

Infantry

January-February 1994



"Hit th' dirt, boys!"

PB 7-94-1

TOGO D. WEST, JR.

Secretary of the Army

MG JERRY A. WHITE

Commandant, The Infantry School

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This medium is approved for official dissemination of material designed to keep individuals within the Army knowledgeable of current and emerging developments within their areas of expertise for the purpose of enhancing their professional development

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05964

Distribution: Special

Infantry

January-February 1994

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FRONT COVER: From *Bill Mauldin's Army* (Presidio Press, 500B San Marin Drive, Suite 300, Novato, CA 94945). Price: \$14.95 Softcover, \$30.00 Hardcover. Reprinted with permission of the publisher.

• **INFANTRY** (ISSN: 0019-9532) is an Army professional bulletin prepared for bimonthly publication by the U.S. Army Infantry School at Building 4, Fort Benning, Georgia. • Although it contains professional information for the infantryman, the content does not necessarily reflect the official Army position, and it does not supersede any information presented in other official Army publications • Unless otherwise stated, the views herein are those of the authors and not necessarily those of the Department of Defense or any element of it. • Official distribution is to infantry and infantry-related units and to appropriate staff agencies and service schools. • Direct communication concerning editorial policies and subscription rates is authorized to Editor, INFANTRY, P.O. Box 2005, Fort Benning, GA 31905-0605. • Telephone (706) 545-6951; DSN 835-6951. • Second-class postage paid at Columbus, Georgia, and additional mailing offices • **POSTMASTER: Send address changes to INFANTRY, P.O. Box 2005, Fort Benning, GA 31905-0605.** • USPS Publication No. 370630.



Commandant's NOTE

MAJOR GENERAL JERRY A. WHITE Chief of Infantry

OPERATIONS OTHER THAN WAR - A BROADER PERSPECTIVE

The United States has remained a world power while her major potential adversary has disintegrated into a number of smaller states. This dissolution, however, has led to instability and an even greater potential for conflict almost anywhere in the world. The bitterest legacy of the Soviet Union's collapse has been the dissemination of advanced weapons and technology throughout Third World countries, with the possibility that even more sophisticated weapons will come on the market as former members of the Soviet bloc enter the arms market.

Although the need to prepare our soldiers to deal effectively with these new potential threats has caused U.S. Army planners to review our doctrine, the possibility of armed conflict is not the only challenge we face in today's world.

In the wake of the Gulf War, U.S. Army units were called upon to provide humanitarian assistance to the Kurds and other groups cast adrift by the war. At home, units were deployed to provide stability and assist civilian authorities during the Los Angeles Riots of 1992. Following Hurricane Andrew, Army units moved in to secure property, shelter, feed, and provide medical care for survivors; and assist in the enormous cleanup effort. More recently, California National Guard units were called again to the streets of Los Angeles, this time in response to the earthquake of 17 January 1994. While all of these efforts were under way, the U.S. Army was providing training and tactical expertise to support the counterdrug operations of the United States and other nations in our hemisphere.

In all of these diverse missions, the emphasis was on missions other than the traditional combat operations of the past. Today, however, we face other contingencies which present the possibility of conducting humanitarian actions under conditions of combat. U.S. soldiers are still supporting the U.N. humanitarian effort in Somalia, under circumstances that are at best unstable, and occasionally require extraordinary constraint and judgement under fire. Peacekeepers in Macedonia could well face similar challenges, as could U.S. forces deployed anywhere in the world. To be sure, the U.S. Army has been conducting operations other than war for 200 years, starting with the commitment of militia during Shays' Rebellion in 1786-87 and the Whisky Rebellion of 1794. The Army has also played a key role in the wake of natural disasters, such as the San Francisco earthquake and fire of 1906, as well as providing support for counter-smuggling operations during Prohibition, but the scope, the cost, and the global nature of today's operations other than war surpass those of earlier years.

Doctrinal literature to support the rapidly evolving U.S. role in a

changing world first appeared with Field Manual (FM) 100-20, *Military Operations in Low Intensity Conflict*, published in 1990. FM 7-98, *Operations in a Low-intensity Conflict*, published in the fall of 1992, was the first infantry publication drafted at the U.S. Army Infantry School to fill the void in doctrinal guidance for units at brigade level and lower on the conduct of operations in low intensity conflict. FM 7-98 includes such timely issues as combating terrorism, peacekeeping and peacetime contingency operations, fratricide prevention, civil disturbances, humanitarian assistance, and support for insurgency and counterinsurgency operations. In addition, the latest version of FM 100-5, *Operations*, which appeared in June 1993, addresses Army-level participation in the conduct of operations other than war (OOTW) to a greater degree than the earlier 1986 version of the FM had addressed low intensity conflict. This manual establishes broad doctrinal guidance, categorizing activities and establishing operational principles beyond the familiar nine principles of war.

Commanders and doctrine writers at Fort Benning and in the field have been busy; they have assimilated information from our own and foreign armies' experiences, both recent and past, and applied it toward meeting tomorrow's challenges. The experience of Coalition forces in the Gulf War, U.S. lessons learned in Grenada and Panama, the counterinsurgency in the Philippines, and U.N. forces' recent experiences in Somalia, all went into the analysis, along with the volumes of data from the Vietnam War and the British success in Malaya.

We recognize that the U.S. is not alone in the OOTW effort and that, by establishing early communication with other countries, we can make sure an OOTW network takes shape concurrently with the information collection effort. Interface with foreign armies is being accomplished through a number of symposiums and exchanges between the armies of the U.S., Great Britain, Germany, Canada, France, and Israel, among others. The efforts of our liaison officers and those of our Allies have already provided an invaluable link between cultures in this collection effort, and the end result is a growing OOTW library at the Infantry School.

The field of doctrinal literature has not been neglected during all of this information collection and coordination, however; in August 1993 the Infantry School published and staffed a draft white paper, *The Application of Peace Enforcement Operations at Brigade and Battalion*. The School is also the primary writer, working with the U.S. Army Training and Doctrine Command (TRADOC), on FM 100-23, *Peace Operations*, which will further clarify the role of

U.S. forces in this new dimension of our Army's mission. The manual was drafted after a determination of the needs of the commanders tasked with conducting OOTW.

Doctrine has its greatest value, however, when it complements training, and that's where we come in. Training and evaluation outlines (TEOs) are either complete or in draft for civil affairs operations, checkpoint operations, convoy operations, the conduct of a cordon and search, and noncombatant evacuation operations. Articles on a number of these subjects have appeared in recent issues of *INFANTRY*, and more will follow. The U.S. Army Sniper School has revised its program of instruction (POI) to include OOTW conditions, rules of engagement, and more emphasis on military operations on urban terrain (MOUT).

Leader development is a key element of preparing the force to conduct OOTW, and we are giving all of its dimensions a good, hard look. Warrior Plus, an initiative of the Army Chief of Staff, has identified those unique leader skills demanded in the OOTW arena, as well as the tasks we will use to develop or reinforce those skills. We need to look beyond the traditional perceptions of the enemy in order to understand the full range of potential threats. We also need to develop leader skills in dealing with the news media, and we must equip our leaders with the ability to negotiate. Even though much of the negotiation in trouble spots will be conducted by State Department personnel, a leader may find himself or herself the only one on the ground who can take timely action to defuse a tense situation or alleviate suffering. Opportunities are often perishable, and we must train leaders to recognize them, seize them, and act. Likewise, this new dimension of operations will require interface with non-governmental organizations (NGOs), and a leader must know how to perform his mission while maintaining a credible, effective degree of impartiality. The development of these skills has already begun at the Infantry School; in the Infantry Officer Advanced Course (IOAC) and the Infantry Pre-Command Course (IPCC), POI revisions now include greater emphasis on operations other than war, while the Army's Ranger School has included the cordon and search technique as part of its program of instruction, along with civilians on the battlefield.

Materiel contributions to OOTW include enabling technologies such as the unmanned aerial vehicle (UAV) Pointer, a filmless camera, improved night vision devices, and a number of nonlethal technologies that are designed to improve the operational capabilities of the unit by improving decision making cycles and by enhancing a commander's command and control capabilities. The 82d Airborne Division's recent rotation, 94-2, to the Joint Readiness Training Center provided a testbed for some of these enabling technologies and allowed us to evaluate our emerging doctrine and the training and evaluation outlines.

The future initiatives in support of OOTW highlight the priority

assigned to it. The Infantry School has responded to a TRADOC tasking for support to the field by drafting a training support package (TSP) and developing a mobile training team (MTT) to assist units at brigade level and below. This initiative was further expanded during the 10-14 January 1994 conference of TRADOC service schools at Fort Benning, and a final product is expected in June of this year. Validation of the TSP/MTT package will take place during the 25th Infantry Division's Joint Readiness Training Center rotation in August of 1994. That rotation will also include an assessment of enabling technologies that are selected on the basis of their potential to enhance a commander's ability to accomplish peace enforcement missions across the entire spectrum of doctrine, training, leader development, materiel, and soldier issues. The Infantry Conference of 9-12 May 1994 will showcase the latest techniques of OOTW.

The Peace Enforcement White Paper will be published in the June 1994 time frame, and a forthcoming revision of FM 7-98, *Operations in a Low-Intensity Conflict*, will incorporate the White Paper. In addition to the POI changes to IOAC and IPCC, the Infantry Officer Basic Course and the Advanced Noncommissioned Officer Course are being reviewed for possible changes to support the OOTW effort. While all of these changes are under way, the Infantry School will offer continued support to field commanders through assessment teams, the Infantry Hotline, and the timely publication of OOTW-related information in *INFANTRY*.

This has been a summary of where we are in the area of operations other than war, but what does it mean to today's infantryman or infantry leader? For one thing, it means that he can expect to be called upon to perform a wider range of missions than ever before, and in some unique environments. Issues such as rules of engagement; civilians on the battlefield; joint, interagency, and combined operations; interface with non-government organizations; unique force tailoring and information requirements; and measures of success different from those we have relied upon in the past will require high degrees of flexibility, versatility, and confidence to arrive at the right solution and act decisively. Operations other than war will require all of the capabilities of the Infantry. Both heavy and light infantry will play major roles. We will see increased emphasis on MOUT, force protection, and the personnel and materiel readiness that will enable us to rapidly deploy a varied mix of forces against an equally diverse range of contingencies.

The USAIS has taken the lead in developing doctrine, training, and equipment for the OOTW missions. We must be out front because our infantrymen will surely be the spearhead of any future operation. Our tribal wisdom is developing and changing quickly in OOTW and I encourage all of you to accept the challenge and grow with us in this endeavor of total readiness across the spectrum of conflict.



INFANTRY LETTERS



60mm MORTAR PRODUCTIVITY

U.S. Army airborne, air assault, and light infantry companies are authorized two M224 60mm mortars each, which are operated by six soldiers: a section leader, a squad leader, two gunners, and two assistant gunners who also double as ammunition bearers.

Each mortar includes an M225 cannon assembly (14.4 pounds), M7 circular baseplate (14.4 pounds), M170 bipod assembly (15.2 pounds), and M64 sight (3.5 pounds with case), for a total weight of 47.5 pounds.

Company mortars are routinely employed with a fire direction center (FDC), using gunner-sighted direct lay or squad leader-adjust techniques.

Austere staffing hampers mortar effectiveness in sector coverage and sustainability. Target engagement is line-of-sight (LOS), which eliminates terrain-immaterial indirect-fire coverage.

The absence of dedicated ammunition bearers can reduce the normal sustained rate of fire of about 20 rounds per minute. Firing the M720 high-explosive projectile (3.75 pounds) generates a logistical resupply burden of 75 pounds per mortar per minute of sustained engagement.

Increased staffing to provide an FDC capability (computer and radiotelephone operator) or a dedicated two-man ammunition resupply capability is not likely in the current era of force downsizing. It may be feasible, however, to reconfigure the 60mm mortar capability and save two crew spaces in the process.

Two 60mm mortars could be spliced into a single crew-operated fire unit by doing the following:

- Mount both cannons side-by-side on one M7 circular baseplate, using a plug-in, dual-socket adapter that permits both cannons to rotate at the same time.

1993 INDEX

The 1993 index to **INFANTRY** is available to anyone who requests a copy. Please address your requests to Editor, **INFANTRY**, P.O. Box 2005, Fort Benning, GA 31905-0605.

- Install a dual-cannon collar on the bipod assembly.
- Use fixed, bi-azimuth cannon alignment.

One gunner could traverse and elevate both cannons. Loading could be accomplished by one assistant gunner.

Eliminating one baseplate, bipod assembly, and sight would reduce the two-mortar weight from 95 to 62 pounds. The new dual-socket baseplate adapter and dual-collar bipod mounting would offset some of the weight savings.

The overlap of burst lethal areas would be range-variable. For example, mounting cannons with a fixed 10-mil divergence between firing azimuths would yield a 10-meter distance between burst points at a range of 1,000 meters. Burst point interval would increase to 30 meters at 3,000 meters. The precise azimuth divergence between cannons would be determined after study of target coverage and engagement range considerations.

RICHARD K. FICKETT
Herndon, Virginia

ARMY SCIENCE CONFERENCE

The 19th Army Science Conference will be held 20-24 June 1994 in Orlando, Florida. The theme for the conference is "Assuring the Competitive Edge."

The biennial conference is intended to provide a forum for the presentation, discussion, and recognition of significant accomplishments by U.S. Army scientists and engineers in their efforts to support tomorrow's combat soldier. The 1994

conference will feature the presentation of 120 papers and posters judged best among those submitted. Exhibits will be available throughout the conference to demonstrate the latest technologies in government laboratories and research, development, and engineering centers.

Anyone who is interested in applications or additional information may FAX a request to Army Science Conference Registration Desk, (804) 255-0056, including complete mailing address, telephone and FAX number; or call me at (804) 255-0409.

BRENDA K. VAUGHAN
Assistant Technical
Conference Manager

ARMY AVIATION ASSOCIATION CONVENTION

The Army Aviation Association of America (AAAA) will hold its annual convention 20-24 April 1994 in St. Louis, Missouri. The theme will be "Army Aviation: Advancing on the 21st Century."

The program will feature two special-focus panels, one on operations and training and the other on acquisition and logistics.

Additional information is available from AAAA, 49 Richmondville Avenue, Westport, CT 06880-2000; telephone (203) 226-8184, FAX (203) 222-9863.

BILL HARRIS



INFANTRY NEWS



THE 1994 INFANTRY Conference will be held at Fort Benning, Georgia, 9-12 May 1994. Additional information is available from CPT Stempniak, DSN 835-4147 or commercial (706) 545-4147.

A WARFIGHTING IDEA hotline has been established at the U.S. Army Training and Doctrine Command (TRADOC). Its purpose is to solicit suggestions from soldiers and civilian employees that can be applied to existing doctrine or used to

develop future doctrine.

A telephone hotline was chosen to make it easy for soldiers and civilian employees throughout the Army to contribute their knowledge to meet the Army's challenges. Specifically, TRADOC is soliciting imaginative ideas on doctrine, materiel, training, leader development, and soldiers, as they apply to the battlefield.

A hotline caller will be notified within two working days that his or her idea was received and is being considered; 30 days

later, whether the idea has merit or not, the caller will receive an update on the status of the idea.

The hotline number is 1-800-445-IDEA (4332) or DSN 680-IDEA (4332).

SOLDIERS GRADUATING FROM advanced individual training and one-station unit training will soon be issued uniforms and selected equipment that they can keep for the rest of their time in the Army.

Allowing soldiers to keep essential field clothing and equipment, instead of turning it in each time they change duty stations, is expected to instill in them a pride of ownership and improve their readiness and professionalism.

The Soldier Support Division (SSD) of the U.S. Army Training and Doctrine Command acts as a user representative in determining requirements and product improvements for all clothing and individual equipment (CIE) for soldiers.

The following are among many improvements now being pursued:

- The possibility of developing one uniform style for both air and armor crews. (Currently, air crews wear two-piece uniforms and armor crews one-piece.)

- Cordless communications for armor and aviation crews. (The system would improve safety during dismounted operations and improve command and control. Soldiers would not have to plug into a radio system to talk with each other.)

- Several types of nuclear, biological, and chemical (NBC) uniforms as alternative means of protection. (This effort includes new gloves for the NBC uniform that will be less bulky and more flexible so a soldier can handle a weapon or a computer while wearing them.)

- An undergarment to protect against chemical agents. (Recently approved for production, this undergarment will be es-



THE NEW DIGITAL MESSAGE Device Group (DMDG), Model C, is used for the transmission and receipt of secure data communications over a variety of attached radio equipment, including HF, VHF, and satellite systems.

It also incorporates a programmable modem that uses advanced digital signal processing techniques to generate signals that interface directly with the audio circuits of a manpack radio. The modem can be modified easily in the field for any fu-

ture modem waveforms, while the original DMDG modem was hardwired for a single waveform.

Other features of the new model include a user-friendly, menu-driven interface (making it simple to learn and operate); larger message memories; and full backwards compatibility with the earlier versions. An earlier model DMDG can be upgraded to a Model C in about 15 minutes.

pecially good for armor crews, enabling them to function more freely. With it, these crews would not have to squeeze into tanks wearing bulky and hot NBC suits.)

The SSD also represents the user on a Department of Defense working group that evaluates clothing and textile items for potential joint service use and oversees the Soldier Enhancement Program (SEP). SEP is an initiative aimed at acquiring items that are commercially available.

A DIGITAL COMPASS SYSTEM for the Bradley fighting vehicle is to be produced under a recently awarded contract. The contract calls for the integration of a unique electronic compass technology with the Army's new precision

lightweight global positioning system (GPS) receiver (PLGR) to produce compasses for the Army's fleet of Bradleys.

One benefit of this compass is its ability to overcome the severe magnetic deviation created by the armor on the vehicle. Another benefit is its ability to interface with the Bradley's PLGR system receiver and tactical computers.

In the Bradley, simple customized displays will interface with the GPS to show the driver and the commander all the navigation information they need. The GPS pinpoints the vehicle's current location within meters, anywhere on earth. The compass provides critical steering and pointing information to help keep the vehicle crew oriented on the battlefield and allow them to steer quickly to their destination. If the external GPS signals

are blocked or neutralized, the compass can automatically calculate the vehicle's latest position by dead reckoning. All information is immediately available digitally in order to communicate with the other electronics on the vehicle, or to be transmitted to mission planners or other vehicles to facilitate synchronized operations.

The fleet of Bradleys to be equipped with these digital compasses will be part of an Army program to improve Bradley capabilities on the basis of lessons learned from the Persian Gulf War in 1991.

During Operation DESERT STORM, it was discovered that U.S. military units, trained to confront Warsaw Pact forces on well-surveyed European terrain, were not prepared to navigate in the desert. To determine direction, armored vehicle

BRADLEY CORNER

THE BRADLEY PROPONENCY Office in the 1st Battalion, 29th Infantry, at Fort Benning publishes Bradley fighting vehicle and Stingray training and field manuals, and also provides subject matter experts to assist in related developments. The office is working on several projects and welcomes comments from the field on them:

Change 1, Field Manual (FM) 23-1, *Bradley Fighting Vehicle Gunnery*, should reach the field by January 1994; and Student Handout (SH) 23-1, *Interim Publication for Bradley-equipped Echo Companies*, by February 1994.

The FM 23-1 change includes a threat-based gunnery methodology, the point-calculation worksheet. After the change is distributed to units, an 18-month transition period will be in effect. During this time, unit commanders will score their gunnery tables using both the new worksheets and the current matrices for qualification scoring and for reporting and evaluating their progress toward National Training Center (NTC) gates (requirements that must be met before NTC rotations).

Units are asked to send the proponency office all the accumulated data from

their gunneries—such as the engagement times for each target and the ranges to the targets—so that any necessary corrections can be made before the complete revision of FM 23-1, which is planned for 1995.

This change also incorporates Bradley Gunnery Skills Test (BGST) Task 19 (Vehicle Identification). Thirty mandatory vehicle slides and an initial list of vehicles for the tasks were mailed in May 1993 to the division master gunners in Bradley-equipped divisions. That initial list has since been reviewed by the Infantry School's Foreign Analysis Division, and some changes are expected. A revised list will be sent to the master gunners when it is completed.

Meanwhile, the Bradley Proponency Office needs assistance in locating unclassified photographs of the vehicles listed so the best possible images can be incorporated. These photos will then be reproduced and distributed by the U.S. Army Training Support Center.

SH 23-1 will lay out the Infantry School's intent on the initial training strategy for the proposed MOS 11HD3 (Bradley-qualified heavy antiarmor infantryman), along with the Echo com-

pany gunnery training strategy.

Other new Bradley developments include the following:

- The M919 APFSDS-T (armor-piercing fin-stabilized discarding sabot-training) round, which was type-classified in September 1993.
- The Rock Island cannon bore erosion gauge, which is now available. The gauge allows master gunners to check the remaining life of their 25mm gun barrels. The correct number for ordering the gauge is NSN 5210-01-329-4860; the cost is \$25.54; and the authority for requisitioning the gauge is TM 9-1005-200-20&P.

Also under development are BFV/Stingray training devices such as the Thru-Sight Video, the Close Combat Tactical Trainer, the Advance Gunnery Training System, and the Precision Gunnery System.

To obtain additional information on any of these projects, or to offer comments, units may write to Commander, 1st Battalion, 29th Infantry, ATTN: ATSH-INA-BPO, Fort Benning, GA 31905; or call DSN 784-6201/6136, commercial (706) 544-6201/6136.

commanders often had to leave the safety of their vehicles and walk several dozen yards away from its magnetic influence to take compass readings with their handheld lensatic compasses.

In addition, it was found that the inability to navigate and maintain battlefield orientation contributed to some of the war's friendly fire casualties. These compasses will enable armored vehicle commanders to better synchronize their movements, with the rest of their unit staying out of harm's way, while also helping distinguish between enemy and friendly forces.

The engineering portion of the contract is to be completed by December 1994; production is to begin in early 1995 and to be completed by the year 2000.

THE LIGHTWEIGHT FIGHTING Position Excavator System, also called the Badger, is designed to help soldiers create a two-man fighting position quickly and safely.

The system uses a hand auger and a soil-loosening explosive charge, both of which are common products readily available in forestry and mining industries, modified for military use. The explosive is completely inert during transportation and storage and is suitable for air delivery. The total system weighs less than nine pounds.

To operate it, a soldier bores two holes with the auger. The binary explosive is then mixed in its container and one explosive container is dropped down each bore hole. The soldier initiates the explosive from a distance of at least 20 meters,

using a non-electric initiator and Primeline connected to the blasting cap. The loosened soil is removed, and the soldier finishes shaping the position by hand.

AN AWARENESS OF CULTURAL diversity among members of the armed services and a concern for global humanitarian efforts have led to the development of two new versions of the MRE (meal-ready to eat):

The Multi-Faith Meal (MFM) uses *kosher* and *hallal* restrictions to keep the new entries and the existing MRE components compatible with a broad range of religious dietary restrictions.

Six new MFMs, some of which are vegetarian, were field tested in Septem-

THE ALLIED KINETIC ENERGY Recovery Rope (AKERR), which allows a tracked armored vehicle to pull a like vehicle out of the mud, was adopted by the Army in 1990.

Some wheeled vehicles are equipped with winches that enable them to recover themselves and similar vehicles, but armored tracked vehicles—with the exception of the M578 and M88A1 recovery vehicles—do not have such winches. To recover a mired tracked vehicle, a like vehicle must be able to approach close enough to connect towing cables and exert pulling force without becoming mired itself. The AKERR allows for quick and simple like-vehicle recovery without cable winches.

The AKERR kit consists of a braided nylon cable and special shackles to connect the cable to vehicles. The shackles in the kit are specially designed to withstand the tremendous forces generated.

The cable is designed to stretch under a load. (If it were a steel cable, there would be no give to it and the shackles would snap, or the cable would break.) The energy of the pulling force is imparted to the rope, which passes it on to the mired vehicle. All the pulling force generated by the recovering vehicle can then be used, without danger, to effect the recovery. (The breaking strength of

the rope is 158,700 pounds or 79.4 tons).

Each recovery operation involves different circumstances, but the technique for using the AKERR is basically the same for all:

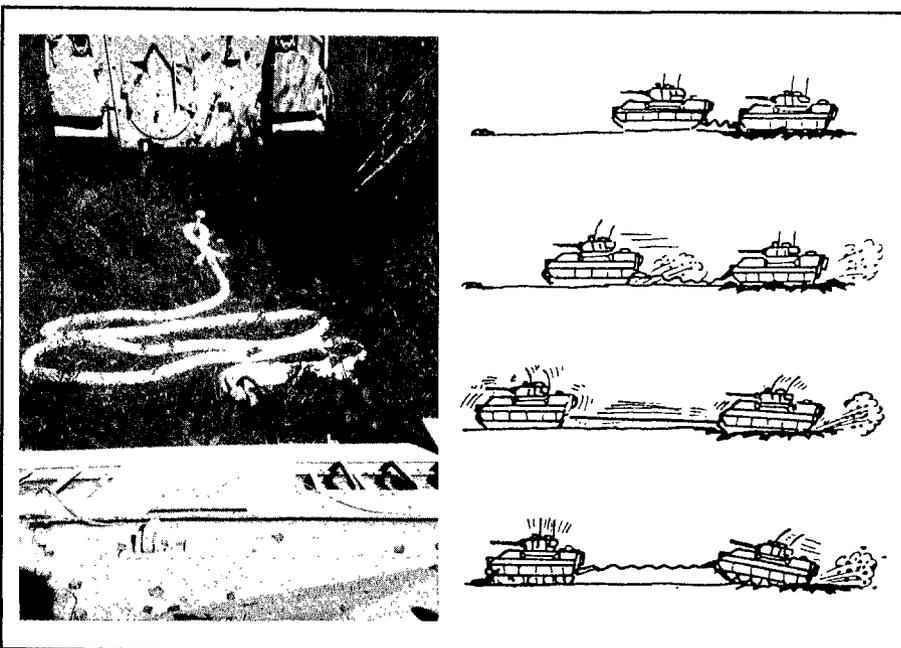
- The recovering vehicle, of the same weight class or heavier, backs up as close to the mired vehicle as possible and centers on it.
- The rope is connected to both vehicles.
- The recovering vehicle accelerates

away from the mired vehicle.

- The rope stretches, pulls taut, then transfers the recovery vehicle's energy to the mired vehicle.
- The mired vehicle, driven by its tracks, pulls free. (It may take more than one pull.) See illustration.

Technical Manual 9-4020-200-10 covers the AKERR components and their uses in detail.

(This item was contributed by SFC Jerry Ruth, Little Falls, Minnesota.)

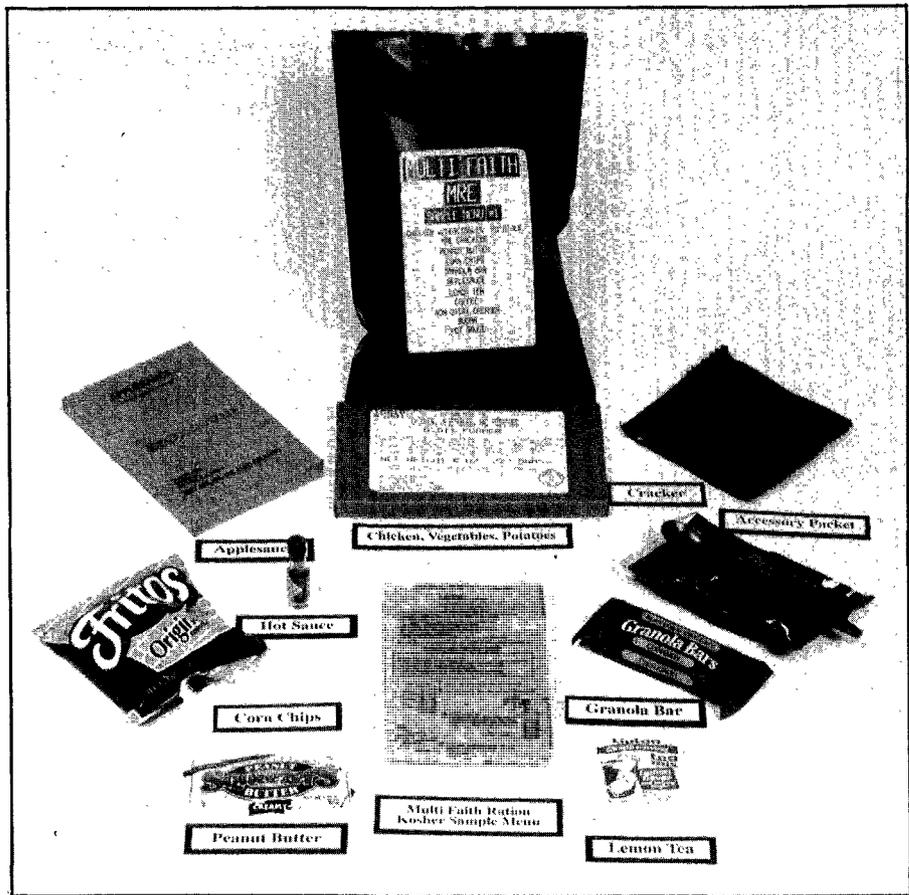


ber and October 1993. The data from these tests is still being analyzed, but initial information indicates that the meals were well received. Pending final approval, one or two MFMs will be included in each case of MRE rations.

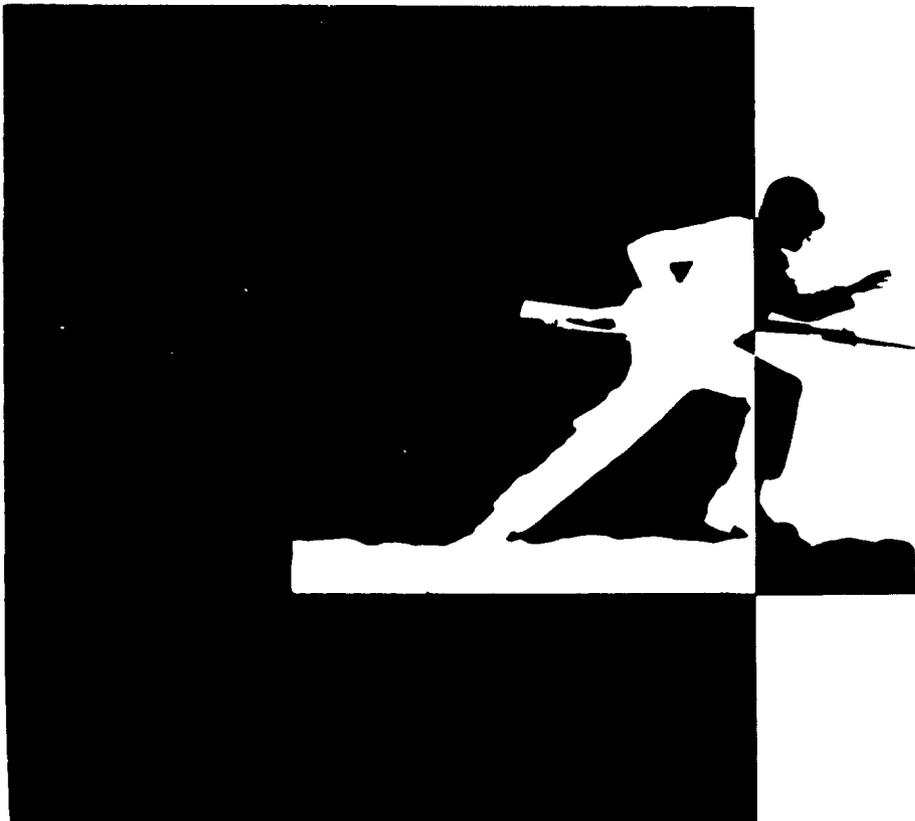
The Humanitarian Daily Ration (HDR) is a more cost-effective and universally acceptable version of the MRE. Although the MRE has served as a humanitarian aid ration during various crises around the world, it is not designed to be universally acceptable or culturally correct.

The HDR is specifically designed for malnourished people whose digestive systems cannot yet handle more substantial meals such as MREs. In terms of the menu itself, the HDR still contains 44 percent of the original MRE food products. It requires no special preparation before eating and can be delivered by airdrop.

Six HDR menus are now available, containing an average of 1,138 calories each. All of the meals are vegetarian and will sustain a person for one day. An HDR costs \$3.95 and meets the nutritional standards of the World Health Organization.



This sample kosher menu for the Multi-Faith Meal (MFM) is one of the six MFMs offered to meet the religious and dietary restrictions of servicemen.



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THE BRADLEY PROPONENCY Office in the 1st Battalion, 29th Infantry, at Fort Benning publishes Bradley fighting vehicle and Stingray training and field manuals, and also provides subject matter experts to assist in related developments. The office is working on several projects and welcomes comments from the field on them:

Change 1, Field Manual (FM) 23-1, *Bradley Fighting Vehicle Gunnery*, should reach the field by January 1994; and Student Handout (SH) 23-1, *Interim Publication for Bradley-equipped Echo Companies*, by February 1994.

The FM 23-1 change includes a threat-based gunnery methodology, the point-calculation worksheet. After the change is distributed to units, an 18-month transition period will be in effect. During this time, unit commanders will score their gunnery tables using both the new worksheets and the current matrices for qualification scoring and for reporting and evaluating their progress toward National Training Center (NTC) gates (requirements that must be met before NTC rotations).

Units are asked to send the proponency office all the accumulated data from

their gunneries—such as the engagement times for each target and the ranges to the targets—so that any necessary corrections can be made before the complete revision of FM 23-1, which is planned for 1995.

This change also incorporates Bradley Gunnery Skills Test (BGST) Task 19 (Vehicle Identification). Thirty mandatory vehicle slides and an initial list of vehicles for the tasks were mailed in May 1993 to the division master gunners in Bradley-equipped divisions. That initial list has since been reviewed by the Infantry School's Foreign Analysis Division, and some changes are expected. A revised list will be sent to the master gunners when it is completed.

Meanwhile, the Bradley Proponency Office needs assistance in locating unclassified photographs of the vehicles listed so the best possible images can be incorporated. These photos will then be reproduced and distributed by the U.S. Army Training Support Center.

SH 23-1 will lay out the Infantry School's intent on the initial training strategy for the proposed MOS 11HD3 (Bradley-qualified heavy antiarmor infantryman), along with the Echo com-

pany gunnery training strategy.

Other new Bradley developments include the following:

- The M919 APFSDS-T (armor-piercing fin-stabilized discarding sabot-training) round, which was type-classified in September 1993.
- The Rock Island cannon bore erosion gauge, which is now available. The gauge allows master gunners to check the remaining life of their 25mm gun barrels. The correct number for ordering the gauge is NSN 5210-01-329-4860; the cost is \$25.54; and the authority for requisitioning the gauge is TM 9-1005-200-20&P.

Also under development are BFV/Stingray training devices such as the Thru-Sight Video, the Close Combat Tactical Trainer, the Advance Gunnery Training System, and the Precision Gunnery System.

To obtain additional information on any of these projects, or to offer comments, units may write to Commander, 1st Battalion, 29th Infantry, ATTN: ATSH-INA-BPO, Fort Benning, GA 31905; or call DSN 784-6201/6136, commercial (706) 544-6201/6136.

PROFESSIONAL FORUM



Convoy Planning

MAJOR JEFFREY J. GUDMENS

The battalion had conducted combat operations for three days and needed supplies. The S-4 put together a convoy and assigned the antitank platoon leader to take it forward. As the convoy moved down the road, the lead TOW vehicle encountered a minefield, and the entire convoy stopped as the crew dismounted to clear the mines. A well-concealed opposing force (OPFOR) squad opened fire and in 20 minutes destroyed all of the battalion's resupply, the TOW platoon, part of the aid station, and half of the mortar platoon. Since the AT platoon leader had not given an operations order, the soldiers did not know what to do when they were attacked.

This story is not unusual at the Joint Readiness Training Center; it happens often. Leaders who are responsible for conducting convoy operations forget one important thing: A convoy is a combat operation and is planned like any other combat operation. Then the information is disseminated to the lowest level, and the operation is rehearsed.

The convoy commander receives his mission from various sources—the battalion commander, the tactical operations center, and the like. He is often given sketchy information and a task such as "Move these supply vehicles to the release point." While this statement allows him great latitude for planning, it also requires him to find the information he needs to accomplish his mission.

The convoy commander issues fragmentary orders any time he has further mission information for members of the convoy. These warning orders contain enemy situation, friendly situation, mission, tentative time schedule (planned from arrival time backward), and instructions to key leaders (vehicle and supply preparation, OPORD time, rehearsal time, among others).

After issuing warning orders, the convoy commander makes a tentative plan using the estimate of the situation. As he develops the plan, he considers the following battlefield operating systems (BOSs):

Intelligence. The S-2 and the convoy commander conduct an intelligence preparation of the battlefield (IPB) to identify choke points, bridges, tunnels, road conditions, populated areas, and possible ambush locations. The commander should know what the enemy has done in the past and his current order of battle. The S-2 determines the availability of intelligence assets such as low-level voice intercept and unmanned aerial vehicles (UAVs).

Maneuver. The convoy commander determines the task organization and the order of movement. The following is a sample task organization:

Advanced guard—two HMMWVs with M2/MK-19s and an engineer squad in HMMWVs.

Main body—a rifle platoon on three

five-ton trucks and convoy vehicles.

Reserve force—a light infantry company with five UH-60 and two AH-64 or AH-1 helicopters; or a mechanized infantry company team of four M1 tanks and nine M2 Bradley fighting vehicles. (M2 BFVs or tanks can be substituted for HMMWVs.)

The distance between elements and vehicles depends on METT-T (mission, enemy, terrain, troops, and time), but the advanced guard is far enough ahead to clear any obstacle before the main body arrives (but not so far that the enemy can block the route after it passes). The rear guard is close enough to provide immediate support but not close enough to join the end of the main body.

The convoy moves on a primary route that allows for rapid movement and avoids such hazards as built-up areas, tunnels, bridges, and the like. The alternate route should be one that the convoy can move to easily if the primary route is interdicted.

A convoy can expect to encounter various situations during operations and should prepare for each with a battle drill. The obvious battle drills for the convoy are *react to ambush*, *react to indirect fire*, *react to air attack*, *react to an NBC threat*, *react to civilians on the battlefield*, *react to obstacles*, *react to sniper*, *vehicle recovery*, *break contact*, and *secure at halt*.

Convoy security is improved by aerial

assets. Attack and scout helicopters can find trouble before it happens or help destroy enemy forces that the convoy encounters. U.S. Air Force AC-130 gunships also provide excellent security and support, especially at night. Planned close air support (OA-10, A-10, F-16) can help secure a convoy and provide immediate, close, and accurate fire.

Fire Support. The convoy commander needs a forward observer (FO) with radios in his vehicle and, if possible, a forward air controller to plan and execute close air support. The convoy commander and the FO develop a fire support plan that helps the convoy move without interruption. The convoy should be allotted one priority target that the FO can plan and shift as the convoy moves on its route.

Mobility, Countermobility, Survivability. The convoy commander considers some mobility tasks, such as hardening vehicles traveling on roads that may be mined and seeing that wheeled vehicles have sandbags or flak jackets to protect the crews and passengers from land mines, booby traps, or small arms fire. Hardening vehicles is a difficult, time-consuming task, but it saves lives. If possible, a dedicated route clearance team precedes the entire convoy. This requires the engineers with the advanced guard to clear only hasty or "panic" obstacles.

Air Defense. The convoy commander plans for air defense, even when the scenario envisions U.S. air supremacy. The convoy uses active measures that include air guards in each vehicle with a plan for 360-degree observation at different altitudes and the integration of dedicated air defense assets (Stinger, Vulcan, Avenger). The convoy also uses passive measures to avoid air attack. As the convoy lines up, the vehicles are dispersed to avoid creating a target. Drivers are instructed to keep proper intervals during movement and halts, and to seek any available cover and concealment during halts.

Combat Service Support (CSS). CSS is critical during convoys. All leaders ensure that the vehicles are mechanically ready for the mission, with mechanics inspecting vehicles just before departing if

possible. Although the goal of a good CSS plan is to avoid halting the convoy to deal with broken down vehicles or with casualties, the convoy also plans and rehearses vehicle recovery. The convoy commander plans for the worst case—more vehicles broken down than recovery assets to handle them—and for field-expedient recovery. The convoy also needs a good casualty evacuation plan for those cases where contact occurs and the convoy must fight its way out.

Command and Control. Convoy command and control must be from battalion level—the first echelon that has the assets to synchronize it properly. The convoy commander should be a captain or senior lieutenant who has experience with combat vehicles (perhaps the antitank or support platoon leader). He needs a vehicle with enough radios to monitor the battalion command net, the convoy net, and the fire support net. He needs a forward observer and a forward air controller in his vehicle with radios (backpack-mounted radios are better than none, though their range may be limited). The battalion signal officer can assist with the communications plan, determining whether the convoy can communicate along the entire route and, if it cannot, make corrections (retransmission or relay stations). Although every vehicle should have a radio, this is almost impossible, and backpack or portable (PRC-126) radios are better than nothing. If all vehicles can't have radios, those that do have them should be mixed in among those that don't.

In addition to these battlefield operating systems, the convoy planner should consider using Special Operations forces. Civil affairs and psychological operations forces can assist the convoy commander. There is a real possibility that the convoy will have to deal with civilians on the battlefield, and these specialists can help plan for and deal with them.

After the convoy commander makes his tentative plan, he continues with the remaining steps of the troop-leading procedures. The convoy commander can initiate movement at any time during the troop-leading procedures, however, and the sooner the convoy elements are centrally located, the better. This will facili-

tate the rapid deployment of march elements into the movement formation.

Even if the convoy commander has conducted a good map reconnaissance during his IPB, he now needs a reconnaissance on the primary and alternate routes. This reconnaissance can be done by other forces—the advanced guard, UAV, AH-64 helicopters with their video cameras, or cavalry helicopter assets. On the basis of this reconnaissance, the convoy commander completes his plan and issues an operations order.

After operations orders have been issued to every soldier, every leader must supervise, and the first supervision task is inspection. Leaders inspect weapons and ammunition for readiness and accessibility; vehicles for protection, maintenance, radios, and load compliance; make sure their soldiers know the mission, battle drills, and routes; and then conduct rehearsals. Conducting a full force rehearsal is best, of course, but if this is not possible, leaders should at least conduct a sand table rehearsal. As the last supervision task, the convoy commander coordinates—at least with the commander of the reserve force, the S-4, units providing fire support, and other support units such as aviation and medical.

Today, U.S. Army forces have to be prepared to conduct convoys in every type of combat scenario. Whether these are relief convoys for civilians or resupply convoys for forces in battle, they must be planned as combat operations. No convoy commander will have all the assets and the time to do all the things recommended here, but if a convoy is considered just a group of trucks driving down the road, soldiers will die needlessly and the people who need the supplies will not get them. A commander who plans his convoy as he would any other combat operation will accomplish his mission and protect his soldiers.

Major Jeffrey J. Gudmens is assigned to Operations Group, Joint Readiness Training Center, where he previously served as a platoon and antitank observer-controller. He commanded an airborne company in the 6th Infantry Division and was assistant G-3 Air, XVIII Airborne Corps, during Operations DESERT SHIELD and DESERT STORM, 1990-1991. He is a 1982 ROTC graduate of the University of Dayton.

Convoy Security Operations

MAJOR MARTIN N. STANTON

Convoy security operations are major missions during any peace enforcement or humanitarian relief deployment. Although some of the factors that must be considered apply to specific locations, others are universal: Units must organize for tactical security during movement and at halts, and the principal threats to convoys are mines and ambushes.

The following are some basic tactical and organizational principles that the 2d Battalion, 87th Infantry, 10th Mountain Division, developed and used in preparing for deployment to Somalia in early 1993. Other units that are to deploy on similar missions may also find them useful:

Organization for Convoy Security.

The preferred unit size for a convoy security operation is an augmented rifle company, and the smallest should be a reinforced platoon.

Convoy security elements that are likely to operate at great distances from the battalion base camp need the equipment to communicate with the camp. On extended convoys, a retransmission element under battalion control may have to be positioned for this purpose, or tactical satellite or other long range communication equipment must be attached.

Each convoy should have an organic indirect fire weapon (60mm or 81mm mortar), an attached TOW section or platoon, a medical vehicle (which may be an ambulance), and a command and control vehicle with an AN/VRC 12 FM radio capability and an OE-254/GRC antenna.

Units in a convoy escort role should take their full complement of automatic

weapons with a basic load of ammunition. They should have at least a two-day supply of rations and other classes of supply, with additional supplies loaded for extended missions.

The following are sample components for convoy security:

- A company of three rifle platoons, 60mm mortar section, Dragon section, TOW platoon or section, company fire support officer (FSO), medic vehicle (two medics), and a command and control vehicle.
- A platoon of two Dragon teams, one 60mm mortar squad, TOW section, platoon fire support element, command and control vehicle with FM communications, and medic vehicle.

Units may make minor modifications to this troop list, of course, but the intent is clear: Each convoy must be capable of extended-range fires, both direct and indirect; each element must be able to call for indirect fire and talk on fire support radio nets; and special troops—such as engineers, air defense, and additional medics—must be task organized to convoy security elements as the mission requires.

Vehicle Preparation. All units must take steps to configure their organic and attached vehicles for convoy security operations. In addition to U.S. Army vehicles, the convoy may include a wide variety of relief and local vehicles in various states of repair. The following steps should be taken to prepare both vehicles and personnel:

- Run maintenance checks on all vehicles—fluid levels, brakes, fuel type.
- Configure cargo load for ready ac-

cess to critical supplies.

- Note type of driver (military, relief worker, or local).
- Sandbag all floors in driver's cab, including under the seats.
- Sandbag all HMMWV (high-mobility multipurpose wheeled vehicle) or five-ton truck seats and flatbeds.
- Double-sandbag the designated point vehicle.
- Remove all HMMWV doors, and roll or tie up the canvas sides.
- Leave the doors on the TOW HMMWVs, but travel with windows down.
- Remove window glass, which is a secondary missile hazard. (Make certain that all drivers and vehicle commanders have sun, wind, dust goggles.)
- Position troop vehicles among the relief supplies. U.S. Army soldiers who are riding as security on relief cargo vehicles must organize the vehicles to provide maximum cover from fire as well as observation in all directions. Care must be taken to see that soldiers are not accidentally thrown out by a poorly trained and disciplined local driver. The soldiers can use the cover that bags or boxes of relief supplies offer. Bags of rice and flour, especially, have the same bullet-stopping qualities as sandbags. They can be piled in such a manner as to create embrasures along the sides of a vehicle so that the soldiers behind them can face outward. The bags have the added advantage of absorbing mine blasts. The supplies should be piled up to the sides of the vehicle's cargo compartment; positions on vehicles should not be built so high that they are unstable.

- Train soldiers to drive the relief cargo vehicles in case the assigned drivers desert under fire or become casualties.

- No more than one squad (nine men) should be on any one vehicle.

- On vehicles carrying U.S. soldiers, a U.S. Army vehicle commander must be in the cab beside the driver.

- Soldiers should face outward at all times. Automatic weapons should be placed over cabs in air-guard fashion, and M60 machineguns should be on sandbag-stabilized tripods, if possible.

- As many vehicles as possible should have some type of radio communications—AN/PRC 126, AN/PRC 77, AN/VRC 12.

- Each convoy should have at least two global positioning systems (GPSs), if they are available.

Movement Considerations. During movement, the following should be in place:

- A signal for herringbone movement (horn blast, pyrotechnics, etc).

- Each vehicle should drive in the tracks of the vehicle ahead to reduce the risk of hitting a mine. The point vehicle crewmen must wear additional body armor and sit on flak jackets.

- Speed should be no more than 15 to 20 kilometers per hour; vehicles must be able to maintain proper interval and dispersion.

- Personnel inside the vehicles must face outward, covering a full 360 degrees with designated sectors of observation. Vehicle crews must always be in visual contact with the vehicles to their front and rear.

- The unit must have clearly established signals for “enemy in sight,” “require assistance,” “close interval” and the like, and these signals must be rehearsed before the convoy movement.

- The vehicle interval should be at least 50 meters.

- The unit must have a hasty perimeter standing operating procedure (SOP) for short halts.

Tactical Considerations. Convoys should generally consist of point, advance guard, main body, and rear or flank guard elements. Convoys may be protected by a unit as large as a company or as small as a platoon, with the strength and

composition of these elements dictated by the strength of the convoy escort.

- The point element should consist of a single vehicle carrying a fire team. The vehicle must be heavily sandbagged, and all occupants must wear extra body armor and sit on flak jackets. The vehicle should carry a mine detector, and the fire team should be trained in its use. The point element carefully observes the road for evidence of recent digging or other mine indicators. The point element halts at all danger areas and allows the convoy commander to move forward to be apprised of the situation. The point element maintains a distance of 50 meters to one kilometer from the next element.

- The advance guard normally consists of the platoon from which the point element is taken. It may have a 60mm mortar squad or a Dragon squad, or both. The advance guard normally travels 500 meters to one kilometer from the point element and the same distance from the main body. Normally, only a company-sized escort forms an advance guard (a platoon just putting out a point element). The advance guard’s function is to provide immediate reaction to any contact

the point element may make, or to set up an overwatch when the convoy encounters a danger area.

- The main body consists of most of the relief vehicles, the convoy command and control, medical, and fire support assets, and at least one platoon of combat power. Troops ride on the relief vehicles themselves and fortify the vehicles. The main body always maintains visual or radio contact with the advance guard and with the flank and rear security elements.

- The rear or flank security element, which can be up to a platoon in size, follows the convoy at a distance of 500 meters to one kilometer. In addition to protecting the convoy from rear attacks, this element must be prepared to come up alongside the convoy to conduct a hasty flank attack on ambushing forces. Because of their cross-country mobility, the flank security elements should consist of either TOW or infantry squad HMMWVs, and the vehicles must have radio capability. The flank security elements engage any hostile forces at the greatest possible distance and maintain contact so the convoy commander can develop the situation (Figures 1 and 2).

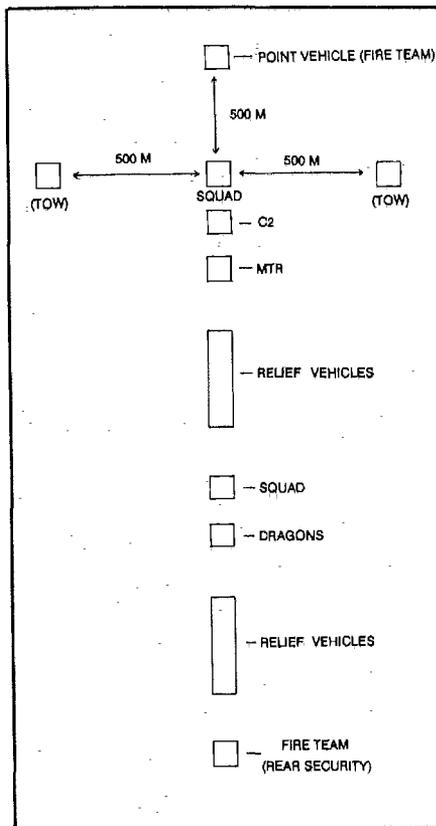


Figure 1

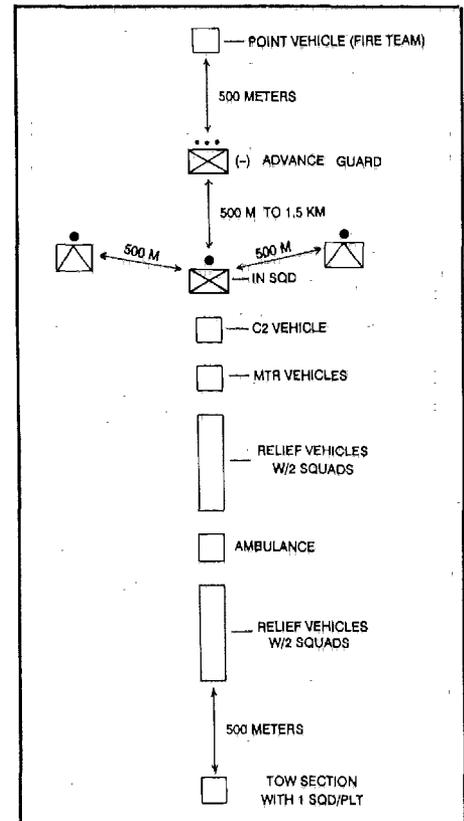


Figure 2

Convoys normally move in a traveling overwatch formation with an advance guard at least 500 meters. The point vehicle should be an additional 500 meters from the advance guard. Most of the convoy protection forces ride on the convoy vehicles. In addition, the rear guard travels 500 meters behind the main body. If terrain and vehicle limitations allow it, flank elements should be 300 to 500 meters from either side of the front of the main body. Mortars should generally travel with the main body, and TOWs with the flank or rear elements.

Some additional tactical considerations for convoy movement are:

- Most of the vehicles being escorted are limited to hard-surface roads or flat hard-packed ground, which makes convoy routes predictable. The convoy FSO should pre-plan targets on all likely ambush sites—such choke points as bridge sites, mountain or hill pass areas, reverse slopes of hills, bends in the road, and dry stream beds.

- Units should have reaction-to-contact drills for contact to the front, flanks, or rear. These drills should involve basically two courses of action: First, herringbone, rapid-dismount, and establishment of a base of fire to defeat the ambush; and second, continued movement through the kill zone. Of the two, the first is probably most common. The best deterrent to harassment or ambushes is a quick and decisive response with organic and indirect fires.

- The convoy commander should have FSO switching priority targets as the convoy advances. In this manner, supporting field artillery is always more quickly available.

- The convoy commander and FSO should know the extent and limitations of friendly field artillery firing fans and what part of the convoy routes are outside these fans.

- The convoy commander and FSO should have the call-signs and frequencies of attack helicopters and U.S. Air Force elements.

- Convoys should halt at all danger areas (defiles, bridges), establish overwatch, and clear the danger area with a dismounted element.

- Convoys should have pre-designated

halt sites with clear fields of fire and pre-planned artillery targets.

- A battalion should have a reaction force of at least company strength with an 81mm mortar section ready to act as a reaction force either by truck or by helicopter.

- If possible, the battalion should have an aircraft ready to move toward a convoy's expected location in case the battalion loses communications, either to reestablish communications or ascertain the convoy's status.

Command and Control Considerations. The following command and control considerations are important:

- Routes, checkpoints, and phase lines are the preferred control measures.

- The progress of the convoy—as it reaches and passes each checkpoint—must be reported to the battalion TOC. The TOC should monitor its progress in accordance with road movement tables, and any deviation from the schedule must be reported to the TOC. A failure to report at two checkpoints or a loss of communications for a specified period causes the battalion to launch an aircraft to investigate the convoy's status.

- A battalion posts the march tables and timelines for each convoy and calls in the convoy's progress to brigade.

- Each convoy should have at least two copies of the march tables and carry them on two separate vehicles.

- Each convoy should have at least three maps, and all vehicles occupied by U.S. soldiers should have strip maps showing all the graphic control measures.

- Each convoy should carry panel markers, strobe lights, and signal mirrors.

- All convoy command and control personnel should practice panel signals in case radio communications fail or the equipment is destroyed.

- Convoy commanders should report on road and refugee conditions and the presence of any armed parties.

- A convoy can be diverted only by U.S. Army personnel who have the proper authorization. Commanders must emphasize to convoy leaders that they are not at the beck and call of other members of the relief effort who may ask them for supplies.

Logistical Considerations.

- Each convoy should have some kind of recovery team—either U.S. Army, relief agency, or local—and the team should have at least a mechanic and a tow bar. The team should be armed and have the same body protection as other soldiers.

- Convoys should have designated points on the route of march for emergency aerial resupply and for medical evacuation as well.

- Convoys should check the fuel and maintenance status of each vehicle at each stop.

- Convoys must not stop to bury the remains of war, disease, or famine victims. Instead, they must report the location of the remains with an eight-digit grid location; local details will then be recruited to bury them.

- Convoy leaders may recruit labor to unload vehicles with food as payment (one MRE, for example). Every effort must be made to use local personnel to unload vehicles so that as many soldiers as possible can remain on security. At no time should more than half the convoy personnel be involved in unloading. Heavy weapons must be manned at all times.

- Soldiers must not be allowed to give food or water from their own rations to local citizens. Large gatherings of refugees clamoring for food provide perfect cover for a terrorist with a grenade. Discouraging people by not giving handouts will reduce this threat.

In summary, convoys are a large part of peace enforcement and humanitarian relief operations. There will always be unusual circumstances in which a commander must come up with an imaginative solution and accept risk. But the overall principles of organization for combat, security, and command and control are principles he must not ignore.

Major Martin N. Stanton is S-3, 2d Battalion, 87th Infantry, at Fort Drum, New York. He previously served in the 2d Battalion, 2d Infantry at Fort Lewis. He is a 1978 ROTC graduate of Florida Technological University. Several of his articles have appeared in *INFANTRY*.

The Los Angeles Riots

A Battalion Commander's Perspective

LIEUTENANT COLONEL WILLIAM V. WENGER

On 29 April 1992, the first night of the Los Angeles riots, I watched as the occupants of the car directly in front of me shot two people. It was shortly before midnight, and the shooting took place only eight blocks from my battalion headquarters armory. Being unarmed at the time, all I could do was follow the small sedan carrying six gang members. I was soon joined by several police cars that quickly surrounded the shooters and arrested them.

Continuing toward the armory, I again stopped, this time at a group of three police vehicles, and was told that officers were arresting two youths who had just shot at them. I identified myself and my unit's mission and reported what I had seen. (One police officer said he was glad

our National Guard unit had been called in.)

As I drove the last few blocks to the armory, the night was filled with sirens, sporadic gunfire, the smell of smoke, and the other sights and sounds of a city in turmoil. This was the tragic scene near the Inglewood, California, headquarters of my battalion, the 3d Battalion, 160th Infantry, 40th Infantry Division, California Army National Guard. The battalion was the first tactical battalion to be mobilized and the first to deploy in the streets of Los Angeles. And it would be the last to re-deploy.

Much was written immediately after the riots about the alleged delay in getting the National Guard into action. Without dwelling on the larger con-

troversy, I would like to present the facts on the mobilization of the 3d Battalion:

At 2230 on 29 April, I received orders to mobilize the battalion. In half an hour, the tactical operations center became operational, security was established, vehicles and communications systems were up, and soldiers were arriving at the armory and preparing to deploy.

At 0300 on 30 April, two companies, more than 200 soldiers, were ready to deploy. By noon, 70 percent of the battalion was equipped, refresher trained, and ready to go. Between 1600 and 1700, the order to deploy arrived at the armory, along with ammunition for our weapons. By midnight, all of the companies moved to the streets. At 2345, Company C was fully deployed in Lynwood. By 0900 on 1 May, 2,000 National Guard soldiers were deployed on the streets of Los Angeles—34.5 hours after the mobilization order arrived. (The first soldiers of the 670th Military Police Company were actually on the streets conducting security patrols within 17 hours of mobilization.)

The Los Angeles riots of 1992 were unquestionably the most costly civil disturbance in 20th century U.S. history, with 58 deaths and property damage estimated in excess of \$800 million. The operating procedures followed by the 3d Battalion, 160th Infantry and other units, both National Guard and Active Army, were not riot control. The techniques used were actually those of combat operations or—more precisely—military



National Guardsmen deploy to the streets of Los Angeles.

operations on urbanized terrain (MOUT).

South Central L.A. is a war zone, even under normal conditions. In 1991 there were 771 gang-related murders in the area. The gangs had large weapon caches, including many automatic weapons, and they showed little reluctance to use their firepower.

The units of the battalion had diverse responsibilities: Company B patrolled East Los Angeles, while Company C patrolled blacked-out malls and streets, including an area where two snipers were killed by police on 29 April.

Company C, along with the battalion scouts and the mortar section, were the first of the battalion's tactical elements to deploy, and they soon found themselves busy. An occasional vehicle would speed out of the darkness, with the occupants sometimes firing at the soldiers. The company commander and his driver were fired on from a freeway overpass by a sniper using an automatic weapon.

Two companies were sent to a prison 40 miles northeast of L.A. where 1,500 prisoners had rioted on 29 April, nearly tearing down the double-fenced compound and threatening to invade the nearby community.

Company D reported to the Hall of Justice downtown to protect the jail, as well as the city and government buildings where disturbances and demonstrations took place during the first five days.

The soldiers in Lynwood, downtown, and later in the Los Feliz area and the Crenshaw Mall came under fire on several occasions. Without exception, they reacted to the snipers and drive-by shootings with cool professionalism. In several instances, they apprehended the shooters, disarmed them, and turned them over to the appropriate authorities. Adding to the stress to which the soldiers were subjected were frequent taunts and threats by gang members.

The Guardsmen's remarkable restraint in the use of deadly force, given the occasional extreme provocation, reflected their high level of professionalism and their expert noncommissioned officer leadership. In all, 9,588 citizen soldiers were deployed, with 325,000 rounds of 5.56mm ball ammunition, 36,000 rounds of .45 caliber pistol ammunition, and

3,750 CS riot grenades.

Fire discipline has long been recognized as a mark of the professional soldier, and the restraint and fire discipline shown by the California National Guard units during the riots were clearly exemplary. Only 20 rounds of 5.56mm were fired by soldiers, resulting in one civilian killed and one wounded.

In fact, this may have been the only civil disturbance in recent U.S. history in which all of the rounds fired by soldiers could be accounted for:

- Fourteen of the 20 rounds were fired at an individual who tried to run down Guardsmen on patrol; 11 of these were used trying to stop his speeding automobile. When he still failed to stop, three more rounds were fired, killing him instantly.

- Two Guardsmen fired one round each, striking a gang member who was trying to run down some policemen.

- The other four rounds were fired near an armed robber to detain him until the police arrived to arrest him.

Lessons Learned

As an old Italian proverb says, "After the ship has sunk, everyone knows how she might have been saved." In the wake of these riots, many high-level officials—civilian and military alike—and the soldiers and policemen on the ground wished they had done some things differently.

Here are a few thoughts, from a battalion commander's perspective:

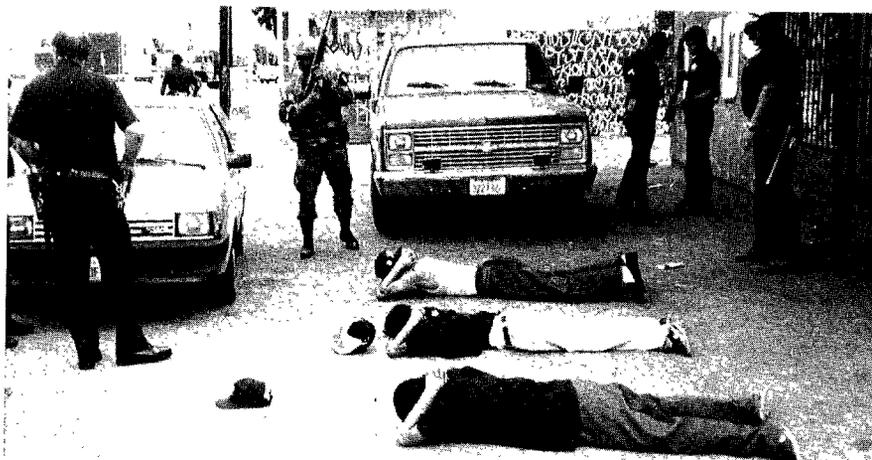
Training. Units at all levels need more training to prepare to meet future

challenges such as those we faced in Los Angeles—specifically, the requirement to complement law enforcement efforts.

Although training in riot control is still useful, MOUT training is essential for soldiers operating in this potentially deadly environment. Likewise, civilian officials who are to be integrated with military forces need training to maintain their knowledge of the procedures for requesting military support. They must also fully understand the capabilities and restrictions of both law enforcement agencies and the National Guard under both state control and the more restrictive federal control. They should use every opportunity to integrate civil disturbance planning and training with other emergency action exercises. Such scenarios might include earthquakes, floods, and both urban fires and wildfires, and even tie in with the Key Asset Protection Plan (KAPP).

Communications. Military FM communications are totally inadequate for urban operations. There are simply too many obstructions, and too many complications to providing fast, reliable retransmission capabilities. When police AM radios became available five days or so into the riots, they were a tremendous help. Initially, personal cellular phones or pagers were a primary means of communication.

In planning for future contingencies of this kind, a readily available supply of cellular phones and pagers would significantly improve communications. At one time, all headquarters armories in California were linked by a common



National Guardsmen supporting local police.

single-sideband radio system that has since fallen into disrepair. This system would be invaluable in coordinating civil affairs operations, and it should be repaired and used at every opportunity.

Plans should also be made for a rapid expansion of the number of dedicated telephone lines at each armory. Our local telephone company installed a bank of mobile pay phones in all the battalion's armories so that soldiers could make personal calls to families and employers, freeing the limited number of armory phones for military traffic.

Finally, every opportunity should be used to test and evaluate an integrated emergency communications network involving the National Guard, law enforcement, civil officials, and the Office of Emergency Services.

Ammunition. Ammunition of the necessary types and quantities should be stocked either in armories or in central ammunition supply points, readily available to units in major cities. This recommendation is not meant to imply that operations in Los Angeles were in any way hampered by lack of ammunition, as some reports led people to believe. In fact, my battalion's basic load of ammunition arrived within an hour of the orders to deploy; the units deployed on time and with the ammunition necessary to perform their missions. But some units in the future may not have ammunition as readily available.

Maps. There are few adequate military maps of U.S. cities. Maps with standard military grid coordinates should be requested for selected cities in both 1:50,000 and 1:100,000 scales. During the L.A. riots, units operated using automobile club maps and maps by a local cartographer.

Equipment. Such equipment as the batons, fire shields, and flak vests used by Guardsmen during the riots was not entirely adequate for MOUT missions. Since much of it was 20 years old or more, it did not offer the advantages of current state-of-the-art riot control equipment. The body armor now on the market is lighter and more comfortable, and it offers better protection. This armor should be evaluated and procured for National Guard use.

Night vision devices are also critically needed in dealing with civil disturbances. Many of the areas in which the battalion was deployed were without power for several days, and were consequently pitch-black at night. In any such situation in the future, night observation devices would give soldiers a decided edge.

Deployment of Small Units. Small units need carefully thought-out and practiced standing operating procedures (SOPs) if they are to carry out their missions successfully. For example, the squads and platoons whose SOPs called for pre-packed squad boxes were best able to perform their missions without having to worry about immediate resupply of expendable items and key items of equipment.

The squad boxes contained such items as radio batteries, TA-312 field telephones, extra communication wire, light sticks, engineer tape, and flashlights. This type of planning allowed the units to load quickly for deployment and still have most of the equipment they needed for operations. Given the often chaotic nature of civil disturbances, it is important that units leave nothing to chance in their planning.

Soldiers' Rights. State laws need to be revised and strengthened to protect the livelihood of citizen soldiers. (The civilian jobs of mobilized soldiers are protected by Federal law but not by state law.) Judge Advocate General officers of the 40th Infantry Division did an excellent job of advising our deploying soldiers; more training and contingency planning in this area would further expedite the future processing of units deploying in response to similar crises.

Intelligence. Executive Order Number 12036, February 1968, restricted the gathering of intelligence on U.S. citizens. Nevertheless, timely, accurate intelligence is essential to the conduct of MOUT operations, and units need to be trained on what they are permitted to do in the way of intelligence gathering and how they can best do it. Guard units, for example, need the most up-to-date information on the composition, location, and operating methods of street gangs. The training of National Guard personnel

should include methods of gathering and disseminating information quickly in the urban environment.

Rules of Engagement and Arming Orders. The special orders for civil disturbance operations were not appropriate in the situation in which Guardsmen found themselves. Commanders often had to use their own judgment to ensure that they kept the necessary level of control, while also ensuring that their soldiers were not placed in unnecessary danger.

Both the 40th Infantry Division and Task Force Los Angeles commanders went to extraordinary lengths to ensure that units maintained an appropriate level of armed response. Commanders had been given the authority to modify the arming order level if the situation warranted, and this was done many times at company level on the basis of the commanders' assessments of the situation and the recommendations of local police. (*See also "Security of the Force: A Commander's Call," by Captain Bruce H. Irwin, INFANTRY, January-February 1993, pages 41-43.*)

This flexibility was particularly critical in light of the sophisticated weapons in the hands of the street gangs. The soldiers soon learned that gang members could tell whether an M16 rifle or a .45 caliber pistol was a threat by noticing whether it had a magazine in it. The disciplined actions of the soldiers on the streets of Los Angeles showed that they were quite competent to decide when force was appropriate, up to and including deadly force.

These issues were discussed with National Guard leaders during and after the riots, and this doctrine will be examined carefully before we are again called upon to deal with similar situations.

Class I Supply. Current policies do not permit stocking an emergency resupply of meals, ready to eat (MREs) at each armory. During the riots, resupply from state sources took 48 hours. We need to look at this again and consider establishing local resupply points. An alternative may be to coordinate cross-leveling from the stocks on hand at local active posts and bases.

Billeting and Staging at Armories.

Billeting and staging soon became a problem for armories near the action during the riots. At one point, my headquarters armory—which was never built to house troops—held more than 600 soldiers, and this was a real challenge for a building with seven toilets and five showers. One solution to this problem would be to pre-position portable toilets and showers, or at least to include them in contingency planning.

Another issue is the security of the armories themselves. Consideration must be given to upgrading fencing and security systems, pre-stocking barrier materials, and installing exterior lighting.

As part of contingency planning, additional civilian facilities such as schools, sports complexes, and similar structures should be identified and evaluated for possible future use, with particular attention to cooking, latrine, and shower facilities, as well as any special security

considerations. Given the problems with telephone facilities during the riots, the telephone capability of each location needs to be assessed and plans for emergency augmentation coordinated with the telephone companies involved.

In the recent past, California has experienced many natural and man-made disasters, and the need for detailed, integrated planning exercises and readiness tests is self-evident. In such disasters as the riots, the greatest threat is complacency; careful preparedness is the only way to prevent such a devastating loss of life and property in the future—not just in California but anywhere in the country.

The California Army National Guard and its 3d Battalion, 160th Infantry, can be justly proud of their rapid, professional response during the riots. But there is always room for improvement. On the basis of lessons learned during those trying days, much has already been im-

proved, and planning is under way to provide for even more efficient responses. Some improvements, such as communications, equipment, and integrated training will take even more time. But we have begun, and we must continue our efforts and rely upon constant re-assessment to ensure that we are ready to respond swiftly and decisively to any crisis that threatens the lives and property of our fellow citizens.

Lieutenant Colonel William V. Wenger commands 3d Battalion, 160th Infantry, 40th Infantry Division, California Army National Guard. He previously served as the division's assistant deputy chief of staff for intelligence and as executive officer and S-3 of the 140th Military Intelligence Battalion. He is an ROTC graduate of the University of California at Santa Barbara and holds master's degrees from California State University at Long Beach and Pepperdine University.

The Combat S-1 In a Heavy Task Force

CAPTAIN BRADLEY T. GERICKE

A battalion S-1 in garrison faces a daily mountain of administrative requirements—paperwork to be processed, correspondence for the commander, evaluations nearing the suspense date, and innumerable strength reports. But these administrative tasks are only part of his job. He also plays a vital role as a staff officer in the field—in preparation for combat. Unfortunately, this role is largely ignored in unit training programs. Keeping the training focus on tactical training and deploying the S-1 section to

the field requires considerable forethought.

A brief examination of the S-1's responsibilities reveals several techniques he might adopt, techniques that have proved successful at the Combat Maneuver Training Center (CMTTC) in Germany.

The S-1 carries out his duties on the battlefield from the combat trains command post (CTCP). Although the S-4 doctrinally commands the CTCP, the S-1 is second-in-command and, in the S-4's

absence, often oversees the minute-to-minute operation of the combat trains. He must aggressively sustain the unit in terms of his doctrinally specified critical military functions as well as his implied overall logistics responsibilities.

According to Training Circular (TC) 12-17, *Adjutant's Call*, the S-1 has overall responsibility for the efficient execution of seven critical military personnel functions. From his forward location on the battlefield at the combat trains, however, he immediately influences only

the four most critical of these functions: Replacement operations, strength management, personnel accounting and strength reporting, and casualty management.

Before the S-1 can perform any of these functions, however, he must receive and process information sent to him by the individual companies. The key players in reporting unit status are the first sergeants, who have the most complete and accurate personnel and logistic information for their units. They operate on the administrative/logistical (A/L) net and readily transmit reports to the CTCP. Likewise, the S-1 and his crew on duty at the CTCP must be prepared to receive and record the reports coming from subordinate elements.

CTCPSOP

A CTCP standing operating procedure (SOP) can augment the task force field SOP on the internal operation of the CTCP and further clarify established report formats and times. This SOP should also cover such topics as the CTCP's sleep plan, responsibilities for security, and the positions of vehicles within the perimeter. Such an SOP is essential in keeping the first sergeants and the CTCP in agreement.

In a heavy task force, an M577 vehicle best serves the CTCP's command and control needs. Manning this vehicle from the S-1 section are the S-1 and one or two soldiers from the section. The rest of the section's soldiers are located at the S-1 main CP in the field trains. The S-4 provides the CTCP with a vehicle driver, an NCO, and one or two additional soldiers. The S-1 forward therefore has limited capabilities.

One way to improve the capability of the S-1 section "forward" is to co-locate an S-1 clerk with the medical platoon, or two clerks if the operation calls for a split medical aid station. This enables the S-1 to record casualty information quickly and leaves him more room in the M577, but detailed planning and execution are necessary to accomplish the four most critical personnel functions from the CTCP:

Replacement Operations. Replacement operations consist of the coordinated transport and support of incoming replacements, as well as soldiers returning to duty. The S-1 must coordinate with the field trains command post (FTCP), to determine the best way to bring replacements forward. A coordinated, efficient time to transport replacements is with LOGPACs. The first sergeants may pick up their soldiers directly, but they must be notified of pickups so they can have enough transportation on hand. Sometimes, replacements who arrive at the CTCP cannot proceed immediately to their units. If these soldiers are to be at the CTCP for any length of time, the S-1 must have tents and cots available for them to rest out of the weather. They cannot be allowed to sleep outside on the ground by themselves. If replacements are to be at the CTCP for more than a few hours, they must also be supervised and incorporated into the security plan. In short, replacements must be positively accounted for and cared for throughout their transportation to the line company. The task force needs fit soldiers who are fully prepared to be assimilated into their new units.

Strength Management. Strength management is the process by which the S-1 assesses the battalion's combat power in terms of personnel. The S-1 allocates replacements and analyzes future require-

ments. One tool for projecting organizational strength is the personnel estimate form (Figure 1), which the S-1 completes during the command estimate process. Through this form, the S-1 gives the task force commander and the supporting headquarters his best guess as to the losses the unit may suffer during an upcoming operation. Planning data for completing the estimate is in Field Manual 101-10-2, *Staff Officers' Field Manual Organizational, Technical, and Logistical Data Planning Factors*. In assessing strength management, the S-1 must also consider such factors as the leadership, morale, and training level of each company in the task force. The task force commander provides further guidance concerning replacement priorities.

Personnel Accounting and Strength Reporting. This area includes timely accountability for every soldier on the battlefield. This reporting establishes the basis for battlefield decisions from a personnel perspective. At the CTCP, the S-1 concerns himself only with hasty, manual reporting systems. The S-1 main CP operates the automated Command and Control Strength Reporting System to reconcile deliberate personnel information.

The S-1 should receive a personnel report from each subordinate element at least twice a day. This report, commonly called a "red" report, is usually de-

PERSONNEL ESTIMATE:-----					MISSION:-----		DATE/TIME GROUP:-----	
PROJECTED LOSSES BY PHASE (KIA/WIA)					PROJECTED STRENGTHS			
UNIT	PHASE			TOTAL	D+-----	D+-----	D+-----	D+-----
CO/TM A	/	/	/	/				
CO/TM B	/	/	/	/				
CO/TM C	/	/	/	/				
CO/TM D	/	/	/	/				
ENGR	/	/	/	/				
ADA	/	/	/	/				
SCOUT	/	/	/	/				
MORTAR	/	/	/	/				
GBT TRNS	/	/	/	/				
FLD TRNS	/	/	/	/				
TF TOTAL								

Figure 1

UNIT/ STATUS	KIA	LITTER UNCON 2hrs	NBC SEV 2hrs	LITTER 4hrs	WALK WND 24hrs	NBC MLD 24hrs	RTD	DOW	OTH
CO/TM A									
CO/TM B									
CO/TM C									
CO/TM D									
ENGR									
ADA									
SCOUT									
MORTAR									
CBT TRNS									
FLD TRNS									
TF TOTAL									

Figure 2

livered by FM radio on the A/L net. At every LOGPAC, the S-1 receives hard-copy reports from the first sergeants.

In accordance with doctrine, DA Form 5367-R (Personnel Status Report) is used to report personnel status. A simple way for the S-1 to consolidate these reports is to create a binder containing an acetated copy of the form for each company. He can then transfer the information from the first sergeants' reports onto those in the binder; thus he will always have the latest status of the task force. He must not forget the reports from specialty platoons and attachments such as air defense artillery and engineers, since the task force commander will need to know the individual strengths of these elements as well.

Casualty Management. The coordination and logistical processes involved in treating casualties and removing them from the battlefield define casualty management, which is the most urgent task the S-1 faces during the battle. Several techniques are available to help him meet this challenge:

While the fight is in progress, the first sergeants report casualties by type of wound only. (Names and battle roster numbers become important later; the first priority is evacuation.) To coordinate ambulance coverage, the S-1 must know immediately which unit is suffering casualties. He may track casualty reports on a chart at the CTCP (Figure 2). (This chart

reflects an exercise at the CMTC, but each S-1 can tailor it to reflect his unit's task organization and expected casualties.)

Each subordinate element reports the number and types of casualties as they occur, and the S-1 notes this information on the chart. Mass casualty situations will become readily apparent, and the S-1 can push additional ambulances to the element involved. At the earliest break in the action, the first sergeants update this information with names and battle roster numbers.

Another method of tracking casualties is a record form that has columns for roster number, last name, MOS, time of wound, unit, type, status/destination, and time at destination. This record is maintained by the S-1 clerk assigned to the medical platoon. The clerk completes an entry for each wounded soldier who enters the aid station. To verify the list, the S-1 checks the information he has received from the units against the list of the wounded actually arriving for treatment. These techniques supplement the doctrinal use of DA Forms 1155 (Witness Statement on Individual), and 1156 (Casualty Feeder Report). They provide redundant systems that allow the S-1 to monitor the complex flow of casualties quickly and efficiently.

In addition to these formal responsibilities, the S-1—as second-in-command of the combat trains—must follow the fight

so that the CTCP can quickly take over command and control of the battle if directed by the main CP. During the fight, the S-4 is usually busy following the status of the various classes of supply, as well as coordinating emergency resupply and maintenance assets. By virtue of his location with the S-4 at the CTCP, the S-1 must also be familiar with these activities. But while the S-4 focuses primarily on logistics, the S-1 divides his time and attention between sustainment and operations. The S-1 does this by continuously monitoring the task force command net to stay abreast of the operation. The S-1's dual role in this case accomplishes several tasks for the CTCP.

The techniques the S-1 uses for tracking the battle are the same ones the Main CP uses. He plots unit positions on a map board, issues updates to the first sergeants on the A/L net; and dispatches ambulances (because he understands the operational situation, he can be most effective in this task). The S-1 becomes the link between the logisticians and the operators, keeping both the S-4's supply personnel and his own medical coverage closely tied to battlefield events. Thus, the CTCP is always prepared to assume control of the task force fight. Essential to battle tracking are an accurate map with graphics, secure communications, and a way to record combat power quickly. A simple chart allows the S-1 to record the exact status of the task force's combat vehicles.

The combat S-1 is a fighter who directly contributes to the success of a task force. All too often, he is tactically unprepared when he arrives in the field. Yet he must perform critical personnel functions for the task force and also make sure the CTCP remains a functioning command and control center. Fortunately, some simple techniques such as the ones presented here are now available to help him prepare for field training.

Captain Bradley T. Gericke, an Armor officer, was S-1 of the 2d Battalion, 67th Armor, during a rotation at the Combat Maneuver Training Center and in Southwest Asia during Operation DESERT STORM. He is now battalion maintenance officer in the 2d Battalion, 72d Armor, in Korea. He is a 1988 graduate of the United States Military Academy.

Target Sheets

In the Targeting and Intelligence Process

MICHAEL R. JACOBSON

Target description sheets are a valuable part of the targeting process; unfortunately, few units seem to be using them. For example, in training exercises, division-level long range surveillance (LRS) teams have been sent out to identify SA-15 surface-to-air missiles (SAMs) and 2S19 self-propelled howitzers without being told what these new systems look like. And during Operation DESERT STORM in early 1991, LRS teams were sent out to determine whether Iraqi Republican Guard units were in the area but were not told how to identify these units by distinctive equipment, markings, or uniforms.

If LRS teams are to be effective in a mission, they must be given accurate and complete information beforehand. And if light infantry units are to attack deep targets, they too must have good target descriptions. Target sheets can supplement intelligence collection efforts in combat and serve as exercise intelligence during training.

The targeting process is discussed in Field Manual (FM) 6-20-10, *The Targeting Process*, dated 29 March 1990, and target sheets are part of that process. Target sheets are single-page descriptions of high-value and high-payoff targets. *High-value* targets are assets the enemy commander must have to successfully complete his mission. *High-payoff* targets are high-value targets that friendly forces must acquire and attack successfully if their mission is to succeed.

For LRS teams, these target sheets should be tied to the commander's priority intelligence requirements (PIRs) and information requirements (IRs), which are used to form the specific in-

formation requirements (SIRs). (A second area in which potential targets may be identified is the decision support template, as the commander and his staff explore courses of action.) Normally LRS teams are sent to observe named areas of interest (NAIs) to look for specific activity units; to accomplish that mission, they must have the necessary information to focus their efforts. If the LRS teams cannot accurately identify what they see in their areas, the information they relay will not be very useful. Equal effort must be made to teach LRS teams to recognize enemy equipment as they go to and from their surveillance sites.

Target sheets normally contain the following data:

Target Category. The data falls into 13 target categories:

- Fire support.
- Command, control, and communications centers.
- Maneuver.
- Air Defense Artillery (ADA).
- Engineer.
- Nuclear/chemical.
- Reconnaissance, surveillance, target acquisition.
 - Radio electronic combat.
 - Class III, petroleum, oil, and lubricants.
 - Class V, Ammunition.
 - Class IX, Maintenance.
 - Lift.
 - Lines of Communication.

Target Sheet Number and Title. A numbering and title system of 128 target numbers is used to cross-reference the targets on the target spread sheets, the high-value target list, and the high-payoff target list. Although FM 6-20-10 does not

list all of these target numbers, a list of target sheet numbers and titles can be found in FM 6-20-40, *Fire Support for Brigade Operations (Heavy)*, January 1990, and in FM 6-20-50, *Fire Support for Brigade Operations (Light)*, January 1990. A unit can also change or add to this list, as additional targets are identified or fielded.

Decimal notations have been added to the basic numbers to describe different targets in the same type categories. For example, the manual lists Target 18, Artillery Firing Battery. This category has been subdivided into Target 18.1 for the 122mm D-30 howitzer battery, 18.2 for the 122mm 2S1 self-propelled howitzer battery, 18.4 for the 2S19 152mm self-propelled howitzer battery, and so on, in order to show differences in the organization and tactics of a target depending on the type of equipment an LRS unit must identify.

Function. The function section describes a target's specific operations and tasks.

Description. The description section includes information on the target's size, normal posture, and distance from the forward edge of the battle area. It also includes the number and types of vehicles, equipment, and personnel.

Signature. The signature section describes the target's visual and electronic signature. The electronic signature of a target is vital to the military intelligence battalion and the electronic warfare officer, while the radar signatures are significant for the aviation brigade. Additionally, several LRS units (being familiar with the Special Forces practice of taking electronic warfare intercept

teams with them) have considered taking a PDR-11 man-portable communication intercept team.

Degradation. This section describes the effects on the enemy if the target is neutralized or destroyed.

Graphic Representation. A picture or line drawing of the equipment is shown along with a diagram of the way it is to be doctrinally deployed.

The following items have been added to these seven types of data for target sheets:

- Weapon/Acquisition/Jamming Range.
- Emplacement/Displacement/Firing Time.
- Sources.
- References.

The sources of the information are shown, using a number/number system (1/4-55), in which the first set of numbers is the source and the second is the page so that anyone who has a question can easily look it up. All sources used are listed in the References section.

Target sheets should be produced at division or corps level. FM 34-25, *Corps Intelligence Electronic Warfare Operations*, page 4-6, states in reference to a corps LRS unit that "the corps has described the target, identified the general location and time of projected engagement . . ." The all-source production section (ASPS), with the electronic warfare officer assisting, should produce the target sheets. The terrain analysis team can analyze the lines of communication for likely target areas such as restrictive terrain, bridges, and so forth.

Target sheets are a vital part of the intelligence preparation of the battlefield (IPB) and the targeting process. Units should develop them and add to them before they participate in command post exercises, field training exercises, or combat. Prepared target sheets can speed up the targeting process, insuring the destruction of high-payoff targets and high-value targets. Target sheets can also identify a potential threat's weaknesses, which can then be exploited. Target sheets should be included in LRS unit mission folders.

In the days when the former Soviet

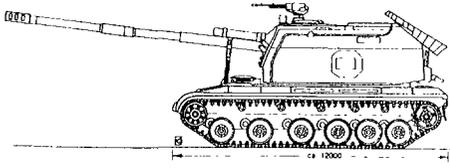
Union was considered the primary threat, units could rely on FM 100-2-3, *The Soviet Army Troops, Organization, and Equipment*. Much of this information is still valid, but the 1991 version of this manual does not include new equipment, such as the 152mm 2S19 howitzer, the SA-15 surface-to-air missile, and the 300mm multiple rocket launcher (MRL). In addition, the Army now faces different threat countries with different equipment, tactics, and terrain that affect the appearance of the targets, and our units need target sheets for instruction.

For example, units that may fight in Korea must be able to identify North Korean equipment. While the North Koreans have a considerable collection of older Soviet equipment, they also produce some of their own equipment, including the M-1978 170mm "Koksan" self-propelled gun and the M-1985 240mm multiple rocket launcher (MRL). Likewise, units oriented toward Iraq will need to be able to identify free-world sys-

tems that the Iraqis have—the Astros II MRL, the Roland II surface-to-air missile, the Cymbeline counter-battery radar, and the Rasit battlefield surveillance radar.

To help meet the need for additional threat information for target sheets, the Infantry Center's Foreign Analysis Division of the Directorate of Threat and Security has developed three sets of unclassified target sheets for use in the Long Range Surveillance Unit Course at Fort Benning, Georgia. These sets are for a European threat (91 targets), a North Korean threat (87 targets), and an Iraqi/Samaran (generic Middle-Eastern) threat (67 targets).

Additionally, the U.S. Army Infantry School has produced and issued on interactive video disks a combat vehicle identification course on former Soviet/Warsaw Pact equipment and one on North Korean combat vehicles. The disks operate on the Electronic Information Delivery System (EIDS) AN/GSH-55, at

TARGET CATEGORY: FIRE SUPPORT	
TARGET NUMBER & TITLE: Target 18.4. 2S19 152mm Self propelled Howitzer Battery	
FUNCTION: Provide direct, indirect, and counterbattery fire support - high explosive, smoke, and illumination for MRD or TD.	
DESCRIPTION:	WEAPON RANGE - 36-40 kilometers TARGET RADIUS 100-200 meters EMPLACEMENT TIME 1 Minute DISPLACEMENT TIME 1 Minute Battery may remain in position as little as 4 minutes after firing first round.
	FIRING TIME 8 RPM POSTURE 20-40 meters between firing positions FEBA DISTANCE 3-6 kilometers COMPOSITION - VEHICLES: 6 or 8 X Tracked 2S19 howitzer 1 X ACRV M1974 (1)/1V23 Battery FDC MTLB 1 X ACRV 1V14/1V22 Tracked Battery COP MTLB* 1 X GAZ-66 Truck 6 X URAL-375 Cargo Trucks Approximately 60
	PERSONNEL: SIGNATURE: VISUAL - See Graphic ELECTRONIC - 8-10 X R-123 Med power VHF radios 8-10 X HF radios OTHER - Sound/Flash (Aural, Visual, IR) Projectile can be tracked by CB-CM Radar 1 X Laser Rangefinder
DEGRADATION: - Destruction of the COP or FDC vehicle will slow down artillery requests. The ammunition supply is on trucks which are vulnerable to destruction. Counterbattery system. * COP Vehicle probably will not be at Battery location, but at maneuver unit commander's location.	
SOURCES: 1/4-55, 5-59; 12/18, 19, 30; 30/47	
GRAPHIC:	
	
Die Skizzen der PZH 2S19 wurden nach nicht reproduzierbaren sowjetischen Fotos gefertigt	

Sample Target Sheet

Training and Doctrine Command schools and in facilities available to the National Guard. Although these courses are also primarily for LRS units, they are useful for other units that need to be able to conduct vehicle identification training.

Further information on the target sheet sets is available from Commander, U.S. Army Infantry Center, ATTN: ATZB-IST, Fort Benning, GA 31905-5372; telephone DSN 835-1561 or commercial (706) 545-1561. Additional information

on the interactive video disk courses may be requested from Mr. Noble at DSN 835-2488 or commercial (706) 545-2488.

Vehicle identification is a skill that must be renewed periodically, and these courses will be critical for LRS unit home station training. In addition to the LRS Unit Course at Fort Benning, which covers a week-long block of threat instruction, the two-week Target Process Course taught at Fort Sill, Oklahoma, trains officers in the Army targeting

process and in targeting operations at division level and higher. Together, these courses should improve the joint targeting capability for all U.S. armed forces.

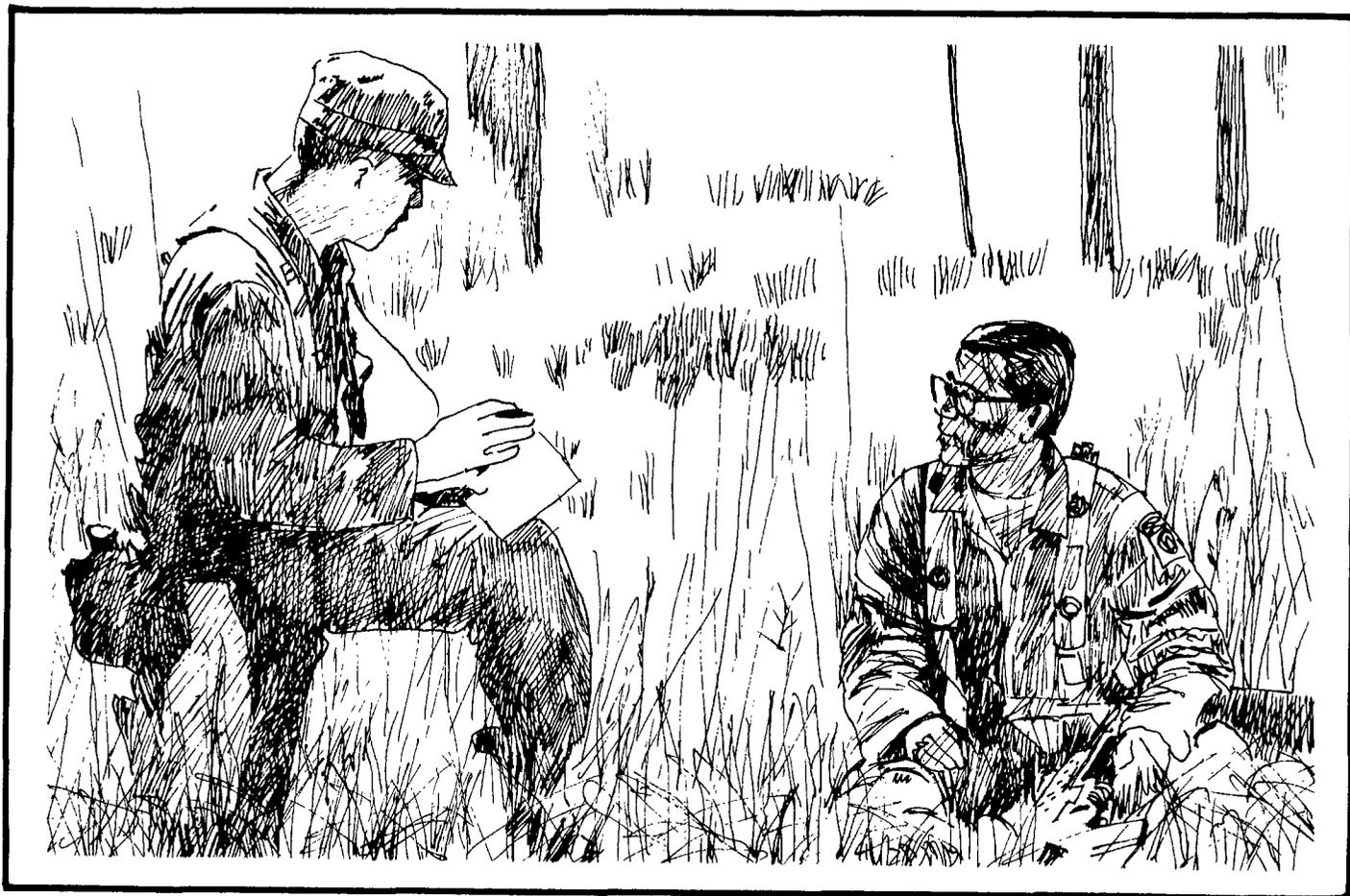
Michael R. Jacobson is an intelligence research specialist in the Directorate of Threat and Security, U.S. Army Infantry Center, and a lieutenant colonel in the 87th U.S. Army Reserve Division Exercise, Birmingham. He previously served on active duty in various Armor and Intelligence positions. He has written several previous articles for publication in *INFANTRY*.

FIFTY YEARS AGO IN WORLD WAR II JANUARY-FEBRUARY 1944

By the beginning of 1944, the Axis Powers were no longer able to recover from their steadily mounting losses in men, materiel, and territory. In spite of stubborn resistance, Allied ground forces in Italy had secured beachheads, pushed inland, and begun mounting a final offensive against the Germans' heavily defended Winter Line. On the Russian Front, the Soviets seized the initiative following a breakthrough in the Kirovograd area, encircling and destroying pockets of resistance. In the Pacific, Japanese positions in the Solomon, Bismarck, and Marshall Islands fell before the relentless pressure of the U.S. Army and Marine Corps, while the air and sea power of the U.S. Navy hammered away at the steadily dwindling numbers of operational Japanese ships and aircraft.

These and other highlights of World War II are excerpted from Bud Hanning's superb chronology, A Portrait of the Stars and Stripes, Volume II (available for \$50.00 from Seniram Publishing, Inc., P.O. Box 432, Glenside, PA 19038).

- 2 January** ***British General Sir Harold Alexander—15th Army Group Commander—orders the U.S. Fifth Army to prepare for a landing at Anzio, south of Rome.***
- 3 January** ***Soviet Army seizes Olevsk, northwest of Kiev, and Novograd-Volyinski; and penetrates the prewar frontier of Poland for the first time in the war.***
- 20 January** ***Advancing Soviet forces surround German units, cutting off their route to the Gulf of Finland.***
- 22 January** ***The VI U.S. Corps lands at Anzio, gaining complete surprise. Ordered to establish a beachhead before advancing inland, the force delays 10 days, allowing German infantry, armor, and artillery to isolate and pound the beachhead for more than three months.***
- 30 January** ***During heavy fighting on Bougainville, in the Solomons, Staff Sergeant Jesse Drowley climbs atop a tank to direct fire against a machinegun that has his company pinned down. Although shot through the chest, he continues to direct fire until the bunker is destroyed, but another bullet blinds his left eye. He is later awarded the Medal of Honor.***
- 4 February** ***Elements of the U.S. 7th Infantry Division overcome the last enemy resistance on Kwajalein Atoll, Marshall Islands.***
- 16-20 February** ***German forces hurl massive attacks against Allied positions at Anzio in an offensive that lasts four days. U.S. and British forces hold, but at the cost of high casualties and equipment losses on both sides.***
- 20 February** ***The United States Strategic Air Force commences a week of heavy bombing raids on Braunschweig and Leipzig, with more than 1,000 bombers participating. Five days later, bombers will hit Regensburg, Stuttgart, Augsburg, and Fuerth.***
- 28 February** ***Allied planners confer in Caserta, Italy, to plan the drive on to Rome.***



THE INFANTRY BATTALION AAR: OBSERVER-CONTROLLER TEAM PLANNING AND PREPARATION

LIEUTENANT COLONEL KARL W. EIKENBERRY

EDITOR'S NOTE: This article is the first in a two-part series on planning, preparing, and conducting infantry battalion task force after-action reviews (AARs). It deals with the training of the observer-controller team in external evaluations (EXEVALs). The second part, scheduled to appear in INFANTRY's March-April 1994 issue, will provide a more detailed look at procedures and techniques that are useful in developing and presenting good AARs.

After-action reviews (AARs) are conducted following training at all levels, but a full-fledged battalion task force AAR requires preparation during large-scale operations such as external evaluations (EXEVALs) and rotations to the Army's combat training centers (CTCs) with trained observer-controllers (OCs).

The Army's training doctrine calls for maneuver battalions

to undergo EXEVALs about every 18 months. Consequently, the key leaders and staff members in an infantry battalion can reasonably expect to perform the duties of observer-controllers (OCs) for a sister unit at some point during their tours of duty.

ARTEP 7-20-MTP, *Mission Training Plan for the Infantry Battalion*, provides excellent guidance for planning and conducting EXEVALs. My purpose here is to look at infantry battalion task force EXEVALs as they are conducted at home station, and to identify important principles and techniques for planning and preparation that can facilitate the AAR process and improve the quality of the end product. Although this discussion focuses on a light infantry battalion task force, much of it is also relevant to evaluations at company and platoon level, as well as to other types of infantry battalions.

Our CTCs serve as excellent models for planning, preparing, and delivering specific, detailed AARs. Units that con-

duct battalion task force assessments at home station would do well to adopt the high standards set by the CTCs. Many units conduct task force EXEVALs specifically to prepare for upcoming CTC rotations; too often, however, they copy the CTC plans too closely. If these units are to avoid some potentially serious problems in building EXEVALs, the leaders must recognize the important differences between the environment at a CTC and that at home station:

First, the opposing force (OPFOR) at home station will be less experienced than that at the CTCs, as will be the leaders' ability to control it so that OPFOR actions will fully support the intended training scenario.

Second, some home stations lack the CTCs' high-tech infrastructure—most important, instrumentation and OC communications.

Third, home-station OCs are usually less experienced and polished than their CTC counterparts.

Fourth, the entire AAR process, which has been refined by established cells at the training centers, cannot easily be duplicated at home stations.

Finally, and perhaps most important, battalion task force leaders usually stand in awe of the OCs they face at a CTC—and hence tend to readily accept their instructions and judgment calls—while the OCs at home stations have no such air of invincibility. It is best to remember that the evaluators and those they are assessing will continue to wear the same patch after the exercise ends. Bruised egos and hard feelings between the evaluated unit and the OCs (not to mention the OPFOR) can more easily be left behind at the CTCs, while similar feelings at home station can hurt a division if they are allowed to linger.

Additionally, leaders of a task force undergoing an EXEVAL at home station may feel even more threatened in one crucial respect: All their senior leaders are likely to be present during home station AARs, and their influence—real or perceived—is unmistakable.

Keeping in mind these fundamental dissimilarities between a CTC rotation and a home-station EXEVAL in terms of resources and environments, we can now examine the battalion task force AAR process and adapt it to our particular needs.

Upon receipt of a mission to head the OC team for an infantry battalion EXEVAL, the chief OC (here assumed to be an infantry battalion commander) should seek initial planning guidance from the commander of the controlling headquarters. The more obvious issues they need to discuss are the anticipated missions and the related scenarios; the depth of the evaluation—for example, Joint Readiness Training Center (JRTC) reaches down to squad level while the National Training Center (NTC) concentrates on platoon level and above; the breadth of the assessment—which has implications for OC task organization; and the rules of engagement—again, different among the CTCs.

In addition, the senior OC must ascertain the schedule and location for the task force AAR. Several points are important here:

First, the senior OC should argue for the allocation of at

least six hours after the mission changes or ends in which to prepare his task force AAR. This is consistent with CTC time lines and represents the minimum time necessary for an inexperienced team to put together an acceptable product.

Second, he should resist using multiple AAR sites. (It is often suggested that the final AAR be conducted in garrison.) The logistical difficulties involved in multiple sites outweigh any superficial convenience.

Finally, it is essential that separate battlefield operating system (BOS) AARs be scheduled (at least intelligence, fire support, and combat service support, and perhaps chemical defense and communications as well). But none of these should be conducted before the final task force AAR. Even at the CTCs, task force momentum is lost during BOS AARs when key leaders and staff members are withdrawn from the field. Furthermore, home station OC teams are already fully committed just producing coherent task force AARs. The BOS AARs should be delayed until the unit has returned to garrison, which will ensure better attendance and interest and, as a result, better AARs.

The chief OC should meet with the commander of the task force being evaluated to get a first-hand assessment of the unit's strengths and weaknesses, and to ascertain where the commander would like the OC team to place special emphasis. From this point until the EXEVAL is completed, the chief OC should work hard to maintain an open dialogue with the task force commander. This will help reduce the friction that can develop between the evaluator and the unit, despite the best intentions of both.

At the earliest opportunity, the battalion responsible for establishing the OC team should form a working group consisting of key players from its staff and companies and from appropriate slice OC elements as well (usually at least fire support, engineer, air defense, military intelligence, and Air Force). It is also helpful if the working group includes representatives from the controlling headquarters, the evaluated battalion, the OPFOR, and any other elements deemed necessary (firemarker control, obstacle markers, and aviation brigade for example).

On the basis of guidance from the controlling headquarters, the infantry battalion that is to lead the OC team should task organize for the EXEVAL and assign responsibilities.

ARTEP 7-20-MTP serves as a good reference in identifying OC personnel requirements, with the following additional considerations:

- If fire support operations are to be continuously and comprehensively evaluated, the number of fire support system OCs suggested in the MTP must be doubled. (The MTP calls for only one captain and one sergeant first class for battalion and one lieutenant for each rifle company.)
- An OC must be assigned to each scout squad. It is not possible for the one lieutenant recommended in the MTP to monitor the activities of this critical unit, which is frequently dispersed and sometimes has communication problems.
- Even if they are not part of the formal OC team, key individuals in the OC battalion should periodically observe their counterparts in the evaluated task force to gain a better per-



An external evaluation conducted by experienced observer-controllers will give a commander a first-hand assessment of his unit's strengths and weaknesses.

spective of the way the unit functions, and to improve future training. These selected observations are best timed to correspond with activities that test the proficiency of their counterparts. For example, the operations NCO may visit the evaluated unit's tactical operations center (TOC) during a displacement; the personnel activities center supervisor may visit the field trains during reconstitution; and the NBC officer and unit NBC NCOs may visit their counterparts during a chemical attack.

- The OC battalion executive officer (XO) should evaluate his counterpart and monitor the synchronization of the BOSs in the TOC, staying with the TOC during the battle; the S-3 should assess the evaluated battalion's operations section and its integration of combat support assets, staying with the tactical command post during the battle; and the command sergeant major (CSM) should monitor his counterpart and focus on NCO leadership, soldier skills, and especially small-unit preparation for combat (which requires that he have his own vehicle). By assigning the XO, S-3, and CSM these areas of responsibility, the chief OC can be sure these key bases are covered in his absence. While he must observe task force operations orders, rehearsals, and actions at the objective, he needs to reserve a considerable amount of time for actually preparing the AARs, and should therefore rely on his team to get the necessary information for him.

The OC team members must be informed of vehicle and communication requirements at the outset, because this equipment becomes more and more critical as the EXEVAL date approaches. The chief OC must also inform his subordinate OCs who will be responsible for conducting separate BOS AARs after the exercise; usually the S-2, the fire support officer, and the S-4. Others may include the S-3, the NBC officer, and the signal officer, who will be conducting AARs in their functional areas.

In addition to the OC team itself, the observer-controller task organization must include the following:

Tactical Operations Center: Run by the assistant S-3 and

the operations NCO and augmented by most of the communications section, the TOC serves as a link to the controlling headquarters and the critical control elements (firemarkers, for example). It also functions as a listening post for all of the evaluated unit's key radio transmissions, which helps the OCs learn what really happened (instead of what each participant thinks happened) for subsequent AARs. To carry out these tasks effectively, the task force must have more radios and operators than those authorized. Accordingly, subordinate and slice units must be informed well in advance of the support they will need to provide.

AAR Site Support Team: Headed by the headquarters company first sergeant, the AAR site support team should number somewhere between a rifle squad and a platoon, with its NCO leaders present. The team is responsible for AAR site preparation, maintenance and police, and clean-up.

AAR Preparation Team: Led by the NBC officer, the AAR preparation team helps the chief OC prepare and present the task force AARs. As the team secures the training aids and audiovisual equipment to support the AARs, it must also include the necessary complement of personnel (equipment and computer operators, draftsmen, photographers, and the like).

Combat Service Support Section: Supervised by the support platoon sergeant, the combat service support section should provide all the logistic support to the OC team. The evaluated unit must never be burdened with the task of furnishing supplies to its evaluators. The section should provide mess, medical, maintenance and recovery, fuel, supply services, and limited Class V items (simulators and pyrotechnics).

In formulating the logistics support plan, it is important to involve the slice OC units, which are often forgotten. Additionally, the OC battalion must identify and request the resources that are essential to a professional evaluation. These include global positioning system (GPS) devices, MILES controller guns, OC Class V (ammunition), audiovisual equipment, and support for duplicating the training and evaluation outlines (T&EOs). The responsibility for replacing MILES

batteries and defective gear must be clearly specified by the controlling headquarters. Except for checking MILES gear for compliance with the rules of engagement (ROEs) and forwarding requests for MILES contact teams, the OC team members must not get involved in battery issue, direct exchange, or maintenance. If they do, they will quickly be overloaded, and their attention will be diverted from their evaluation and control tasks.

The OC battalion headquarters must also take the lead, along with the working group mentioned earlier, in developing a set of time lines and milestones that cover planning, preparing, and executing the evaluation. Because of the number of units involved, the headquarters must carefully orchestrate certain events—T&EO submission and publication, AAR site preparation, OC training, OC briefings to and link-up with player units, working group in-process reviews, and separate BOS AARs (which must be held at different times because many of the same people attend).

The following are some final points that the chief OC and his staff should bear in mind early in the planning process:

First, an OC battalion's task is time-consuming and leader-intensive. OCs should not allow unit commanders to plan sophisticated training during the EXEVAL under the theory that the "second team" will execute. Any such training will be "leaderless"; this is the time to schedule organized athletics, equipment maintenance, and clothing and billet inspec-

tions, which can be supervised by subordinate leaders.

Second, the OC chief must actively assist in the design of the EXEVAL. He should not assume that the higher headquarters was all-wise when it developed the initial concept. The OC team members may also have some innovative ideas that are worth considering; for example, shortcomings in the scope of the EXEVAL—such as failure to include electronic warfare or close air support in the scenario—should be brought to the attention of the controlling headquarters.

Third, the OC chief should consider taking a brief trip to the CTC that is the model for the home-station EXEVAL. He can learn more techniques by accompanying CTC OCs on just two evaluations than he can ever learn by reading volumes on the subject of AARs.

If the OC team is to conduct a thorough evaluation, it must be well-prepared and well-trained. The chief OC should first give all the OCs his general guidance and evaluation philosophy. He must reinforce the idea that the team's goal is to improve the training value of the EXEVAL. The OCs must therefore rigorously enforce the rules of engagement and continually search for and explore areas in which the evaluated task force needs work.

At the same time, the chief OC must emphasize the positive points and avoid contagious and destructive cynicism; then he must set the example. Any OC who makes sarcastic remarks about an evaluated unit's actions should be reprimand-



Site selection and training aids are important considerations when planning an after-action review.

ed swiftly and severely. An OC team is on the right track if it collectively believes that it is successful if it contributes to the evaluated unit's performance on its final EXEVAL mission, or on its subsequent showing at a CTC. OC solidarity with the evaluated unit is especially helpful in preserving camaraderie back at home station. The OCs should wear the same uniforms as their counterparts (helmets and not soft caps, for example), and exercise proper camouflage, noise and light discipline, and live under the same conditions as the evaluated unit.

OCs must prepare and train as both observers and controllers. For their observer mission, team members must study the doctrine in the relevant field manuals and MTPs, read CTC lessons learned—especially those from the Center for Army Lessons Learned (CALL) series—and watch CTC AAR tapes that cover the same missions as those to be included on the EXEVAL.

The OC responsible for each BOS (with the S-3 covering maneuver and command and control) should collect the appropriate study material and plan centralized training (such as viewing CTC tapes) when it is appropriate to do so. The OC team must also prepare T&EOs for all missions, ensuring that all evaluated echelons and BOSs have been covered.

Three points must be considered here:

First, our ARTEP MTPs are guides, not directives. Blindly duplicating these T&EOs without editing (both deleting and adding) yields a high-density, low-quality product. For example, ARTEP 7-20-MTP does not specifically address the infantry battalion mission *search and attack*, and some effort is required to create a useful T&EO that covers it.

Second, if we are to be candid, the reams of documents we produce in preparing T&EO sets are worth far less than the formal AAR. Few have the time to go back and read the T&EOs, and even CTC take-home packages are rarely examined in detail. The point is that, in a world of competing priorities, preparing glossy T&EO books should rank low on the list. The real value of T&EO preparation lies in training the OCs on the things they will need to focus on during the EXEVAL.

Third, tasks should be consolidated whenever possible. Obviously, there is no need for all three rifle company commander OCs to prepare company, platoon, and squad T&EOs. Given the necessary guidance, they can share the work load in preparing one set of T&EOs; this will also ensure uniformity and evaluation to a common standard.

Another important part of preparing for observer duties is creating the AAR format. In addition to the techniques for structuring the battalion task force AAR, the chief OC must also guarantee the quality of all the AARs the team conducts. Our MTPs provide useful references, and the tapes of CTC AARs offer valuable examples. Particular emphasis must be placed on training junior officer and NCO OCs, because they may have had little formal training or experience in deliver-

ing AARs. Although the chief OC may want to standardize some briefing slides, he should avoid stifling initiative. Aside from directing that all OCs have the applicable T&EOs on hand during their AARs, he should allow each of them to develop a format he is comfortable with. He can ensure quality control by having the OCs backbrief him on their AAR plans.

OCs must also receive guidance on preparing OC cards and input for the collection charts to be used at the AAR. These charts provide aggregate data on selected task force and OPFOR measures of performance (casualties, fire missions, and the like). They are proposed by the OCs responsible for the various BOSs and can be patterned after those used at the CTCs and in ARTEP 7-20-MTP. They should be adopted, however, only if the data can be accurately collected (on the basis of available resources) and if they will contribute to the AAR. Some CTC charts may not meet these criteria if they are adopted without modification at home station.

After the collection charts have been approved by the chief OC, the assistant S-3 should prepare appropriate input packets for the members of the OC team, personally instruct the team members on the method of preparation, and serve as the focal point for the submission and compilation of charts during the EXEVAL. Because of the ad hoc nature of the team and the chaos that normally follows a change of mission, leaders must not treat this subject lightly if they expect meaningful results that they can use constructively at the task force AAR.

For the sake of efficiency, the OCs' training and preparation for their controller duties should be consolidated. This training can be accomplished in one day, and all OCs must attend. The OC responsible for each BOS should brief the relevant ROE (for example, the S-3 briefs the general ROEs and the maneuver rules, the FSO the fire marker system and the indirect fire casualty assessment tables, and so forth). Rifle companies should be tasked to present classes on MILES equipment—its wear, maintenance, zeroing, and use—as well as controller guns. ROE handbooks must be distributed to all OCs. The training should conclude with an operations order that emphasizes significant event time lines, combat service support, communications, and command and control.

At the operations order briefing, the chief OC should stress once again that the primary OC mission is to coach, while also refusing to compromise on tactical standards of performance and rules of engagement.

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A TASK FORCE COMMANDER'S PERSONAL PREPARATION FOR THE NTC

LIEUTENANT COLONEL KEVIN L. HUDDY

After serving as an observer-controller (OC) at the National Training Center (NTC) for more than a year, I came to the conclusion that many task force commanders suffer from the same deficiencies in the way they have prepared themselves for their units' rotations.

One of my duties as an OC was to follow the task force commander during a mission and observe and report on his actions to the senior team OC. In this process, I had an opportunity to monitor the actions of many commanders and see how they interacted with their staffs and subordinate commanders. The problems I observed seem to apply equally to commanders of light infantry, mechanized infantry, and armor units.

Battalion commanders spend a great deal of time, energy, and resources in preparing their units for rotations at the NTC, as they should: The NTC offers a battle focus for home-station training at a time when the Army's missions have become con-

tingency based, and the Army recognizes that training at any one of the combat training centers is a battalion's premier event. The assumption is that if a unit can do well at the NTC it will also do well against any likely opponent. But the cost is high—in terms of both training dollars and the staff work involved in deploying a unit, drawing equipment, and redeploying. As an NTC rotation looms nearer, preparations for it determine most of a unit's training tasks.

Unfortunately, battalion commanders do not seem to devote the same amount of energy to preparing themselves for coming rotations. As a result, they may not think through and practice their own roles in interacting with their units. And actions that have not been thoroughly practiced at home station will not run smoothly when they are needed during the first battle at the NTC. Even more regrettable, improving one's own performance takes little effort in comparison to that expended in preparing the unit as a whole.

On the basis of the deficiencies I observed, I offer the following recommendations that should help a task force commander prepare himself for an upcoming NTC rotation:

Gain a more detailed knowledge of doctrine. Although most commanders know doctrine well enough to discuss it intelligently at the post simulation center, this level of knowledge is not enough when they are tired and faced with time constraints; this is when they need specifics, not concepts. Adding to the problem, our doctrine itself is vague and contradictory in some areas; different but equally valid manuals and references may provide significantly different information.

This is not to imply that much of our task force level doctrine is not worth using. In fact, it works quite well at the NTC. When the OCs look at cause and effect in developing feedback for the training unit, the first step is to study the unit's plan and actions to see if the doctrine was correctly applied. More often than not when something goes wrong, it can be established that the proper application of doctrine would have prevented the problem. (Although a non-doctrinal approach to a mission is not always wrong, it should be a calculated step, not an act of ignorance.) In other cases, the problem with a mission can be traced back to a failure to understand effective techniques for applying the doctrine. The units may know the principles of direct fire control, for example, but may be lacking in effective techniques for implementing a complex fire control plan for a task force equipped with Abrams tanks and Bradley fighting vehicles.

A commander can work to avoid this misapplication of doc-

trine by taking two relatively simple steps:

The first step is to review the applicable doctrinal literature. Field Manual (FM) 7-20, *The Infantry Battalion*; FM 71-2, *The Tank and Mechanized Infantry Battalion Task Force*; or FM 17-95, *Cavalry Operations*; and the associated mission training plans (MTPs), all offer workable doctrine. The MTPs in particular are excellent for understanding the doctrinal approach to accomplishing a mission. FM 71-123, *Tactics and Techniques for Combined Arms Heavy Forces: Armored Brigade, Battalion/Task Force, and Company Team*, provides good advice on effective techniques and procedures. (I am not suggesting that the commander just memorize doctrine; the information is far too perishable. He needs to understand the principles and intent of the doctrine.)

The second step is to have "cheater cards" prepared for use in training at home station as well as at the NTC. These cards should be a staff effort, with the executive officer (XO) leading and the other staff members contributing. Cards should be prepared for each of the missions on the commander's mission essential task list (METL). The cards are best organized by battlefield operating system (intelligence, maneuver, fire support, air defense, mobility and survivability, logistics, and command and control).

The following are some key items of information for the cards:

- Organization of the force. (Security, breach, and assault forces.)
- Missions of sub-elements of the force. (What is expected



A commander must fully understand doctrine if he is to effectively employ fire and maneuver at the NTC.

of an advanced guard?)

- Control measures normally used. (What are the control measures normally used for a night attack?)
- Relevant doctrinal principles (suppression, obscuration, security, and reduction for breach operations).
- Techniques for applying the doctrine. (How are target reference points marked?)

The information required for a specific mission—defense in sector, for instance—will fit on both sides of a 5'' x 8'' index card. The XO and the S-3 should each have a duplicate set of the cards. If the cards are properly developed and used, developing a plan under stress will be much simpler.

Give the staff clear and complete planning guidance.

Commanders regularly provide confusing and disjointed planning guidance that does not address significant task force elements. Worse yet, they may provide the guidance in increments, which makes planning a tedious and potentially unproductive process for the staff. The tendency in such cases is to focus on one or two key points that come readily to mind while omitting other important elements. As a result, staff time is wasted; some members of the staff are either not working at all or working in the wrong direction.

A commander needs a systematic approach to providing planning guidance. I recommend that he structure his guidance using the battlefield operating systems plus nuclear, biological, and chemical (NBC). This approach ensures that all elements of the task force will be considered. Here again, a set of cards is useful. The cards should be developed for specific types of missions, but at least for offense and defense. Each member of the battle staff should participate in developing them. The air defense officer, for instance, can make cards showing the minimum essential guidance he needs from the commander to plan air defense during a deliberate attack.

The process of developing the cards generates professional discussions between the commander and his battle staff, and this is a good way to get to the issues of fighting philosophy. Often, however, some battle staff members may be ill-prepared to tell the task force commander what they need. The air defense and engineer officers, for example, may be newly assigned second lieutenants who have had little training on the staff functions of their jobs. In this instance, the commander can ask more experienced officers in these branches to assist in preparing the cards. The air defense battery or battalion commander may provide assistance. The ultimate intent of preparing the cards is to make sure the commander will be able to give the staff complete guidance in a logical format, even when he is tired and has little planning time.

Prepare a commander's intent statement that subordinate commanders can easily understand. Many commander's intent statements are useless or even detrimental to the understanding of the subordinate commanders. Often it appears that the commander realizes he must say something but is not sure what he wants to say. Some commanders have "canned" statements: "The intent of this operation is to seize Objective Blue and retain 60 percent of our combat power." A similar statement is issued for each plan. This is not particularly helpful, in that it causes no action to be taken, or is

of little help when a company commander loses communication. In the worst case, the commander delivers a 30-minute intent statement that his staff hears for the first time during the task force operations order. Often the commander contradicts the plan as delivered by the staff, which causes confusion or a revamping of the plan during the briefing.

The content and purpose of a commander's intent statement are personal—closely related to his individual leadership style and the command climate within the unit. It is important for a commander to realize that a poorly conceived commander's intent can be detrimental to mission accomplishment and that a good statement cannot be delivered without serious consideration of the desired result. The staff should have the advantage of hearing the intent before they have completely developed a plan, certainly no later than the point at which the commander selects a course of action. Ideally, a tentative intent is provided along with the initial planning guidance.

See that the task force executive officer and S-3 work as a team. A commander should not assume that the XO and the S-3 have a clear idea of their own roles. These officers often work at cross purposes, or one of them, out of frustration or confusion, chooses not to participate at all. The frustration occurs when their roles and duties are poorly defined, and the power of personalities becomes the dominant factor in determining their status in the organization. This lack of understanding most often shows up during the planning process, but the roles of these officers, if left unaddressed, can become cloudy in other areas as well. The effect on the unit can be devastating: Essential areas of the task force go without supervision, work is duplicated, and tempers flare.

The solution to this problem is for the commander to provide specific guidance on the role each of these officers will play during operations. In all likelihood, the executive officer's support form contains only one or two lines that deal with tactical operations, and that is not enough to ensure a complementary effort at the NTC.

It is not my intent to recommend how the work should be divided or where the XO and S-3 should be located at specific times. Each commander must wrestle with these issues himself, keeping in mind the personalities involved. But it is essential that the commander clearly lay out what he expects, build cohesion between these officers, and tolerate no rivalry between them.

Know the status of all units during preparations for combat. More than one commander has been astonished to learn during an after-action review that his main effort company issued no operations order and was low on ammunition, or that a critical obstacle was not emplaced. He was not made aware of these problems before contact with the opposing force (OPFOR) because his staff did not know what was important to him.

The effectiveness of a unit during the execution of a mission can generally be predicted on the basis of its preparations for combat: Units that give simple, timely orders, that boresight and zero their weapons, and that execute troop-leading procedures with some precision are more likely to fight

well. Additionally, when good things happen, it is usually because of effective supervision, and the reporting and tracking of critical information is a key part of the supervisory process.

The commander must lay out for the staff his commander's critical information requirements (CCIRs)—items of information that he considers essential and wants the staff to gather, track, and report to him.

Again, a single list of items probably will not work, because the things that are important in the defense may not be as relevant in the offense. What is essential depends upon the individual commander, but the following items are clearly critical:

- Issuance of orders by subordinate elements.
- Conduct of rehearsals by subordinate elements.
- Status of boresighting and zeroing.
- Status of obstacle development.
- Status of resupply or cache operations.
- Operational ready rate.

Allow the staff to execute the tactical decision-making process. Task force commanders often limit the honest attempts of their staffs to execute the tactical decision-making process. This usually occurs when a commander is unsure of the process, when he has little faith in it, or when he understands it but is not sure how to make it fit the available planning time. The staff, quickly conforming to the commander's style, may go on to develop plans that are unrealistic or hastily conceived.

Whether one believes in the doctrinal tactical decision-making process or not, plans that are developed without the staff's participation in a logical process will be flawed. When the commander becomes the driving force and the primary participant—using the "Let me tell you what we're going to do" style of orders development—he often fails to see the broader view of the plan, and the staff members are uncertain about the details, or reluctant to provide input.

This is not to say that it is wrong for the commander to direct a course of action when time is short. This method involves a degree of risk, but in most cases the commander is the most tactically competent member of the unit. Even on the rare occasions when he does direct a course of action, the commander should still allow the staff to wargame and develop it in the usual manner. His job is to provide clear guidance that heads the staff in the right direction.

Ensuring that the commander plays the proper role in the staff planning process requires more effort than any of the tasks previously discussed:

First, he must become intimately involved in training the staff to his standard; he cannot leave this training to the XO or the S-3 alone. He must approve the staff's methodology, noting particularly which steps are to be shortened when time is running out. Left on their own, the staff members may decide to cut a step or a product on the basis of the effort it involves instead of its importance to the mission.

The commander must set the standard for the procedural steps to be cut, for the way information is presented, and for the desired end product. Since he will not have an opportunity at the NTC to review orders before they are issued, he

should read the products the staff has prepared at home station and decide whether they are useable or not. Is the information presented in a format he is comfortable with? Charts, overlays, and other written products should be standardized to improve comprehension when time is short and everyone is tired.

All of this requires time and considerable interaction with the staff in a training environment. During home-station training, the commander must be a player, not just a coach. If he gets closely involved in the staff process during the development of SOPs and staff training at home, he may be able to avoid getting bogged down in it at the NTC. The end result should be a workable SOP for producing orders in a limited time. (Four hours from receipt to issue is a tough, but attainable, standard.) The SOP should be one the commander has approved, understands, and supports by playing his role and demanding compliance.

In addition, the commander should spend some time with the secondary staff members. At the NTC, the commander and staff will be in an AAR during a significant portion of the planning process. Will the S-3 Air, the battlefield information control center, and the fire support NCO be able to maintain operations in his absence? If they don't, three or four hours will be wasted. There is no reason they cannot produce sound orders, given good guidance and home-station training. But they must know the commander's standards to the same degree the primary staff knows them.

Base plans on the enemy. Too many commanders are uncomfortable with the intelligence preparation of the battlefield (IPB) and weak on the OPFOR's tactics and organization. This is extremely detrimental at task force level, because the S-2 is often relatively inexperienced. The IPB forms the base of any meaningful planning process and, if it is done badly or not at all, the plan will be built on a shaky foundation.

For this reason, a commander at task force level must be more familiar with the IPB process and the OPFOR than the commanders at higher levels. Often he must make sure the S-2 focuses on how to proceed with an enemy course of action the commander wants developed. At the very least, the commander must know enough about the IPB and the OPFOR to recognize a highly unlikely or non-doctrinal enemy course of action the S-2 may present. On many occasions at the NTC, a task force plan has been developed to meet the threat of an OPFOR course of action that neither the NTC OPFOR nor any army with similar characteristics would ever choose. The commanders in these cases were not knowledgeable enough of the OPFOR to recognize the problem.

The commander should demand that the S-2 produce a situational template before issuing his initial planning guidance to the staff and an event template for use during wargaming. If these two products are not available at these important points in the process, the plan cannot be developed properly.

Walk around and see the battlefield. During the preparation period, many commanders spend their time in the tactical operations center (TOC) revising poorly conceived plans instead of visiting their subordinate units. A commander can learn more in two minutes from chatting with a track com-



A unit's performance at the NTC often reflects the commander's ability to focus the efforts of his staff.

mander or a rifle squad leader than he can from two hours of wearisome activity in the TOC.

Getting out to see the troops is a basic leadership responsibility that is often neglected. The cause of this neglect is not apathy or ignorance but the commander's tendency to get so involved in the process that he cannot stand back and see the broader view.

In addition to failing to get out and see the troops during preparation periods, commanders also do a poor job of seeing the battlefield during execution. Although most commanders are well aware of the importance of seeing the critical point of action, some of them do not devote enough effort to making it happen. Operating under inflexible tenets such as "I always move with the main effort" will cause a commander to miss the action at the NTC. His positioning for battle must be based on the analysis of METT-T (mission, enemy, terrain, troops, and time), and he must remain flexible.

Taken as a whole, the preparatory steps discussed here are intended to do three simple things:

- Allow the commander to be consistent and predictable when dealing with the task force staff in a tactical environ-

ment. (The NTC is not the place for the staff to try to figure out how the commander likes to operate.)

- Increase the likelihood that the task force will produce doctrinally sound plans that are complete, understandable, and timely.

- Improve the commander's ability to function under stress by making the routine things routine and reducing the probability that the staff will surprise him, or be surprised itself.

If a task force commander can set aside only a small amount of his total effort and devote it to preparing himself for the NTC, this effort will greatly improve the performance of the entire task force.

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TRAINING NOTES



A Guide For The Light Infantry Company XO

LIEUTENANT CHADWICK W. STORLIE

Few positions are more demanding for an infantry lieutenant than that of company executive officer (XO). The XO is responsible for a wide range of duties, from company maintenance officer and logistical coordinator to tactician and second-in-command.

Previous *INFANTRY* articles have described the company XO's duties, but most of these have detailed the company commander's expectations of the XO and his designated duties. My intention in this article is to offer a list of duties for a light infantry company XO (as shown in Table 1), and then to describe specific techniques and methods for accomplishing those duties.

The foundation for a good company XO is a high standard of personal ethics and professionalism. In addition to the leadership qualities outlined in Field Manual (FM) 22-100, *Leadership*, the XO also needs certain other abilities and traits:

- The XO must be able to lead others in the company's logistical areas of maintenance, repair, resupply, and administration. And as the second highest-ranking leader in the company, he must be able to assume command at any time without a moment's loss of combat

effectiveness.

- He must be able to look ahead to determine requirements and then take the initiative and act within the scope of the commander's intent.

- He must be able to organize, set priorities, and work within the established priorities. He is responsible for compiling all the input from the commander, the first sergeant, the battalion XO, and the battalion S-3, posting requirements and determining the priority of all taskings according to the commander's intent.

- He must be able to advise the commander in tactical operations and assist him during troop-leading procedures—specifically, in the estimate process, where he can present a specific course of action or help the company commander develop specific courses of action and then wargame them.

- He must be able to advise the rifle platoon leaders on tactics, standing operating procedures (SOPs) and myriad other tactical operations. To do this, he needs an in-depth knowledge of the Army's basic tactical infantry doctrine, ARTEP and FM 7-8, *The Infantry Rifle Platoon and Squad*, and ARTEP and FM 7-10, *The Infantry Rifle Company*; an elementary knowledge of ARTEP and

FM 7-20, *The Infantry Rifle Battalion*; and an understanding of the essential elements of FM 100-5, *Operations*, FM 25-100, *Training the Force*, and FM 25-101, *Battle Focused Training*, are also vital to the XO in coordinating, planning, and logistically supporting training.

- He also needs a knowledge of Army systems. This knowledge extends from The Army Maintenance Management System (TAMMS) to Personnel Action Center (PAC) operations; from strategic deployment to the point of contact for reporting a leaky faucet. Most XOs learn the details of these systems through on-the-job training, but a long, detailed transition, a strong continuity file, and communications with other XOs can ease the pain of learning them.

- Finally, the XO needs a confident, positive attitude to help him face the many frustrations of his job—lost work orders at support maintenance; fund shortages for Class II, IX, and supply center items; and the assumption that—regardless of these problems—he will accomplish the mission.

The Headquarters Platoon

The XO leads the headquarters platoon. Its mission is to provide adminis-

trative, NBC, communication, logistical, arms room, and indirect fire support to the company in support of garrison and tactical operations. To accomplish this mission, the XO must have a fully capable and industrious headquarters platoon.

Unfortunately, under the current company headquarters MTOE (modified tables of organization and equipment), as shown in Table 2, the communication-sergeant, NBC sergeant, supply sergeant, and supply assistant must be responsible for the logistical support of the

COMPANY XO'S DUTIES

- Second-in-command.
- Mentor, trainer, and adviser to rifle platoon leaders.
- Company maintenance officer (responsible for monitoring and completing DA Form 2406, Materiel Conditions Status Report, and DA Form 3266-1, Army Missile Material Readiness Report).
- Request and monitor expenditure of Class I, II, III, IV, IX, and Self Service Supply Center (SSSC) items.
- Unit movement officer (UMO).
- Company awards officer.
- Unit fund officer.
- Unit supply officer.
- Company logistics coordinator (responsible for determining requirements from the training calendars; ordering Class I and MILES supplies; and requesting Army aviation, training areas, Class V, medical support, transportation, and TSC items).
- Responsible for tracking and meeting equipment taskings.
- Training and employing company trains in a tactical environment.
- Pickup zone (PZ) control officer and OIC of company sling-load operations.
- Headquarters platoon leader responsible for the health, morale, welfare, and administrative and tactical training of the platoon. Responsible for training and rating the 60mm mortar section leader, communications NCO, supply sergeant, NBC NCO, training NCO, and armorer.
- OIC of all company internal command inspection program (CIP) evaluations.
- Responsible for writing, revising, and enforcing SOPs on maintenance operations, company trains tactical operations, administrative procedures, company tactical logistical operations, air assault operations (PZ procedures, air mission brief (AMB) formats, and medical evacuation (MEDEVAC)).
- Responsible for writing paragraphs IV, V, VI (Safety) of the company operations order, and the AMB for tactical operations.

Table 1

headquarters. Clearly, it is impossible for four men to resupply a company team of 140 soldiers in the field and to administer the same number in garrison. Presently, soldiers within the three rifle platoons are often diverted from their duties to augment the headquarters platoon in the areas of training, supply, communications, and arms room. I believe the MTOE should be changed, instead, to increase the size of the platoon as shown in Table 3.

In leading the headquarters platoon, the XO must inspire the soldiers to work diligently, and must also develop and motivate them to adopt the same qualities that make a good XO—initiative, organization, selfless service, knowledge of Army systems, and an aggressive, “can-do” attitude toward logistical support. The soldiers and NCOs of the headquarters platoon must be capable of acting independently. And to lead the platoon effectively, the company XO must understand the duties and responsibilities of each NCO.

Maintenance

A good company maintenance program is where the XO makes his mark, and the foundation of such a program is an excellent and workable maintenance SOP. The SOP should contain the following items:

- The responsibilities of leaders, from commander to team leader.

- The responsibilities of the communications, NBC, supply, and arms room sections in assisting with company maintenance and conducting their own.

- A maintenance schedule.

- Materiel readiness reporting procedures.

- Requisition procedures and repair parts ordering.

- Three-to-four-day field recovery SOP.

- Vehicle maintenance procedures.

- Sample DA Form 2404, *Equipment Inspection and Maintenance Worksheet*, on selected pieces of equipment so that leaders know how to complete the form properly.

- A monthly schedule of maintenance days to ensure that each piece of company equipment is maintained monthly.

- A standing operating procedure (SOP) for leaders to check the quality of maintenance activities.

This SOP may also include other information, policies, and procedures, so long as it remains simple and understandable, allows leaders to check maintenance standards, and ensures that all company equipment is maintained.

TAMMS. A knowledge of TAMMS is crucial for the XO. At first, the maintenance system is difficult to understand.

HEADQUARTERS PLATOON UNDER CURRENT MTOE

Company Commander
First Sergeant
NBC Sergeant
Supply Assistant/Armorer 2
Mortar Section Leader
2 60mm Gunners

Company XO
Communications Sergeant
Supply Sergeant
Radiotelephone Operators
Mortar Squad Leader
2 Assistant Gunners

Table 2

SUGGESTED MODIFICATIONS TO CURRENT MTOE

Company Commander
First Sergeant
Supply Sergeant
2 Armorers
Radiotelephone Operator/
Training Clerk
Mortar Section Leader
2 60mm Gunners

Company XO
NBC Sergeant
2 Supply Assistants/Drivers
Training NCO
Radiotelephone Operator/
Communications Assistant
Mortar Squad Leader
2 Assistant Gunners

Table 3

TRAINING NOTES

The person best able to explain how the XO interacts within the battalion maintenance system to fix equipment is the battalion maintenance technician (BMT). Before speaking with the BMT, however, the XO should obtain and read the current battalion maintenance SOP and then make a list of questions to ask him. This list may include the following:

- How does the parts ordering system work?
- How often are Document Control Registers (DCRs) printed?
- What do the rejection codes on the DCR mean?
- How does the Prescribed Load List (PLL) work?
- How can a part be added to the PLL?
- Who is authorized to pick up parts, and where are they picked up?
- What are the vehicle dispatch procedures?
- How does the Unit Level Logistics System (ULLS) operate?
- What is expected of vehicle operators when working with mechanics?
- When are company vehicles scheduled for their next quarterly services?
- How do I open and close job orders?
- What is the standard of cleanliness for vehicles in the motor pool?
- Who is the shop officer at our support maintenance section?

These are just a few of the questions the XO will eventually have for the BMT. The point is to develop a good working relationship with him to ensure the best possible maintenance support. The XO and the BMT should talk daily, face to face if possible, to find out what is important for that day's maintenance.

Support Maintenance. The first step to understanding company maintenance is an understanding of maintenance procedures at battalion level. The next step is to meet face to face with the forward support battalion (FSB) shop officer who supports his battalion. Again, before speaking with the shop officer, he should obtain and read a copy of the FSB's current external SOP. The FSB shop officer can remove much of the mystery surrounding third-level maintenance procedures.

The following is a selection of questions for the shop officer:

- May I have a tour of the facility, including small arms, communications, missile, vehicle shops, and parts warehouse?

- Describe the entire process, from beginning to end, how equipment is repaired and parts ordered (for example, an ordered Class IX part, M60 machinegun, AN/PRC-77 radio, HMMWV, and SU-36P Dragon sight).

- How are work orders opened and closed?

- What are some common reasons for rejecting equipment for repair from the FSB (vehicle undercarriage dirty, M60 bolt fouled with carbon)?

- How does the parts ordering process work at your level?

- What are the levels of priority at which different parts may be ordered?

Finally, the XO should get the shop officer's name, rank, and telephone number, along with those of the NCOs in charge of the small arms, communications, missile, parts warehouse, and vehicle shops. And, of course, he should leave his own name and number with these points of contact.

Aggressive maintenance begins at operator level, and the XO must do everything he can to ensure that as many problems as possible are identified and corrected at that level. Classes must be conducted regularly on the proper preventive maintenance checks and services (PMCS) for all the company's major pieces of equipment. For example, the armorer should conduct quarterly -10 level classes on PMCS for the M249 machinegun for all squad leaders and M249 gunners.

Property Accountability. The final element of maintenance procedures is property accountability. It is the XO's duty to protect company property, supervise property sign-out and return procedures, and ensure that company equipment is maintained and no property is lost.

The XO can ensure property accountability through a number of methods:

First, the initial change-of-command inventory and monthly 10-percent inventories must be conducted in great detail. Property must be neatly laid out, with hand-receipt holders present, technical

manuals (TMs) on hand for all equipment, and up-to-date shortage annexes. The missing components shown on the shortage annex should have document numbers of ordered parts listed next to them. The ten-percent inventories must be conducted to standard throughout the command.

Second, sub-component hand receipts must be used when any piece of equipment is signed out or returned. Sub-component hand receipts ensure that the user and the commodity area NCO know exactly what equipment and components are signed out. The supply sergeant must ensure that the hand-receipt holders update their receipts at least once a quarter. When equipment is returned, it is usually Class II and Class IX parts that are missing, not the major end items. Funds for Classes II and IX are strictly controlled, even for legitimate repairs, and it is fiscally irresponsible not to control accountability for parts.

Third, the XO must see that hand receipt holders place every piece of equipment, no matter how small or insignificant, under lock and key. Solid key control and physical security programs are vital in this area.

Fourth, if property is missing or cannot be accounted for, the loss must be reported immediately to the battalion S-4, the battalion XO, and the battalion commander. The company XO should never try to recover lost property through illegal means or to cover up a loss. It is in the best interests of both the XO and the company commander to report losses and use the current report-of-survey system.

Administration

As in maintenance, the basis of any strong company administrative framework is a simple, workable, and well-understood SOP. This SOP should contain the following subjects, among others:

- Purpose, scope, and references.
- Flowchart diagram of incoming and outgoing information flow and who is responsible at each stage. This diagram should include the way a form requiring the commander's signature is submitted up the chain of command, signed by the commander, and returned to the soldier.
- Meetings—the conduct, length limi-

tation, attendees, and notification times.

- Awards—examples, concrete bullet comments, neatly written in black ink, submitted 60 days before PCS/ETS (permanent change of station/expiration term of service), logged by XO.

- DA Form 4187, *Request for Personnel Action*—examples, neatly written, and standards.

- Uniform Code of Military Justice (UCMJ)—examples, commander's guidance, several counseling statements, and concrete situations.

- Sample DA Form 285, *Accident Report*, with deadline for submission.

- Counseling—examples, company and battalion policies, and conducted at least once a month.

- Administrative tracking requirements for platoon leader and platoon sergeant (platoon and company Smart Books).

- Commodity area responsibilities during daily operations.

The entire purpose of the administrative SOP is to reduce the complexity of daily company operations and avoid misunderstandings, and it should be written to meet this purpose.

The XO needs many pieces of information to track administrative missions and to make sure they are accomplished—deadline report, parts ordering, field preparation, document numbers, and training resource coordination, and many others.

Tracking Charts. The following information tracking charts help the XO in the organization, management, and information relay of resource status and company missions:

- The Headquarters Platoon Chart is designed to control and focus the diverse missions and duties of the company headquarters. The chart should outline company priorities, goals, and specific missions for each commodity area.

- The Training Resource Coordination Chart is designed to track and plan logistical coordination through all classes of supply for training events.

- The Range Resource Matrix is used alongside the training resource coordination chart to assist in planning and coordinating range resources. The matrix is completed with all information dur-

ing company and battalion range weeks and then distributed throughout the company to help coordinate information.

- The Deployment Preparation Chart is used to help organize the many tasks a company needs to complete before a field training exercise or deployment. It establishes the time and tracks the completion time of each of the three rifle platoons and the headquarters platoon as it completes the various standard deployment tasks.

In addition to these charts, the back of DA Form 2406, *Materiel Condition Status Report*, is used to track daily non-mission capable status on company equipment.

Training Resource Support

Many people, both inside and outside the battalion, control training event resources. The most important of these inside the battalion are the support platoon leader, medical platoon leader, communication platoon leader, headquarters and headquarters company XO, the battalion S-4, the S-3 Air, the ammunition/training area NCO, the S-3 operations NCO, and the BMT. The most common outside the battalion are the Stinger teams, engineer squads, and fire support teams.

Again, the first step in learning about external training resource support is to obtain, read, and understand the external SOPs that pertain to requesting and coordinating logistical resource support. A generic question list for each support provider includes the following:

- What is your mission (garrison and tactical)?

- What resources (soldiers, vehicles, equipment) do you have with which to provide support?

- How do you conduct battalion and company support operations in a tactical environment? How is a typical support mission for a light infantry company team planned and executed, and what are the criteria for its success?

- How do you request the different types of support (medical, vehicles, or Army aviation); what forms are necessary, who gets them, how early must they be submitted, and are there examples to be followed?

- What are the rules governing the storage, transportation, holding, and turn-in of Class V and Class V dunnage on this post (support platoon leader only)?

- How is support from the Training Support Center (TSC) conducted on this post (operations NCO only)?

- What support is available from external agencies on post, and how is it coordinated?

- Who are the leaders of the slice elements (engineers, military police, field artillery) from the task force attachments—name, rank, and phone number? How is support coordinated for these different attachments?

- What information about light infantry operations would help you provide better support?

- What are some common problems in support operations, and what are some techniques to help avoid them? How can you better support a light infantry company?

- Where and how can you be contacted?

It is crucial that the XO talk face to face with each person who provides support, asking these questions and any others that may occur to him and leaving his telephone number. The secrets to planning and executing challenging and realistic combat training are coordination, knowledge of the available support and the way support operations are conducted, and a full integration of all types of support.

Deployment

The focus of all units in the continental United States, especially the XVIII Airborne Corps, is on rapid, effective, and combat ready deployment. To accomplish this vital mission, it is essential that the company plan, prepare, inspect, and maintain its equipment and personnel for the Division Ready Force One (DRF-1) mission.

Planning and Preparation. The foundation of all DRF-1 planning and preparation is a simple, complete, and well-understood SOP. The DRF-1 SOP is a combination SOP and Smart Book containing standardized procedures and essential deployment information; these

complement the company administrative Smart Book. The SOP should contain the following items, and many others as well.

- DRF-1 company mission statement.
- Company team task organization.
- Company and battalion N-hour sequences.
- Current manifest printout of all company team personnel.
- Match-up of drivers, vehicle commanders, vehicles, and their respective chinks.
- Updated alert roster, including slice attachments.
- Alert notification types, instructions, and procedures.
- Responsibilities of key leaders and commodity area NCOs during DRF-1 preparation and execution.
- DRF-1 preparation sequence by day (four-to-five-day sequence).
- DRF-1 summer and winter packing list.
- Standard vehicle and pallet loads and load plans.
- File folders for company team vehicles and pallets containing five copies of load plans, DD Form 1387-2, *Special Handling Data/Certification* on all hazardous cargo signed by Strategic Deployment School-qualified individual, blank joint inventory inspection sheets, and extra completed pallet load cards.
- Copies from the division readiness SOP on the following items: Personnel preparation, preparation for overseas replacement SOP, privately owned vehicle (POV) disposition forms and instructions, telephone cutoff plan, required briefing, and duffle-bag markings.
- SAEDA and threat briefing.
- Arms room consolidation procedures and plan.
- Rear detachment SOP, responsibilities, and roster.
- Family Support Group chain of concern and phone roster.
- Safety.

DRF-1 planning and preparation should begin at least 30 days before the deployment. The company commander should hold a planning meeting with the XO, first sergeant, platoon leaders, fire support officer, the platoon sergeant, training NCO, supply sergeant, and slice attachments (medical, air defense, en-

gineer and the like) to discuss unit status report data (weapon qualification, non-deployables, shortage MOSS) preparation sequence, manifesting, and deadlined equipment. In short, the intent of this meeting is to correct deficiencies.

A second meeting of the same participants should be held 14 days before the deployment to discuss these same topics and the progress that has been made in correcting deficiencies. The final meeting is held seven days later to correct any final problems, confirm coordination, and detail the procedures for the DRF-1 upload. The DRF-1 preparation sequence from the SOP will occupy the remaining four to five days. The upload covers the fine points of pallet loading times and details, vehicle joint inventories, wall-locker inventories and other DRF-1 activities.

An intimate knowledge of the division readiness SOP is also valuable in planning, preparing, and executing the DRF-1 sequence. This SOP describes the planning, preparation, execution, and redeployment of the division.

Load Planning. Load planning is one of the most crucial elements in assumption of responsibility as a DRF-1 unit. With a limited number of pallets and vehicles, decisions on what to take and what not to take can be difficult. The best rule is to plan for mid- to high-intensity conflict combat operations. This includes the vital aspect of NBC defense, which means the XO may overpack NBC items for a low-intensity conflict. It is still better to over-prepare. Another decision is whether to leave out an essential item used in daily operations (the armorer's tool kit, for example) or to pack it on a vehicle or pallet. The best rule for an 18-hour deployment sequence is, "If it isn't packed, it isn't going." The items packed and those staying behind must be carefully chosen so as not to shortchange operations in a future combat area or in garrison. Finally, all vehicles and pallets must be cross-loaded in case of vehicle loss or destruction.

Immediate Reaction Company. Each DRF-1 battalion has an immediate reaction company (IRC), the first unit to deploy. The IRC XO must be on top of all DRF-1 preparations and have the

company on its way in 18 hours. He must also be aware of any possible classified CONUS (continental United States) mission, post security mission, or other mission. The most important considerations for the IRC XO are to have an excellent notification system and a comprehensive company N-hour sequence to ensure that all tasks are accomplished. Finally, as in all military operations, a leader rehearsal should be conducted, followed by a full rehearsal of the N-hour sequence to ensure that the plan is feasible.

Tactical Operations

Tactical operations present the greatest challenge to the XO. He must not only maintain and resupply the company, but also stay fully abreast of the tactical situation so he can assume command in the event the commander becomes a casualty.

Second in Command. The XO's role as second-in-command (2IC) is one of overall logistical planner and coordinator, responsible for overall company maintenance, and the tactical second-in-command. The placement of the XO during tactical operations is best decided by the XO and the commander; but he should be in a position from which he can control the secondary effort and effectively replace the commander if the need arises.

Although the importance of his 2IC role seems self-evident, too many XOs become overly involved in the execution of logistical operations, which detracts from their ability to assume command. In brief, the XO *plans and coordinates* logistical and maintenance operations, and the company headquarters platoon *executes* the plan.

Troop-Leading Procedures. The XO must be a driving force in the company orders process. The first step is the battalion warning and operations orders. Upon receipt of the warning order—usually given by radio—the XO begins to plan and coordinate the logistical, resupply, and maintenance operations the company will need to refit and prepare for the next mission. To allow as much time as possible for logistical operations, the XO must anticipate, as much as possible, the current and future needs of the

company.

The XO needs to attend the battalion operations order with the company commander, if at all possible, to coordinate face to face with logistical coordinators (battalion XO and S-4) and the slice attachments, and to hear the battalion operations order first-hand, including the commander's intent. Once he has heard the order, he is better able to help the commander in the estimate process, war-game courses of action, and understand the entire concept and execution of the mission. Because of mission constraints, however, the XO may be commanding the company in the commander's absence and be unable to attend the battalion order. But he must immerse himself in the orders process so he can competently and confidently command the company.

Air Assault Operations. Air assault operations present the company XO with special challenges. An air assault must be planned, coordinated, and rehearsed like any other combat operation. In the planning process, two crucial meetings—the air mission coordination (AMC) meeting and the air mission brief (AMB)—determine the airflow, landing and pick-up times, and pickup zone (PZ) and landing zone (LZ) locations.

The AMC meeting is part of the aviation-infantry estimate process in which courses of action are discussed and fitted to the restrictions of the aviation element (number of aircraft flying, crew rest, ADA threat) and of the infantry (ground tactical plan). It is a working meeting that includes the aviation LNO, the battalion S-3 Air, and the lead pilots.

The AMB is presented in an operations order format. The format should be standardized at brigade level and mutually agreed upon by all members of the brigade task force. At the AMB meeting, the XO receives pick-up and landing times; PZ and LZ locations; lift, serial, and chalk places for his personnel; and an overview of the way the air assault fits into the ground tactical plan.

After the AMB, the XO must ensure that his company's ground tactical plan will fit into the air assault plan. This briefing is the final product of hours and hours of coordination between the aviation and infantry battalion staffs, and only

mission-stopping problems should change it. If the airflow needs to be changed to support the ground tactical plan, he should try to do it—realizing, however, that changing one company's part of the air assault affects the entire task force, especially on multiple-lift missions using the same aircraft.

The company XO needs to know the lift capabilities of all aircraft in terms of personnel and slingload—especially the UH-60A Black Hawk and the CH-47D Chinook, the most commonly used. PZ and LZ selection and marking (day and night), landing formations, light and heavy PZ and LZ control, and slingload operations, especially HMMWVs (high-mobility multipurpose wheeled vehicles), must be second nature if he is to keep up with the fast pace of air assault operations.

Pre-combat checks are required on all air items—A-22 bags, sling nets, and vehicles—so that the company can be resupplied by air. The Air Assault School Handbook is a required source in planning, especially for heavy PZs when vehicle preparation checklists and link counts must be checked and double-checked to ensure the safety of aircraft, personnel, and equipment.

The XO must also use a simple, well-understood, and comprehensive company AMB format so he can quickly, concisely, and thoroughly brief his company on the operation. A vital part of the AMB is the bump plan, the process used when one or more aircraft fail to show up at the PZ. Aircraft usually bump from the rear, so the company bump plan must either place nonessential personnel on the last aircraft or have a designated chalk that will step out of line and allow an essential chalk to move up.

Field Maintenance. Proper maintenance procedures may be more vital in a tactical environment than in garrison. Regardless of the mission, maintenance must be deliberate, planned, and leader supervised and inspected each day. Regular maintenance to standards on all company equipment will ensure that a company is ready to fight. Leaders must stipulate that DA Forms 2404, equipment technical manuals (TMs), and cleaning supplies are to be brought to the field.

Soldiers and leaders must conduct at least one PMCS check daily on each piece of equipment, strictly following the TM. The company headquarters must also conduct daily or twice-daily maintenance on its equipment, especially vehicles. The company headquarters also pushes maintenance support to the platoons in their assembly areas or during consolidation and reorganization to spot-check maintenance, provide -20-level support, and evacuate equipment that cannot be repaired to support maintenance. Maintenance is a leader activity, and leaders are responsible for checking maintenance procedures.

The company headquarters platoon must have a comprehensive and detailed field SOP on logistical and resupply operations. This SOP should contain at least the areas shown in Table 4. This may seem like an extremely exhaustive list of subjects for an SOP, but tactical logistical and maintenance operations must be

HEADQUARTERS PLATOON FIELD SOP AREAS

- Section collection tasks.
- Company trains organization.
- Assembly area procedures.
- Reconnaissance and quartering party operations.
- Company trains setup and operations.
- Tactical road march.
- Prepare for combat.
- Field preparation checklist.
- Consolidate and reorganize.
- Logistical and resupply procedures.
- Process enemy prisoners of war (EPWs) and captured equipment.
- Personnel actions.
- Defense.
- NBC operations.
- Company trains battle drills.
- Stand-to procedures.
- Sample individual and section sector sketches.
- Reports.
- Vehicle and pallet load plans.
- Safety.
- DRF-1 summer and winter packing lists.
- Anti-fratricide measures.
- Air assault operations with sling-load excerpts from the Air Assault School Handbook.
- Blank air mission brief (AMB) format.
- Blank warning order and operations order formats.
- Blank situation tracking charts.

Table 4

as nearly perfect as possible so the company can get the best possible support. The purpose of this SOP is to provide a detailed guideline for the way the headquarters platoon operates in the field. Combined with common sense, considerations of METT-T (mission, enemy, terrain, troops, and time), and current Army doctrine, this SOP details the way the company trains will operate in the field.

Resupply. In addition to the field SOP, logistical resupply packages (LOGPACs) should be established within the company or the battalion to ease the burdensome and unsecured transmission of resupply requests. These various LOGPAC requests encompass the areas of sustainment, communications, NBC, blank and live ammunition, maintenance items, Class IV, demolition, and other support items.

For example, the daily sustainment of a company in the field becomes a sustainment LOGPAC. All the items in that LOGPAC are brought daily at the established quantities, unless otherwise noted. A sample sustainment LOGPAC is shown in Table 5. To change the quantities, the requestor calls the line and letter combination and then the change, plus or minus. For example, he would order 130 T-Rations, "LINE AE, PLUS 10, TANGO." The LOGPAC format allows resupply packages to be standardized but flexible; it vastly shortens the transmission time for resupply requests; and it is secure on unsecured nets, so long as the LOGPAC format has not been compromised.

The combination of the field and LOGPAC SOPs allows the headquarters platoon to be effective, efficient, and tactically precise. It enables the XO to focus his efforts on planning and coordinating, and on assisting the commander in tactical operations. The headquarters platoon is responsible for all company resupply operations, and it is vital that its soldiers practice and fully understand the importance of their mission.

There are various methods of resupply, but the primary criteria for the selection of a method are: It allows the necessary amounts of supplies to be moved forward safely, gives the using unit time to distribute and absorb the supplies, and does

LOGPAC #1—SUSTAINMENT

LINE	QTY	ITEM
LINE AA	10	AN/PRC-77 Batteries
LINE AB	12	AN/PRC-126 Batteries
LINE AC	02	SLUGGER Batteries
LINE AD	50	"AA" and Lithium NOD Battery Mix
LINE AE	120	MREs (M) or T-RATS(T) or A-RATS(A)
LINE AF	10	Trash Bags
LINE AG	15	First Aid Bandages
LINE AH	12	Sets of Pioneer Tools (Axe, Shovel, Pick)
LINE AI	01	55-gallon Blivet of Water
LINE AJ	20	Bottles of Iodine Water
LINE AK	15	Infrared (IR) Chemlights
LINE AL	20	Green Chemlights
LINE AM	10	Red Chemlights
LINE AN	01	Roll 100-mph Tape
LINE AO	30	Feet 550 Cord

Table 5

not place the resupply assets at unnecessary risk.

The following are the four primary resupply techniques:

- The *in-position* technique is used when enemy contact is imminent. Supplies are pushed by the company trains directly to the platoons. This technique is very time-consuming, but it allows combat power to remain forward.

- The *out-of-position* technique, most often used in the defense, is used when enemy contact is unlikely. A supply point is established close to all platoon positions. Squads are rotated out of platoon positions to covered and concealed resupply points and then back on line. This is the preferred method, because it is timely, it keeps a significant amount of combat power forward, and the company resupply point is removed from likely enemy contact.

- The *aerial resupply* technique is used during the pursuit and when a large number of aircraft are available. Rations, water, ammunition, and other necessary supplies are sling-loaded with A-22 bags or cargo nets, or kicked out of a helicopter. This technique allows limited backhaul. All aerial resupply equipment must be returned immediately and complete for further aerial resupply operations.

- The *cache or pre-position* technique is used when none of the others will work. Cache sites are established away from natural lines of drift, below ground, away from civilians, and away from known enemy locations. Caches are useful in the pursuit when contact with the enemy must be maintained and speed is

essential. Cache sites are given an azimuth and a distance from at least two known points. Ground positioning system grids are used, if possible.

Casualty Collection Point. The XO, along with the company first sergeant, is responsible for establishing a company casualty collection point (CCP). The CCP is established in a covered and concealed position 100 to 200 meters from a suitable LZ/PZ, marked (day and night) according to company SOP, in a location every man knows, and with local security provided. The CCP can be marked with strips of engineer tape during the day, or with one-quarter of a VS-17 panel. At night, red chemlights, infrared chemlights, and an infrared strobe can be used.

The company's senior medic is responsible for establishing and operating the CCP. The senior medic and the platoon medics conduct an initial assessment and then group the casualties by severity of wounds—*litter urgent*, *litter priority*, and *walking wounded* categories—and they are evacuated in priority order. Security is provided initially by four men, and they are replaced by walking wounded. The MEDEVAC plan must be rehearsed so that problems can be worked out and all soldiers understand the importance of quick, efficient MEDEVAC.

Enemy Prisoner-of-War (EPW) Procedures. The company headquarters platoon establishes a company EPW cage with the two rolls of concertina wire it carries on each vehicle, or in another secure location. If the company headquarters is not forward, a platoon is detailed

to establish the cage under the XO's supervision. The XO is also responsible for the cage's placement and for coordinating the pickup of the EPWs. Although the company cage is only a temporary holding area, it still must provide some shelter, food, water, a trash point, and a latrine.

At least four guards are necessary, and they are provided by the capturing platoons. It is important that EPWs be handled according to the Geneva conventions and the Law of Land Warfare. It is also important not to put local civilians or displaced citizens in with the EPWs but to turn them over to civil affairs teams—unless they are suspected of supporting enemy activity.

All EPWs are searched, and their equipment is taken from them. Once a search has been completed, certain items are returned—personal protection items (helmets, flak vests, protective masks), personal letters and effects, and inclement weather gear. All other gear is tagged with EPW document tags. If no tags are available, the following information must be provided: location where the gear was found, name and rank of the person it was found on (if known), and the suspected use of the equipment. EPWs are processed according to company and battalion SOPs. The capture of EPWs must be reported immediately to the battalion S-2 so that interrogation can begin.

Safety. Safety is always an area of concern for the XO, both in garrison and during tactical operations. He needs safety indicators for all operations, from post guard to limited visibility live fire operations. Some safety prevention measures are easy—ensuring that soldiers have and wear the proper equipment, that the correct amount of water is available, and that a safety briefing is conducted before a range or movement. Other safety measures are not so easy: Are the platoons trained enough for a limited-visibility live fire, and is the commander incorporating enough safety measures into his plan? The XO needs to act as an advocate for the commander in ensuring that all possible safety measures are taken. In addition, the XO conducts a risk assessment for all training. Safety is not the unnecessary coddling of soldiers, but the intelligent prevention of accidents. Accidents waste combat power, and the XO must do everything possible to prevent them.

The challenges of operating the company headquarters, maintenance, administration, and tactical operations are ever-present and ever-changing for the company executive officer. He must always maintain the focus of the second-in-command and not place too much attention on any one area. He must supervise and monitor all areas of the company. He must continue to learn about his job, communicating and sharing with other company XOs. Continuing profes-

sional development as an infantry officer goes hand-in-hand with his continuing improvement as an XO. The techniques and methods discussed here are not authoritative dogma but a guide to help the XO do his job in an air assault infantry rifle company. A company that can maintain, administer, and logistically support itself is also a company that can fight and win on the battlefield.

EDITOR'S NOTE: Lieutenant Storlie has compiled a packet of detailed materials that could not be included in the article. The packet includes duty descriptions and standards of conduct for the members of the headquarters platoon; a contents page from the company Smart Book; examples and descriptions of tracking charts; sample vehicle and pallet load plans; a company CCP layout, and recommended procedures for handling EPWs.

This packet is available at no charge upon request from Editor, INFANTRY, P.O. Box 2005, Fort Benning, GA 31905-0605.

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Developing OPFOR Soldiers

**CAPTAIN GEOFFREY N. BLAKE
LIEUTENANT STEVEN D. YOUNG
LIEUTENANT KARL I. KUSSOW**

The success of the 1st Battalion, 509th Infantry (Airborne)—the opposing force (OPFOR) unit at the Joint Readiness Training Center (JRTC)—lies in its ability to focus on the tenets of fighting and

to identify and exploit any shortcomings in the rotation unit's battlefield operating systems.

The OPFOR battalion is made up of two rifle companies, one cavalry troop,

and a headquarters company. Each of the rifle companies breaks down into three rifle platoons, a mortar section, and a headquarters section. The cavalry troop operates in four tank platoons with a

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headquarters section. The headquarters company consists of single scout, mortar, support, and medical platoons. The staff sections operate in a supporting role with the companies.

The battalion operates under field conditions about ten months of the year. It has approximately 460 authorized positions and is normally augmented by an engineer company and infantry units, which participate in the rotations, task organized according to METT-T (mission, enemy, terrain, troops, and time).

With the battalion and its augmenting units, the OPFOR battalion's strength during a rotation is close to 700 soldiers. The number actually on the battlefield at any one time depends upon the phase of the rotation and the threat being portrayed.

All OPFOR leaders at the JRTC are experienced and have previously served in the same positions; the platoon leaders, company commanders, squad leaders, and platoon sergeants are all experienced professional, dedicated, and respected soldiers of today's Army. They have served with soldiers throughout their careers and understand how to plan, prepare, and execute a mission with just a mission statement, a commander's intent, and a set of graphics.

Officers assigned to the OPFOR, like the NCOs, participate in almost every after-action review at every level. This in itself is an excellent professional development tool. Observing and interacting with the rotating unit makes it easier for the NCOs to learn the battlefield operating systems. The development of a plan

and the execution of a mission against a particular operating system justly reward squad and platoon leaders.

An OPFOR company commander continually matches his wits against those of battalion and brigade commanders. Operating with his few resources against a more volatile force measures his ability to synchronize his assets. It is here that a company grade officer can appreciate the fundamentals, seen through the principles of war.

The OPFOR cadre trains all the soldiers on four fundamentals before they participate in any force-on-force training at the JRTC—individual and collective tasks that focus on marksmanship (with MILES), fieldcraft, battle drills, and decentralized operations. Proficiency in these tasks at individual, squad, and pla-

OPFOR INDOCTRINATION AND SUSTAINMENT PROGRAM

INDIVIDUAL TASKS:

- Conduct MILES familiarization with the MILES equipment found on the JRTC battlefield.
- Conduct advanced marksmanship training in order to improve the individual soldiers' ability to shoot at different and challenging stationary and moving targets.
- Execute fieldcraft skills to orient the OPFOR soldier on the methods of surviving on the battlefield. These skills include soldier's load, camouflage, and cache techniques.
- Familiarize soldiers with the JRTC scenario and that of the surrounding countries.
- Understand the order of battle with the composition of the forces that are portrayed on the battlefield.
- Understand the JRTC Exercise Rules of Engagement.
- Call for and adjust fire so that every soldier can properly call for and adjust indirect fire.
- Administer First Aid for hot and cold weather injuries to prevent and treat different types of environmental casualties.
- Conduct training on individual movement techniques focusing on the high crawl, low crawl, and rush in order to increase survival on the battlefield.
- Report enemy information to ensure the correct method of collecting/reporting of combat critical information.
- Train drivers to ensure that they are familiar with the procedures and hazards associated with driving in off-road conditions.

COLLECTIVE TASKS:

- Infiltrate an area of operation without the enemy determining size, composition, destination, or orientations.
- Establish and occupy a patrol base to prepare for the next mission.
- React to combat (mounted/dismounted) both by direct and indirect fires.
- Conduct box attack by squad during the day or night against a known or suspected enemy location.
- Breach an obstacle moving either mounted or dismounted.

PLATOON COLLECTIVE TASKS:

- Prepare for combat
- Assault (mounted/dismounted)
- Defend
- Occupy assembly area
- Move tactically
- Cross danger area
- Perform tactical road march (mounted)
- Defend built-up area
- Breach obstacle (mounted)
- Construct obstacle
- Defend against air attack
- Consolidate and reorganize
- Airborne assault
- Raid
- Perform helicopter movement
- Employ fire support

SQUAD COLLECTIVE TASKS:

- Perform tactical road march
- Perform stay-behind operations
- Infiltrate/exfiltrate
- Reconnaissance
- Perform helicopter movement
- Assault (mounted/dismounted)
- Disengage
- Defend
- Cross danger area
- Defend against air attack
- Counterreconnaissance
- Construct obstacles
- Occupy patrol base
- Perform link-up
- Employ fire support
- Breach obstacle (dismounted)
- Overwatch/support by fire
- Perform hasty ambush
- Move tactically
- Conduct operations security
- Consolidate/reorganize
- Establish Cache



OPFOR soldiers at the JRTC conduct rehearsals for a deep strike air assault against a brigade TOC.

toon levels allows the unit to be an excellent, uncompromising OPFOR.

The battalion conducts an indoctrination and sustainment program. Each company plans, prepares, and executes the program for all newly assigned soldiers and as part of refresher training. This program is conducted in two phases. Phase I focuses on the individual skills in which the soldiers need to be proficient before they participate in a rotation. This is a training event conducted monthly as part of troop rotations. Phase II, conducted at squad and platoon level, is intended to integrate new soldiers into crews, teams, and squads. It is normally conducted as part of the planning and preparation for each rotation.

The training conducted at the JRTC is hazardous and demands close attention to detail; safety is therefore a continuing training focus before every mission. Safety briefings are conducted as part of troop-leading procedures before each phase, and the OPFOR battalion holds all leaders accountable for the safety of their fire teams, squads, and platoons.

Certain potential safety problems go along with working decentralized.

Dehydration is a big concern during dismounted operations; headaches and lethargy can occur after operating for 36 to 48 hours, and leaders must force soldiers to drink enough water to prevent these symptoms. Although classes on the

subject also help, the leaders must be the ones to enforce hydration. A thorough inspection of rucksacks before deployment is also needed to check the weight of the soldiers' rucksacks and the type of clothing they are wearing and carrying.

Sleep deprivation is also a safety hazard for the OPFOR. Roughly 48 hours before deploying to the field, the OPFOR is confined to the battalion area—not only for troop-leading procedures and forced hydration but also for rest and food. Once they are in the field, sleep is critical for roughly a week of continuous operations. The OPFOR stresses that soldiers and leaders alike must get restful sleep in the patrol base—away from the radio and monitoring of operations, but still in a secure, overwatched position.

Animals also pose safety problems—from insects to rodents to larger animals. With the proper repellent, identification, and working knowledge of what to do if bitten or attacked, the OPFOR can reduce the threat of non-battle injuries from animals.

Careless mistakes as well as freak accidents can cost lives, especially in inherently dangerous air assault and airborne operations. Attention to detail and well-executed rehearsals can reduce the risk of serious injury.

Driving wheeled or tracked vehicles is risky. A soldier who is not qualified to operate a piece of equipment simply is

not allowed to operate it, day or night. In a vehicle, each driver will have a non-commissioned officer as a vehicle commander. The speed limit for the OPFOR in the field is 25 miles or less per hour, depending on the conditions.

Driving at night requires more stringent measures for the OPFOR. Since most operations are conducted during periods of limited visibility, drivers and vehicle commanders must be experienced and dependable. A driver who is not qualified with night-vision equipment is not allowed to drive at night. In assembly areas, each vehicle has a ground guide, regardless of the time or the conditions.

Safety is incorporated into everything the OPFOR does—in all written and verbal orders. There is no room for compromise when it comes to safety.

The soldiers and leaders in the OPFOR continually assess their fighting ability, holding all squads and platoons accountable for proficiency in the collective tasks. With the OPFOR indoctrination and security program as the starting point and the rotation itself as the measuring tool, the OPFOR members assess themselves monthly on all of the squad and platoon level tasks.

These OPFOR soldiers and leaders take pride in their actions because they understand the principles of fighting. Facing all types of light infantry units (airborne, air assault, Ranger, and light), and having seen the success of their own squads and platoons, they continually stress the tenets of marksmanship, battle drills, fieldcraft, and decentralized operations.

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Live Fire Training

CAPTAIN JOHN E. BESSLER

The Army today faces the task of maintaining tough, realistic multi-echelon training within an austere budget. With fewer opportunities to conduct live fire training, a smart commander must make the most of those he does have. Live fires may well be the best way to train as many soldiers as possible, at every level, in such a short amount of time.

A well-executed live fire exercise also inspires confidence in the soldiers—confidence in their weapons, their peers, their leaders, and their unit. Young privates see all of the platoon's firepower brought to bear. They see their team leaders leading by example and the squad leader controlling his squad amid the noise and smoke. They see squad leaders becoming mentors and their new platoon leader undergoing his acid test in front of them and their company commander.

Live fire training in peacetime thoroughly exercises the planning process at every echelon, and the entire chain of command must be involved:

The commander has overall responsibility for the success of the live fire mission. His creativity and attention to detail make it all work; his lack of these traits can turn it into another "canned" exercise that wastes the soldiers' time and leaves them with nothing but shell casings in the weeds and a ringing in their ears.

Depending on the scope and intent of the mission, the executive officer can be responsible for numerous tasks—pushing ammunition forward during the consolidation phase and evacuating "wounded" soldiers, serving as the pickup zone (PZ) control officer or the safety officer with the mortars, or coordinating logistics

(with the supply sergeant), on both ends of the actual exercise.

The first sergeant, as the senior enlisted trainer in the unit, is responsible for training the common task and individual soldier skills needed to execute the mission. During planning, he helps the commander by approving the drills selected by the platoon sergeants and squad leaders to support the company's mission essential tasks. He supervises leaders at all levels, critiques squad operations orders, monitors ammunition distribution, observes rehearsals, and reinforces such common skills as camouflage, individual movement techniques, and maintenance.

During the execution of the live fire, it is up to the commander to decide where the first sergeant can be most effectively employed. He may be with the support-by-fire element, serving as an experienced observer on the ground to confirm the lifting and shifting of direct fires ahead of the assault element. In a large company live fire, he may be with the supporting attack; at the casualty collection point or the enemy prisoner of war point during consolidation and reorganization; or he may stay at the landing zone to coordinate the arrival of extraction or medical evacuation aircraft.

The supply sergeant can work with the XO for the delivery and distribution of all classes of supply. If the live fire is the culmination of a field problem or deployment, he can work out of the field trains to transport ammunition forward as part of the logistical package. If the operation takes place from garrison, he is responsible for any needed transportation, all classes of supply consumed during the operation; and, during consolidation and

reorganization, he can supervise the loading and unloading of a supply helicopter bringing supplies in for follow-on operations.

The fire support officer or members of his team must be present for any operations involving mortars or artillery. Even during squad live fires on small ranges without the capacity to incorporate anything larger than 7.62mm ammunition, a forward observer should be somewhere near the action, either calling for fire or critiquing the squad leader's calls.

In a larger scenario, planning gets more complex. The FSO and the company commander must also identify overhead firing restrictions for 60mm mortars, determine how hasty a "hasty lay" can be when the mortars go into action, coordinate with the dedicated firing battery, find aerial routes in and out, and coordinate all the fire planning that goes into setting up the range.

The fire support team's training begins as soon as the initial planning session with range control ends. Among other things, they laser designate targets, walk the ground with the commander to determine phase lines, help define time of movement instead of time of flight, calculate danger-close lines, and find minimum safe distances (MSDs).

The key to successful tactical operations is a good rehearsal. For air assaults, leaders should try to get the aircraft for at least an hour before PZ time to let the troops reacquaint themselves with loading, manifesting, seating arrangements, and seatbelts. (Nothing can throw a schedule off faster than excited troops trying to figure out how to put on their safety belts.) If four-point shoulder harnesses are required, rehearsals are imper-

ative for reducing time on the ground.

At night, the safety-belt shuffle is even more difficult and time-consuming. Crew chiefs have to climb over and around rucksacks, mortar rounds, equipment, and soldiers to check the security of the load. Aircraft loading rehearsals must therefore be conducted with all gear, and it should be made clear at the air mission conference that crew chiefs will participate in ground rehearsals.

Other things to think about for an air assault are bump and load plans, cross-leveling weapons on aircraft, flight times, which side of the LZ may be hot (so that automatic weapons can be put on that side), and downed aircraft procedures. Most units have well-established air mission checklists to cover these points and others as well.

The coordination of artillery, U.S. Air Force aircraft, and attack helicopters with inbound assault aircraft is a complex planning drill that involves all unit commanders. Pulling off a successful H-hour requires detailed planning, wargaming, and rehearsing. The live H-hour, which requires numerous assets, is best left for company-level live fires, but there is no reason the commander cannot plan and execute a dry H-hour. For a platoon mission, the company FSO can act as the battalion FSO, or even the air mission commander; he will gain valuable experience for his next job, whether it is as fire direction officer of a firing battery or as the battalion FSO, where he will be responsible for such assets as close air support and attack helicopters.

Range control is a training aid that allows commanders to tailor training areas and resources to training events to improve combat readiness. Commanders should make sure they get a written scenario (if required) on time and that they are kept informed of any changes. They need a lot of lead time to work out their own details, such as safety fans, areas that may need to be cleared of duds, and coordinating shutdowns of adjacent ranges.

A good technique is for the commander to invite the range control safety officer to the range with all key players to walk the ground so he will know what is needed. The platoon leader must make sure

what he wants to do before taking the safety officer out on the ground; azimuths need to be on hand, and a global positioning system (GPS) for recording exact safety fan grids is helpful. The FSO should be there to talk about MSDs and sequencing of fires. When a logical scenario is presented and everyone agrees on azimuths, MSDs, axes of attack, limits of advance, types of ordnance, and all the other details, range control personnel will do whatever they can to help.

For squad live fires, it is not necessary to incorporate more than organic small arms into the training. With the platoon's M60 machineguns set up on a flank and the mortars firing from a nearby observation post (OP), the commander will have all the realism he needs; whether the fire is impacting on his range or not, the gunners can still receive calls for fire and fire into their own impact area. The secret is for the commander to be creative with his assets but not to attempt more than he can handle. If he coordinates more than is necessary, he may end up with a set-piece exercise in which the troops are just going through the motions.

For platoon live fires, more weapon systems can be brought to bear, and the leader can be more creative with the use of terrain and the way it supports the execution. The scenario must not be driven by the terrain. On most reservations, a platoon is about the most that can shoot and still retain some freedom of maneuver and flexibility in execution.

For company live fires, planning should begin at least four months ahead to coordinate all the assets needed. If the commander wants to execute a company live fire successfully, he should not let it turn into an excuse for all the combined arms people to tag along—for example, he may not really need Vulcans firing as part of his scenario and should not have them unless it makes sense tactically.

On the other hand, writing his scenario as part of a battalion mission can pay dividends because it gets the battalion staff involved. Assets normally out of reach to a company commander become available, such as attack helicopters and close air support. Again, however, it must make sense to include them. Too

many players can turn the live fire into a ponderous, canned exercise. The commander should keep in mind throughout planning what he wants the end state to be and what he wants to achieve with his company, and then plan the exercise to meet these goals.

During rehearsals on the dry fire lane, with opposing force (OPFOR) troops on the objective, MILES (multiple integrated laser engagement system) is the best thing available for teaching soldiers to take well-aimed shots from cover during an assault. MILES can be used to train the fundamentals of continuous forward movement and continuous suppressive fire during the assault. In addition, it trains the leaders to be aware of and responsible for killing everything in their sectors of fire. Before moving the squads onto the live fire lane, they should be put through the lane until they are thoroughly comfortable with the units on their left and right, and until they can maintain continuous fire and movement and kill all targets. MILES training should also be conducted before night live fires; it gets soldiers used to firing downrange with their buddies moving close alongside and builds confidence.

Night firing is a culminating event for a rifle company. A commander should not conduct a night live fire assault until he is comfortable with his soldiers' performance during daytime live fires. The squad leaders should wear AN/PVS-7 night vision goggles around their necks, taking periodic checks; the platoon leaders wearing them in the head harness; and the team leaders leading by example and keeping their teams under control. No artificial illumination is needed either—such as chemlights on the silhouettes, as some units have been known to do.

Non-illuminated night attacks are not any harder to execute, but they do require more thorough rehearsals. Every soldier needs to know not only who is on his left and right but about how far he is going to bound, whether he rolls left or right or has a habit of drifting left or right during individual movement techniques. This may sound like overplanning the assault phase, but it just allows the squad members to know each other's habits under stress.

With all the planning, terrain walking, and briefings in preparation for the live fire, there is a danger of its becoming routine. There are several techniques to keep this from happening.

The first is to conduct all blank and MILES training on similar terrain instead of on the actual lane to be used. While it may be feasible to walk all leaders through the actual lane to talk about MSDs and safety considerations, there is no need to let the troops see the ground they're going to fight for until it is time. If money is tight, just doing a tactical exercise without troops (TEWT) is good.

Another way to maintain realism and the free flow of the event is to provide more than one way to do it. That is, let the squad or platoon leader decide which flank is best for setting up the support position and let him figure out where the limit of advance is. This requires detailed planning and thorough reconnaissance, but it can be done.

No artificial range-limiting stakes or phase-line markers should be allowed. If properly planned and surveyed, this approach adds a great deal of realism. Trails, streams, and unique terrain provide all the indicators needed to keep the bullets going in the right direction and the lead fire team just outside MSD.

Finally, an execution or brevity checklist for the leaders and safety personnel should be mandatory. A list of key events given an alpha-numeric code keeps

everyone on track. This, added into the H-hour, keeps everyone informed. This improves flexibility; for example, if the assault is over early, the extraction aircraft can come in on call instead of waiting for a specific time. It trains radio-telephone operators and leaders to be concise and flexible and doesn't tie up time on the radio when everyone is ready to move out.

Planning for a company live fire should begin at least four months ahead. Platoons need about half that long. Squad lanes can be put together rather easily, but in keeping with the intent of Field Manual 25-101, *Battle Focused Training*, five weeks out is not too early. Early in the planning cycle, the commander should circle the tasks in the MTP that he wants his company trained on and offer it to the platoon leaders and platoon sergeants for their input during his training meeting. Once he has his list of tasks, the commander should not add any more unless it makes sense tactically.

During the train-up, he should make sure the junior leaders stress the fundamentals and conduct plenty of rehearsals. These include common skills often overlooked such as reducing a stoppage, magazine and barrel quick-change, misfire procedures, and collective skills, such as breaching a wire obstacle, maintaining continuous suppressive fire, continuous movement, and consolidation and reorganization. Once on the range, he

should let no element go downrange until he is convinced that it is properly trained.

After-action reviews, as the combat training centers have discovered, are significantly improved by video. Video shows in real time the sequencing of events and what really happened. Troops and leaders get caught up in the action and sometimes remember very little after it's over. One or two well-placed, inconspicuous video recorders can make all the difference. Also, every soldier who pulled a trigger should submit a written critique with suggestions. It is interesting to see the comments, and good ideas from them will improve future training.

A properly executed live fire is the best training for building teamwork, cohesion, and confidence. Tough and realistic training are the watchwords of today's smaller Army. In preparation for combat, nothing beats the multi-echelon training gained from the conception, planning, coordination, rehearsal, and execution of a safe, well organized small-unit live fire.

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The Platoon Raid

Leader's Reconnaissance and Fire Control

LIEUTENANT COLONEL EDWIN F. DAVIS, JR.
SERGEANT FIRST CLASS LARRY K. ALLEN

The raid is probably the most difficult and challenging of all the tasks on an infantry platoon mission essential task list

(METL), but it can also be the most rewarding for its leaders. The raid requires extensive planning and a large measure

of autonomy in execution. Frequently, in a raid, there are no adjacent units—left, right, or front—to depend on in the event

of enemy contact. Platoons frequently operate deep behind enemy lines, outside friendly direct fire support, and within range of only limited friendly indirect fire support. Platoon plans must therefore be detailed, fully rehearsed, and adequately war-gamed for a wide array of contingencies.

The troop-leading procedures and the tactics and techniques for conducting a successful raid are covered adequately in various field manuals and other publications. In this article, we will focus instead on two important considerations in the planning and execution process—the leaders' reconnaissance and fire control.

Although platoons do a good job of backward planning, with detailed schedules and good rehearsals, sometimes their performance on the objective is still best described as chaotic.

Intelligence pertaining to an objective is often either scarce or outdated. Platoon leader mission statements do not contain exact coordinates but are prefaced instead with "in the vicinity of." This is not unrealistic, however, because targets that are appropriate for platoon-size operations are frequently perishable and time sensitive, and their locations may be unclear. Under these conditions, about all a platoon can do before infiltration is to conduct a good generic rehearsal on similar terrain—making the most of well-developed unit SOPs, coordinating with supporting units, and sending out a reconnaissance element.

Still, many platoons fail to allocate enough time for the leaders' reconnaissance in the backward planning process. In practice, too much time is spent in a secure area, infiltration time is generally miscalculated, and too little time is allocated to the actual reconnaissance and the subsequent backbrief to soldiers.

A leaders' reconnaissance is laborious and time-consuming. Movement in and around an objective area requires stealth and is by its nature slow and deliberate. If movement in and around the area of interest is hasty and careless, the patrol is apt to be compromised. Infiltrations to objective areas always take more time than is scheduled; as a result, not enough time is available for the reconnaissance of the objective itself. In any event, pla-

toons find that they must hustle if the raid is to take place at the prescribed time.

Units should also strongly consider using advance reconnaissance. Any snipers that may be attached to the platoon or provided for the operation should be used immediately to conduct reconnaissance on the target. Snipers are especially good for reconnaissance, and with little probability of compromise. Still, the organic reconnaissance capability within a platoon cannot be discounted. Immediately after a platoon leader receives a mission, and if he decides advance reconnaissance is practical, he must give the reconnaissance element specific requirements that support his tentative concept. He must make sure a link-up and communications plan is coordinated and the reconnais-



sance party deployed quickly. Good SOPs can reduce the amount of guidance and coordination needed for the reconnaissance element.

The reconnaissance element can pinpoint the objective; identify potential assault, support, and security positions; identify likely avenues of approach; identify key targets for direct and indirect fires; provide continuous surveillance on the target; and act as guides for the main body in and around the objective area. Prior reconnaissance reduces the time needed for the leaders' reconnaissance and significantly decreases the chance of compromise.

Prior reconnaissance is not, however, a substitute for the leaders' reconnaissance. The leaders' reconnaissance is intended to accomplish two purposes:

pinpoint the objective, and confirm the concept of the operation. The concept of the operation prior to infiltration may be sketchy at best, and the information gained on the reconnaissance will permit the platoon leader to decide upon the best course of action.

Once a platoon is in the objective area, the terrain may offer some unique challenges. The platoon leader at the objective rally point (ORP) must confirm his list of leaders to take along on the reconnaissance. In this process, he must realistically consider the time available and the potential for compromise. He must take at least his element leaders, and when prudent, their subordinate team leaders as well.

Ideally, the platoon leader, support element leader, assault element leader, and element team leaders should conduct reconnaissance from the assault and support positions. It is from these positions and other vantage points in the vicinity of the objective that the concept of operations is really formulated, cultivated, and finalized. Here, the plan is synchronized—wargamed, in fact.

The support team leader has to have an intimate knowledge of the way the assault team will actually assault the objective. If obstacle breaching is in order, this knowledge is absolutely critical. The platoon leader, support team leader, and assault team leader must wargame the concept from every prudent position to fully synchronize troop movement in and around the objective with the indirect and direct fires.

While the leaders are forward completing the plan, the rest of the force is at the ORP making final preparations. After the platoon's leaders return to the ORP, the team leaders need time to backbrief the soldiers. Often, due to time or anxiety, this step is streamlined or eliminated. But all the wargaming and synchronization conducted thus far is worthless if the leaders cannot brief the individual soldiers on the modifications to the original plan and on the pre-planned fire control measures.

Since the raid will take place on the enemy side of the FLOT (forward line of own troops), resupply is generally not an option. The ammunition a unit takes

along in the beginning must be enough to accomplish the mission with a reasonable amount left for use in the exfiltration. Regardless of the ammunition taken on the mission, ammunition discipline is still a major concern.

The platoon will consider and rehearse many fire control measures during the planning process and through the employment of SOPs. But every objective is different, and a generic rehearsal can only do so much. When anxiety and the conditions presented by limited visibility are added, fire control is tough.

The support element cannot just traverse the guns across the objective and "hose it down" in an attempt to suppress the enemy. First, a platoon does not have enough ammunition for indiscriminate firing and, second, the likelihood of fratricide increases. The support element must work closely with the assault element to suppress the appropriate portion of the objective at the right moment to keep the enemy from delivering aimed fire. Additionally, the support element must prevent enemy troops who are not directly opposing the assault from repositioning to points that allow them to interfere with the assault. (See "Range Cards in the Deliberate Attack," *Captain Chester A. Char and First Sergeant Dewayne Chapman, INFANTRY, September-October 1992, pages 33-35.*)

Weapon systems need specific targets. During the reconnaissance, sectors are identified and, within reason, specific targets are identified for major weapons. In the plan, targets need to be identified for antiarmor weapons (AT-4s, LAWs, Dragons), M203 grenade launchers, and light and heavy machineguns. Even the rifle-men's fires are directed by their team leaders. A good technique that has been used for years is for the team leader to load his magazines primarily with tracer ammunition. He can then direct the team's fires by focusing his tracer fires at the center of the team's sector of responsibility.

Once the assault is initiated, the support and assault elements engage previously identified targets; the automatic weapons fire for several seconds at a cyclic rate of fire to achieve surprise and fire superiority, then quickly transition

to a sustained rate of fire. Snipers are especially valuable in engaging such priority targets as key leaders, radiotelephone operators, and crew-served weapon gunners.

By this point, significant damage should have been inflicted on the enemy, or at least enough confusion for the assault to begin. A simple but effective gauge for determining when to assault is the accuracy and density of the return fire. At this juncture, the actual assault is not a chaotic footrace across the objective; it is orchestrated by its leaders in accordance with the concept of operation and then modified as the situation develops. As the assault breaches and progresses across the target, the support element engages secondary and tertiary targets.

The support element, in concert with the assault element, must suppress enemy positions that directly affect the assault. Aimed enemy fire must be suppressed. Machineguns must be mounted on tripods with traversing and elevating mechanisms; they work best in pairs, alternately firing (in six-to-nine-round bursts) at specific targets. The guns must sustain fire throughout the assault, which may take several minutes. Suppressing the enemy does not require a great volume of fire, but it does require sustained, well-aimed fire. The support element leaders must rigidly monitor the rate of fire. A support element leader, using binoculars or night vision goggles, directs the assistant gunners and, in turn, the gunners to suppress targets according to the plan and the progress of the assault. All members of the support element are alert for prearranged signals that shift or lift supporting fires.

A few of the many methods of controlling fire are established sectors, timing, pen-gun flares, handheld starclusters, M203 starcluster rounds, leaders' weapons loaded with a high density of tracer rounds, chemlights, covert handheld lasers, events that signal a reaction, and distinctive uniform markings. Regardless of the methods used, a platoon can save much time and effort by standardizing methods in SOPs, training to perfect these methods, and deviating by exception only.

One method that works especially well is chemlight bundles. Once the assault team clears a bunker or a portion of an assigned target, the team leader throws an infrared chemlight bundle that marks the new left or right limit for supporting fires. The support element acknowledges by also throwing an infrared chemlight bundle. This method is repeated across the objective until supporting fires are no longer needed.

Another method that can be used to assist the support team during execution is marking the assault element's left and right limits with infrared chemlights. And, of course, there is no substitute for good marksmanship. Disciplined soldiers engage suspected or known enemy positions and practice ammunition awareness.

A raid is a difficult and challenging mission. How does a platoon excel at it? By remembering the basics—individual marksmanship, crew proficiency, and basic team and squad movement techniques. A platoon leader must use good judgment and—on the basis of METT-T (mission, enemy, terrain, troops, and time)—plan adequate time for the unit's infiltration, the leaders' reconnaissance, and adequate briefings for the individual soldiers.

To receive a *Trained* rating, a platoon must meet all established Army standards. In many categories, the evaluation is subjective. Nonetheless, a platoon leader can be confident when his platoon is trained to accomplish the mission under the conditions of live fire, and at night.

Lieutenant Colonel Edwin F. Davis, Jr., commands the 4th Battalion, 22d Infantry, 25th Infantry Division, in Hawaii. He previously commanded companies in the 7th Infantry Division and the Ranger Training Brigade, and served as S-3 of the 3d Battalion, 75th Ranger Regiment, during Operation JUST CAUSE in Panama in late 1989. He is a 1975 ROTC graduate of Jacksonville (Alabama) State University, from which he also holds a master's degree.

Sergeant First Class Larry K. Allen is air operations NCO, Headquarters U.S. Special Operations Command, in Florida. He previously served in mortar section leader and platoon leader assignments in the 1st and 2d Battalions, 75th Ranger Regiment, including participation in Operation URGENT FURY in Grenada in 1983.

OFFICERS CAREER NOTES



JOBS AVAILABLE FOR EXPERIENCED LIEUTENANTS

The following assignments are available for lieutenants with 24 months on-station in the continental United States (CONUS) or in a must-move situation from outside CONUS:

- The Old Guard.
- The 75th Ranger Regiment.
- The Joint Readiness Training Center opposing force.
- Executive officers at all training facilities—Forts Benning, Jackson, Dix, Knox, and Sill.

Lieutenants should remember that the key to success is job performance, not location or position, and that those who serve in TDA assignments before attending an advanced course are less likely to draw these assignments after the course.

Lieutenants who are interested should call CPT Irwin at Infantry Branch, PERSCOM, at DSN 221-5516.

FUNCTIONAL AREA OR NOMINATIVE ASSIGNMENTS

The assignment officers at Infantry Branch are often asked to explain what is involved in a nominative assignment or a functional area assignment.

Nominative Assignment. A nominative assignment is normally managed and assigned by an officer's career manager within Infantry Branch. Examples of these are ROTC, United States Military Academy, foreign exchange officer, and PERSCOM assignments. Normally, nominative assignments occur after an officer is branch qualified.

An officer is nominated to the gaining command for a position on the basis of his manner of performance, academic background, skills, and personal desires. The gaining command reviews information provided about the nominee and ac-

cepts or rejects the nominee's assignment.

Functional Area Assignment. A Functional Area (FA) assignment is normally managed and assigned by a career manager within the Functional Area Assignment and Management Division of PERSCOM. FA jobs include assignments in MTOE and TDA organizations around the world. Again, these assignments occur after an officer attains branch qualification, but most FA jobs also require qualification in the specific functional areas.

As with nominative assignments, manner of performance, academic background, skills, and personal desires are important to the FA assignment process. But individuals are normally assigned to jobs for which they are qualified on the basis of availability, much the same way basic branch assignments are handled.

ADVANCED CIVIL SCHOOLING

Annually, Infantry Branch recommends Infantry officers for advanced civil schooling to support assignments to the United States Military Academy and for functional area assignments.

An officer who applies for advanced civil schooling must send his current Graduate Record Examination (GRE) or Graduate Management Admissions Test (GMAT) scores, a completed DA Form 1618-R (see Army Regulation 621-1), and his undergraduate transcripts to his career manager. The application should reach Infantry Branch by October of the year before the officer wants to start the program.

USMA ASSIGNMENTS

The Department of Social Sciences at the United States Military Academy

(USMA) is looking for highly qualified company-grade ROTC or OCS officers from basic Year Groups 1986 to 1990 who are interested in civilian graduate study followed by teaching assignments at West Point.

The Department of Social Sciences educates cadets in the academic disciplines of political science (U.S. and international) and economics. The selection process is exceptionally competitive, and officers must express their interest early—it is never too early to begin the application process.

Now under consideration are the applications of officers who may be available to start graduate study in the summer of 1995 or later. Officers available in 1995 must complete their applications, including reported GRE or GMAT scores, no later than 28 February 1994.

Selection criteria include the following:

- Branch qualification before beginning graduate school.
- Demonstration of strong long-term military potential.
- Undergraduate or graduate records that indicate the ability to gain admission to graduate study at a top U.S. university and the potential to successfully complete it.

Further information is available from Department of Social Sciences, United States Military Academy, ATTN: CPT Dana Isaacoff, West Point, NY 10996.

ACADEMIC TRANSCRIPTS FOR YEAR GROUP 1989

Any officer in Year Group 1989 should send a copy of his academic transcripts to Infantry Branch to be placed in his career management information file (CMIF).

Academic transcripts are an important factor in determining potential for advanced civil schooling, functional area

OFFICERS CAREER NOTES

designation and utilization, and nominative assignments. An officer's failure to keep his academic achievements documented in his records can adversely affect his assignments.

Officers who are interested in attending fully-funded advanced civil schooling must maintain current copies of their Graduate Record Examination (GRE) scores in their CMIFs. GRE scores are valid for five years.

CAPTAINS SOUGHT FOR NBQ PROGRAM

Infantry Branch is looking for non-branch-qualified (NBQ) captains who are officer advanced course graduates and who have the versatility and drive to serve in assignments with the U.S. Army Recruiting Command (USAREC) and the Reserve Officer Training Corps (ROTC).

Current Army requirements demand that highly trained junior captains be given an opportunity to excel in positions previously reserved for command-qualified officers. Officers in the NBQ program should have a combination of staff and leadership experience—platoon leader, specialty platoon leader, company executive officer, or staff officer at battalion level or higher.

An officer who is assigned under this program will:

- Be assigned to the command for two years.
- Attend the Cadet Command School enroute to an ROTC assignment or the Recruiting Commanders Course enroute to a USAREC command position.
- Be scheduled to attend the Combined Arms and Staff Services School (CAS3) within six months of his assignment to the gaining unit.
- Be assigned to an MTOE division

that offers the best opportunity for a branch qualifying position following his NBQ Program tour.

A request for orders must be initiated with the following assignment instructions:

Officer has been selected for the approved Chief of Staff, Army initiative to assign selected advanced course graduates for a two-year assignment to the United States Army Recruiting Command (USAREC) or the Reserve Officer Training Corps (ROTC). Officers will identify three preferences for assignment following the USAREC or ROTC assignment. PERSCOM will, to the extent structure changes allow, honor one of the preferences. Additionally, officer will not be reassigned to USAREC, ROTC, or Reserve duty as a company-grade officer.

Officers will be assigned as assistant professors of military science in ROTC units and as staff officers and company commanders in USAREC. Company command in USAREC will not constitute branch qualification, and each of these officers will be given an opportunity to branch qualify in his subsequent assignment. These safeguards are in place to return these officers to MTOE assignments without disadvantage. In fact, they will return more seasoned, more mature, and better able to take on the responsibility of command.

SENIOR OFFICER LOGISTICS MANAGEMENT COURSE

The Senior Officer Logistics Management Course is specifically designed as a pre-command refresher course for commanders and their primary staffs at battalion and brigade level in the area of logistics. Generally, however, it is for all Army leaders of all branches in the Ac-

tive Army, Army National Guard and Army Reserve in the rank of major and above, and for Department of Defense civilians, GS-11 and above, who are working in the logistics field.

The course encompasses maintenance, supply, and transportation procedures as well as hands-on application in maintenance, with vehicles, weapons, ammunition, medical equipment, communications, NBC equipment, and common soldier support equipment. The course

COURSE SCHEDULE			
FY 1994			
94-05	13-18	Feb	94
94-06	20-25	Mar	94
94-07	17-22	Apr	94
94-08	15-20	May	94
94-09	19-24	Jun	94
94-10	24-29	Jul	94
94-11	21-26	Aug	94
94-12	18-23	Sep	94
FY 1995			
95-01	16-21	Oct	94
95-02	13-18	Nov	94
95-03	4-9	Dec	94
95-04	8-13	Jan	95
95-05	12-17	Feb	95
95-06	19-24	Mar	95
95-07	16-21	Apr	95
95-08	14-19	May	95
95-09	18-23	Jun	95
95-10	16-21	Jul	95
95-11	20-25	Aug	95
95-12	17-22	Sep	95

complements all pre-command courses by providing a detailed update on current logistics issues.

The one-week course is conducted ten times each fiscal year at Fort Knox, Kentucky. The accompanying schedule shows the classes for the remainder of FY 1994 and for 1995. Class quotas may be obtained through normal Training and Doctrine Command (TRADOC) channels. Additional information is available from CPT Lee or CPT Higdon at DSN 464-7133/3411 or commercial (502) 624-7133/3411.

BOOK REVIEWS



BOUNCE THE RHINE. By Charles Whiting. Avon Books, 1992. 212 Pages. \$4.99, Softbound. First published in hardcover in 1985. Reviewed by Lieutenant Colonel Donald C. Snedeker, United States Army Retired.

In the days of Caesar, the Rhine River marked the edge of the civilized world. In late 1944 and early 1945, it was the last great barrier blocking the advance of the Allied armies into the German homeland. Breaking the back of the Atlantic Wall in Normandy had required Herculean effort and all the ingenuity the Allies could muster. Cracking the Siegfried Line had demanded raw courage and tenacity. But the Rhine—Father Rhine, the epitome of all that was German, the artery through which the lifeblood of the German nation flowed—Allied leaders knew the Germans would defend to the death.

Bounce the Rhine tells the story of the Allies' three attempts to cross the Rhine into Germany. Most of all, it is a story of bridges—the disastrous “bridge too far” attempt at Arnhem in September 1944; then the drive by General Jacques P. LeClerc's French 2d Armored division, which stalled virtually on Strassbourg's Rhine River bridge in November 1944; and finally, the Ludendorff Railway Bridge at Remagen, which fell into the hands of the U.S. 9th Armored Division on 7 March 1945 (allowing General George S. Patton to “spit in the eye” of his rival British General Bernard Law Montgomery).

Charles Whiting artfully uses the results of extensive interviews with veterans of each of these attempts to tell this story, mixed with impressive research in British, Canadian, French, American, and German memoirs and archives. The blend of strategic context and in-the-mud war stories will keep the reader's attention throughout. The reader should be prepared, however, for some unnecessary revisionist history and “investigative reporting” (looking for what went wrong more than for what went right). Fortunately, these distractions are kept to a minimum and do not significantly detract from the overall narrative.

This book is a good history as well as a fast-paced war story. Anyone who missed the 1985 hardcover edition should pick up this

book and thrill to the irony of Lieutenant Timmermann's story, wonder at the courage of Regimental Sergeant Major Lord, and marvel at the hair-raising adventure of “a broken-down ex-cavalryman,” Brigadier John Hackett. It will be well worth the time it takes.

FORGED IN BATTLE: THE CIVIL WAR ALLIANCE OF BLACK SOLDIERS AND WHITE OFFICERS. By Joseph T. Glatthaar. Free Press, 1990. 370 Pages. \$24.95. Reviewed by Major Don Rightmyer, United States Air Force Retired.

This new study on the role of black soldiers in the Union Army during the Civil War is a valuable addition to the military history of the war and the part blacks played in it. Joseph Glatthaar, an associate professor of history at the University of Houston, is a noted Civil War historian and author of an earlier book on General William T. Sherman's Savannah and Carolina campaigns.

The book begins with a thorough examination of the opposing views in both North and South concerning the issue of putting blacks under arms. Although there was considerable resistance on both sides, in the end both the Union and the Confederate armies used black troops.

When the Union finally decided to put black soldiers into its ranks, the United States Colored Troops (USCT) was created and a process was instituted that determined who would serve as its officers and noncommissioned officers. While the entrance screening varied from one location to another, it was one of the first times Union officers were forced to pass some sort of evaluation before being awarded commissions. The author also discusses the methods used to fill the ranks of the black units, again providing soldiers of varying quality in the long run.

There was considerable disagreement as to what roles these units should play once they were organized and placed under arms. Some thought they should be used only for fatigue details, while some thought they should be used on the front line along with other Union forces. Several black Federal units distinguished themselves at such places as Fort Wagner (54th Massachusetts), Port Hudson,

and Milliken's Bend.

The book covers numerous combat experiences of the black units in considerable detail. It closes with the activity of black Army units as occupation forces in Southern states after the war ended. It also includes reference footnotes, extensive appendixes on specific black units, and a detailed bibliography and index.

This book provides an excellent, in-depth study of the significant contributions of black soldiers during the war and many of the problems and trials experienced in the process of their moving from civilian status into the armed service.

ROYAL UNITED SERVICES INSTITUTE AND BRASSEY'S DEFENCE YEARBOOK 1992. Edited by the Royal United Services Institute for Defence Studies. Brassey's (UK), 1992. 293 Pages. \$69.00. Reviewed by Major Harold E. Raugh, Jr., United States Army.

In 1886, Lord Brassey instituted an annual periodical on military affairs, the aim of which was “the study of the events of the year, to draw lessons for the future, and to provide knowledge of defence matters by stimulating discussion.”

Lord Brassey's legacy has been continued with the publication of the *Defence Yearbook 1992*. Although somewhat slimmer than in previous years, this superb volume contains 19 well-written and topical essays by distinguished senior officers (serving and retired), diplomats, and academicians.

These informative essays are divided into six main sections: Security Policies and Military Concepts; The British Defence Debate; European Security; The Gulf War and Regional Security; Technology and Arms Sales; and Sources. As expected in the wake of the Persian Gulf War, seven essays cover this topic, including the excellent “The Future of Gulf Security after the Kuwaiti War,” by J.E. Peterson; “The United States and the Persian Gulf in the Bush Administration After the Gulf War,” by Bernard Reich and Stephen H. Gotowicki; and “Israel's Relations with the Arabs: What Difference Did the Gulf War Make?” by Rosemary Hollis. Jona-

BOOK REVIEWS

than Eyal's insightful "Managing the Balkans" is clear and truly prescient: Eyal predicts accurately that of all the problems facing Europe since the demise of the Soviet Union, "the Balkans will present the biggest challenge."

This collection of thought-provoking essays will be of great interest to students and theorists of military affairs and will be sure to stimulate discussion. Lord Brassey would approve.

A WAR TO WIN: COMPANY "B" 813TH TANK DESTROYERS. By Harry D. Dunnagan. Royall Dutton Books, 1992. 214 Pages. \$17.95. Reviewed by Colonel Cole C. Kingseed, United States Army.

The 50th Anniversary of World War II has generated numerous books and monographs on this century's greatest conflict. In *A War to Win*, 16 veterans recount their experiences as members of Company B, 813th Tank Destroyer Battalion. These personal accounts, which focus strictly on the tactical level, provide interesting insights into the war from the perspective of the combat soldier.

The 813th Tank Destroyers were activated at Fort Bragg in December 1941. Following training in North Carolina and in the United Kingdom, the unit participated in every major campaign in the European theater from North Africa to Berchtesgaden. Equipped with the M-10 (three-inch) self-propelled gun and later the M-36 and M-36B1 (90mm) guns, the 813th was the first Allied armored unit across the Seine and the Rhine. The unit's motto was *Seek, Strike and Destroy*, and their special targets were Hitler's tanks.

The 16 veterans reminisce about the bloody hedgerows of Normandy, daily life in the front lines, battle fatigue after nine months of combat, and the more humorous aspects of life in the forward divisions—including eating "horse head" soup. Present-day infantrymen will find this book both interesting and entertaining, as the stories illustrate the aspects of combat common to soldiers of all generations.

VIETNAM ABOVE THE TREETOPS: A FORWARD AIR CONTROLLER REPORTS. By John F. Flanagan. Praeger Publishers, 1992. 314 Pages. \$24.95. Reviewed by Lieutenant Colonel Jack Mudie, United States Air Force Retired.

This book would have been a marvelous training aid for any forward air controller (FAC) immediately after author John Flanagan's 1966 tour in Vietnam. Now, however,

these memoirs may be relegated to the category of a personal rehash of that war. But this does not diminish the drama of Flanagan's growth from an idealistic neophyte to a highly effective expert—still idealistic and a proud warrior but with a cynicism borne of personal experience.

Flanagan, a 1962 graduate of the United States Air Force Academy, served as a FAC with the Korean Tiger Division in his initial in-country assignment. Joining the division on the ground, he quickly learned first-hand the importance of his own job in the air in support of the infantry. He was soon assigned to Project Delta, the forerunner of the Army's elite Delta Force, and most of the book covers his personal experiences with the insertion and extraction of Delta teams.

Although Flanagan's excellent prose makes the events he relates easier to visualize, some large-scale sector maps would have helped. The photographs bring to life a few of the names in the books, and the glossary is excellent.

Since the author worked closely with Korean, Vietnamese, and various U.S. Army units, his candid observations are valuable in exploring cultural and other differences that either helped or hindered combat effectiveness.

In the final paragraph of the book, we learn that Flanagan was eventually promoted to brigadier general in the U.S. Air Force Reserve, only to be abruptly fired. We are then left hanging with no further explanation. Hopefully, Flanagan will follow through on his contemplations about entering politics and writing a second book.

THE UNITED STATES AND VIETNAM, 1787-1941. By Robert Hopkins Miller. National Defense University Press, 1990. USGPO S/N 008-020-01213-1. 324 Pages. \$10.00, Softbound. Reviewed by Dr. Joe P. Dunn, Converse College.

Although most Americans became aware of Vietnam's existence in the 1960s, the United States' interest in that country began in the late 18th century. Miller's chronicle of this diplomatic, economic, and strategic relationship from 1787 to the beginning of World War II is the most complete coverage of the subject in print.

A career foreign service officer with extensive experience in Southeast Asia, Miller, formerly Ambassador to Malaysia, now serves as Diplomat-in-Residence at George Washington University.

His research and documentation are impressive as he describes early naval visits to the

country, attempts to establish economic and diplomatic relations in the early and mid-19th century, U.S. efforts to mediate between the conquering French colonials and the Vietnamese, and U.S. concern with Japan's move into the area.

Unfortunately, Miller relies too much upon lengthy quotations, which undermines the book's scholarly nature and detracts from the flow of his narrative. Judicious paraphrasing would have improved it significantly. Still, it is an important addition to the literature on U.S.-Asian international relations and the background of the Vietnam conflict.

CRISES AND COMMITMENTS: THE POLITICS AND DIPLOMACY OF AUSTRALIA'S INVOLVEMENT IN SOUTHEAST ASIAN CONFLICTS, 1948-1965. By Peter Edwards, with Gregory Pemberton. Allen and Unwin, 1992. 515 Pages. \$45.00. Distributed in the United States by Paul and Company (P.O. Box 442, Concord, MA 01742). Reviewed by Lieutenant Colonel Albert N. Garland, United States Army Retired.

This is the first volume in a planned seven-volume official history of Australia's involvement in Southeast Asian conflicts between 1948 and 1965—most notably the Malayan Emergency, the Indonesia-Malaysian confrontation, and the Vietnam War.

Peter Edwards, who has written extensively on Australia's foreign policy, points out that as an official historian he was given unrestricted access to all of the relevant Australian Government documents, published and unpublished, and was "assured of uncensored publication."

He concentrates on the conduct of foreign affairs as practiced by the Department of External Affairs (roughly corresponding to the U.S. Department of State), following the guidelines laid down by the two prime ministers who held office during the period covered by the book—Joseph Chifley (1945-1949) and Sir Robert Menzies (1949-1966). He pays scant attention to the other major government offices but does occasionally bring in the views of various officials in Australia's Department of Defence.

The Department of External Affairs was certainly kept busy throughout Southeast Asia during this period in events that Edwards tracks more-or-less chronologically. This approach does not make for easy reading, because he lets his documents speak instead of offering his own thoughts on the events as they transpired and on the decisions made. When he does get away from the documents to offer

his own interpretations, the narrative is smoother and more interesting.

Edwards' approach is understandable, however, because this first book must lay the foundation for the volumes that will follow, such as the Australian effort in South Vietnam, and these will give the details. In brief, Edwards tells us how Australia became involved in certain conflicts but leaves it to other authors to tell us what happened afterward.

Australia in 1945 was not unlike the other British Commonwealth countries—exhausted by almost six years of total war, its economic and social structures in disarray. The country, its leaders, and its people all looked forward to a long period of peace. By 1948, however, the specter of an aggressive Soviet Union in the west, the impending communist takeover in China, and the increasingly vicious guerrilla war in Indochina cast dark shadows on this relatively peaceful scene. And although Australia had supported the Indonesian independence movement in 1949; from early 1950 on (under President Sukarno's leadership) Indonesia was, in Edwards' words, "never far from the minds of those responsible for shaping Australian policy." (Much the same situation exists today, although with a different cast of characters.)

These events and others caused Australia's political leaders and its foreign policy establishment to begin a searching review of the country's future in the international forum and the path its policies should take. They knew that Australia could not stand alone but found themselves split as to the proper course to follow—whether to continue to support Great Britain's policies or to loosen its ties with the Commonwealth leader and adopt a more independent foreign policy, one that would lead to closer ties with the United States.

Edwards believes the future course was set by the 1959 and 1960–61 crises in Laos, which he calls "a major turning point." He believes, too, that this change of course was only the first step along a road that led to Australia's commitment of troops to the struggle in Vietnam, an action he deplors. (Although he does not say it, I believe the Korean War, following so closely on the heels of World War II, and the close relations established with the United States during those war years, had considerable bearing on Australia's final decision.)

With the so-called "Pacific Rim" countries in the forefront of today's news, U.S. military professionals would do well to reacquaint themselves with Southeast Asia. I recommend they consider adding this book to their reading lists, because Australia is not only a staunch ally of our country but a Pacific

power in its own right and one that will have much to say about events in that part of the world for years to come.

THE CIVIL WAR: AN ILLUSTRATED HISTORY. By Geoffrey C. Ward. Alfred A. Knopf, 1990. 425 Pages. \$50.00. Reviewed by Major Don Rightmyer, United States Air Force Retired.

This book is a companion volume to the widely acclaimed Public Broadcasting System series, "The Civil War." The historical narrative—by Geoffrey Ward, a historian and a former editor of *American Heritage* narrative—is accompanied by more than 500 photographs of the era, many of them rare.

The book is arranged chronologically and divided into five major sections that coincide with the five different years of the war. Although the text covers the political and military aspect of the war's causes and progression, its main focus is on the human element of those who fought in the conflict or were affected by it. That makes this study very worthwhile. The poignant photographs also take the reader back into those days.

This book is slightly higher priced than normal, but it is a very interesting, worthwhile coverage of that conflict.

GENERAL SMEDLEY DARLINGTON BUTLER: THE LETTERS OF A LEATHERNECK, 1898–1931. Edited by Anne Cipriano Venzon. Praeger, 1992. 357 Pages. Reviewed by Colonel Cole C. Kingseed, United States Army.

Major General Smedley Darlington Butler was the quintessential Marine of his generation. He had used political patronage to secure an officer's commission on the eve of the Spanish-American War (although only 16 years of age) and served his country until his retirement in 1931. Always proud of his "roughneck" image, he participated in a number of expeditions, not the least of which involved action in the Philippines, China, Cuba, Haiti, and Nicaragua. He also served in France during World War I.

Editor Anne Venzon, with complete access to Butler's personal papers, has written a compelling biography of one of the Marine Corps' most distinguished officers. The Butler who emerges from these pages is a "leatherneck" of remarkable contradictions, a devout Quaker but also one of the toughest Marines of his era.

Butler frequently questioned the morality of using American fighting men as agents of the "dollar diplomacy" of Presidents Theo-

dore Roosevelt and William Howard Taft and as implementers of the "moral imperialism" of President Woodrow Wilson. But he set aside these personal sentiments in the name of duty. Although he was the son of a congressman, he was not very politically astute, often making public statements that contradicted Administration policy.

Venzon has done a laudable job of recreating Butler's life from his personal correspondence, but a bit more narrative would have improved the text and the reader's understanding of the contemporary debate over the roles and missions of the Marine Corps. For example, she mentions that Butler was an early proponent of Marine aviation and amphibious warfare doctrine but quickly shifts to his failure to receive the post of Marine Corps commandant in 1930. She, like Butler himself, views the assignment of any other officer to that post as a political conflict between two philosophies—that of the "roughnecks" who were proud of their intuitive approach to warfare, and the officers, many of them Naval Academy graduates, who applied more intellectual methods to military science.

For today's officers, this biography illustrates that interservice and intraservice rivalries are nothing new. In Butler's day, the armed forces struggled to define their roles in the military establishment. In the absence of war, the Marine Corps, like the U.S. Army today, found itself involved in nation-building, humanitarian relief, and peacetime engagement missions. Although such roles were not glamorous, these missions were, and continue to be, an important component of our military heritage.

THE DRAFT, 1940–1973. By George Q. Flynn. University Press of Kansas, 1993. 336 Pages. \$45.00. Reviewed by Major Harold E. Raugh, Jr., United States Army.

When reinstated in 1940, conscription—"the draft"—helped unify the people of the United States as they prepared for the nation's imminent entry into World War II. Less than three decades later, however, in the turbulent era of civil rights concerns, selective service was a major divisive element in American society as the country became stuck in the quagmire of Vietnam.

During the intervening decades, as chronicled in rich detail by George Q. Flynn—Professor of History at Texas Technological University and author of two related books—the concepts of individual liberty and conscription were frequently in precarious balance in American society. This "perpetual tension," according to Flynn, was

BOOK REVIEWS

"manageable." The theme of this book is that numerous compromises and adjustments were used in different societal and historical contexts from 1940 to 1973 to maintain this often delicate balance. The result is an enthralling chronicle and an insightful analysis of the draft through America's mid-20th century wars.

This superb study is the result of impeccable research, solid scholarship, and excellent use of language. The depth of the research is revealed in 66 pages of endnotes and an outstanding 12-page bibliographical essay. Close to two dozen photographs and political cartoons also enhance the narrative.

This thought-provoking book makes a significant contribution to military history and deserves a wide readership.

RECENT AND RECOMMENDED

JOB SEARCH: MARKETING YOUR MILITARY EXPERIENCE IN THE 1990s. By David G. Henderson. Stackpole, 1991. 175 Pages. \$14.95, Softbound.

LIEUTENANT RAMSEY'S WAR. By Edwin P. Ramsey and Stephen J. Rivele. Knightsbridge Publishing Co. (10513 W. Pico Blvd., Los Angeles, CA 90064), 1991. 352 Pages. \$19.95.

QUEEN VICTORIA'S ENEMIES (4): ASIA, AUSTRALASIA AND THE AMERICAS. Text by Ian Knight. Color Plates by Richard Scollins. Men-at-Arms Series No. 224. Osprey, 1990. 48 Pages.

THE ROYAL AIR FORCE, 1939-1945. Text by Andrew Cormack. Color Plates by Ron Volstad. Men-at-Arms Series No. 225. Osprey, 1990. 48 Pages.

GENERAL OF THE ARMY: GEORGE C. MARSHALL, SOLDIER AND STATESMAN. By Ed Cray. First published in hard cover in 1990. Touchstone Books. 1991. 847 Pages. \$14.95, Softbound.

ENGAGE THE ENEMY MORE CLOSELY: THE ROYAL NAVY IN THE SECOND WORLD WAR. By Corelli Barnett. Norton, 1991. 1,052 Pages. \$35.00.

IN THE MIDST OF WARS: AN AMERICAN'S MISSION TO SOUTHEAST ASIA. By

Edward G. Lansdale. First published in 1972. Fordham University Press, 1991. 386 Pages. \$19.95, Softbound.

IRAQI POWER AND UNITED STATES SECURITY IN THE MIDDLE EAST. By Stephen C. Pelletiere, and others. USGPO, S/N 008-020-01231-9. 95 Pages. \$3.25, Softbound.

VIETNAM AT WAR. By Phillip B. Davidson. First published in hard cover in 1988. Oxford University Press, 1991. 838 Pages. \$15.95, Softbound.

DUNKIRK: THE COMPLETE STORY OF THE FIRST STEP IN THE DEFEAT OF HITLER. By Normal Gelb. First published in hard cover in 1989. Morrow, 1991. 352 Pages. \$12.00, Softbound.

THESE GOOD MEN. By Michael Norman. First published in hard cover in 1989. Pocket Books, 1991. 300 Pages. \$4.95, Softbound.

CAVALIER IN BUCKSKIN: GEORGE ARMSTRONG CUSTER AND THE WESTERN MILITARY FRONTIER. By Robert M. Utley. Originally Published in 1988. University of Oklahoma Press, 1991. 247 Pages. \$10.95, Softbound.

HERO: THE LIFE AND DEATH OF AUDIE MURPHY. By Charles Whiting. Jove Books, 1993. Reprint of the 1990 edition. 288 Pages. \$4.95, Softbound.

FRANKLY SPEAKING ABOUT WW-II IN THE SOUTH PACIFIC. By Stanley A. Frankel. Woods Books (185 E. Hartsdale Avenue, Hartsdale, NY 10530), 1993. \$13.00.

THE MILITARY EXPERIENCE IN THE AGE OF REASON. By Christopher Duffy. Atheneum Publishers, 1988. 346 Pages. \$24.95.

REFORGING THE IRON CROSS: THE SEARCH FOR TRADITION IN THE WEST GERMAN ARMED FORCES. By Donald Abenheim. Princeton University Press, 1989. 266 Pages. \$29.95.

NORDIC SECURITY AT THE TURN OF THE TWENTY-FIRST CENTURY. Edited by Ciro Elliott Zoppo. Contributions in Military Studies, Number 117, ISSN 0883-6884. Greenwood Press, 1992. 272 Pages. \$55.00.

EUROPE IN TRANSITION: THE MANAGEMENT OF SECURITY AFTER THE COLD WAR. Edited by Robert J. Jackson. Praeger, 1992. 224 Pages. \$47.95.

FORCE AND DIPLOMACY IN THE FUTURE. By Stephen J. Cimbala. Praeger, 1992. 256 Pages. \$47.95.

WAR IN EUROPE, VOL. 4: BATTLES IN THE BALKANS. By Edwin P. Hoyt. Avon Books, 1992. 160 Pages. \$4.99, Softbound.

WAR IN EUROPE, VOL. 5: NORTH AFRICAN STRUGGLE. By Edwin P. Hoyt. Avon Books, 1993. 147 Pages. \$4.99, Softbound.

SOLDIERS ON SKIS: A PICTORIAL MEMOIR OF THE 10th MOUNTAIN DIVISION. By Flint Whitlock and Bob Bishop. Paladin Press (P.O. Box 1307, Boulder, CO 80306), 1992. 224 Pages, 270 Photos. \$50.00.

WHAT SHOULD WE TELL OUR CHILDREN ABOUT VIETNAM? By Bill McCloud. Berkley Books, 1992. 155 Pages. \$4.50, Softbound.

MISTER: THE TRAINING OF AN AVIATION CADET IN WORLD WAR II. By Eugene Fletcher. University of Washington Press, 1992. 224 Pages. \$19.95.

THE ANATOMY OF ERROR. By Barry S. Strauss and Josiah Ober. Reprint of 1990 hard cover edition. St. Martin's Press, 1992. \$11.95, Softbound.

GERONIMO! By William B. Breuer. St. Martin's Press, 1992. Reprint of 1989 hard cover edition. \$15.95, Softbound.

GUERRILLA IN STRIPED PANTS: A U.S. DIPLOMAT JOINS THE ITALIAN RESISTANCE. By Walter W. Orebaugh with Carol Jose. Praeger, 1992. 264 Pages. \$45.00.

A CERTAIN IDEA OF FRANCE: FRENCH SECURITY POLICY AND THE GAULLIST LEGACY. By Phillip H. Gordon. Princeton University Press, 1992. 255 Pages. \$35.00.

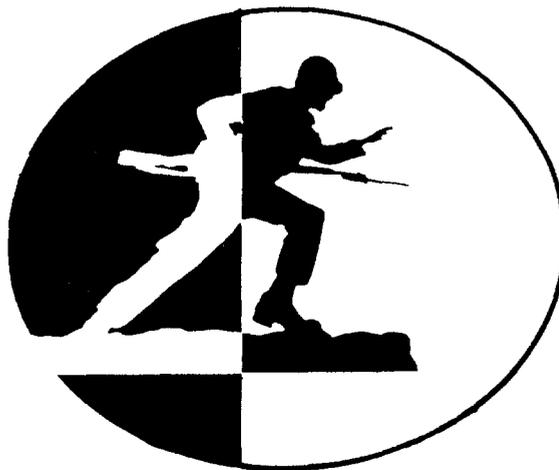
NCO GUIDE. 4th Edition. Revised by Frank Cox. Stackpole, 1992. 320 Pages. \$17.95, Softbound.

WINNERS & LOSERS: BATTLES, RETREATS, GAINS, LOSSES, AND RUINS FROM THE VIETNAM WAR. By Gloria Emerson. Norton and Company, 1992. 423 Pages. \$12.95, Softbound.

FORGOTTEN WARRIORS: COMBAT ART FROM VIETNAM. By Dennis L. Noble. Praeger, 1992. 240 Pages. \$29.95.

DUTY, HONOR, COMPANY: WEST POINT FUNDAMENTALS FOR BUSINESS SUCCESS. By Gill Dorland and John Dorland. Henry Holt, 1992. 238 Pages. \$19.95.

FROM FARMCARTS TO FORDS: A HISTORY OF THE MILITARY AMBULANCE, 1790-1925. By John S. Haller, Jr. Southern Illinois University Press, 1992. 285 Pages. \$32.50.



From The Editor

THE U.S. INFANTRYMAN—DOING THE SAME JOB BETTER

During 1994, INFANTRY will continue its commemoration of World War II with examples of tactics, leadership, and doctrine that continue to be relevant to the soldiers and leaders of today's Army. The extensive combat experience of our soldiers of 50 years ago provides the foundation for much of today's doctrine, and although technology has improved our weapons, the dynamics that determine the success of the infantryman in the close-in fight are remarkably similar to those that brought victory in the Pacific and in Europe. Today it is still the infantryman who must dislodge a stubborn enemy from an occupied city, drive him from his fighting positions, and track him down in his tunnels, spider holes, and base camps, and the American soldier learned his trade well in World War II.

But combat is not the only challenge the soldier has had to face. For much of our nation's history, the U.S. infantry has also conducted operations other than war at home and abroad—helping to restore order in the wake of civil unrest, evacuating and protecting noncombatants, keeping warring factions apart, and providing aid and comfort in the aftermath of natural disasters. The differences between the Army of today and its predecessors lie in the advances in weapon technology, training, and leadership during the intervening years, but the spirit of the infantry has remained constant throughout history.

Also as part of our World War II commemoration, INFANTRY covers in 1994 will feature Willie and Joe, who have symbolized that infantry spirit to millions of Americans, both in and out of uniform. Cartoonist Bill Mauldin served three years in the 45th Infantry Division and saw some of its bitterest fighting as the division fought its way across Italy. It was this experience that gave us these two timeless infantrymen. Mr. Mauldin was awarded the Pulitzer Prize in 1945, and again in 1959.

Bill Mauldin's contribution to the traditions and spirit of the U.S. infantry were recognized in 1982 when he was selected to receive the Distinguished Doughboy Award, presented each year to an individual who has been instrumental in improving the morale and welfare of the infantryman. (Other recipients of the award have included Bob Hope, General Matthew B. Ridgway, Senator Robert H. Dole, and General Richard E. Cavazos. The most recent recipient is Lieutenant General David E. Grange, Jr., who received the 1993 award.)

So read your issues of INFANTRY, learn what World War II and later actions have taught us, and broaden your understanding of our profession. As you do, you will also learn how the infantry will meet the challenges of the next century, through the coordinated efforts of the Dismounted Warfighting Battle Lab, at Fort Benning, Georgia. We indeed live in exciting times, and—as throughout our history—the infantryman will continue to be where the action is.

RAE

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