

LIGHT INFANTRY

Light infantry is specialized for rapid air transportability, clandestine insertion, very rugged terrain, night operations, infiltration, raids, and ambushes; it gives off only small tactical signatures. This kind of infantry complements other forces at the strategic, operational, and tactical levels.

At the strategic level it provides the flexible, rapid, initial response capability that often is sufficient in itself, or it provides the entry point for other follow-on forces.

At the operational level, light infantry is often used in many creative ways to complement heavy forces. In the defense, for example, it denies the enemy large areas of rugged terrain as primary avenues of advance; it frees other forces to become operational reserves; and it defends these areas of rugged terrain so that they can become the fulcrum for defensive maneuver and counterattack. In the offense, large light infantry forces infiltrate through rugged terrain to seize critical points or disrupt lines of communication, air assault to seize bridge-crossing sites for linkup, or conduct other deep maneuvers to facilitate the attack of heavy brigade, division, or corps forces.

At the tactical level, light infantry forces frequently cooperate with other arms. For instance, light infantry cooperates with helicopter formations to become a vital part of an "air mechanized" force. Light infantry battalions also assist by holding critical chokepoints in smaller, more rugged areas within the schemes of brigades and divisions that are made up primarily of heavier forces. In attacks conducted by heavier forces, light infantry battalions are air-lifted to seize chokepoints before they can be occupied by the enemy, thereby facilitating the rapid passage of the armored formations. They maneuver through impassable terrain in any weather or under cover of darkness into an enemy's flank or rear.

Light infantry is difficult to detect, but once detected it must complete its tasks quickly and violently or it can be defeated easily. It derives its protection from its ability to hide and to move in rugged terrain. It does not like to dig in and hold strongpoints because it lacks the means to do those tasks quickly and well. It can't carry much weight because it does not have the mechanical transport to stockpile ammunition, mines, and barrier material or the tools to prepare strongpoints.

It uses a wide pattern of hit-and-run tactics to repeatedly deny opposing mechanized forces the use of the regular road nets through rugged terrain. It works best, perhaps, in conjunction with attack helicopters, protecting the air avenues of approach into the flanks of enemy columns along high speed corridors through rugged terrain.

Light infantry, being more nimble, forces the enemy to dismount his own infantry to root it out and destroy it. The purpose of these tactics is to tie down a large number of enemy troops with a small number of our own, and to slow their tactical and operational advance. Slowing the advance without committing our heavier forces allows our higher level commanders, at division and corps, to maneuver striking forces against the enemy at the appropriate places to defeat him operationally.

To do these things, light infantry troops must be lightly but potently equipped. There can be few compromises on their equipment. The battalion should not have any mission-essential vehicles. All its vehicles must be transportable by utility helicopter. The light infantry soldier himself must be able to carry his entire fighting load, a load that should not exceed 50 pounds. His weapon should be light but capable of tremendous firepower during the short but violent engagements that are expected. He must have the ability to direct precision-guided munitions from remote locations. It must be possible to resupply him by air at night and from prestocked caches.

MISSIONS

In summary, then, both armored and light infantry can do regular infantry tasks, but not as well as regular infantry can do them. Regular infantry can occasionally support the advance of tanks and work in close tactical cooperation with them. Regular infantry can also occasionally perform dismounted combat in highly restricted terrain. But the equipment, organization, and training of the three types of infantry make each particularly well-suited for a particular range of missions.

If we truly had these three types of infantry, at the operational level we might well see all of them fighting interdependently within a corps sector. Armored infantry might be found in task forces and brigades that were primarily armor and might perform their tactical chores within operational schemes using speed and shock action.

Regular infantry might be found in task forces and brigades that were primarily infantry and might perform the difficult tasks of holding or taking key terrain. During an offensive, they might follow and support — protect the lines of supply of the armor and reduce pockets of resistance.

The light infantry might play a critical role in difficult terrain and during night fighting, the medium of battle that suits them best, and might free other forces to do what they do best. Light infantry could also be positioned rapidly by air (when being there first was most important) over tactical, operational, *and* strategic distances.

How these types of infantry should be grouped is a topic for another article. The important thing here is to resist the trend toward only two types of infantry — armored and light. Much of the debate today over how to use the Bradley-equipped infantry and the new light infantry results from trying to use either force as regular infantry. We need to develop a third type of infantry — a regular infantry — for use in that middle range.

We may already have such a force. In fact, we have basically had it all along in our M113-equipped mechanized battalions — especially when they were trained to fight using tactics suited to their equipment. That's worth thinking about!

Colonel Huba Wass de Czege served with airborne infantry units in Germany and Vietnam, as a ranger advisor in Vietnam, and with both regular and mechanized infantry in the 9th Infantry Division. Now on the staff of the Command and General Staff College at Fort Leavenworth, he has been selected for brigade command.

Training Infantry in the ROK Army

LIEUTENANT COLONEL GARY E. WOODRING

The organization and training of the Republic of Korea Army (ROKA) are similar to our own in many ways. (Exact comparisons are left to the reader's discretion.)

This article is intended to give my fellow infantrymen some general information about the ROKA and its infantry training. (The examples and the observations and comments are illustrative only and are based on my brief exposure to the ROKA 26th Infantry Division — the "sister division" of the U.S. 2d Infantry Division.

The tone for conducting training in the ROKA has been set by its Chief of Staff, General CHUNG, Ho Yong. Here is the guidance he has issued to all ROKA units:

- Units are to conduct mission oriented unit training by echelon (MOUTRE).
- Each echelon is responsible for the individual and collective training of its organic soldiers.
- Unity of command must be established during peacetime in preparation for war.
- Leaders and commanders must understand the training plans and priorities of their superiors and subordinates.
- Squad leaders must master all the tasks required of their men and be proficient instructors in those tasks.
- Battalion commanders are to personally lead cadre training for officers and noncommissioned officers.

The ROKA 26th Infantry Division, organized on 7 September 1953, is commanded by Major General RHEE, Byoung Tae. It presently serves as the ROKA 6th Corps reserve. Its motto is "Can Do," and this spirit is apparent in the attitudes and actions of its members.

The 26th Infantry Division's insignia consists of a red ball (representing the sun and the prosperity of Korea) overlapping a yellow ball (representing the moon and happiness, and the freedom of Korea) on a field of blue (representing the mission of the ROK armed forces). The whole is circled by a band of white, which represents unity of effort among all of the division's elements. (The ROKA 26th is therefore known as the "Fireball" division.)

The division has three infantry regiments (the 73d, 74th, and 75th), an artillery regiment, a reconnaissance battalion, a signal battalion, an engineer battalion, a tank company, and various combat service and combat service support units.

Each infantry regiment has four infantry battalions, but during peacetime, the fourth battalion of each regiment is staffed with only a cadre of permanent party members and serves as a training battalion. The three training battalions form an organic, dedicated, division training base.

All new recruits receive basic infantry training. Some of the soldiers are also trained to be mortar, machinegun, and antiarmor crewmen, while selected soldiers are trained to be future squad leaders. Battalion-sized units receive training in patrolling and in Ranger operations.

The 4th Battalion, 73d Infantry Regiment, is tasked with conducting basic infantry training, and with training crewmen for the M60 machinegun, the 81mm mortar, and the 90mm recoilless rifle. Each year, the unit conducts nine basic training courses and nine classes for crew-served weapon crewmen.

The basic infantry course covers 24 subjects presented in 264 hours of instruction. The subjects are grouped into three general categories: general subjects (76 hours), weapons (82 hours), and tactics (94 hours). An additional 12 hours is programmed as commander's time, which he can use for reinforcement and remedial training as needed.

Each soldier's performance is monitored and evaluated throughout the training cycle, and individual progress is measured by a point system. Each soldier must accrue a minimum of 600 points (out of a possible 1,000) to graduate. In addition, he must qualify with the M16 rifle; pass a five-event physical fitness test; meet minimum standards in bayonet drill, squad tactical formations, and dismounted drill; and demonstrate proficiency in Tae Kwon Do by breaking a brick with the edge of his hand. (Several of the proficiency demonstration events are incorporated into the graduation ceremony, to which parents and relatives are invited.) Upon graduation, the soldiers are immediately transferred to their new units. Only a few of the outstanding ones

receive a seven-day pass before they have to report for duty.

ROKA enlisted soldiers who make the Army a career can expect to spend their entire service with the same regiment. The minimum tour of duty for the draftees is 30 months. (Service is compulsory for all South Korean males.)

The 4th Battalion, 75th Infantry Regiment, also a training unit, has the mission of training squad leaders. The course of instruction is eight weeks in length and each class has about 80 students.

The division spends a good deal of time and effort in selecting the students for this course. For example, basic trainees who demonstrate leadership qualities during their basic training program are brought to the attention of their permanent unit; then the unit conducts its own evaluation of those soldiers during the following 16 to 20 months. If at the end of that time a soldier has further demonstrated his leadership potential, he may be scheduled to attend the course. Those who graduate from the course usually receive accelerated promotion to the grade of staff sergeant (U.S. equivalent).

The squad leader course consists of 360 hours of formal instruction, and a student must earn at least 700 out of a possible 1,000 points. The subjects include individual soldier skills, NBC warfare, first aid, dismounted drill, bayonet drill, hand grenades, squad battle drill, and weapons qualification.

One of the most interesting aspects of the curriculum is the emphasis the course places on the use of hand-and-arm signals. The number of commands that can be communicated by these signals far exceeds the number taught in our own army. And in the ROKA, a small unit's responsiveness to these commands is considered a critical determinant of its success in battle.

The 4th Battalion, 76th Infantry Regiment, the third of the division's training units, provides company and battalion collective training in patrolling and in Ranger operations. This battalion also operates live fire ranges in support of squad and platoon tactics and airborne ground training for the division's units.

Each infantry battalion in the division attends a two-week Ranger course every year. The first week of the course is devoted to a review of patrolling fundamentals, river crossing and mountain operations, and small unit tactics. The second week is used for platoon level operations in the division's area of operations. This two-week annual training period includes extensive night training.

Training for the division's nine infantry line battalions is designed to sustain a high level of rational readiness. The fact that a real, almost tangible threat exists is a critical factor in maintaining this readiness.

ROKA soldier on platoon attack course.

Accordingly, individual soldiers as well as units are frequently evaluated. In physical training, for example, soldiers are expected to attain a black belt status in Tae Kwon Do within 18 months after they enter service. The soldiers are also required to take a physical fitness test during each quarter of the year, a test that consists of pull ups, push ups, a 25-meter sprint, a 100-meter dash, and a 1,500-meter run. Each infantryman must also complete road marches that total 400-kilometers each year. These include a single 100-kilometer road march each year and one 10-kilometer forced march in one hour during each year.

NBC training is conducted monthly and includes a one-kilometer run while masked. Semi-annual NBC performance-oriented tests are administered, while each platoon-sized unit in the division takes part in an evaluated tactical exercise conducted in an NBC environment.

The infantry battalions also conduct a one-week field exercise four times each year using a reverse-cycle (night training) format. Each week, too, the battalions conduct 24-hour training sessions. Twice a year, each battalion takes part in a four-week field training exercise. Company and battalion tactical evaluations are held annually.

As mentioned earlier, each battalion commander is responsible for personally leading cadre training. The 26th Infantry Division's commander has ordered that at least 300 hours each year be devoted to this program. The units make extensive use of unit journals dating from the Korean War to reconstruct and to wargame specific battles. This stage of cadre training is often conducted indoors over detailed sandtables and is supplemented by the use of terrain walks over the actual scene of the battle under discussion.

Finally, a field exercise with troops is conducted to rehearse and to execute offensive and defensive operations. Often, the battles studied took place on terrain located in a unit's current area of operations, and this lends considerable realism to the exercise.

While it is difficult to measure the exact degree of esprit, motivation, and confidence that has been instilled in the soldiers of the ROKA 26th Infantry Division, those factors are very much in evidence in every aspect of their activities. It is reassuring to confirm that the spirit of the professional infantryman is being upheld by such a close ally.

Lieutenant Colonel Gary E. Woodring, an Infantry officer, is Logistics Management Officer, Army Section, Joint U.S. Military Advisory Group-Korea. He previously served as an advisor to the 42d Infantry Division, New York Army National Guard. He is a 1972 graduate of the University of Puget Sound.

Cohesion in a Non-COHORT Company

CAPTAIN MIKE HUGHES

Army leaders have long been interested in promoting cohesion at company level. Recently this interest has led to the Cohesion Operational Readiness and Training (COHORT) system, which keeps a group of combat arms soldiers together for a complete unit "life cycle" of three years. This COHORT effort is truly commendable, but the fact is that most combat arms officers will never be lucky enough to serve in or command a COHORT company. We therefore need to examine closely ways to develop close-knit teams in all company-sized units. There are several practical ways a commander can build a cohesive, proud, combat ready company that has many of the desirable characteristics of a COHORT company.

Obviously, a company commander is responsible for establishing goals, setting priorities, and charting the long-term direction for his men. Accordingly, he must cultivate a command climate in which each soldier will know he is part of a TEAM. The essence of effective leadership is building *winning teams* in our companies so they can be prepared to fight outnumbered and win. The commander must remind himself and his chain of command that all efforts must focus on reinforcing the value of teamwork, because it is a very important combat multiplier.

The way the daily business of a company is conducted has a tremendous effect on unit cohesion, even in such daily tasks as cleaning the motor pool or conducting "police call." Often an entire platoon or company can be observed simply going through the motions and wasting countless hours doing such jobs. A far better approach might be to assign motor pool clean-up or police call to a specific squad each week. This would enable a squad leader to employ his squad to accomplish a mission in which the results are obvious to everyone. An innovative platoon sergeant could add a touch of competition by determining which squad had improved the company or motor pool area the most during its week of clean-up duty. This is a simple, inexpensive way of building small-unit pride.

SMALL-UNIT INTEGRITY

In fact, I believe a company should always assign details and taskings in accordance with small-unit integrity. Setting up camouflage nets around a field mess site, operating a booth at a division's carnival, and building a barbeque pit are just a few examples of things I have seen small units do to develop pride and teamwork. A commander should look for these opportunities and should not always pick his best unit to do the job. The weak unit will grow stronger with exercise, just as a muscle will. And with proper coaching from the chain of command, the worst squad in a platoon may soon challenge all the others.

In addressing his subordinate leaders, a commander should use "we" and "our" instead of "I" and "my." In a truly close-knit unit, the soldiers, too, feel a sense of ownership; they are proud of their unit and they will refer to it as "ours."

The leadership style of a company's first sergeant, platoon leaders, and platoon sergeants is worthy of close attention. Team building is their business, too, and its success depends on their enthusiastic support. A cynical platoon sergeant, for example, must not be allowed to stifle a commander's efforts by tasking his soldiers piecemeal to do things or by constantly reorganizing his platoon just to keep his squads exactly the same size.

A commander might use meetings and classes to observe the degree of cohesion in his company: Do the platoon leaders seek input and feedback from their squad leaders? Do squad members sit together in class? Do they make an effort to help each other accomplish the task being taught? Is the chain of command *with* the soldiers? Indicators such as these may tell a commander something about the effectiveness of his team-building efforts. It also may be beneficial for him to know how his soldiers spend their off-duty hours. Do squads do things together or does everyone go his own separate way?

Without question, training is the most important thing any company does and commanders must strive to promote cohesion in both the planning and the execution phases of all training events. First, in the planning phase, a commander might ask himself how much the platoon leaders, platoon sergeants, squad leaders, and team leaders really contribute to the weekly training schedule. All too often the company commander lets himself be overwhelmed by events and ends up writing the company's training schedule at the last minute to meet a suspense to the S-3 or the battalion commander. (I know, because I have done it myself!) Including the chain of

command in the process is vital if training efforts are to be focused on team-building. Everyone in the chain must be made to feel like part of the team.

In the actual conduct of training, a commander might notice how many soldiers in the unit (squad, platoon, team) are actually present for the training. Is unit integrity being maintained, or are the soldiers being conveniently grouped into "orders" or "stations"? We must not let the small-unit team be dissolved for the sake of convenience.

The critique phase of training is also important. This is where the "coach" or trainer provides the team with valuable feedback. Indeed, a thorough, professionally done critique is the key to the mastery of tactical concepts at the small-unit level. The following are some suggestions for conducting a successful critique that will promote teamwork:

- Have the team members participate. Let them talk through the events and discover the teaching points for themselves.
- Do not rush. Let each soldier or subordinate leader speak his mind. Each must feel he is an important part of the team.
- Try to conduct the critique from a vantage point where you can observe the ground on which the action took place. If possible, walk back over the ground while discussing the specific teaching points. Try to relate the concepts to the terrain and let the soldiers see how it all works.
- Let the small-unit team practice it again until they do it right. This will help ensure that they really have learned the skill. (If the Green Bay Packers perfected the sweep through repetition, 1st Squad can excel in the movement to contact!)

Of course, there are countless other ways to promote pride and cohesion in a company. A smart company commander realizes that his company will be no better than its small-unit teams — his machinegun teams, fire teams, mortar gun squads, and squads. He must direct every effort toward developing the bonds that establish, train, and sustain cohesive small-unit teams.

COHORT companies do not have exclusive claim on cohesion. In the end, no formal program will ensure success in small-unit team building. Cohesion in *our* Army is up to *us!*

Captain Mike Hughes, a 1977 graduate of the U.S. Military Academy, is now attending graduate school at the University of North Carolina in preparation for a teaching assignment at the Academy. He previously served in several infantry assignments in the 7th and 2d Infantry Divisions.

First Class: An Attitude

MAJOR L.J. SKLENAR

Some time ago, Captain Michael T. McEwen proposed in INFANTRY magazine that the Army establish a combat fitness badge (CFB). The badge would be awarded to soldiers who achieved certain high scores on each of the events of the Army Physical Readiness Test (APRT), and who also passed a combat water survival test, qualified sharpshooter or better with their individual weapons, and completed a five-mile endurance run within a certain time limit. The badge would then have to be recertified annually. (See "A Fitness Badge," July-August 1983, p. 9.)

I haven't heard any more about this proposal, but it may be a good idea; it may provide the change of attitude necessary for soldiers to excel at physical fitness. I found out how important attitude can be a few years ago when I attended the U.S. Marine Corps Command and Staff College Course.

In this course, the students from the Marine Corps must take the USMC Physical Fitness Test (PFT), which consists of the pullup or chinup (20 is maximum score), the situp (80 is maximum), and the three-mile run (18 minutes or less). The overall PFT ratings are Fail, Third Class, Second Class, or First Class.

Each "sister service" student has the option of taking the USMC PFT or his own service's test. The dozen or so Army officers in the class usually choose to take the PFT instead of the APRT for reasons of interservice "cooperation" and peer pressure (you guess which dominates). In my class, many of the Army officers had come from Special Forces, Ranger, and airborne duty and expected to pass the PFT easily. Even though I hadn't done a pullup in more than ten years, I didn't expect much trouble passing it either. As commander of a company in an Army Reserve Special Forces group before attending the College, I had kept myself in condition to meet the same higher APRT standards my soliders had to meet to qualify for airborne or Special Forces training. On the day of the test, therefore, I did almost twice the minimum number of pullups for my age group and was pleased that my pushups and three-mile run time put me about halfway into the Second Class range.

Overall, we Army officers felt we had done well. Some even scored First Class (we had a couple of marathon runners and a recent Ranger Course graduate). Our attitude, for the most part, had been geared toward *passing*

the three events and the test, not toward making the highest possible score.

What I didn't expect was the cool reception the Marine officers showed toward any score other than First Class. Perhaps I should have expected it after I stood and watched almost all of the Marine officers in my study group (including the lieutenant colonel who was our faculty advisor) crank out, not ten or fifteen, but the maximum of twenty pullups with apparent ease. I also realized why they had been so conscientious about running five or six miles during the two hours that were scheduled for physical fitness and lunch each day.

From the colonel who was the Director of the College to the newest lance corporal who operated the audio-visual equipment, the Marines' attitude was to reach the First Class level. As I watched other Marine units at the base take their PFTs, I noticed that same attitude.

Given this challenge from the Marines, and without too much more effort, most of us from the Army moved our own scores into the First Class range on the end-of-course PFT. The only thing that had really changed was our attitude.

I don't propose that the Army adopt the USMC PFT. We are not the Corps. Also, while there is some value in having the Second and Third Class levels for the individual Marine to progress through on successive PFTs, the real function of these other levels is to promote the attitude to "go for it" and reach First Class. I agree with Captain McEwen that a single top category (say, Expert) should be the motivating factor, but his proposed combat fitness badge test might be more appropriate as Phase II of a two-phased program. Phase I would be to establish Expert scores for each of the three events in the present APRT and for the overall test. Soldiers who scored Expert on the APRT could then go for the combat fitness badge.

The CFB would not have the logistic requirements of the Expert Infantry Badge test, and it would have the advantage of applying to all soldiers. But how many soldiers can swim 25 meters even in a swim suit, much less in boots and fatigues? A person has to run only about a mile and a half to "test" his endurance, so the five miles Captain McEwen suggests, plus the swim test, plus the weapon qualification constitute a goal that would, indeed, be worth striving for — but in Phase II.

We would not need to wait until the Institute of Heraldry could design a new badge; we would not need to start a massive swim training program. A one-page change to the field manual on physical fitness training could establish scores for males and females, by age group, for Expert minimums in each of the APRT events as well as overall.

More quickly, organization commanders could establish local programs, specifying Expert minimums for members of their units (perhaps using the scores proposed in Figure I of Captain McEwen's article). They could award certificates and letters of commendation to soldiers who scored Expert overall.

Some soldiers always aim for the maximum score in all events of the APRT, but today there is no recognition factor between "maxing" the PT test and just passing it. The Army needs to reinforce the attitude that physical fitness is a good thing. The establishment of Expert scores for the APRT, coupled with some sort of certificate, would reinforce that attitude because many soldiers could attain the Expert level on the APRT.

The Combat Fitness Badge would be tough to achieve and a real distinction on the uniform, but let's implement Expert scores for the APRT now as Phase I of a program leading to the badge.

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Aerobics: In *My* Army?

LIEUTENANT RAYMOND L. NAWOROL

The Army has changed its approach to physical training. The word has been put out by the Chief of Staff of the Army and by the Soldier Support Center at Fort Benjamin Harrison to get the soldiers in top physical condition.

If you are in charge of PT in your unit, you may be asked any day now to come up with a better PT program for your unit. If so, you might consider aerobics — with music. (Your first reaction here may be "What? In *my* Army?" But physical training, to be effective, does not have to be boring and tedious.) A unit aerobics program can be designed to give the soldiers the best in cardiovascular and muscular development.

In approaching such a program, there are three things you need to

know: What the experts say about fitness; how such a program can benefit soldiers; and how the program operates.

Physical training experts have shown that during the first 30 to 35 seconds of a fast run (at a 7:30 per mile pace), the heart undergoes its greatest stress and therefore its greatest development. In addition, the experts agree that when a person trains for cardiovascular fitness, his heart rate should exceed 120 beats per minute and, to obtain the best results, it should go up to 160 or more when he runs for 25 to 40 minutes.

As for strength, muscular strength is often thought of as the need to spend long tedious hours in the weightroom. But the experts say that strength is developed by creating stress, or resistance, through a muscle's range of motion. Thus, to increase strength, all that is needed is to increase the stress on the appropriate muscles.

The key value of a unit aerobics program, when compared to programs in the civilian sector, is that it allows each soldier to exercise at a rate that will enable him to get the cardiovascular benefits and at the same time to develop the stress needed to gain muscular strength. Such a program also takes into account the fact that no two soldiers will work at the same rate; yet if they are motivated, all of the soldiers will derive the same cardiovascular and muscular benefits.

When you have to decide what to do in bad weather, while in the field, or coming out of the field after a rough ARTEP, you may find a unit aerobics program most effective. It can be implemented in the dayroom, the motorpool, the mess hall, an aircraft hangar, or any other facility, and with any size formation. It can be used when you want a change of pace from your present PT program or when you are concerned about leaving the tired soldiers behind while the "rabbits" run out front. Because everyone can participate, everyone can be motivated.

The sample program shown in the table is designed to work in a way that will allow your troops to develop their upper bodies in one exercise and lower bodies in the next, while their stomach muscles and cardiovascular systems are being worked in all the exercises. Breaks from the sequence are afforded by running in place or by using the side straddle hop.

NUMBER	EXERCISE	TIME (Seconds)
1	Side straddle hop	60
2	Running in place	60
3	V-up	30
4	Pushup	30
5	Squat thrust	30
6	Situp	30
7	Side straddle hop	60
8	Leg spreader	30
9	Mountain climber	30
10	Body twist	30
11	High jumper	30
12	Leg over	30
13	Running in place	60
14	Situp	30
15	Pushup	30
16	Leg circle	30
17	V-up	30
18	Side straddle hop	60
19	Mountain climber	30
20	Body twist	30
21	Eight-count pushup	30
22	Squat thrust	30
23	Pushup	30
24	Running in place	60
25	Repeat again if time will allow, or shorten the time intervals if you don't have enough time to do the program in 30-second intervals.	

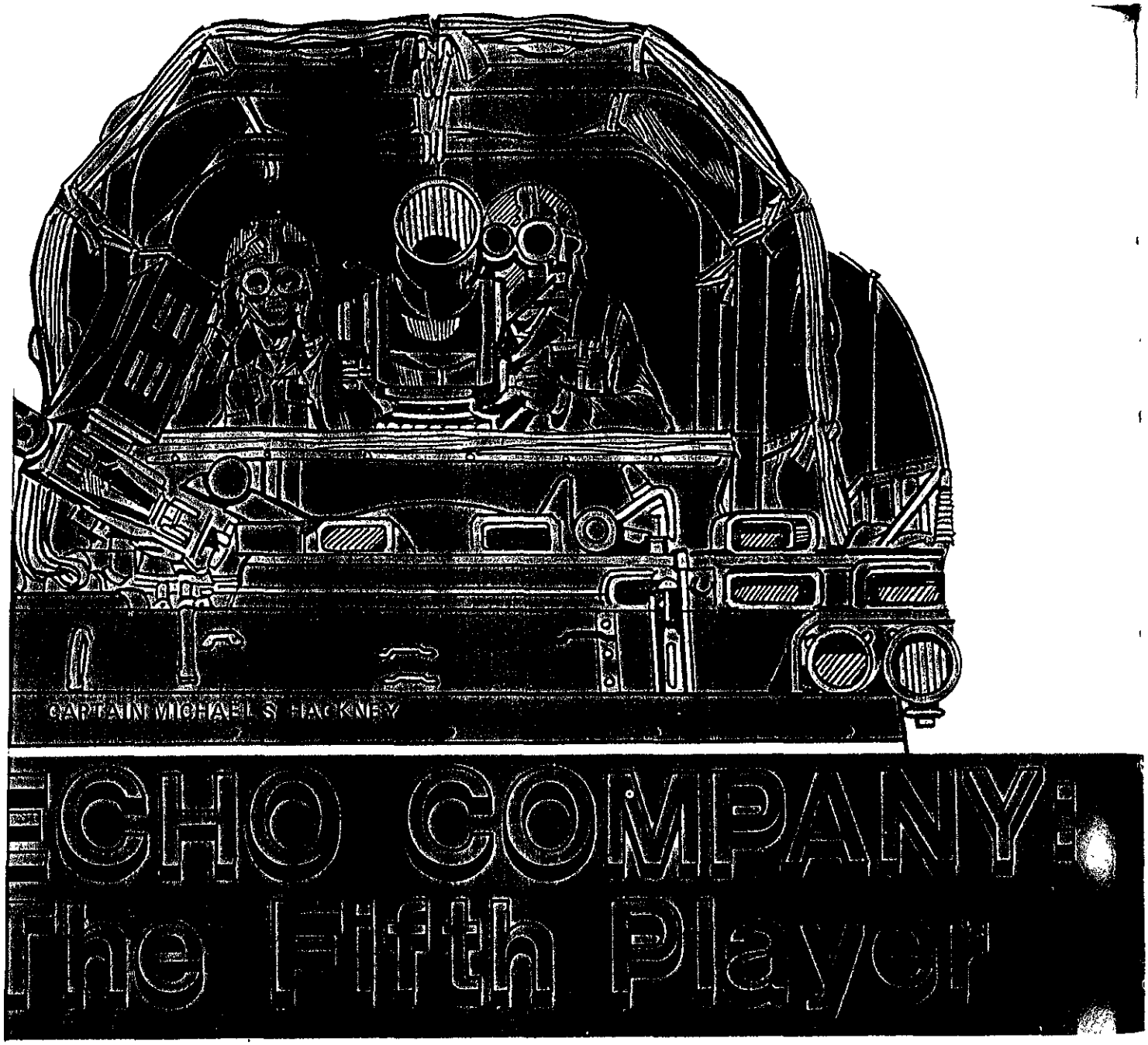
If you are pressed for time, an intensive 10 or 15 minutes of this program will get the heart rate up to a point at which positive benefits should result. The benefits of the program will be minimal, however, if you as leader do not adhere to seven necessary measures:

- Prepare your troops for the PT session by briefing them on the program and on your expectations for it. Be thorough and give the briefing in advance of the PT session. (Consult FM 21-20 on the proper warm-up and stretching exercises to be done before and after any PT program.)
- Use cassette tapes of preprogrammed music with a flavor that will fit the personality of your unit.
- Use a formation that will allow your troops to see you perform the exercises.
- Be sure to keep track of the time.
- Watch to make sure the soldiers perform each exercise correctly and in a manner that allows for the most repetitions.
- When you perceive that the soldiers are lagging behind, use the side straddle hop or run in place to regain control. Then continue the program.
- Lead by example and set the pace. You must be able to perform each exercise correctly and must continue to perform when the exercises become difficult.

If the unit leaders are committed to physical training, this sample program will work for any unit — infantry, armor, medical, or headquarters. It takes only 15 minutes, but if you go through it twice, the additional work will ensure greater benefits.

The important points about a unit aerobic program is that it develops the soldiers' cardiovascular and muscular systems; it can be done anywhere; it allows the option of a short or a long workout; it allows the leaders to emphasize certain exercises more than others; and it gives the soldiers a taxing workout in which they are constantly moving. Most important, this program is a physical training vehicle that can help ensure our soldiers are ready for combat.

Lieutenant Raymond L. Naworol, when he wrote this article, was assigned to the U.S. Army Chemical School at Fort McClellan, Alabama.



ECHO COMPANY: The Fifth Player

The current employment of the J-series mechanized infantry battalion is limited by the absence of a clear doctrine for employing its new fifth player — the antiarmor company (Company E) — more commonly known as Echo Company. Many infantrymen therefore do not fully understand how to use their antiarmor assets.

As commander of a consolidated antiarmor company in the 25th Infantry Division (Mechanized) — and a "veteran" of two trips to the National Training Center (NTC) at Fort Irwin — I found out a great deal about the combat capabilities of that company.

What I offer here is not proposed doctrine. It is rather an attempt to share my perspective on the subject, a perspective gained from experience.

The Division 86 antiarmor company differs greatly from the combat support company's antitank platoon. Essentially, the platoon headquarters has been replaced by the combat support company headquarters, and the antitank sections have been organized into three platoons, each with a platoon leader and a platoon sergeant. Each platoon has four ITVs and one M113. In addition, each rifle company in an M113-equipped battalion has an ITV section (two ITVs). (Companies that have the Bradley Fighting Vehicle do not have an ITV section. Thus, the BFV battalion has only 12 ITVs compared to 23 for M113-equipped battalions.)

In many of the battalions still equipped with M113s, the rifle company antitank sections are attached to Echo Company, giving it a total of 20 M901 Improved TOW Vehicles (ITVs). Therefore, two of its platoons have six ITVs each and one M113, while its other platoon has eight ITVs and one M113.

Echo Company, according to TT 71-2, The Mechanized Infantry Battalion Task Force, can be employed in

various ways: It can be employed "pure" to provide centrally controlled heavy antiarmor fires; its antitank platoons can be attached to company teams when the factors of METT-T (mission, enemy, terrain, troops available, and time) so dictate; or it can be task-organized with mechanized infantry and armor platoons to form a fifth company team for the battalion's operations.

In accomplishing these missions, Echo Company has certain abilities — and certain limitations.

Brigade Task Organization

The allocation of ITV assets begins at the brigade level. In addition to determining how his battalions will be organized for combat, the brigade commander performs a METT-T analysis to determine the distribution of his ITV assets. This is particularly crucial for those brigades in which battalion TOW assets have been consolidated in Echo Company.

Simply categorizing tanks and ITVs as "tank killing systems," then dividing the number of each accordingly, is an unrealistic appraisal of the capabilities and limitations of these two systems. The ITV's advantages over a tank are its accuracy, its killing power, and its range of nearly four kilometers. Its limitations are less armor protection, slower cross-country speed, a relatively slow rate of fire, and an inability to fire on the move.

An armor-heavy brigade with two tank battalions and one M113-equipped mechanized infantry battalion has a total of 116 tanks and 20 ITVs. (The brigade also has three additional ITVs in each battalion, which are part of the scout platoons. As these assets will almost always remain organic to their respective battalions, and as their missions are substantially different from the mechanized infantry and armor roles, these scout ITVs are not included in the battalion totals.) On the other hand, an infantry-heavy brigade of two mechanized infantry battalions and one tank battalion has 58 tanks and 40 ITVs.

The brigade commander determines how many (if any) ITVs will be allocated to the tank-heavy task forces. This number is dictated by the organization of the task forces (the projected mix of tank and mechanized infantry companies) and by the mission (the task force mission and terrain that is most appropriate for the ITV).

ITV sections should not be cross-attached, as this would nullify the advantage of multi-section employment. Any inter-battalion ITV cross-attachment, therefore, should be made by ITV platoon. The obvious benefit of this is the command and control aspect of having a trained, ITV-qualified platoon leader control the employment of a unit's antiarmor assets for his attached commander.

For an armor-heavy brigade, in which the ITVs are consolidated, the brigade commander may augment an armor task force with a six-ITV platoon, or he may direct that the heavy ITV platoon (eight ITVs) be divided with four ITVs going to each armor task force. One group of ITVs would be under the control of the platoon leader, the other under the platoon sergeant.

Battalion Task Organization

The decision on whether to use Echo Company pure, as a company team, or to attach its ITV platoons to the maneuver companies is contingent on an in-depth METT-T analysis. For both offensive and defensive operations, the commander must determine whether the terrain will allow freedom of maneuver for five company teams. In many cases, either because of constricted space or restricted mobility corridors, the battalion commander may elect to use just the four maneuver companies in his maneuver plan.

If he should decide not to use Echo Company as a maneuver element, the commander must determine how he can best use his ITV assets. In many cases, he will employ the company pure, with a mission of providing general support for the battalion. In so doing, he retains centralized control of the ITV assets, which best ensures a comprehensive, coordinated antiarmor fire plan throughout the battalion's sector. The Echo Company commander obviously must fully understand the battalion commander's intent and must be tactically capable of implementing the ITV plan in conjunction with that intent.

The Echo commander, with the battalion commander and the S-3, formulates an antiarmor fire plan and executes it through his platoon leaders, controlling the platoons' movement to alternate firing positions and engagement positions. Sometimes the terrain or other requirements will not allow the Echo Company headquarters to control or execute the antiarmor fire plan effectively. In these situations, the battalion commander should augment the maneuver company teams with the ITV platoons, making the respective company team commanders responsible for an ITV platoon's tactical employment and fire control.

Unfortunately, as with any attached unit, the ITV platoon attached to a company team often will be forgotten in the heat of battle while that team commander maneuvers his primary assets. A battalion commander should certainly consider this potential for neglect when he organizes his battalion for combat and should be fully aware of his subordinate commanders' ability to use an ITV platoon properly and effectively.

The use of Echo Company for a given mission does not depend totally upon a tactical analysis; it requires a logistical analysis as well. The current battalion organization does not have the resources it needs to support five maneuver teams equally. The standard rifle or tank company's recovery section, medical section, and mess section with water trailer are not directly available to Echo Company, whether it is employed pure or organized as a company team. If the battalion support resources have been severely reduced because of maintenance or combat losses, the problem becomes particularly acute.

THE OFFENSE

When Echo Company is employed pure in the offense, in

both a movement to contact and a deliberate attack, the ITV platoons are maneuvered immediately behind the lead company teams on the axes of advance for the battalion. As the lead company teams move forward, the ITV sections rotate — one overwatching while the other continues to move behind the company team. The Echo Company commander controls the movement of his ITV platoons so that mutual support is maintained between the axes of advance. By observing the company team locations and monitoring them through their reports over the battalion command net, the Echo commander starts, stops, and maneuvers his ITV platoons to support the battalion advance.

Movement to Contact

In a movement to contact, as the battle is joined and the initial enemy locations are determined, the battalion commander directs the orientation of his force and issues the battle orders necessary to overcome his opponents. The dispersion of the ITV platoons on the battalion's axes of advance makes it easier for the Echo commander to respond quickly and to bring antiarmor fires on the enemy. As the situation develops, the Echo commander can maneuver his ITV platoons so that all of them can fire on the opposing force.

This gives the battalion commander a unique flexibility: He can maneuver Echo Company's assets, much the way he would a reserve force, to provide the firepower needed to assist his units in contact. This allows him to keep his other company teams on their primary axes of advance and to maintain the initiative while his units in contact develop the situation.

Deliberate Attack

The employment of Echo Company for a deliberate attack is similar to that for a movement to contact. The ITV platoons, again dispersed on the battalion's axes of advance, trail the lead company teams. To achieve the best stand-off ranges for the ITV, the Echo commander should conduct a careful terrain analysis of the objective to determine the probable enemy dispositions (if they are unknown). His analysis should take particular note of the terrain that allows the enemy his best routes either to withdraw from or to reinforce the objective.

Once this analysis has been made, the positions — both primary and supplementary — from which the company can overwatch the battalion assault on the objective should be determined. These positions, ideally, should provide effective fields of fire to the enemy positions from a minimum distance of 2,000 meters, and should also allow the ITV platoons to engage any enemy forces that seem intent on reinforcing or withdrawing from those positions.

When the terrain permits, an ITV platoon should be positioned to cover these enemy routes at the longest engagement range possible, even if its primary firing position does not allow the platoon to engage the objective area directly.

After crossing the line of departure, the Echo commander maneuvers the ITV platoons much the way he does in a movement to contact — to overwatch the initial movement of the lead teams. As the lead maneuver teams approach the objective, their axes or routes of advance may not go through the ITV platoon's designated objective overwatch positions. Therefore, the ITV platoons will have to leave the "cleared" area of march that the lead teams have passed through and move on their own to their objective overwatch positions. This is a critical maneuver for the battalion commander, because moving the ITV platoons through terrain that has not been cleared risks his ITV assets.

Sometimes, the battalion commander can use one or more mechanized rifle platoons to provide security for the ITV platoons and to clear their overwatch areas and access routes. At other times, the combat power of the battalion, or the delay that would be involved in getting a mechanized rifle platoon back to its company team for the attack, may make this kind of protection impossible. Accordingly, the ITV platoons may have to clear and seize their overwatch positions unassisted.

During the advance, the depth of the objective or a repositioning of the enemy forces can force the Echo commander to move the ITV platoons to different overwatch positions, and alternate positions must also be planned to allow for such a contingency. Echo company accomplishes this mission much the same way it conducts a movement to contact mission, with the ITV platoons displacing to identified locations on order, and in accordance with a preplanned event-triggered execution matrix.

In the attack, the ITV platoons cannot limit themselves to a narrow range of targets. Any point target that brings effective fire against friendly forces, and that cannot be destroyed by some other indirect or direct fire means, is a TOW missile target. Enemy bunkers, dismounted ATGM positions, and helicopters — as well as tanks, personnel carriers, air defense vehicles, and artillery positions — are all appropriate ITV targets. Because of the enemy's capabilities, however, coupled with the availability of ammunition, a stringent delineation of target priorities may be necessary. If the enemy has a large number of tanks on the objective, or if he is expected to counterattack with a heavy armored force, then the battalion commander should specify any target limitations for the ITVs.

Consolidation

Once the objective has been seized and the primary elements of the attacking force have begun to consolidate, the ITV platoons should begin moving to their objective positions. In many cases, especially if the enemy resistance had been tough, the ITVs will be low on missiles

ITV commander checks line of sight through the periscope.

or out of them entirely. It is therefore smart, whenever possible, to have an ammunition resupply truck under the control of the Echo executive officer or first sergeant ready to move forward from the combat trains to a designated resupply point. This movement must be done rapidly to allow the ITV platoons to re-arm quickly enroute to their consolidation positions. If time and distance factors do not allow re-arming enroute, then a designated section from each platoon should move to a re-arm position and load as many missiles as it can carry and deliver them to the other vehicles in the platoon.

As in any defensive situation, terrain permitting, the long range fires of the ITV platoons are critical to the successful consolidation of the objective and to the defeat of the expected enemy counterattack. The Echo commander must conduct a METT-T analysis to this end. Once the objective has been seized, he must position his ITV platoons, fully rearmed, where they can best defend against the enemy's probable avenues of approach.

THE DEFENSE

The defense, by its very nature, offsets many of the limitations and vulnerabilities the ITV faces in the offense and also makes the most of its capabilities and its strengths. For one thing, the options for employing a battalion's ITV assets are significantly more varied in the defense than in the offense. (For purposes of this discussion, it will be assumed that a battalion task force is operating as part of a division main battle area force.)

A battalion's defensive mission and the terrain over which the battle will be fought are the primary factors a battalion commander will consider in determining his ITV task organization. For a defend-in-sector mission, in which centralized ITV fire control is desired, a battalion commander can choose to keep his Echo assets pure. He can better control the ITV fires on specific engagement areas and, through the Echo commander, can quickly maneuver the ITV platoons to overwatch or defensive positions to cover the movement of his company teams from position to position.

This same responsiveness is present when the battalion is defending in place. The mobility of the ITV platoons gives the Echo commander a great deal of flexibility in responding to the situation as the battle develops. As in the offense, this ability of the Echo platoons to maneuver also allows a battalion commander to deal with an enemy force without a major repositioning by his company teams or a premature commitment of his reserve.

When factors of METT-T do not favor a centralized retention of ITV assets, a battalion commander can attach an ITV platoon to another company team and employ the remaining ITV assets as an Echo Company (minus). Or the battalion commander can parcel out his ITV assets and make Echo a company team.

In the latter configuration, an Echo team can be employed the same as any other company team. (A task organization of five company teams, in fact, gives the battalion commander more options: He can position four elements forward with one in reserve, or he can place three company teams forward, hold one to give his position depth, and use the fifth in a reserve role.

When Echo Company (minus) is employed as a company team, with a mechanized infantry rifle platoon and on occasion with a tank platoon as well, the Echo team should be positioned where its assigned sector or battle position allows it to cover as much of the primary antiarmor kill zone (AKZ) as possible.

Ideally, the AKZ should be along the enemy's primary mobility corridor at a range of 1,500 to 3,800 meters from the company team positions, but these ranges will not always be attainable. (The minimum AKZ should extend

from 1,500 meters out to the greatest possible effective range.) Whether the ITV platoons are under centralized control or not, the AKZ must be further subdivided into company team and ITV platoon engagement areas to achieve effective fire control. The platoons must not duplicate targets any more than necessary.

Between the range of 2,000 and 3,700 meters, the ITVs engage the enemy. As the enemy comes in to a range of 2,000 to 2,500 meters, the tank platoons engage these targets. As he closes to Dragon range, the Dragons and tanks maintain the fight.

Two or three ITV sections should be positioned in depth 1,000 to 1,500 meters behind the forward elements. These ITVs can then provide continuous fires while achieving the best stand-off ranges against any remaining enemy forces that may try to penetrate the main defensive line.

As the enemy closes to within 1,500 to 2,000 meters, the forward ITVs should begin moving to their alternate positions to maintain their range advantage and to reduce their close-in vulnerability. If the battalion intends to hold its forward position, lateral movement by the ITVs to alternate firing positions becomes essential, but a decision to move to those positions before the enemy closes to 1,500 meters must be carefully weighed. For example, it takes three or four minutes for an ITV section to move to an alternate position 300 meters away — longer if the route is not direct or easily traversed. The loss of its firepower for that amount of time can be critical, particularly if more than two sections are displacing. Of course, the survivability of the ITV and its crew must be maintained, but any significant loss of ITV firepower from the AKZ is potentially detrimental to the battalion's success. Unless the forward position is under ATGM or accurate indirect or direct fires, ITVs should not displace to their alternate positions until the enemy has closed to within a range at which tanks can take over — 1,500 to 2,000 meters.

If the mission is to defend in sector, the decision to move to alternate positions must be made before the enemy closes to less than 2,000 meters, and the movement order must be well into its execution stage by the time the enemy reaches 1,500 meters. (Experiences at the NTC have clearly shown that if a commander waits too long to give the appropriate orders, or if the task force fails to move quickly enough, a task force will be overrun or the enemy will be so close behind that he will literally occupy the next position at the same time as the task force.)

By positioning two or three ITV sections in depth, a battalion task force provides itself an overwatch element for any movement it must make from the forward defensive positions. Regardless of the task organization, the ITVs should be the first element to displace to alternate positions. There are several reasons for this: The ITV's longer range allows better overwatch for the other teams; once displacement is triggered, the enemy is usually within effective friendly tank fire range; and the ITVs are much more vulnerable to enemy tank and ATGM fires, given their comparative lack of armor protection.

One real Echo Company limitation, whether it is employed as a team or pure, is its lack of a fire support team (FIST). Thus, when necessary, the Echo commander must do the detailed time-consuming fire support work that a FIST chief normally does.

VERSATILE

Despite the lack of a FIST, the antiarmor company is a versatile unit. This versatility adds tremendously to the potential combat effectiveness of the Division 86 mechanized infantry battalion task force. This is particularly true for the M113-equipped units that are not scheduled to change over to Bradley Fighting Vehicles in the near future. These units must rely solely on the ITV as their long-range tank killer. It is therefore important for a commander to make the most of his Echo Company.

For the BFV battalion task force, particularly when it works with tank companies that are equipped with the Abrams, the ITV is not as crucial to its long-range combat power. Still, the primary mission of the ITV platoon is to augment the task force's fires with the long range fires of the TOW system — a singular task that the BFV and its infantry squad are not expected to perform, given the five-missile capacity of the BFV. Even with the greatly increased armor killing ability of the BFV task force, though, the task organization options for using his ITVs are as important and potentially favorable to a BFV task force commander as they are to an M113 task force commander.

The lack of a battalion task force operational doctrine that incorporates a "how-to" for Echo Company reduces the potential combat effectiveness of our Division 86 units. This void is now being filled through unit initiative, but the result is an obvious lack of inter-unit standardization. The specific doctrinal roles an Echo Company is to play in combat must be clearly established. If an active maneuver role is to be its primary mission, then the battalion logistics and fire support capability must be broadened to adequately support the company in this role.

Until an antiarmor system is fielded to replace the TOW, that weapon will continue to be a battalion's mainstay for long-range antiarmor fires. When it is mounted on an ITV, its accuracy is complemented by better survivability and mobility. The ITV system, integrated into a combined arms fire plan, makes a task force's long range fires far more lethal.

This firepower, combined with the maneuver command capability of an Echo Company headquarters, is a critical combat force. But that force must be employed properly by brigade and battalion task force commanders if it is to succeed on the battlefield.

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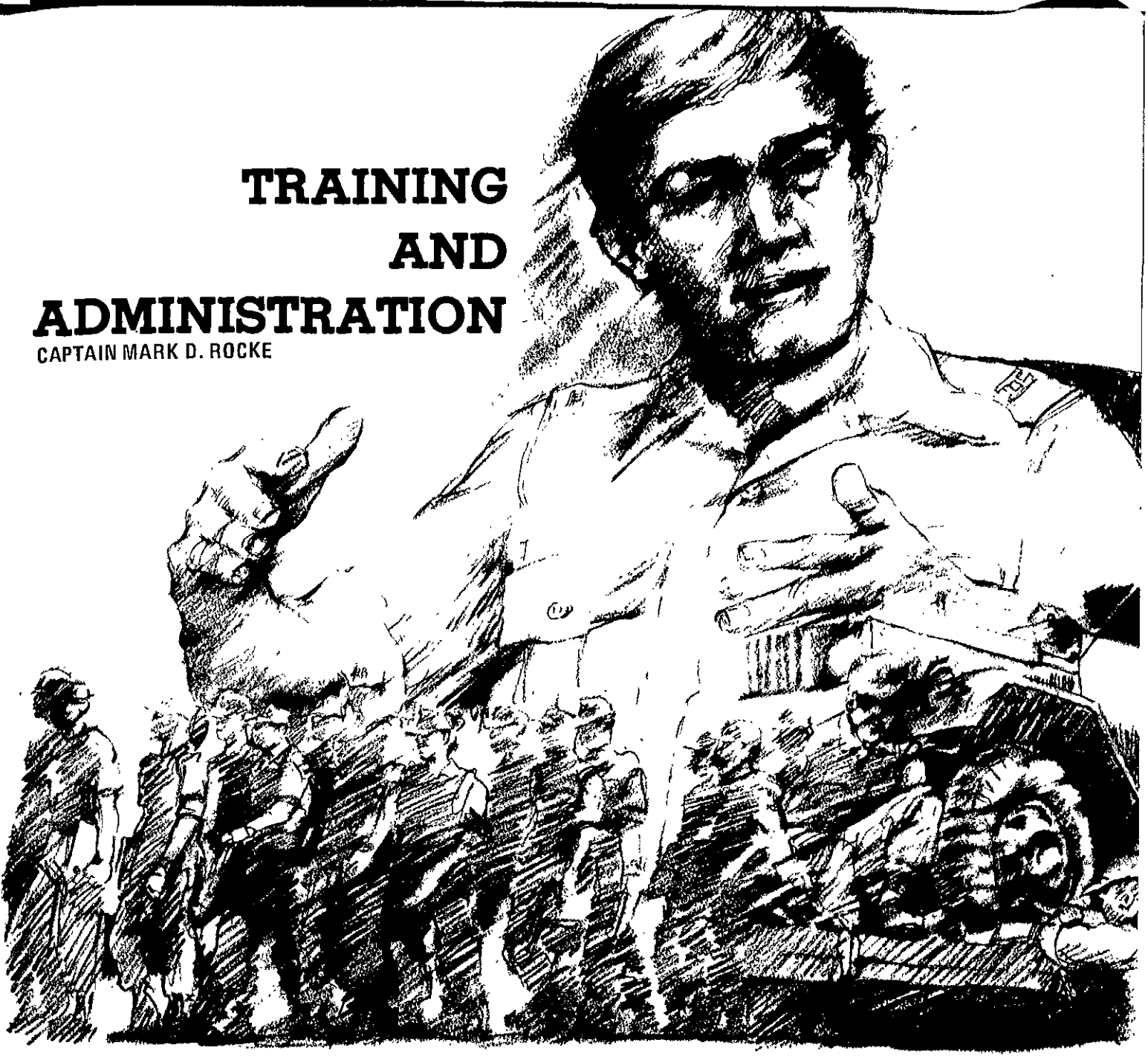
TRAINING AND ADMINISTRATION

CAPTAIN MARK D. ROCKE



The single most important responsibility of a company commander is to train his soldiers to fight and win on the battlefield. His primary mission, as mandated by the United States Army, is to achieve and maintain combat proficiency through collective and individual training. But combat proficiency results only from an interdependence between effective training, administration, and maintenance. Of these three, administration is the most time consuming. In fact, a recent survey conducted in the 24th Infantry Division concluded that its company commanders spent as much as 59.4 percent of their time on administration, 27.5 percent on training, and 8.6 percent on maintenance. A survey in other divisions would probably reveal similar figures.

Given these statistics, a commander must develop a comprehensive, realistic approach to unit administration so that it will not interfere with training. In addition, he must fully understand his responsibilities for choosing and planning training tasks and for effectively managing his limited training resources. At the same time, of course, his unit must conduct a systematic maintenance program that will insure the availability of organic equipment for training, and operators, crews, mechanics, and supervisors must be trained in the full scope of organizational maintenance.

Clearly, if a company commander expects to concentrate on training his unit, he must first control the administration of it. And if he expects to get administration under

control, he must first understand its unique requirements.

Company level administration consists of the following major areas:

- Personnel actions.
- Additional duties.
- Commodity area management (arms, supply, NBC, communications, and motor pool).
- Army programs and campaigns.
- Details, guards, and taskings.
- Billet maintenance.

Personnel actions consist of things the commander must do to take care of the soldiers, noncommissioned officers, and officers assigned to his unit. This includes counseling, awards, efficiency reports, and administrative procedures for elimination or reduction. It also includes promotion boards, judicial and non-judicial punishment, dependent counseling, and family assistance programs.

Additional duties are the mission, administrative, housekeeping, and personnel-related responsibilities assigned to officers in addition to their primary duties. Additional duty officers are commonly viewed as being special staff officers who assist the commander in particular functional areas. Although each of the duties contributes to the overall accomplishment of the command's mission, together they also place a large supervisory burden on the commander.

(The number of additional duties varies. In a 1979 study performed by the Army Research Institute, 29 common additional duties were identified. *The Army Officer's Guide* identifies 41 such duties, while a 1982 24th Infantry Division workload assessment revealed that the number of perceived duties ranged from 54 to 81.)

Supervising the officers when they perform their assigned additional duties is critically important to a commander because many of these duty areas are inspected during the Annual General Inspection (AGI). The results of this inspection are generally considered an accurate and lasting assessment of a unit's organizational efficiency. As a result, the amount of time and energy spent in the performance of additional duties usually increases as the date for the unit's AGI inspection comes closer. (The same ARI study mentioned above concluded, however, that additional duty requirements were difficult to determine, poorly managed, and over-emphasized as an indicator of both unit readiness and officer efficiency.)

Much like additional duties, commodity area management requires an excessive amount of time for record keeping, paperwork, and adherence to rigidly defined, inflexible procedures. While these tasks are normally supervised by the executive officer, the respective commodity chiefs, and the additional duty officer, the commander bears the ultimate responsibility for performance and must dedicate a good deal of his time to supervising them. Moreover, by regulation, many inspections and inventories must be conducted by the commander himself.

The commander's most significant and time consuming responsibility in managing commodities is property accountability. The following summary from a recent book by Colonel Dandridge Malone shows the extent of this responsibility:

In the least complex and most humble of fighting companies in our Army today, there are 169 men. For each of these men, there are 66 items of equipment and clothing that belong to him. There are at least 20 items given to him by the company. And the company itself has 866 more items of equipment and weapons that the 169 men use when the whole unit fights.

As the hand-receipt holder for all of the items listed on the unit property book, the commander is directly responsible for this property. He bears supervisory responsibility for the Common Table of Allowances (CTA) 50-900 property as well as all of the items that make up the soldiers' personal clothing bags. The rational and prudent commander will therefore adhere to all of the specified procedures and will develop appropriate internal programs to safeguard this property. It is an understatement to say that the military organization is unforgiving toward the commander who cannot accurately account for the installation, organization, and CTA property under his control. Another time-consuming activity in this regard, and one of much larger proportions, is the necessity for a company commander to retrain new key leaders and commodity chiefs when their predecessors are reassigned unexpectedly.

Army programs and campaigns include such things as the Lifestyle Weight Control Program, the Hometown News Release program, the Combined Federal Campaign,

SUBJECTS IN POLICY BOOK

Junior Officer/NCO Development
Enlisted Evaluation Reporting
Performance Counseling Program
Unit Awards/Incentive Program
Physical Security
CTA-50-900 Storage
Key Control
Unit Leave and Pass Policy
Reenlistment
Physical Training
Athletics and Recreation
Open Door
Equal Opportunity
Sexual Harassment
Drug and Alcohol Abuse
Hometown News Release Program
Army Suggestion Program
Savings Bonds
Dayroom Policy
Restriction
Contraband Items
Inprocessing Checklist
CTA-50-900 Display
Room Display
Cold Weather Procedures
Accountability and Security of Commodity Areas
NBC Room
Arms Room
Motor Pool
Communications Room
Supply Room

Figure 1

Savings Bond drives, and Army Emergency Relief activities. Local fund drives for divisional and regimental locations must be supported as well.

Details, guards, taskings, and billet maintenance are also necessary, and they, too, take away from training time.

The complexity of the company commander's managerial problems is made even more intense by the organizational environment in which he functions. Perhaps the most distinguishing characteristic of a military organization, particularly an infantry battalion, is the premium it places on performance. According to Field Manual 22-100, a commander is "responsible for everything his unit does or fails to do." The assignment of this personal responsibility must be viewed in relation to the duty concept of the professional officer, which is both a baseline value and a time-honored tradition. In simplest terms it means that the mission will be accomplished regardless of personal cost or preference.

To accomplish the mission — to keep abreast of the broad scope of activities in a unit on any given day and to influence these activities — a commander must manage his time judiciously. (A great deal of that time, unfortunately, has to be spent in dealing with telephone calls, impromptu meetings, minor crises, and serious incidents. In addition, he must deal with shifting demands, competing priorities set by higher headquarters, and time-sensitive requirements.)

What a commander really needs is a model to guide him in approaching his administrative and training tasks. I developed such a model while I was serving with the 82d Airborne Division and have since adapted it for use in the 2d Battalion, 75th Infantry (Ranger). The two-part model includes a policy book and a company training management book that any company commander can use to develop his own personal approach.

(Although this model does not independently address maintenance, its underlying logic can be applied to the establishment of an effective maintenance program that will insure the availability of organic equipment for training.)

The policy book contains 31 policies, which were developed over my 18-month tour of company command in the 2d Battalion, 505th Infantry. The book evolved from the application of some basic leadership principles in a sequential process. A list of the topics included in this book is shown in Figure 1.

To develop a similar book of his own, a commander should first determine what policies his unit needs by thoroughly analyzing its mission. Then he should develop the policies, publish them, distribute them, and enforce them. (One of the problems is that higher levels of command place various requirements upon companies in the form of regulations, field manuals, technical manuals, bulletins, circulars, and messages. And these written requirements are often open to a wide variety of interpretations.)

By laying out the procedures to be followed for a wide range of administrative activities as early as possible after assuming command, however, the commander can avoid answering the same questions again and again. At the same time, he can instill discipline in his unit because his procedure will demand that his people, even in his absence, reach the desired level of performance.

In an attempt to extract the requirements for my company and to put them all together, I developed a matrix that I call "Garrison Training Tasks and Administrative Responsibilities," a portion of which is shown in Figure 2. The matrix, which is part of my policy book, is used as a checklist for measuring progress in each area. It is also

GARRISON TRAINING TASK REQUIREMENTS
AND ADMINISTRATIVE RESPONSIBILITIES

TASK	D	W	M	Q	S	A	OTHER	REFERENCES/REMARKS
Opportunity Training	*							
Opportunity Training Evaluation		*						
Equal Opportunity						*		AR 600-21
Human Self Development				*				AR 600-30
Alcohol and Drug Abuse					*			AR 600-85
Urinalysis/Drug Detection Teams							*	AR 600-85, As Reqd.
Organizational Effectiveness			*					AR 600-76
Check Cashing					*			CSA Directed 210-60
Command Information						*		AR 360-81
Benefits of an Honorable Discharge						*		AR 350-21
Electronic Security								
The Army Saf...								

Figure 2.

COMPANY COMMANDER'S
TRAINING MANAGEMENT WORKBOOK

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Figure 3.

valuable in delegating specific responsibilities to members of the company chain of command.

The commander who understands the requirements that have been placed on his unit and uses his policy book to conduct periodic internal reviews will be making great progress toward controlling administration so that he can concentrate on training. By clearly defining for the members of his command both their individual responsibilities and the effect of their performance on the group, he will also be making them feel like they're contributing to the overall goals of the organization. The matrix helps guide the company to a unity of effort, which, in turn, develops cohesiveness.

Clearly, there are no hard and fast rules to define the scope of a company policy book. A commander can include as many or as few policies as he chooses, provided he has addressed the topics that are mandated by regulations and directives. The key point is that the establishment and publication of policies provides a point of reference by which a fair and equitable command climate in the unit can be ensured.

The success of the book will depend in large part on the way a commander incorporates the views of his subordinates into the process of formulating the company's policies. In addition, the announced policies must be rational and flexible and must be updated periodically to meet the needs of the unit and to include any new guidance from higher headquarters.

The second part of the model is a company training management system, which I prepared (with guidance from my battalion and brigade commanders) for inclusion in a workbook designed to help unit commanders plan and execute training. The workbook's table of contents is shown in Figure 3.

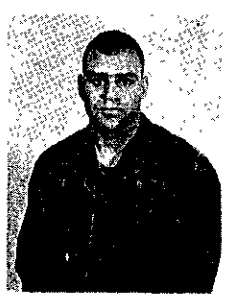
(The original workbook includes a cover letter in which the brigade commander spelled out his training goals; a company commander's training management guide; a list of required training references; company mission and task analysis lists; and a training task requirements matrix. Copies of these documents, as well as copies of the other documents mentioned in this article may be obtained from the Editor of INFANTRY Magazine.)

This system forces a commander to analyze his company's broad training mission and then to delineate the specific tasks to be accomplished, along with how often each needs to be done.

In an environment in which it seems that everything is first priority, the training management book provides a simple, pragmatic approach to determining objectives and priorities for the use of a unit's resources. The commander who applies such a system will be forced to actively direct the training of his unit and, in so doing, work to develop combat proficiency, which is his primary responsibility.

If the commander applies sound managerial techniques, he can improve his unit's administrative performance and also limit the amount of time he must spend dealing with it. In the process, he will also improve the organizational efficiency of his unit, boost morale, and eliminate the constant tension within the unit between expectations and realities.

Ultimately, he will be able to concentrate on implementing high-quality, well-resourced training programs that will develop his unit's proficiency and ensure its success on the battlefield.



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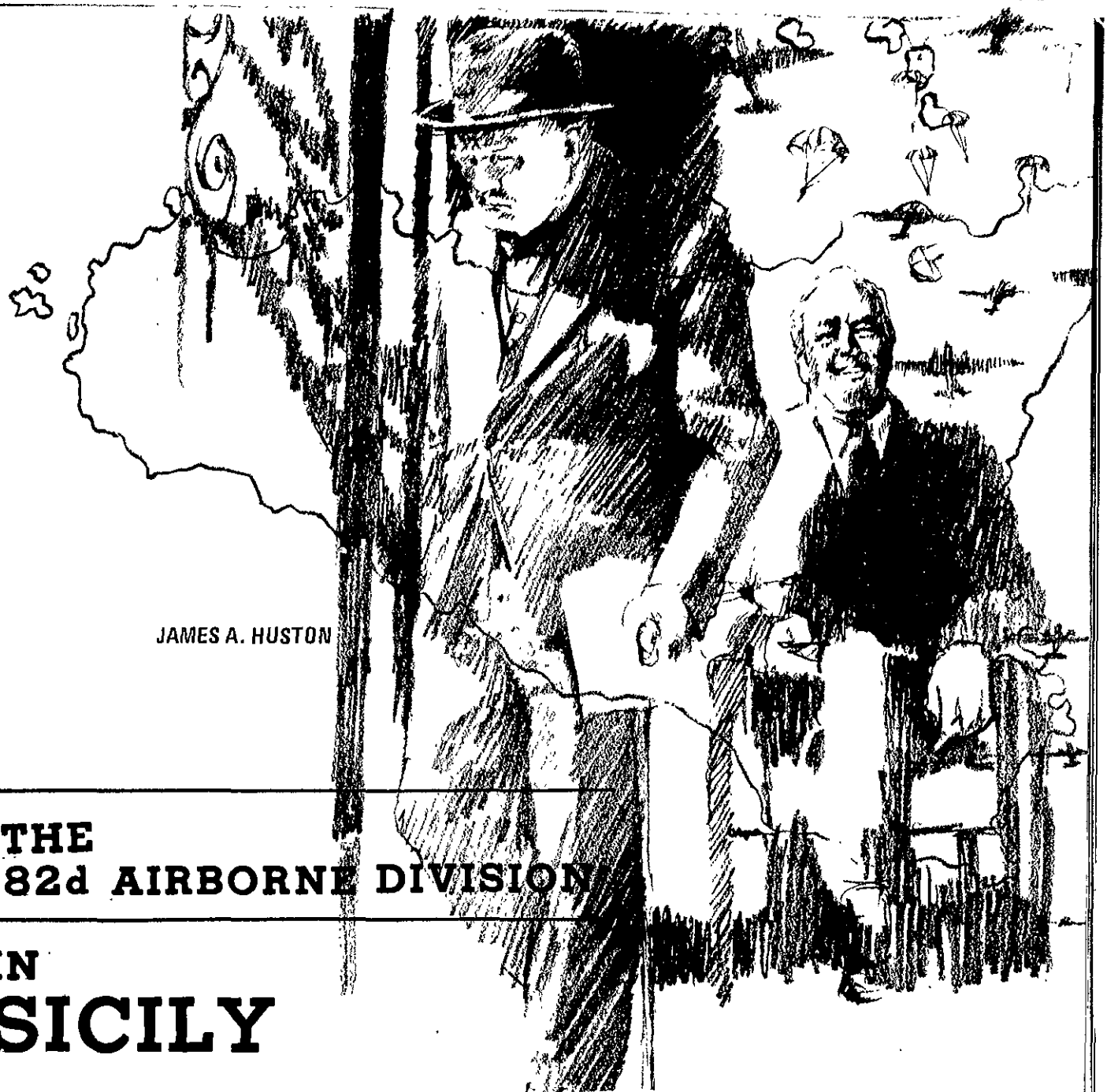


JAMES A. HUSTON

THE 82d AIRBORNE DIVISION IN SICILY

In a conference at Casablanca in January 1943, President Franklin D. Roosevelt and Prime Minister Winston S. Churchill accepted the recommendation of the United States-British Combined Chiefs of Staff that the next allied objective in the Mediterranean after the North African campaign had been concluded should be Sicily. The target date was "the period of the favorable July moon."

The objective might have been Corsica, or Sardinia, or perhaps Crete in the Eastern Mediterranean. Corsica and Sardinia were more lightly defended and might have been springboards for an invasion of Italy in the vicinity of the Po Valley — with a view to "sawing off" the Italian boot instead of fighting up its entire length — or for an earlier invasion of southern France. But it was none of these. It was Sicily, because the military chiefs and the national leaders concluded that this would involve less risk to the shipping needed for the assault waves and follow-on support; that the control of Sicily would be an important advantage in the security of sea lines of communication through the Mediterranean; that its airfields would be more useful in the further bombing of Italy; that it would provide a convenient jumping off place for an invasion of the Italian mainland; and that its capture would be decisive in persuading Italy to leave the war.

Four months after the Roosevelt-Churchill conference, the 82d Airborne Division, commanded by Major General Matthew Ridgway, arrived at Casablanca. Within a day or two, leaders of the division knew that they were scheduled to parachute into Sicily on the night of 9 July. After three days in a staging area eight miles outside Casablanca, the division set out by train, truck, and

plane for Oujda and Mahrnia, site of the Fifth Army Airborne Training Center, in the northeast corner of the country near the Algerian border and close to the Mediterranean Sea.

After six weeks of sleeping on the ground in rows of pup tents and facing daily duststorms and blistering heat (and also weakened by that universal malady of army life in strange lands — dysentery), the men of the 82d Airborne were ready to jump into battle anywhere just to escape.

Under the overall command of the British General Sir Harold R.L.G. Alexander and his 15th Army Group Headquarters, General George S. Patton's newly organized U.S. Seventh Army with its single II Corps under Omar Bradley was to make the assault in the Gulf of Gela. At the same time, the British Eighth Army, under General Sir Bernard L. Montgomery, on the right, was to attack at the corner of the island, Cape Passero, and through the Gulf of Noto as far north as the vicinity of Syracuse.

In the U.S. zone the 45th Infantry Division, on the right, would assault a wide stretch of beach on either side of Scoglitti; the 1st Division, in the center, would hit Gela and capture the Ponto Olivo airfield, about five miles inland; and the 3d Division, on the left, would go for the beaches and the airfield around Licata.

Not enough airlift was available for either the 82d or the British 1st Airborne Division to be fully committed on D-Day. On the British side a glider brigade was to lead the way, in the manner of the Germans on Crete in 1941, with an assault on Ponte Grande, just south of Syracuse. For the Americans, the parachute troops would lead. For this mission Ridgway chose the 505th Regimental Combat Team, including the 456th Parachute Field Artillery Battalion, and reinforced it with the 3d Battalion, 504th Parachute Infantry, all under the command of Colonel James Gavin.

The planners' first thought was to use the paratroopers directly against the beach defenses. Later, this was changed to a mission of seizing key points — primarily in the 1st Division zone — to block the movement of enemy counterattacking or reinforcing units and to clear the way for the seaborne forces to move rapidly inland. Specifically, the paratroopers were to seize the high ground known as Piano Lupo east and northeast of Gela and to assist the 1st Division in the capture of the Ponto Olivo airfield. After a link-up with the 1st Division had been effected, General Bradley planned to attach the 3d Battalion, 504th Infantry, to the 1st Division to help in capturing Niscemi, which was about five miles to the northeast of the Ponto Olivo airfield. The remainder of the 504th Infantry Regimental Combat Team was to assemble near Gela as a 1st Division reserve. The airborne planners hoped for a link-up with the 1st Division within a few hours, but they planned for Colonel Gavin's units to receive an initial resupply by air.

The defenses of Sicily were in the hands of 200,000 men of the Italian Sixth Army — rather poorly trained, organized, and equipped — and two well-trained and equipped German divisions, the 15th Panzergrenadier Division and the Hermann Goering Division, which arrived in Sicily in June. The 15th Panzergrenadier Division moved to the western part of the island while the Hermann Goering Division concentrated most of its elements at Caltagirone, about 20 miles northeast of Gela and prepared to launch a counterattack against any beach landings in that area.

Thanks to the Ultra system, by which the Allies were privy to the German code and thus could eavesdrop on German radio communications, Alexander, Montgomery, Patton, and their staffs knew of the whereabouts of the two German divisions in Sicily. They also knew that Colonel Gavin's soldiers were likely to encounter the Hermann Goering Division soon after landing. Yet they dared not pass this information on to the 82d, so they thought, because some captured paratrooper might disclose the information, an action that might compromise Ultra itself. (Surely aerial reconnaissance and photography should also have revealed the presence of those divisions, but Allied intelligence summaries, unfortunately, were silent on the matter.)

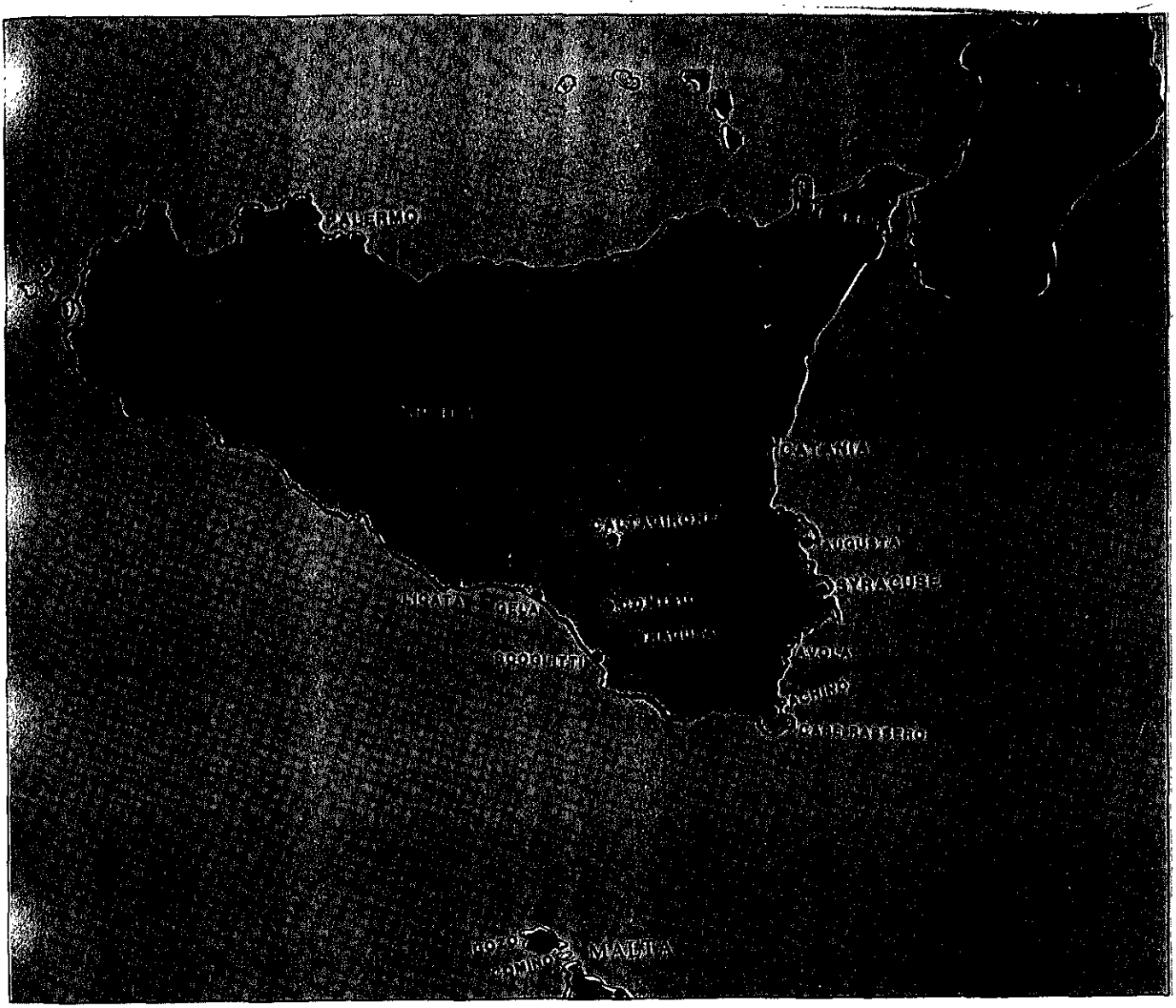
When it came down to the individual airborne infantry battalions, it may not have made any difference anyway. Known enemy dispositions might have influenced the location of their drop zones, but whatever the enemy, the order was to attack.

Meanwhile, the airborne forces continued their training. Small unit leaders studied sand-table models of the Sicilian terrain; battalions rehearsed their ground attacks on replicas of their objectives set up in the training areas; troop carrier and airborne commanders coordinated loading plans and memorized aerial photographs of the objective area.

On a June night just a month before D-Day when conditions were expected to be similar, Gavin and some other airborne leaders were able to make a night aerial reconnaissance over the route they would follow for the attack — east from Kairoun, Tunisia, over the island of Linosa to Malta and from there, after a sharp turn to the north-northwest, to Gela, Sicily. The weather that evening was perfect. Calm and peaceful, the whole Mediterranean lay bare under a bomber's moon. The checkpoints appeared on schedule. As the flight approached Sicily, land first came into sight on the right, just as it was supposed to, and the terrain below matched the aerial photographs they had memorized — and which the pilot also carried in his cockpit. Gavin wished that this were the invasion itself, because everything seemed perfect for it.

Final preparations hastened. Ridgway chafed at the lack of fighter protection to be provided for the troop carrier columns — the fighter planes were to be off on other missions judged to be of higher priority.

Friday, 9 July, dawned calm and clear — as nearly all summer days did in Tunisia — and the airborne soldiers soon were busy checking equipment and loading planes.



High winds were springing up by late afternoon, though, as the men, wearing white bands pinned to their sleeves for identification and carrying heavy packs of equipment and weapons, climbed aboard the planes.

The sun was setting as the planes of the U.S. 52d Troop Carrier Wing began roaring down the runways with the paratroopers of the 505th Combat Team. Only now were the men told their destination, and each was given a slip of paper with a message from Colonel Gavin:

Soldiers of the 505th Combat Team.

Tonight you embark upon a mission for which our people and the free people of the world have been waiting for two years.

You will spearhead the landing of an American Force upon the island of Sicily. Every preparation has been made to eliminate the element of chance. You have been given the means to do the job and you are backed by the largest assemblage of air power in the world's history.

The eyes of the world are upon you. The hopes and prayers of every American go with you.

But both chance and mischance rode with them that night.

Fighting a 35-mile-an-hour wind, the aerial formations soon loosened and the planes scattered. Most of the planes failed to come in sight of even the principal checkpoint, Malta, and the midnight moon was of little help. As their aircraft crossed into Sicily early in the morning of 10 July, the airborne leaders looked in vain for the landmarks they had memorized from photographs, landmarks that had shown up so clearly a month earlier. Unfortunately, pre-invasion bombing had stirred up a ground haze, which made landmark identification still more difficult.

The pilots took evasive action as some antiaircraft fire came up, and this caused further scattering. Completely lost, two pilots turned around and found their way back to North Africa. Another crashed into the sea. But the orders were to drop every parachutist and every piece of equipment somewhere in Sicily, even if the correct drop zone could not be found. And drop they did.

The careful selection of drop zones and the detailed plans of attack for specific objectives now seemed almost irrelevant. From now on, this would be a battle of improvisation, a free-lance affair.

The paratroopers were scattered all over southeastern Sicily — as far apart as 50 and 60 miles — from Cap Moto to Licata. Thirty-three plane loads landed in front of the British Eighth Army — much to the surprise of everyone; 127 sticks came down inland from the 45th Division beaches between Vittoria and Caltagirone; 53 — less than half — landed in the zone of the 1st Division, around Gela, where they were supposed to, and even these were widely scattered. Only one battalion made it to the ground relatively intact, but it was 25 miles from its designated drop zone.

ACTION

Wherever they were, small groups and individual soldiers began moving about to find each other and to try to find the direction toward their assigned objectives. As they did so, they fell upon Italian and German defenders, supply parties, and communication lines and centers wherever they could find them. All day, paratroopers engaged in isolated, small-unit actions, though a number were involved, along with the 16th Infantry and the 180th Infantry, in stemming enemy counterattacks. The Italian and German commanders were confounded in their efforts to determine the location of the main parachute force.

The amphibious landings began at 0245. Heavy surf, stirred by the high winds of the night, threatened some of the landings. British and Canadian soldiers of the Eighth Army had little trouble getting ashore over the more sheltered beaches around the southeastern corner of the island. For the Americans it was more difficult, but by daylight infantrymen of the 45th, 1st, and 3d Divisions were moving inland everywhere except around Gela in the 1st Division's sector. Here, there was trouble in getting artillery pieces ashore, and nowhere was it possible yet to bring in tanks in any numbers. Enemy counterattacks in this area became stronger and stronger.

Colonel Gavin spent most of the day playing hide and seek — hiding from the enemy and seeking his paratroopers. On landing, he had found himself in the 45th Division zone near Vittoria. He tried to move northwestward, the direction in which he perceived his objective to be. But with only a small party of paratroopers, he had to play the role more of a squad leader on a patrol than of a regimental commander in an assault. After encountering enemy groups here and there, he lay low for the rest of the day and then took advantage of darkness to move up toward the sounds of the German counterattacks.

Arriving on General Patton's command ship at Gela about dawn, General Ridgway borrowed a sergeant from General Terry Allen's 1st Division staff and, with his own aide, set out on his own game of hide and seek. After a few hours of walking and crawling around out in the unknown beyond the 1st Division's front lines, Ridgway's only contact with a friend was with General Theodore Roosevelt, Allen's assistant division commander, who was wandering around out there in a jeep. Ridgway's only contact with the enemy was with a low-flying Messerschmitt. Presently he came upon a lone paratroop officer sitting under a fig tree, trying to get some relief for his ankle, which had been broken in the jump. Soon he began to encounter a few groups of paratroopers. Then he went back to Allen's 1st Division headquarters to report on what he had found and to establish communication with the 504th, which was waiting in Tunisia for the follow-up flight.

The 504th had been scheduled to come in that night, the night of D-Day, but in view of the threatening counterattacks in the center, Patton postponed the airborne reinforcement, tentatively until the next night, in favor of landing elements of the 2d Armored Division and the 16th Regimental Combat Team from the floating reserve to plug a gap in the 1st Division's center.

By nightfall on 10 July, things had quieted down. Both the U.S. Seventh Army and the British Eighth Army were consolidating their positions. Only in the Seventh Army's center, in the zone of the 1st Division, did the issue remain in doubt. Here, the German and Italian counterattacks finally had been stopped. But they could be expected to resume the next day.

COUNTERATTACK

At 0615 on 11 July, with the support of air attacks on the beaches and against the naval vessels, the enemy struck again. An Italian column swept past the 26th Infantry and was bearing down on Gela when heavy concentrations of artillery stopped it. General Patton himself came ashore about 0930 and went to a rooftop observation point. Watching the approach of enemy tanks, he turned to a naval ensign and shouted, "For God's sake drop some shellfire on that road!" A barrage of six-inch shells was the prompt response.

German tanks struck the paratroopers and the 2d Battalion, 16th Infantry on the Abbio Priolo ridge. With effective support from the 7th Field Artillery Battalion, they were able to hold fast. Under cover of field artillery and naval gunfire, the paratroopers and the infantrymen pulled back slowly, and by 1100 were back at Piano Lupo where they had started from earlier that morning.

On the right, in the zone of the 45th Division, another column of the Hermann Goering Division was rolling westward along Biazzo Ridge from the vicinity of Biscari toward Biscari Station.

In the meantime, Gavin, after gathering paratroopers in the vicinity of Vittoria, was moving toward Biazzo Ridge. He found a platoon of engineers to go with him as infantry and moved on up the ridge, but he and his men

were quickly pinned down by intensive small arms fire.

Farther to the west, tanks of the Hermann Goering Division rolled on toward the 1st Division beaches. The lead tanks came within 2,000 yards of the water's edge and began taking supply dumps and landing craft under fire. The German commander issued a premature report that the Americans were re-embarking. It was premature because a field artilery battalion came ashore just in time to open direct fire on the tanks, the 16th Infantry Cannon Company joined in from the dunes, and four medium tanks came ashore. Engineers joined infantrymen on the firing line. As the German tanks began to pull back, deadly naval gunfire took after them. Sixteen German tanks lay disabled before Gela.

At 1400 Gavin was able to attack the Biazzo Ridge with more strength and purpose. The men moved up the ridge and then, in the face of heavy fire and the threat of tanks, down the other side. The Germans scattered in front of the attack, and before dark Gavin pulled his men back to the top of the ridge to organize a defense line.

Meanwhile, the naval gunfire had in effect destroyed the attacking columns of the Italian Livorno Division north of Gela. The beachhead appeared to be secure. And airborne reinforcements were on the way, for General Patton had ordered the 504th Regimental Combat Team (less the 3d Battalion, which had jumped with the 505th) to come in that night. Accordingly, General Ridgway, who was still on shore was kept busy trying to coordinate its arrival. He was especially worried about the troop-carrying aircraft flying in low over the naval vessels off the coast and then over the battle positions on the beachhead.

He had reason to be worried. During the planning for the Sicily invasion, Ridgway, incredibly, had been unable to receive assurances that his airborne units would not be fired upon by the ships. Virtually at the last minute, after repeated efforts, he finally exacted a promise that the ships would not fire on his airborne soldiers — provided the troop carriers kept close to their designated route and made sure they arrived over Sicily at Sampieri, at the extreme right (east) flank of the Seventh Army Zone, and then flew northwest keeping to an altitude of 1,000 feet through a two-mile wide corridor for the 30 miles to the Gela-Farello landing zones.

Checking on antiaircraft artillery crews in the area of the 1st Division on the afternoon of 11 July, Ridgway found that five out of six had been warned to expect a paratroop jump on the Gela-Farello field that night. He then obtained further assurances from the antiaircraft battlion commander that all crews would be warned before the afternoon ended.

REINFORCEMENTS

Within minutes after his order to have the 504th fly in that night to reinforce the 1st Division's beachhead, Patton at 0845 had sent a priority message to all his principal subordinate commanders directing them to notify their units that parachutists would drop on the Gela-Farello landing field about 2330 that night.

Unfortunately, enemy aircraft had struck sporadically at the beaches all day. At 1540, about 30 Junker dive bombers attacked. Several bombs fell harmlessly around the cruiser *Boise*, but one hit an ammunition ship, the Liberty ship *Robert Rowan*, which blew up and sank in shallow water where smoke from her exposed bow became a reference point for later waves of enemy bombers.

This night, 144 troop carriers with 2,000 paratroopers of the 504th Combat Team took off from Tunisia into calmer weather than the 505th had had. In a basic V of Vs formation, the aerial column flew essentially the same dog-leg route but this time kept in better formation. A few rounds of antiaircraft fire came up from Allied shipping north of Malta but caused no harm. Some of the troopers gazed down at the calm sea while others dozed in their bucket seats.

INTO THE CALM

An hour ahead of the troop carriers, though, Axis planes returned for a massive strike on the Gela beach area. A rain of bombs damaged numerous ships with near misses. As on other such occasions earlier in the day, the transport ships weighed anchor and dispersed. As the troop carriers with the 504th crossed the coastline at Sampieri and turned to the northwest, the enemy bombers withdrew. The antiaircraft fire fell silent.

Into this calm flew the troop carriers. All remained quiet as the leading flight arrived over the drop zone, and the first paratroopers jumped into the still night. Then, as the second flight approached the final checkpoint and the first flights of the second serial were beginning their turns into the overland aerial corridor, and while the third serial was still over the sea, a lone machinegun broke the silence below. Then all hell broke loose. Within minutes it seemed that every gun in the vicinity, on land and sea, was turned on the low-flying, slow C-47s. The planes' display of amber belly lights as recognition signals made no impression on the nervous gunners. Clinging to enemy beach areas in the black night, edgy from the bombing attacks that had just taken place, the gunners responded to the opening of fire with a contagion that became worse as more flights arrived. Their fire, unhappily, was remarkably more effective against the transport planes than it had been against the German bombers.

Six planes with paratroopers still on board were shot down. Twenty-three planes were shot down altogether, and 37 were badly damaged. Several planes turned back to North Africa before their paratroopers had a chance to jump. Of those who did jump, several came under fire as they floated earthward, and many faced continuing fire on the ground. As pilots took evasive action and lost track of their landmarks, the formations became widely scattered. As had been the case with the 505th, the paratroopers of the 504th were scattered all the way from Gela to the east coast.

Without even meeting the enemy, the 504th Combat Team suffered 229 casualties, including 81 killed. The troop carrier wing reported 7 killed, 30 wounded, and 53 missing.

But the choice of the Gela-Farello landing ground as the drop zone could itself be brought into serious question. It had been generally assumed that the proper use of an airborne force was to land it deep in the enemy rear. The initial landing of the 505th — to the extent that it was where it was supposed to be — was between the enemy and the beach, not in the enemy's rear area. The drop zone of the 504th was even nearer the beach. Clearly this was a stop-gap measure, an effort to shore up the security of the beachhead, rather than a *coup de grace* aimed at breaking the enemy's resistance.

By this time the Seventh Army was ready to move inland to the phase line that would establish victory in the battle for the beachhead, and early on 12 July the 1st Division, in the center, moved out from the Gela area. Soon the beachhead was secure, and during the next several days Allied units consolidated their positions while Alexander, Patton, and Montgomery pondered the next moves.

On 19 July, with the 82d in the vanguard of a provisional corps along the coastal road on the left, Patton's Seventh Army rolled out to the north and northeast to overrun the eastern horn of the island and take the principal city, Palermo, on the northern coast.

In six days units of the 82d Airborne Division moved 150 miles through hostile territory and captured 15,000 prisoners while suffering only 23 casualties. The principal enemies had been the hot Sicilian sun, the choking dust of the roads, and the rough terrain.

While the 45th, 3d, and 9th Divisions turned eastward toward Messina, men of the 82d Airborne remained on what amounted to occupation duty in the rear areas in Trapani and Castellammare. They enjoyed more than three weeks of "R and R," (rest and rehabilitation) caring for and cleaning their equipment, undergoing the inevitable siege of intensive training, and swimming in the now peaceful waters of the Mediterranean.

On 12 August Patton summoned Ridgway and Gavin, together with the commander of the 52d Troop Carrier Wing, to discuss the feasibility of a parachute jump behind the German delaying forces in the coastal corridor. But the airborne leaders dreaded German tanks, while the troop carrier leaders dreaded their own antiaircraft fire. Everyone agreed that the terrain was too rough (yet this rough terrain, while a hazard to parachute jumping, should have offered protection from the German tanks). In any case, Patton decided to rely on a series of short amphibious end runs instead of on a vertical envelopment to remove the obstacles. This decision allowed the 82d Airborne Division to sit out the remaining days of the campaign.

But in the final dash to Messina, there was not dash enough, for 40,000 German and 62,000 Italian troops managed to escape during the last six days across the Strait of Messina to live and fight another day. Here is where a massive airborne drop — on the Calabrian side of the strait — might indeed have been decisive in sealing off the escape.

Instead, the 82d assembled and flew back to Tunisia, there to prepare to fight under less favorable conditions at Salerno the German forces that had escaped from Sicily and the other German units that would come down from the north to man the defenses of the Italian peninsula.

While the leaders and the men of the 82d Airborne Division could feel a certain pride in sharing in one of the great Allied triumphs of the war in overrunning Sicily, they could not avoid the gnawing question as to whether their role in it really had been essential. No one, surely, would claim that without the airborne drop, the amphibious assault would have failed.

Actually, the 82d might have been far more effective in Sicily if it had been committed more boldly and imaginatively. But it was committed piecemeal, one regimental combat team at a time (and with a glider regiment that never did get into action), instead of in mass as a division. Its paratroopers jumped only a short distance beyond the beaches, in front of the enemy forces instead of in their rear. If the division had landed on the tablelands of the central plateau of the island, it might have been able to assemble and attack the enemy's rear areas and higher headquarters with a dispatch that would have put a quick end to the whole Sicilian campaign.

Near the end of the campaign, the division might have reassembled and jumped across the Strait of Messina to block the enemy's withdrawal. In that case it would not have contributed to a speedier conclusion of the campaign, but it might have made a really decisive contribution to the destruction of forces instead of simply in the capture of real estate.

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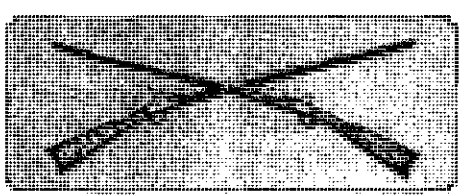


TRAINING NOTES

Drills

MAJOR ROYAL A. BROWN III
CAPTAIN MARK E. CROOKS

One of the greatest challenges facing the platoon and squad leaders in our infantry companies today is in knowing how to conduct sound tactical training. To help these leaders meet this challenge, the U.S. Army Infantry School (USAIS) has developed for them a number of platoon level drills. They can use these drills to train their soldiers in critical collective, leader, and individual tasks to the proficiency necessary for their units to fight, survive, and win on the battlefield.

The drills developed by the School consist of actions that require rapid, spontaneous responses to an event, stimulus, or command with a minimum of direction from the leader. These actions can be trained to standard and executed repetitively.

Drills support the accomplishment of tactical missions and integrate critical individual and leader tasks into collective tasks. They can be used either separately or linked together in a situational training exercise (STX). As a training tool, drills provide a high payoff for obtaining and sustaining proficiency in collective tasks at small unit level.

Drills also reinforce the following proven training concepts:

- Provide the small unit leader with core collective tasks (drills) that can be used in scheduled training or as "hip pocket" opportunity training.
- Build from the simple to the complex.
- Facilitate continuous coaching, evaluation, feedback, and teambuilding.
- Train the soldier to function aggressively and correctly amid the noise and confusion of the battlefield when detailed orders and instructions may be absent.

BUILDING BLOCKS

Individual (MOS and common) tasks form the basic building blocks for training infantry units. It is only after a unit has successfully trained its soldiers in these tasks to the prescribed standards that it can engage in good drill or collective training, which starts at the squad level.

Likewise, squad and platoon drills are the key building blocks that support platoon missions. Another building block includes supplemental tasks, such as planning and controlling operations. These two groups of collective and leader tasks can be linked through a logical, tactical scenario to form a number of STXs.

An STX normally consists of from three to five drills connected in a logical sequence to form a block of tactical training. Although an STX is mission oriented, one STX generally will not result in mission accomplishment. Normally, multiple STXs must be linked through a field training exercise (FTX) in order to train a unit to total mission proficiency. The resulting overall training program therefore takes on the shape of a pyramid (Figure 1).

In this figure each of eight critical mechanized infantry platoon missions is represented by a triangle. These missions are supported by FTXs and the FTXs by STXs. The STXs are supported by drills and supplemental tasks, which are supported by individual tasks. Although the missions stand alone, most of them have in common many individual soldier and leader tasks. And because many drills also appear in more than one mission, a unit training for a particular mission will also be training in many of the drills and tasks required for other missions. Changes in the conditions of METT-T (mission, enemy, terrain, troops, time) will cause remarkable differences, however, in the mix of collective tasks required to execute a given mission. The exact combination of drills and supplemental tasks, therefore, will vary with the factors of METT-T, but the standards for exe-

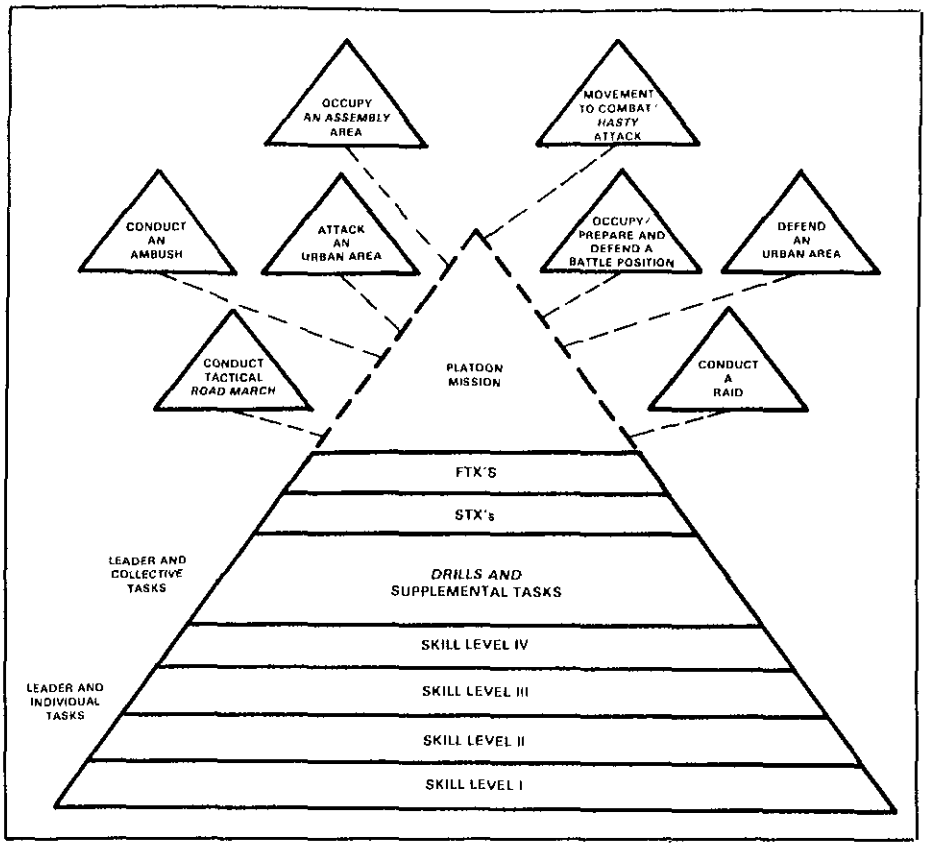


Figure 1. Overall Training Program.

cuting those drills or tasks will not change. Thus, drills provide for both flexibility in executing tactics and standardization in executing the tasks those tactics require.

THE COMBAT DRILL

The overall mission of infantry units, of course, is to close with the enemy by means of fire and movement in order to destroy, capture, or repel his assault by fire, close combat, and counterattack. To accomplish this mission, infantry platoons spend a great deal of time aggressively moving on the battlefield seeking enemy contact.

To provide platoon and squad leaders with the tool they need to train their units to act rapidly, aggressively, and decisively to overcome enemy resistance (within their capability), the Infantry School has developed a critical kind of drill called the "combat drill."

The combat drill consists of a series of collective actions that are integrated into sequential steps to reduce decisions to critical points and to cause the enemy to fight in two directions simultaneously.

It is vitally important to a unit's survivability and success in combat. The combat drill, therefore, must be perfected until a unit is confident in its ability to execute the drill automatically and aggressively upon enemy contact without stopping for long periods of time.

Versions of the combat drill have been developed for light infantry, infantry, and mechanized infantry platoons equipped with the Bradley fighting vehicle and with the M113. Squad versions have also been developed for all but BFV mechanized infantry units — Bradley infantry tactics are focused at platoon level. (Figure 2 illustrates the platoon combat drill for a mechanized infantry unit equipped with M113s.)

Seven sequential steps are normally followed in the conduct of drill training:

Step 1. First the leader identifies the critical drills on which his unit needs to be trained. (Obviously, all the drills cannot be conducted at once.) The leader selects his drills from a menu of available drills based on training guidance, level of training proficiency, and the factors of METT-T.

Step 2. On the basis of his assessment of his unit's strengths and weaknesses, the leader next conducts all the prerequisite training on individual soldier and leader tasks. (The leaders must master the soldier skills themselves before they can train their soldiers to standard.) This is a critical step in the building block approach, because it establishes a sound foundation for the drill training.

Step 3. The leader must then establish conditions for each drill (in MOPP 4, at night, for example). The USAIS drill publications do not prescribe set conditions for the drills other than those that are implicit in the task itself. This allows the leader to be flexible in conducting training and to build in increasing complexity and challenges. It also guards against stereotyped thinking. Initial drill training, for example, might include very basic conditions until a firm baseline of proficiency is attained. Then more demanding conditions can be added to the drill. In short, a leader must use a crawl-walk-run method in building up to a drill conducted at full speed.

Step 4. In the crawl phase, a leader describes the standards and the roles of each individual who is to take part in the drill. He then identifies a triggering event, an initiating cue and/or a command which starts the drill and the key actions and standards within it. Finally, he conducts a demonstration and then has the soldiers and his subordinate leaders practice the drills by the numbers. Continuous correction is used as the leader coaches his soldiers through the drill.

Step 5. In the walk phase, the unit executes a drill at a slow pace, with the leader-trainer continuing to coach, critique, and correct individuals as they perform the drill. The unit then practices the drill until the soldiers can execute it to standard without being coached. This leads up to the run ph

Step 6. During the run phase, a drill is run at full speed and without coaching, and conditions are changed to increase the difficulty and realism. Opposing forces and the Multiple Integrated Laser Engagement System (MILES) are incorporated at this point to help provide performance feedback. As with any training exercise, an after-action review (AAR) should be conducted.

Step 7. Once the individual drills have been mastered, a unit can integrate them into an STX, in which drills are linked together through a logical sequence. Although STXs are mission-oriented, they normally do not lead to total mission proficiency. Instead, they train only a portion of a mission or a "chunk" of the battle as shown in Figure 3. It therefore takes several STXs to train a unit on all the tasks required to accomplish a *mission*.

Once platoons and squads can execute drills to the prescribed standard, the unit's soldiers will gain confidence in their own abilities and in the coordinated actions of the unit. This will allow the unit's leaders to use fewer and shorter orders to control their soldiers during the confusion and intensity of combat. In short, drills will enable squads and platoons to train the way they would fight.

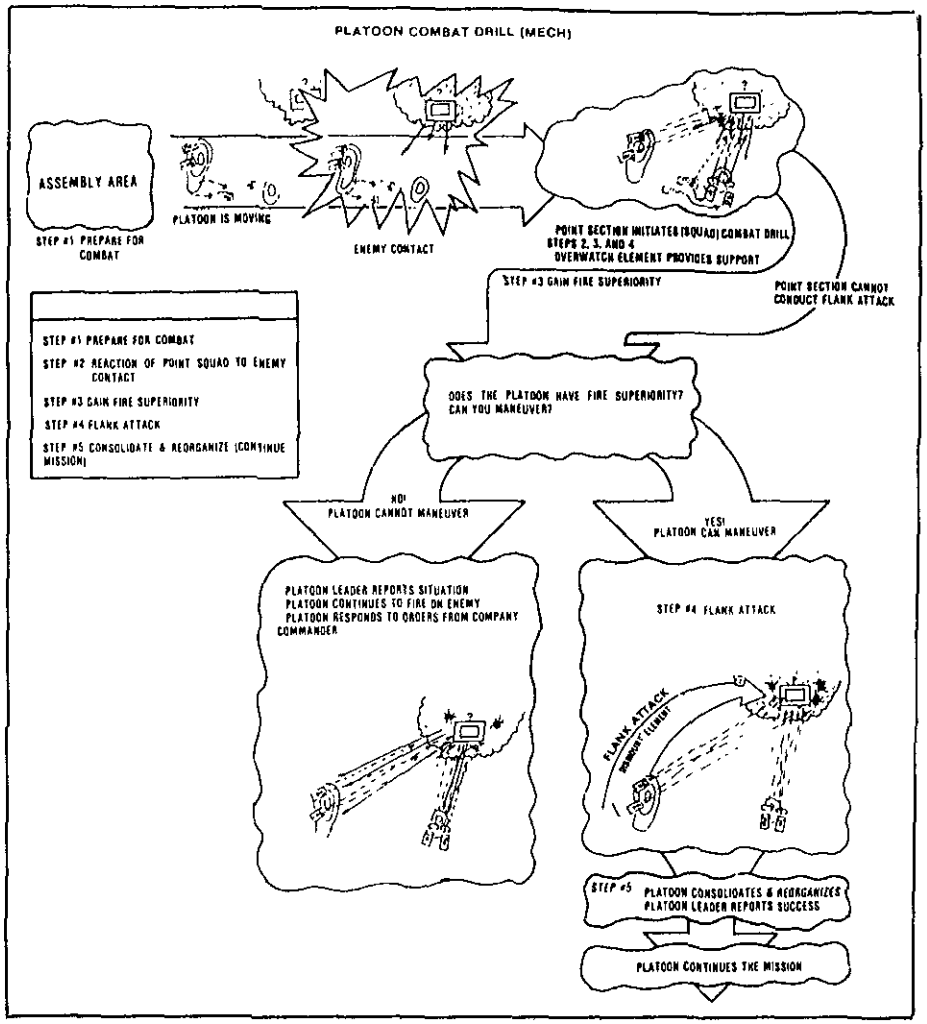
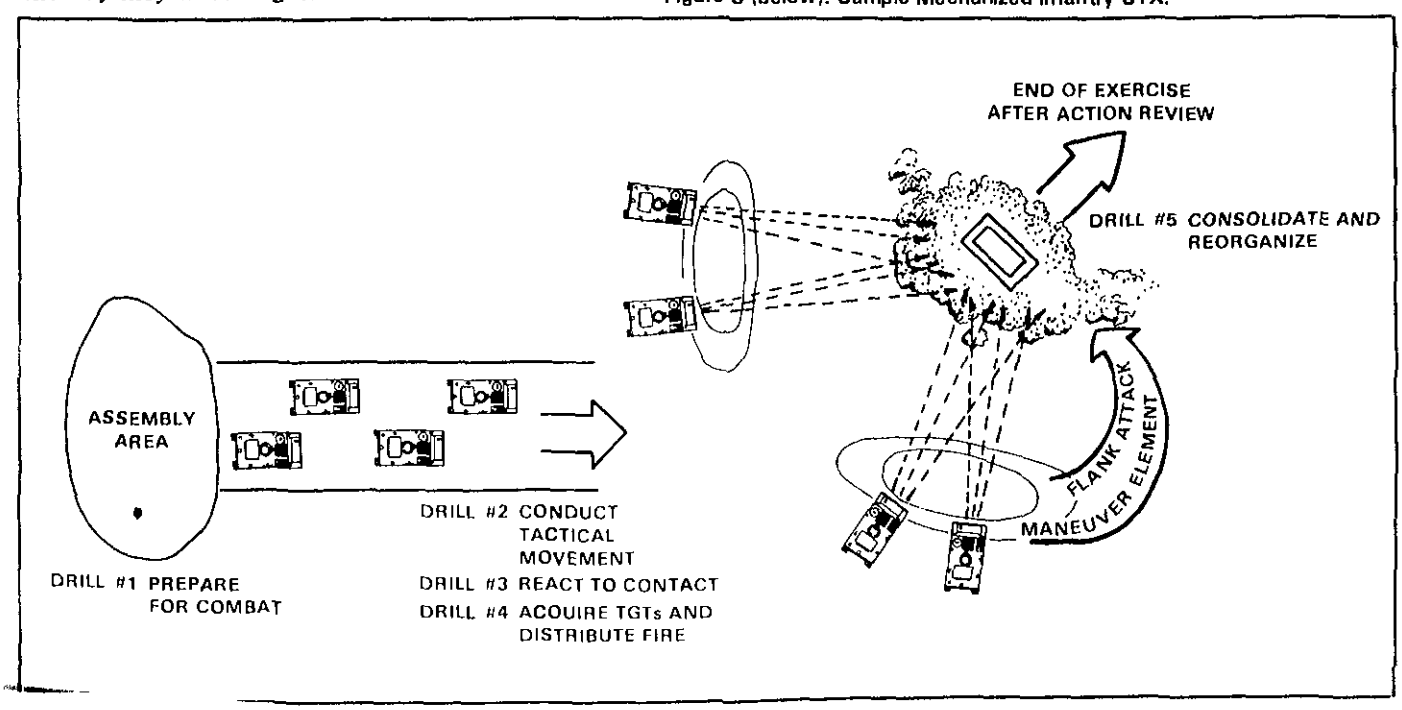


Figure 2. Mechanized Infantry Platoon Combat Drill.

Figure 3 (below). Sample Mechanized Infantry STX.



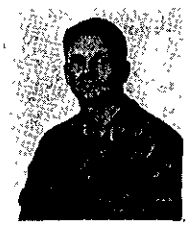
The preface to the School's drill field circulars compares drill training to football practice: Drills address individual tasks (blocking and tackling), leader tasks (skull sessions), and collective tasks (plays) before conducting ARTEP missions (scrimmages). Performing ARTEP mission training before drill training would be like scrimmaging on the first day of practice. Trying to react to METT-T conditions that require action without drills would be like formulating and calling out a play after the ball is snapped.

The final goal of training is to produce a ready unit that can respond rapidly and correctly to known or suspected enemy activity and defeat the enemy. Drill training is a key factor in achieving that goal.

The Infantry School has prepared and distributed four new field circulars containing squad and platoon drills: FC 7-21 (M113), FC 7-21B (BFV), FC 7-22 (Infantry), and FC 7-15 (Light Infantry).

Instruction on drills is included in all the applicable resident courses taught at the School. In addition the School's New Equipment Training Team (NETT) presents drill instruction to CONUS-based units that are making the transition from the M113 to the Bradley fighting vehicle as part of the Doctrinal and Tactical Training (DTT) Program. (The 7th Army Training Command conducts the same training for USAREUR units converting to the Bradley.)

Users of the USAIS drill circulars are encouraged to submit any recommended changes or comments they may have. The School's objective is to standardize a core set of critical drills for all types of infantry as soon as possible. Comments should be sent to the Commandant, USAIS, ATTN: ATSH-I-V-T-C, Fort Benning, GA 31905 (AUTOVON 835-4848/1317/4759).



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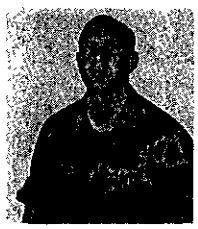

Captain Mark E. Crooks is also assigned to DOTD at the Infantry School. He is a 1977 ROTC graduate of The Citadel. His previous assignments include command and staff tours in Europe and at Fort Carson.

Mortars:
Able to Leap Tall Buildings

CAPTAIN STEWART E. GOESCH
CAPTAIN ROBERT A. LAMBERT

In spite of the continuing spread of urban areas throughout the world, the U.S. Army has no current doctrinal techniques for placing indirect fires into built-up areas in such a way as to avoid or overcome the masking effects of buildings on those fires.

A mortarman doesn't have to work with mortars long, however, to observe that a mortar round's steep angle of fall is almost a mirror image of its steep angle of ascent. If he had a way of determining the angle of fall necessary to get a mortar round over buildings and onto a target in the street below, then he could compute the elevation necessary to produce that angle of fall.

Here is such a method, one that is as mathematically correct and reliable as the firing tables now in use. In fact, it is derived from those tables. Two main phases or procedures are involved in making the needed calculations.

To explain the first procedure, a new term must be introduced — "required angle of entry." The required angle of entry is the minimum angle at which an incoming mortar round must travel to avoid the masking effects of buildings along either side of a street and still fall on the street. This angle is described from the edge of a street to the top of a building on the opposite side of the street (Figure 1). In the figure, Angle B is the required angle of entry for an incoming round.

Establishing a measure for this angle is remarkably simple, because the required angle of entry for any

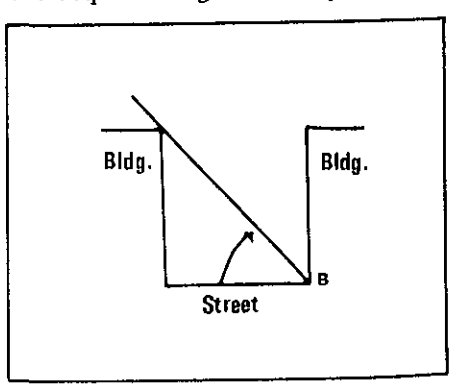

Figure 1

CONVERSION TABLE
FOR
TANGENT VALUE TO ANGLE OF FIRE

TANGENT VALUE	ANGLE OF ENTRY (in mils)
1.000	800
1.061	830
1.103	850
1.171	880
1.219	900
1.294	930
1.348	950
1.435	980
1.497	1000
1.596	1030
1.668	1050
1.786	1080
1.871	1100
2.011	1130
2.114	1150
2.286	1180
2.414	1200
2.631	1230
2.795	1250
3.078	1280
3.297	1300
3.684	1330
3.992	1350
4.658	1380
5.027	1400
5.936	1430
6.741	1450
8.449	1480
10.150	1500
14.530	1530
20.360	1550
60.920	1580
101.900	1590

Figure 2

street can be determined by dividing the height of the building in the target area by the width of the street. (These measurements can be provided to the fire direction center [FDC] through map data, reconnaissance, or a forward observer's estimate — along with the usual call-for-fire information.) The figure that results from this division is called the "tangent."

Using the conversion table in Figure 2, the FDC can then find the tangent value (in the left column) and opposite it (in the right column) the corresponding mil measure of the required angle of entry. (Any tangent value of less than 1,000 can be fired without concern for the masking effects of buildings.)

As long as the angle of fall of an incoming round is equal to or greater than the required angle of entry, the round will land where it is supposed to — on the street — and not on a roof top (Figure 3).

Once the required angle of entry is known, the FDC needs only to determine the necessary elevation and charge to produce the necessary range and angle of fall.

All of this data is in our current firing tables, but its arrangement makes it difficult to use for this type of calculation. In Figure 4 is a portion of a reconfigured 81mm firing table that is easier to use.

For example, given a fire mission with a range of 1,000 meters, a street width of 11 meters, and a building height of 55.3 meters, the FDC divides the street width into the building height to get a tangent value of 5.027. A glance at the conversion table (Figure 2) shows that the corresponding angle of entry is 1,400 mils. At a range of 1,000 meters, the first angle of fall greater than the 1,400 mils required for angle entry is under Charge 4, and the corresponding elevation is 1,393 mils.

This first procedure, though mathematically correct, deals with the theoretical, the ideal. But no two mortar rounds follow the same path, because each is subject to the effects of ran-

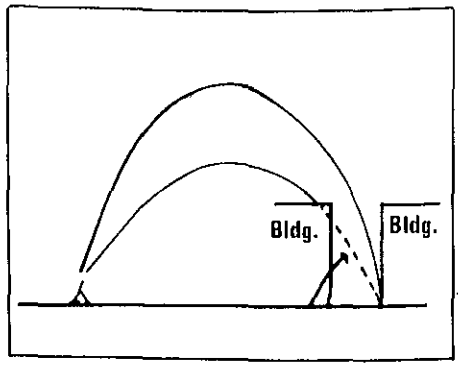

Figure 3

dom deviations in flight caused by a multitude of forces.

The second procedure, by using these random deviations, gives a commander or his FDC a practical way of judging how effective the unit's indirect fires are likely to be.

The random deviation, known as dispersion, is dealt with in the current firing tables under the term "probable error." For every range, the firing tables show a range probable error distance, which means that 25 percent of the rounds fired will land beyond the theoretical point of impact and 25 percent will land short of it, but within the range probable error distance shown. The rest, because of the random deviations in their flight paths, will land outside that area but in predictable percentages as they move away from the theoretical point of impact.

Why is this important?

Once the people in the FDC know the street width, they can compare it to the range probable error distance and compute with certainty the number of rounds that will reach the street. For instance, if the target street width is the same as the range probable error distance, then only 25 percent of the

MOUT FIRING TABLE

RANGE	PROBABLE ERRORS		CHARGES									
	R	D	0	1	2	3	4	5	6	7	8	9
			ANGLE OF FALL ELEV	ANGLE OF FALL ELEV	ANGLE OF FALL ELEV	ANGLE OF FALL ELEV	ANGLE OF FALL ELEV	ANGLE OF FALL ELEV	ANGLE OF FALL ELEV	ANGLE OF FALL ELEV	ANGLE OF FALL ELEV	ANGLE OF FALL ELEV
75	7	1	1511 1508	* *	* *	* *	* *	* *	* *	* *	* *	* *
250	8	1	1282 1271	1468 1478	* *	* *	* *	* *	* *	* *	* *	* *
500	9	1	* *	1365 1346	1445 1429	1488 1473	1513 1499	* *	* *	* *	* *	* *
750	10	2	* *	1222 1191	1362 1336	1430 1406	1469 1447	1494 1473	1511 1491	1523 1504	* *	* *
1000	11	2	* *	991 945	1269 1231	1368 1335	1423 1393	1457 1429	1481 1454	1497 1471	1509 1484	1518 1493
1250	12	3	* *	* *	1153 1101	1302 1258	1375 1336	1420 1384	1450 1415	1471 1438	1486 1454	1497 1466
1500	13	3	* *	* *	931 865	1225 1169	1324 1274	1381 1336	1418 1375	1444 1403	1462 1423	1476 1438

Figure 4

MOUT PROBABILITY TABLE	
Street Width in Relation to Range Probable Error Distance	Percentage of Rounds to Reach Target
2.0 X	50.00%
2.5	60.05
3.0	68.84
3.5	76.19
4.0	82.26
4.5	87.03
5.0	90.80
5.5	93.62
6.0	95.74
6.5	97.18
7.0	98.16
7.5	98.84
8.0	99.30
8.5	99.60
9.0	99.76
9.5	99.87
10.0	99.92
10.5	99.96
11.0	99.98
11.5	100.00

Figure 5

rounds will reach the street even though all have been fired correctly. But if the street width is twice the range probable error distance, 50 percent of the rounds fired will reach their target (Figure 5).

Or, going back to the example used earlier with the MOUT firing table (Figure 4), the FDC knows that if Charge 4 is used with an elevation of 1,393 mils, the range probable error distance (R) is 11 meters. This means that the rounds will clear the buildings and 25 percent will fall within 11 meters of the intended range — that is, in the street. If all else is equal but the street width is 22 meters, then half of the rounds fired will reach the street. (For this fire mission, any charge of 4 or above will work, but with counter-battery radar, the lowest workable charge should be used.)

If they had this kind of information in hand, commanders and FDCs would know not only how to fire their mortar rounds but how many they would have to fire to produce a given effect, even in the narrowest of streets. In some situations, such information would tell them that they could not bring effective fire on a certain street without a great and inefficient expenditure of rounds — or that they could not bring effective fire on it at all. Guesswork would be eliminated.

The Army needs to incorporate these two procedures into its doctrine and teach them for all kinds of mortars. No new research or technology would be needed. By simply restructuring what is already available, we could vastly improve the effectiveness of our indirect fire assets in urban terrain operations.

We can't afford not to do it.

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Captain Robert A. Lambert has also served as a mortar platoon leader and, while assigned to the Infantry School, helped write a field manual on the tactical employment of mortars. He is a graduate of the University of Alabama and is now a company commander in the 1st Infantry Training Brigade at Fort Benning.

81mm Mortar Training — with 60mm Ammunition

CAPTAIN RODNEY W. JOYE

Sustaining combat readiness in any unit is a continuous process that includes equipment, personnel, maintenance, and training. All of these unit readiness criteria are important, but if unit personnel are not trained to perform their assigned missions, all the other categories of readiness become meaningless.

Gunnery training, in particular, has become increasingly difficult because of the rising costs of training ammunition, and this includes mortar training. Today, the Army simply cannot afford to conduct all of its mortar gunnery training with service ammunition. The cost of a current production 81mm high explosive (HE) round, for example, is $122, and the cost of the improved 81mm HE round is estimated at $225. In addition to the cost, the transition to the improved 81mm round has created a critical shortage in the ammunition available for training. Presently, almost all remaining stocks of the old ammunition are being held in war reserve, and the shortage for training purposes is expected to continue through Fiscal Year 1992.

If this situation is left unresolved, the Army is faced with two unacceptable choices: Either use war reserve stocks of 81mm ammunition for training or allow the combat effectiveness of its 81mm mortar sections to decline.

The logical solution to this dilemma, therefore, is to use training devices, scaled range ammunition, and subcaliber ammunition, along with service ammunition. The new POCAL scaled range ammunition, for example, can be used on local scaled ranges (up to 500 meters), sub-

caliber ammunition for practice gunnery or for ARTEPs, and full-caliber 81mm ammunition (when it is available) for ARTEPs. If necessary, 81mm mortar sections can conduct *all* their live fire missions effectively with subcaliber ammunition using the 60mm Insert Subcaliber Device (ISD).

This device was developed by personnel of the 50th Armored Division, New Jersey Army National Guard, for use in its mortar training. The ISD is identical to the M-31 subcaliber device used to fire 60mm ammunition in the 107mm mortar except that the adapter rings and the spacer sizes are smaller to fit snugly inside the M-29A1 mortar. During training, all crew actions are the same with this device as they are with 81mm ammunition.

The maximum range of 60mm ammunition is about 1,800 meters, which makes the ISD ideal for use in small impact areas. The 60mm ISD is the only way to provide training in the use of high explosive, white phosphorus, and illumination rounds, aside from using 81mm service ammunition.

Unlike 81mm ammunition, there is plenty of 60mm ammunition available. In fact, after deducting war reserve stocks from the total Army stocks, there is approximately a 10-year supply in the Army inventory available for training. And as improved 60mm ammunition is procured for war reserve stocks, additional quantities of the old 60mm ammunition can be released from war reserve for use in training. This means that, with proper management, there may be a 30-year stock for training.

Aside from the availability of 60mm ammunition, its use for 81mm mortar training would greatly reduce the cost of the ammunition used in 81mm mortar training programs. The existing stocks of 60mm ammunition were procured many years ago for $12.57 per round, and the use of existing stocks would not require the expenditure of new funds for training ammunition as the other options would.

In short, the use of 60mm ammunition for 81mm gunnery would save the Army at least $95 million over the next ten years. (With this saving, the Army could buy another 50 M-2 Bradley Fighting Vehicles.) Total Army requirements for the 60mm ISD could be procured for less than $1 million (based on a recommended basis of issue of four devices per infantry or mechanized infantry battalion).

Although the device, in concept, is not new, the need for it has recently become more critical, and it can be locally produced at minimal cost.

If the 60mm ISD were adopted, it would quickly provide a highly realistic solution to a long-term training problem.

Anyone who would like to have further information on this device and its use may write or call the Ammunition and Support Branch of the National Guard Bureau in Washington, D.C. — Major Schlimgen, AUTOVON 289-1720 — or the Office of Policy and Planning, New Jersey Army National Guard, Eggert Crossing Road, CN340, Trenton, NJ 08625-0340 — telephone (609) 984-3621.

Captain Rodney W. Joye is a National Guard officer serving with the National Guard Bureau where he recently completed an assignment as a training devices staff officer. He previously served on active duty with the 3d Infantry Division, including a tour as a mortar platoon leader, and with the 24th Infantry Division.

Platoon Early Warning System

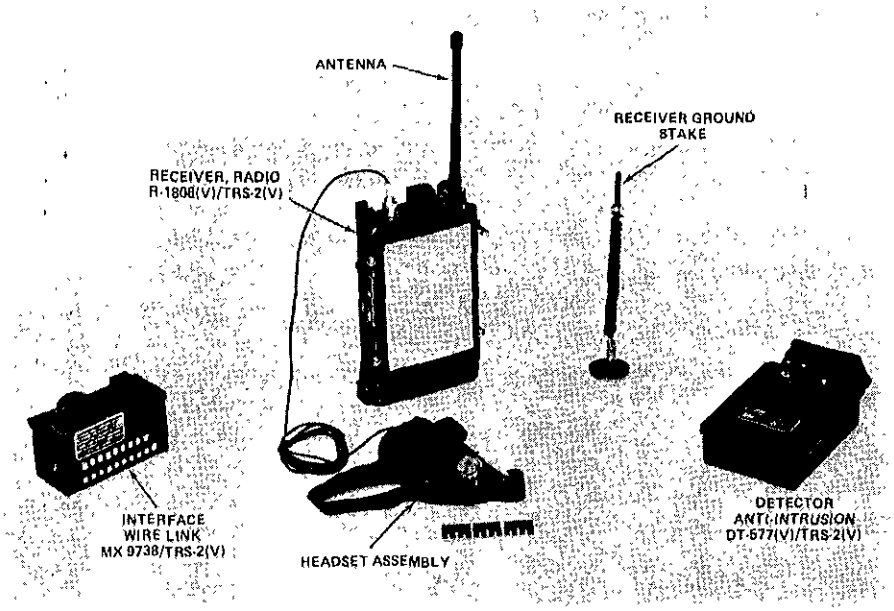
STAFF SERGEANT DONALD L. MOORE

"Protect the force" is one of the seven imperatives of modern combat, but sometimes there are not enough people to provide the necessary security. Although technology cannot replace a skilled rifleman in this role, it can help. One product of technology that can be of tremendous help to a commander is the Platoon Early Warning System (PEWS).

PEWS is a lightweight, battery-powered, portable intrusion detection system designed for use by small units. PEWS detectors, when activated by personnel or vehicular intrusion (ground vibration or magnetic field), transmit a coded message by radio or wire to a remotely located receiver. The operator receives both audible and visible alarms.

The major components of the system include:

- A receiver, which receives signals from the detectors and transmits an



audible warning through the headset or activates a warning light, or both.

- An antenna for operating in the radio mode.
- Lightweight detectors that detect ground vibrations or magnetic intrusions and send a message to the receiver by radio or wire.
- A wire link for use in the wire mode. (The link can accommodate wires from up to nine detectors.)
- A grounding rod, which is placed in the ground to protect the operator from electrical shock.
- A carrying case for storing and protecting the system.

The system has several features that are important to units: It can locate and classify personnel or vehicular intrusions within 10 meters of an emplaced detector; the detectors are easy to conceal; and the distance between a detector and the receiver can be as much as 1,500 meters for both radio and wire operations.

The system is compact and weatherproof. It has two bags that weigh about 11 pounds each for a total of 22 pounds. (The bags are 18 inches long, 6 inches wide, and 6.6 inches high.) It is reliable and can be remotely operated by radio or wire and three of the major components have built-in test circuits. The system operates on 9-volt batteries (BA90, or BA3090 for low temperatures), which last three days in a receiver and 14 days in a detector. (The batteries weigh about two ounces each.)

The system is simple to place in operation, although there are certain important points an operator must remember after he has used the built-in test circuits to check the receiver and detectors to make certain they are operating properly.

The key to emplacing the detectors is knowing the composition of the soil in the area, because the detectors pick up ground vibration. Thus, the looser the soil pack, the better the detectors will work. Detectors should not be placed close to trees, because the roots of windblown trees may activate them. Metal objects nearby may also activate them.

An initial detection will always be represented by a tone sent through the operator's headphone, by a message displayed on the receiver's display, or by both. The display shows a P for personnel or a C for vehicles, plus a number to show which detector has been activated.

The displayed information will be repeated in rotation, starting with the lowest detector identification number and going to the highest. It will stay in the receiver's memory and will be displayed until the operator erases it by pressing a test reset button on the receiver.

A receiver can monitor up to 16 different detectors at once in either a radio or a wire mode. Naturally, in the radio mode, the radio frequency information for both a receiver and a detector (shown on their data plates) must match or the receiver will not pick up the detector's signals.

There are a number of tactical situations in which PEWS can be used to good advantage:

- By a platoon in the defense to cover dead space, flanks, or boundaries forward of the defensive position, and along both mounted and dismounted avenues of approach into the platoon's sector.
- In ambush positions to give early warning of targets moving into the ambush site. (The security element could use PEWS to provide early warning of a superior force trying to outflank or envelop the ambush force.)
- By observation post and listening post personnel to extend their range of surveillance and provide early warning while they remain protected by the parent unit's covering fires.
- To replace or augment security patrols in the rear battle area and in a unit trains area where a limited number of personnel are available to provide security.
- During limited visibility operations to improve a unit's effectiveness by extending the range at which it can detect enemy forces beyond the ranges of its night vision devices.
- In depth in the covering force area or forward of a defensive position to enable the defender to monitor the progress of an advancing enemy force.
- On the flanks of an attacking unit to provide security.
- By patrols and units operating in the enemy's rear to help secure objective rallying points and patrol bases.

When combined with active security measures, when integrated into a unit's reconnaissance and security plan, and when covered by indirect fire, PEWS can be a valuable asset to any commander.

Staff Sergeant Donald L. Moore is assigned to the Combined Arms and Tactics Department of the U S Army Infantry School. He previously served in the 2d Battalion, 17th Infantry at Fort Ord.

CIPC

CAPTAIN JOHN L. WOLF

One of the most essential but most often overlooked areas of training for combat arms soldiers is that pertaining to intelligence-related tasks. In combat we expect our soldiers to be able to process prisoners of war, identify friendly and enemy vehicles, and observe and report information, as well as many other similar tasks.

Fortunately, these are skills that can be practiced in a unit during both individual and collective training. Most of our soldiers can recite the five steps in processing prisoners and can explain the meaning of the SALUTE acronym. But many of them have little idea of how to apply these concepts in a realistic situation or of the importance of timely and accurate intelligence reports to higher headquarters. Too many units, during their FTXs and ARTEPs, either completely overlook these important tasks or give only cursory attention to them.

A course such as the combat intelligence proficiency course (CIPC) conducted in my battalion at Fort Lewis can be an excellent way for a commander to improve the intelligence proficiency of his unit. Using a squad reconnaissance patrol as its vehicle, this type of course combines several events and incorporates them into a tactical environment. In most cases, few training aids are needed, and support personnel can be kept to a minimum. The CIPC is flexible in that the assigned tasks can be changed each time a block of training has been completed. Also, various non-intelligence tasks, such as conducting a passage of lines, breaching a minefield, reacting to an enemy contact, and countering an NBC hazard, can be added or substituted.

A sample course will illustrate how a CIPC can be conducted. In this sample, a patrol conducts a passage of lines, reconnoiters a suspected enemy position, reacts to an enemy contact, processes a prisoner, and reenters friendly lines.

The first phase of this CIPC (as in any patrol) is the planning phase. In an assembly area, the squad leaders from one platoon are issued an operations order by the platoon leader. The order specifies the route both to and from the objective, and staggers the starting time for each squad by 30 to 45 minutes. It also contains debriefing instructions for each patrol.

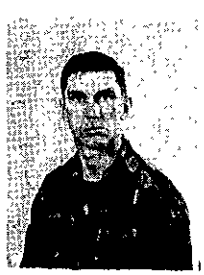
A tactical situation is developed so that the squads are considered part of the reserve element of a larger unit that is occupying a defensive position. Each squad, therefore, is required to coordinate and conduct a passage of lines both going out and coming in. The platoon leader, or platoon sergeant who acts as the evaluator, serves as the point of contact for the passage of lines.

The second phase of the course, the execution phase, begins with the passage of lines. The evaluator guides the squad to the passage point; after the passage has been conducted, he follows the squad on its patrol. His function at this point is to observe the squad and to make it move along the designated route.

The reconnaissance of the objective is conducted in accordance with the unit's tactical SOPs; it includes making sketches of the objective and disseminating the acquired information to all of the squad members. At some point along the return route, the squad is ambushed and has to try to break contact and continue toward the friendly lines. At another point, the squad encounters an enemy soldier and takes him prisoner. This requires the squad leader to search, segregate, silence and safeguard him, and speed him to the rear.

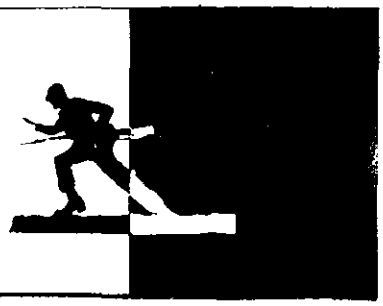
The debriefing is a CIPC's most important phase, for it is during the debriefing that the soldiers demonstrate their understanding of the SALUTE report. The evaluator can make the debriefing even more successful by asking questions that lead the members of the patrol to describe their observations in detail. The after-action review is conducted at the same time so that the evaluator can lead the squad through a self-critique. This enables the individual soldiers to point out their own shortcomings and identify areas in which they need improvement.

With a little planning and some imaginative thinking, a combat intelligence proficiency course such as this one can be tailored to fit the training needs of any unit. It is a valuable training tool that can be used to develop a critical yet generally overlooked set of soldier skills.



Captain John L. Wolf recently completed the Infantry Officer Advanced Course and is now assigned to the Infantry School's Ranger Department. Formerly, he was S3 of the 2d Battalion, 47th Infantry, at Fort Lewis. He is a 1980 graduate of the U.S. Military Academy.

ENLISTED CAREER NOTES



ARTICLE 15 PETITIONS

Time limits on the submission of Article 15 petitions will be dropped in the near future. A change to AR 27-10, scheduled for publication in September, will eliminate the three-year time limit in which to petition to have records of non-judicial punishment transferred from the performance to the restricted record on microfiche.

Under the current provisions of paragraph 3-43 of AR 27-10, 31 October 1985 is the deadline for petitioning Article 15s received before 1 November 1982 by those serving in the ranks of SSG and above on that date (including officers and warrant officers).

On the basis of the experiences of the DA Suitability and Evaluation Board (DASEB), which adjudicates Article 15 petitions, time limits serve no useful purpose and could act to the disadvantage of some soldiers.

This change does not nullify the DASEB's policy of returning petitions without actions unless at least a year has passed and one non-academic evaluation has been received since the Article 15 was imposed.

Petitioning the DASEB for transfer of the punishment is relatively easy. The soldier involved should address a letter in military format to the President, DA Suitability Evaluation Board, HQDA (DAPE-MPC-E), Washington, DC 20310-0300.

In the letter, he should state why he feels that the intent of the non-judicial punishment has been served and why the transfer would be in the Army's best interests. Most successful petitioners submit supporting evidence in the form of statements and other documents not already recorded in the OMPF. Enlisted petitioners should also send certified copies of DA Forms 2A and 2-1.

More information on petitioning for transfer of Article 15s is available from local MILPOs or Judge Advocate General offices.

EER POLICY CHANGES

The requirement for soldiers to be rated three months after promotion to sergeant (AR 623-205, paragraph 2-6) has been eliminated. All other provisions of the regulation (Enlisted Evaluation Reporting System) remain in effect.

MILPERCEN officials also report that some units may not be aware that the Army-wide EER Weighted Average was eliminated on 1 January 1984. Although the last EER Weighted Average was published in December 1983, some units may still be using it or calculating a local average.

Any units that are still using either type of average should discontinue it immediately. These averages do not reflect the status of EERs throughout the Army or at unit level and may handicap soldiers in their career progression. The use of these averages in the past also contributed to inflated EER scores.

MILPERCEN has prepared an instructional package to educate soldiers and rating officials on the proper preparation of EERs. A copy can be obtained from the Commander, MILPERCEN, ATTN: DAPC-MSE, 200 Stovall Street, Alexandria, VA 22332-0400.

For more information on EERs, anyone who is interested may call MSG Hendrix, AUTOVON 221-9610.

OVERSEAS EXTENSIONS

The Overseas Extension Incentives Program was established to encourage soldiers to extend their overseas tours. The program improves retention and readiness by stabilizing soldiers and giving them a longer time in CONUS between overseas assignments.

Two categories of soldiers are eligible: Those with Space Imbalanced MOSs (SIMOSs) that have more than 55 percent of their authorized spaces overseas, and other MOSs with a turnaround time of less than 24 months in CONUS.

A soldier with one of the designated specialties who completes a normal foreign tour and extends that tour between 12 and 18 months may choose from the following incentives: $50 per month incentive pay during the period of the extension; 30 days non-chargeable leave; or 15 days non-chargeable leave with space-required travel to and from CONUS for himself.

The program is self-financing — the cost of even the most expensive of these options is less than the cost of a permanent change of station.

MILPOs and commanders should encourage eligible soldiers to consider participating in the program.

More information is available from MILPERCEN, DAPC-PLP, AUTOVON 221-9770 or 221-8420.

OMPF RECORDS

MILPERCEN's Enlisted Records and Evaluation Center (EREC) at Fort Benjamin Harrison keeps track of the official military personnel files (OMPFs) of 600,000 soldiers. In 1984 EREC received an average of about 240,000 documents a month.

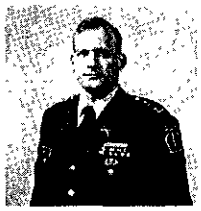
More than 20 percent of those documents, however, could not be added to the OMPFs, because they were duplicates of documents already on file; they were not authorized for filing on the OMPF; or they did not

INFANTRY BRANCH
(202) 325 or AUTOVON 221-8055

LTC George Basso
Branch Chief
(no photo available)

SGM James R. McClurg
Chief
Professional Development

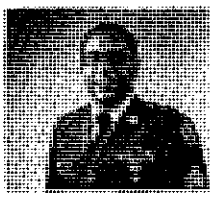
Juliette E. Miley
Chief
Assignment Section



CPT Joseph A. Dubyel
Deputy Branch Chief

Professional Development
(202) 325 or AUTOVON 221-0656/0569

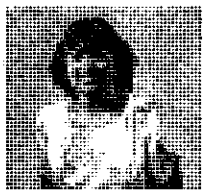
SFC John Henson
Senior Infantry
Career Advisor



SFC Joseph Calanni
ANCOES Advisor

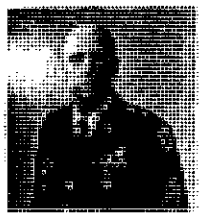
Liz Alexander
USASMA
Professional Development

Joanne Stinson
ANCOES Manager



Michaelle Lesher
Branch Secretary

E7/E8 Assignments
(202) 325 or AUTOVON 221-8056/8057

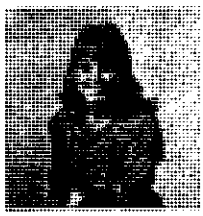


SFC Billy Paulk
E8 11B
Career Advisor

Rosie E. Garner
Chief, E7/E8
Assignment Team

Gregory Fox
E6/7 11C/H
Assignment Manager

SFC Steven T. Baker
E7 11B/M
Career Advisor



Tina M. Burroughs
E7
Assignment Manager

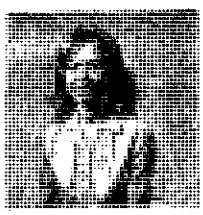
Ruth Ann Dotson
E8, Assignment Manager
(Photo not available)

E5/E6 11B/M Assignments
(202) 325 or AUTOVON 221-8059/9399

Lenore F. Christenson
Chief, E5/6
Assignment Team

Gwendell Heath
E5/6 CONUS
Assignment Manager

Cynthia Wagner
E5/6 CONUS
Assignment Manager

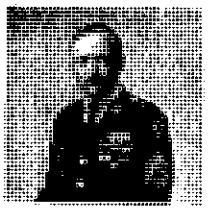


Joann Filakousky
E5/6 Overseas
Assignment Manager

Shirley Price
E5/6 Overseas
Assignment Manager

SFC Larry J. Smith
E5/6 11 B/M, Career Advisor
(Photo not available)

E1-E4 Assignments
(202) 325 or AUTOVON 221-9517/9543



SFC David W. Draughn
E1-4 11B/C/H/M
E6/7 11C/H Career Advisor

Jackie Cohen
Chief, E1-4
Assignment Team

Beverly Eastman
E1-4 11B/C/H/M CONUS
Assignment Manager

Carver E. Poindexter
E1-4 11B/M Overseas
Assignment Manager

Debra Hendrix
E1-5 11C/H Overseas/CONUS
Assignment Manager

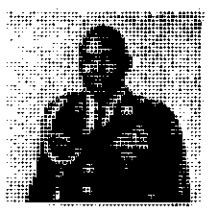
Special Forces and Ranger Assignments and Applications
(202) 325 or AUTOVON 221-9429/8340

MSG Horst Duchow
SF
Career Advisor

Theresia H. Palmer
Chief, SF/Ranger
Assignment Team

Cindy Holst
SF
Assignment Manager

Patricia Garcia
SF
Applications



MSG Laurence Williams
Ranger
Career Advisor

Frances Rawlings
Ranger
Assignment Manager

NOTE: *Drill Sergeant Assignments and Applications* — (202) 325 or AUTOVON 221-8070/8394.

include enough information to identify the soldiers for whose files they were intended. (This lack of information usually means a soldier's Social Security number was not included, and without it the document cannot be matched to the correct soldier.)

Having a correct and complete OMPF is important for all soldiers but it is even more important for soldiers in the ranks of SSG and above. DA selection boards use the OMPF to select soldiers for promotion to SFC/PSG and above, for the Advanced NCO Course, the Sergeants Major Academy, and for Command Sergeant Major. Career branches at MILPERCEN also use the OMPF to make assignments.

Any enlisted soldier can get a copy of his microfiche OMPF at no cost by writing to Commander, U.S. Army Enlisted Records and Evaluation Center, ATTN: PCRE-RF-I, Fort Benjamin Harrison, IN 46249-5301. The request must include the soldier's name, Social Security Number, grade, mailing address, and written signature.

OCS CLASS SCHEDULE (FY 86)

The following is the proposed schedule of Officer Candidate School (OSC) classes, both regular and Reserve Component, to be held at the U.S. Army Infantry School during Fiscal Year 1986:

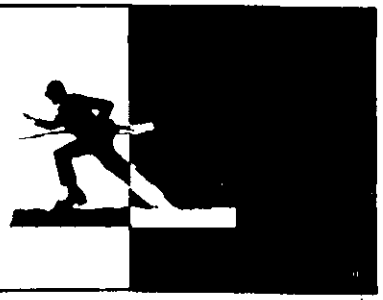
OCS

CLASS	REPORT	CLOSE
1	27 Oct 85	21 Feb 86
2	12 Jan 86	22 Apr 86
3	4 May 86	12 Aug 86
4	13 Jul 86	21 Oct 86
5	7 Sep 86	18 Dec 86

OCS (RC)

CLASS		
1	30 Mar 86	2 Jun 86

OFFICERS CAREER NOTES



OPMS REVISED

As a result of an extensive year-long review of the Army's Officer Personnel Management System (OPMS), several key changes will be made to the system over the next five years.

Several steps have already been taken to implement these changes.

First, branch proponents and major Army commands are reviewing Tables of Allowances (TDAs) and Tables of Organization and Equipment (TOEs) with regard to the revised officer classification system, and all the new documentation should take effect during Fiscal Year 1987.

Three "immaterial" position codes are being incorporated into the documents:

- "Branch immaterial" (01A) will be used to identify positions that can be filled by any officer (so long as he will not be performing the duties of an officer of a particular branch as outlined in AR 611-101).
- "Combat arms immaterial" (02A) will identify positions that can be filled by any combat arms officer (infantry, armor, field artillery, air defense, aviation, or engineer) but does not call for an officer of a particular branch.
- "Logistics immaterial" (03A) will identify positions that can be filled by any logistics officer (ordnance, quartermaster, transportation).

Also under consideration is a "personnel immaterial" code that would include the Adjutant General branch and the personnel management functional area (41).

When the new OPMS has been fully implemented, additional specialty designations into a second branch will no longer be permitted.

Officers of Year Group 1978 (YG78) have begun the transition to a policy of one branch per officer (supplemented by functional areas).

Only a limited number of these officers have had a second branch designated as an additional specialty. (Some branch-to-branch pairings were considered necessary to support current Army requirements.)

Some YG 78 officers in combat support and combat service support branches have received single track designations. This will permit repetitive basic branch assignments for them.

Most of the officers, however, were given the option of dual tracks that would include both branch and functional area assignments, or sequential tracks with repetitive functional area assignments.

Once this transition is complete, some officers from all branches may sequentially track in a functional area and concentrate their efforts there at various points in their careers.

Under the revised program, some officers will be transferred to combat arms and combat service support branches to meet Army requirements.

Other-Than-Regular-Army (OTRA) officers applying for Competitive Voluntary Indefinite (CVI) status under a centralized board process are being branch transferred at their third year of service to meet the requirements for captains. A few OTRA and RA officers will be branch transferred at their eighth year of service to meet requirements for field grade officers. This process will help manage losses more effectively and will maintain the proper inventory by grade and branch or functional area.

Command selection procedures have been modified and the changes implemented to emphasize the selection of lieutenant colonels and colonels:

- Each command board (combat arms, combat support, and combat service support) is now using three panels.
- The Fiscal Year 1986 command selection boards that adjourned this past fall and winter assigned ten percent or less of command positions to promotable majors and lieutenant colonels.
- No promotable majors or lieutenant colonels are on either alternate command list.
- To reduce the practice of "frocking" commanders, promotable officers are being slated to assume command as late in the fiscal year as possible.
- Basic training battalions and brigades are being slated to receive infantry officers only, instead of officers of just any combat arm.

Many of the other approved recommendations will be implemented over a period of several years, and further information on them will be provided as it becomes available.

DOPMA CHANGES

Several provisions of the Defense Officer Personnel Management Act (DOPMA) have been changed. These changes, which affect Reserve Component and active-duty commissioned officers and active-duty warrant officers, are the following:

- An officer who is discharged from a Regular appointment can now be given a Reserve appointment in the highest grade held, and he can be credited with the time-in-grade that he had in the former Regular grade.
- The three-stage board process for discharging a Regular officer for cause has been reduced to two boards. A recommendation that an officer must show cause for retention on duty will be sent directly to a board of inquiry without being considered first by an elimi-

nation selection board.

• An officer on the active duty list who has failed twice to be selected for promotion to captain is no longer eligible for further consideration by a selection board.

• Commissioned officers will be excluded from consideration for promotion if they have an approved separation date within 90 days of the date a promotion board convenes. This policy applies to officers who are eligible for promotion to the ranks of captain through colonel.

• Special selection boards may now be used to consider warrant officers for promotion when there were errors in their original consideration, or when they were eligible and should have been considered but were not. (This is similar to the current process for commissioned officers.)

• Reserve second lieutenants on the active duty list who are not qualified for promotion to first lieutenant will now be discharged from their appointments instead of being released from active duty. (This makes the process for Reserve officers the same as for Regular officers.)

• DOPMA allows the Army to deny separation pay if an officer is separated for cause. Before DOPMA this "severance" or "readjustment" pay could not be restricted.

• Eligibility for promotion has been restored for retired officers who were on active duty and were eligible for promotion before DOPMA was passed, and have remained on active duty.

PREFERENCE STATEMENTS

We always seem to be reminding officers that we need their preference statements, but there continues to be a need for these reminders.

Many lieutenant colonels, in particular, may feel that, because of a variety of factors, a preference statement is not important for them. But nothing could be further from the truth. Of the officers selected for battalion command this year, less than half had preference statements on file. These statements are important to the slating process, because the slate is made before the list is released, and it is too late to provide a preference statement after being notified of command selection.

All officers, lieutenant colonels included, should provide a preference statement annually, making sure their duty addresses and phone numbers are correct.

INFANTRY SCHOOL SCHEDULES

Here are the proposed schedules of Infantry Officer Basic and Advanced Course classes for Fiscal Year 1986, including the Reserve Component classes.

Anyone who would like additional information about this schedule may call or write the Editor, INFANTRY Magazine, P.O. Box 2005, Fort Benning, GA 31905-0605; AUTOVON 835-2350.

IOBC

NUMBER	REPORT	CLOSE
1	6 Oct 85	6 Mar 86
2	3 Nov 85	3 Apr 86
4	12 Jan 86	29 May 86
5	9 Feb 86	26 Jun 86
6	9 Mar 86	24 Jul 86
7	6 Apr 86	21 Aug 86
9	1 Jun 86	16 Oct 86
10	29 Jun 86	13 Nov 86
11	27 Jul 86	11 Dec 86
12	17 Aug 86	15 Jan 87
13	14 Sep 86	12 Feb 87

(Classes 3 and 8 have been cancelled.)

IOAC

NUMBER	REPORT	CLOSE
1	6 Oct 85	17 Mar 86
2	26 Jan 86	18 Jun 86
3	6 Apr 86	27 Aug 86
4	8 Jun 86	29 Oct 86
5	14 Sep 86	23 Feb 87

IOBC (RC)

NUMBER	REPORT	CLOSE
1	4 May 86	8 Jul 86

IOAC (RC)

NUMBER	REPORT	CLOSE
1	23 Feb 86	19 May 86

PMS ASSIGNMENTS

Each year Infantry Branch receives requirements to place about 25 lieutenant colonels in positions as Professors of Military Science in various university ROTC programs around the country. Whenever possible, we fill these positions with volunteers, but normally more than half of them are filled with other officers.

The PMS selection process works this way:

TRADOC, in conjunction with the four ROTC regions, determines which school gets an officer of which branch. The fact that an Infantry lieutenant colonel has been in the PMS position at a certain school does not guarantee that an Infantry lieutenant colonel will replace him. Trading schools between branches is not permitted.

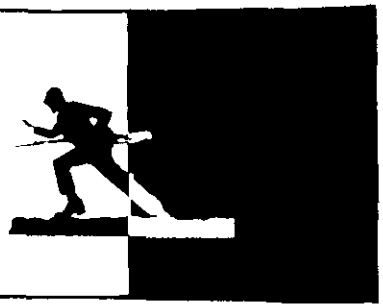
Once the Officer Distribution Plan is determined, requisitions for the schools are passed to assignment officers in September of each year to be filled the following summer. To qualify, an officer must have a graduate degree, must not be in the primary zone of consideration for promotion to colonel, and must (normally) be available between June and September.

Two officers for each school are nominated to the appropriate ROTC Region Headquarters. The nomination packet on each officer consists of his ORB, a xerox copy of his current photograph, and xerox copies of his graduate and undergraduate transcripts. The two packets are evaluated at the Region Headquarters and one is sent forward to the school. Each school then has its own selection process, which normally takes from 45 to 90 days.

Infantry Branch is committed to send good officers to serve as Professors of Military Science, and the fact that three or four PMSs are selected for battalion command each year is evidence that Infantry officers remain fully competitive while in these assignments.

Any officer who is interested in a PMS assignment should contact Infantry Branch soon.

BOOK REVIEWS



One of the most controversial military leaders of World War II was (and still is) British Field Marshal Bernard Law Montgomery, victor at El Alamein in late 1942 and commander of the combined Anglo-American armies that stormed ashore in Normandy in June 1944.

Unfortunately, Nigel Hamilton's second of a planned three-volume Montgomery biography — MASTER OF THE BATTLEFIELD: MONTY'S WAR YEARS, 1942-1944 (McGraw-Hill, 1983. 863 Pages. $25.95) — does not in any way make Montgomery a less controversial military leader; if anything, it does just the opposite. In fact, in his almost total distortion of the Allied military campaigns in northwest Africa, Sicily, Italy, and Normandy, Hamilton does Montgomery a tremendous disservice and makes Montgomery appear a far less capable high-level military commander than even his harshest critics claim.

Montgomery was never a team player, and he had little use for his American allies. (For that matter, he didn't care much for the Canadians and the Poles.) He could barely conceal his contempt for the Americans after the Kasserine Pass fiasco, and his almost complete lack of regard for the U.S. commanders dominated the later campaign in Sicily. His actions during the early days of the Italian invasion reeked of this same contempt. (It is probably only fair to say that most of the senior British commanders in Europe at this time felt the same way.)

The Normandy operation should have been regarded as the great Allied victory it was, but Montgomery's ego stood in the way and his insistence that "every thing had gone exactly as I had planned it" destroyed any sense of victory and led to serious divisions in the Allied ranks before the war ended in May 1945.

Fortunately, there is a corrective to the Hamilton story about Montgomery's actions in planning for and executing the 1944 invasion of northwest France. In fact, no other author has presented a better description of Montgomery's role in that operation and the 76 days of heavy fighting that began on 6 June and ended at Falaise and Argentan on 17 August than Carlo d'Este in his book DECISION IN NORMANDY (Dutton, 1983. 555 Pages. $22.50). The author served as an officer in the United States Army from 1958 to 1978, when he retired to research and write this book. He has done both exceedingly well, and his book should prove one of the definitive accounts of what actually transpired in Normandy — how the campaign went wrong and how it was eventually won.

Along the way, d'Este attacks the British official military history of the Normandy campaign, accusing the British historians of relying on incomplete documentary evidence and criticizing them for their "clear lack of objectivity and a failure to address a number of important questions."

Since 1945, a myth has grown up about Montgomery's role in Normandy and has been perpetuated and enlarged upon mainly by British writers, the latest being Nigel Hamilton. D'Este's book destroys that myth, and U.S. military men are urged to read it at their earliest opportunity.

Another book on the fighting in Normandy that the U.S. military professional should read is Max Hastings' OVERLORD: D-DAY AND THE BATTLE FOR NORMANDY (Simon and Schuster, 1984. 368 Pages. $17.95).

Hastings is a British war correspondent and military historian with a long list of previously published works to his credit, including one on the Falklands war. He takes a less rigorous approach than d'Este, but he did read d'Este's manuscript before writing his own book.

What concerns Hastings the most is the fact that few people today realize "just how intense were the early OVERLORD battles." He goes on to say, "In the demands that they made upon the foot soldier, they came closer than any other in the west in the Second World War to matching the horror of the eastern front or of Flanders 30 years earlier. Many British and American infantry units suffered over 100 percent casualties in the course of the summer, and most German units did so."

Hastings, therefore, concentrates on how the German, British, and American ground troops performed. He feels that the "German Army's achievement in Normandy was very great" and that the "Allies in Normandy faced the finest fighting army of the war, one of the greatest that the world has ever seen."

He also feels that it was "not that the Allied armies in Normandy were seriously incompetent, merely that the margin of German professional superiority was sufficient to cause them very great difficulties."

By the first week in August 1944, though, as Hastings points out, the "balance of psychological advantage had at last shifted decisively" and "the Americans had gained a new confidence in their own powers." He says, "Isolated infantry units held their ground; headquarters staffs kept their nerve; the American forces dispatched to meet the Germans [at Mortain] drove hard and sure to throw back the panzers."

The U.S. war in the Pacific between 1941 and 1945 has never received the attention the war in Europe has but

two recent publications go a long way toward balancing the difference.

One is Ronald H. Spector's EAGLE AGAINST THE SUN: THE AMERICAN WAR WITH JAPAN (The Free Press, Macmillan, 1985. 589 Pages. $24.95), which is one of the volumes in the publisher's series titled "Wars of the United States."

Spector now teaches history at the University of Alabama, and holds a commission as a major in the U.S. Marine Corps Reserve. He previously served with the Army's Center of Military History, and was recently ordered to active duty to prepare a study of the Grenada operation.

Spector's is a complete, if sometimes opinionated, story of the war in the Pacific — ground, air and sea — and includes the happenings in the China-Burma-India theater. He also includes an account of the Army's only Black combat units to see action in the Pacific — elements of the 93d Division — and of the Black service units that served in the Marine Corps.

His chapter titled "Strangers in Strange Lands" graphically portrays how the American fighting man and his supporting elements reacted to the largely inhospitable environment.

Spector concludes his narrative by saying that "for the United States, the record of the Pacific War is not so much a story of how the services forgot their differences but rather of the ingenuity displayed by service leaders in devising courses of action which allowed them to get on with the war without having to settle those differences."

There are generalized notes at the end of each chapter and a rather complete bibliographic note just before a comprehensive index. An excellent reference work, this book should be remembered by the U.S. military professional.

The second Pacific War publication is Edward J. Drea's DEFENDING THE DRINIUMOR: COVERING FORCE OPERATIONS IN NEW GUINEA, 1944 (Leavenworth Papers Number 9, Combat Studies Institute, Fort Leavenworth, 1984. 182 Pages. $5.00, Softbound).

The main strength of this volume for the infantryman lies in its account of the small unit actions that were fought during General Douglas MacArthur's Aitape, New Guinea campaign in mid-1944.

The author, formerly with the Combat Studies Institute at Fort Leavenworth but now with the Military History Institute at Carlisle Barracks, was well qualified to write this study. A U.S. Air Force veteran, he lived and studied in Japan for six years. He has authored one other Leavenworth Paper.

In this volume, Drea concentrates on the performance of the 112th Cavalry Regiment and those elements of the 32d Infantry Division that fought units from the Japanese 18th Army along the Driniumor River for 45 days in a series of small but bitter engagements. He not only provides a day-by-day account of the battle, he also addresses tactical planning, logistics, and combat support.

Both sides experienced enormous difficulties in the hostile jungle terrain, and Drea points out that neither army had a sophisticated doctrine for jungle warfare. Accordingly, the combat units themselves had to improvise doctrine as the fighting went on.

Drea does not neglect the big picture, or the importance of Ultra information to the success of the overall operation. But the importance of his work is his tactical narrative and the lessons that this long-ago action on New Guinea can offer today's U.S. fighting man.

We would also call your attention to a good, solid, and generally dependable one-volume military history of the United States — FOR THE COMMON DEFENSE, by Allen R. Millett and Peter Maslowski (Free Press, Macmillan, 1984. 621 Pages. $24.95).

The authors, both of whom teach history at the university level, present a straightforward historical narrative, concentrating their attention not only on the military services and their combat operations but on the political, economic, and social factors that helped shape this country's military policies. The focus on social factors is particularly evident is the later chapters.

A selected bibliography can be found at the end of each chapter — a nice touch — while a general bibliography can be fonnd at the end of the book.

Professor Maslowski wrote the first nine chapters while Professor Millett prepared the other eight and the epilogue. As a general history of American military policy, we do not hesitate to recommend it to the military professional for study and reference.

A new publication, in softbound form, has just come to our attention. It is titled DEFENSE ANALYSIS and is produced by Brassey's Defence Publishers. Its Volume 1, Number 1 is dated March 1985, and its North American editor is Roger Beaumont, a professor of history at Texas A&M University. Four issues a year will be published. The publisher intends this publication as a "new kind of forum," one that will "open up discussion and analysis in defense studies."

This first issue contains four articles, four professional notes, and a short section titled "Landmarks in Defense Literature."

All in all, this publication should attract considerable attention at the higher military levels in this country. It may not be the sort of thing junior infantrymen find helpful and informative, but they should at least look at it.

Finally, in our May-June 1985 issue, we mentioned the Osprey Publishing Company's several series of uniform books, one of which is titled Men-at-Arms. We also mentioned several of the more recent publications in that series. We have now received another one that U.S. infantrymen should find most interesting: GRENADA, 1983, with a text by Lee E. Russell and M. Albert Mendez, and color plates by Paul Hannon. (Men-at-Arms 159. 1985. 48 pages. $7.95, Softbound.) In addition to the eight color plates, numerous black-and-white photographs complement the short but concise and seemingly complete narrative that covers the activities of all of the military services.

'while operating under stringent rules of engagement, American personnel accomplished their missions with prudence and valour....The military skills of every participant were tested and found sound. Hopefully, the Grenada operation will serve a similar purpose to the Falklands war, as a symbol of military professionalism and a national resolve to keep faith with its citizens in peril."

Here are a number of our longer reviews of recently published books:

THE END OF CHIVALRY: THE LAST GREAT CAVALRY BATTLES, 1914-1918, by Alexis Wrangel (Hippocrene Books, 1982. 176 Pages. $24.95). Reviewed by Lieutenant Colonel David A. Rolston, United States Army.

The author has collected a number of eyewitness accounts of World War I Russian cavalry battles and presents them in the story-telling style of oral history.

While the stories are interesting, the reader gets the feeling that old men's memories may have drifted far from fact during the 60-odd years between living the battles and telling of them.

The author makes no attempt to analyze the battles for significant lessons or historical significance. But this is still a worthwhile book for people who enjoy the reminiscing of their elders and those who wish to get the flavor of Russian cavalry units of the past.

THE SOURCES OF MILITARY DOCTRINE: FRANCE, BRITAIN AND GERMANY BETWEEN THE WORLD WARS. By Barry R. Posen (Cornell University Press, 1984. 282 Pages). Reviewed by Lieutenant Colonel John C. Spence III, United States Army Reserve.

Why did Germany's blitzkrieg offensive succeed so well in the spring of 1940, and why did Germany's air offensive against England fall just a few months later? The answers to these paradoxical questions can be found in Barry Posen's illuminating and well-researched study of comparative military doctrine.

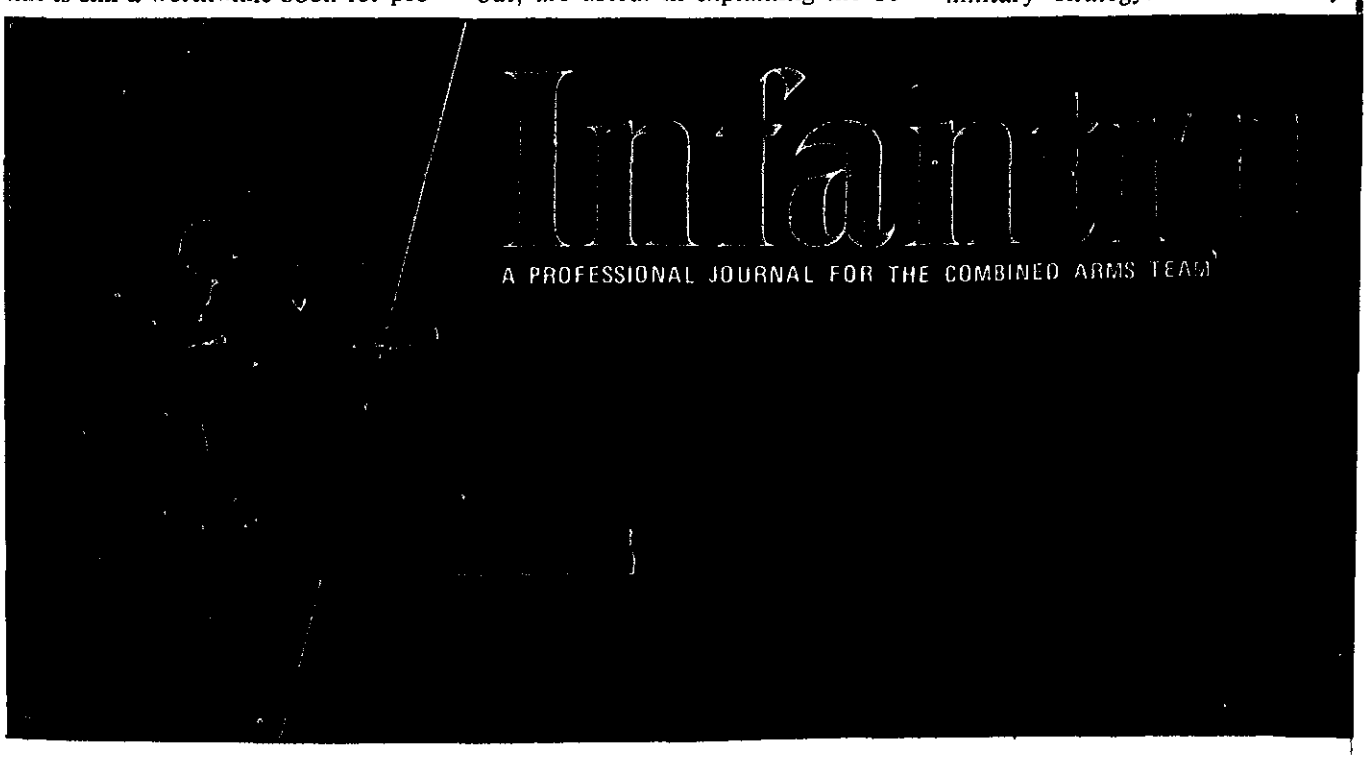
Posen, an assistant professor of politics and international affairs at Princeton University, carefully examines the military doctrines of France, Britain, and Germany in the interwar period. His methodology focuses on the various doctrines in terms of the theory of balance of power and the theory of organization. Both of these theories, Posen points out, are useful in explaining the behavior of states during the past several centuries. For instance, the balance of power theory explains the behavior of states in an essentially "unregulated" environment." On the other hand, organization theory can be used to explain organizational behavior when there are "functionally specialized bureaucracies."

Specifically, Posen points out that organization theory explains the French tendency after World War I to develop a primarily defensive doctrine. It can also explain the development by the British of the RAF Fighter Command and the air defense system.

Likewise, the balance of power theory explains much of the behavior of the three subject states during the interwar period. Thus, Germany, a pariah nation after the Treaty of Versailles, had no firm allies and had to rely on her own devices. Britain and France had to rely on each other in terms of a coalition.

Posen concludes that the balance of power theory is a "slightly more powerful tool" than organizational theory for the purposes of the study of doctrine. He deemphasizes technology and geography as elements of military doctrine.

This book is of great interest to the student of both military history and military strategy. Posen's analyse



and insights are as germane to the present-day formulation of military doctrine as they were to French, British, and German leaders in the 1930s.

THE GULF AND THE SEARCH FOR STRATEGIC STABILITY: SAUDI ARABIA, THE MILITARY BALANCE IN THE GULF, AND TRENDS IN THE ARAB-ISRAELI MILITARY BALANCE, by Anthony H. Cordesman (Westview Press, 1984. 1,041 Pages. $45.00). Reviewed by Major David N. Fetter, United States Army.

Anthony Cordesman's ambitious undertaking, as indicated by the title of his book, helps to fill the void in the current literature about an area that has grown in geostrategic importance since the 1970s, not only for the United States but for the West in general. There is nothing with which to compare Cordesman's book; it is a unique and valuable addition to the literature on the military and internal security situation in the Persian and Arabian Gulf region. The book carefully examines that situation in each of the states in the Gulf, with special emphasis on Saudi Arabia, Iran, and Iraq.

The book is filled with facts, details, charts, and tables, and Cordesman's analyses, fully supported by statistical data, are clear and informed. As with any undertaking of this kind, some errors will occur and some of the data will become dated as arms shipments into the region continue at their current pace.

The beauty of the book is that, after a reader gets through the background material in the first three chapters, he is free to skip around to different issues of interest without becoming confused. If an AWACS sale interests him, for example, he can read chapters 8 and 9; if his interest is oil, then he can skip to chapter 14.

Taken as a whole, the book is well written, thoroughly documented, and relatively comprehensive. It stands by itself as a valuable addition to any library of contemporary issues in the Middle East, personal, professional, or academic.

RECENT AND RECOMMENDED

VOICES, 1870-1914. Edited by Peter Vansittart. Franklin Watts, 1985. 352 Pages. $16.95.

TO HEAL A NATION. By Jan C. Scruggs and Joel Swerdlow. Harper and Row, 1985. 414 Pages. $25.95.

CHARLIE MIKE (CONTINUE THE MISSION). By Leonard B. Scott. A Novel. Ballantine Books, 1985. $7.95, Softbound.

SO THEY RODE AND FOUGHT. By Major General S. Shahid Hamid. Hippocrene, 1984. 189 Pages. $17.95.

NAPOLEON AT WAR: SELECTED WRITINGS OF F. LORAINE PETRE. By Albert A. Nofi. Hippocrene, 1984. 288 Pages. $19.95.

GENTLEMEN OF WAR. By Dan van der Vat. Morrow, 1984. 205 Pages. $12.95.

WEAPONS OF THE FALKLANDS CONFLICT. By Bryan Perrett. Sterling, 1984. 152 Pages. $6.95, Softbound.

THE STORY OF THE RASC AND RCT, 1845-1982. Edited by Brigadier D.J. Sutton. David and Charles, 1984. 801 Pages. $35.00.

THE CIVIL WAR ALMANAC. Edited by John S. Bowman. Facts on File, 1982. 400 Pages. $19.95.

BLACK AMERICANS IN DEFENSE OF OUR NATION. S/N 008-000-00413-7. U.S. Government Printing Office, 1985. 192 Pages. $5.50, Softbound.

COMMAND DECISIONS. S/N 008-029-00071-7. U.S. Government Printing Office. 1984. 576 Pages. $18.00, Softbound.

SEVEN FIREFIGHTS IN VIETNAM. By J.A. Cash, et.al. S/N 008-029-00072-5. U.S. Government Printing Office, 1985 Reprint of the 1970 Edition. 168 pages. $4.25, Softbound.

ESSAYS ON STRATEGY. S/N 008-020-01002-2. U.S. Government Printing Office, 1984. 132 Pages. $4.00, Softbound.

DEFENSE PLANNING FOR THE 1990s. S/N 008-020-01007-3. U.S. Government Printing Office, 1984. 328 Pages. $8.50, Softbound.

THE SOVIET ARMED FORCES: A HISTORY OF THEIR ORGANIZATION DEVELOPMENT. S/N 008-070-00524-7. U.S. Government Printing Office, 1984 Reprint of the 1978 Edition. 580 Pages. $14.00, Softbound.

BEAM WEAPONS: THE NEXT ARMS RACE. By Jeff Hecht. Plenum Press, 1984. 363 Pages. $17.95.

FUTURE WAR: ARMED CONFLICT IN THE NEXT DECADE. Edited y Frank Barnaby. Facts on File, 1984. 192 Pages. $16.95.

From The Editor

MAILING LIST SURVEY

We appreciate your responses to our recent mailing list survey, and are in the process of making the necessary changes.

Your responses, however, brought out some points that need to be clarified:

• Some of you said you seldom or never received copies of the magazine. But our survey cards were sent to the same addresses we use for our magazines. So if you received a survey card but are not receiving copies of the magazine, then we ask that you check your distribution channels to see why you are not getting them. (For units, copies are always addressed to the commander.)

• Some of you said you were getting either fewer or many more copies than we are actually sending. You should be receiving (in any one envelope) the exact number of copies shown on the label. Here, again, please check your distribution channels.

•Some of you indicated on the survey cards that we should direct a "Commander" copy to some subordinate element — such as a G-3, for example, instead of a division commander. But sometimes we hear from division and brigade commanders (or heads of other agencies or schools) who want to know why they never see the magazine. We believe, therefore, that this is a routing problem. (We realize that there is a lot of mail addressed to "Commander" that he does not want to see, but we like to think that INFANTRY magazine is not one of them.) So we keep the commander on the list, on the off chance that he'll really get it, and (sometimes) add the subordinate element as well.

• In some cases, whoever received the card returned it indicating that some change in the organization had taken place. In fact, it might now be a completely different kind of unit. (Usually, these were Reserve Component units.) In those cases, we simply delete the original unit and add the new one indicated — but only if the new unit qualifies under our distribution guidelines.

We work hard to keep our mailing list up to date. You can help us by letting us know when there is some change to your organization or your mailing address. And if at any time you have any questions about our distribution system, please let us know.

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 Company B, 1st Battalion, 4th Infantry exit Bradley while it is in motion.

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