



CONTROL OF DISPLACED CIVILIANS: A How-To Guide (Page 22)
THE WAY AHEAD: Lessons from Gnjilane, Kosovo (Page 28)

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MG PAUL D. EATON

Commandant, The Infantry School

RUSSELL A. ENO

Editor, INFANTRY

MARIE B. EDGERTON

Deputy Editor

BETTY J. BYRD

Editorial Assistant

SFC MICHAEL MUNOZ

Contributing Artist

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FRONT COVER: As Army Transformation proceeds apace, we will see wheels such as the representative types shown, that will offer yet greater deployability, maneuverability, and survivability for the infantry force.

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Commandant's Note

MAJOR GENERAL PAUL D. EATON Chief of Infantry

THE OBJECTIVE FORCE ROLE: SECURING THE FUTURE

This is an exciting time to serve as Chief of Infantry, and I particularly welcome the opportunity to represent the interests of our Branch at a time when we are preparing to realize the full benefits of the Army Transformation. Building upon the readiness, morale, and professionalism of the Legacy Force, we have committed assets toward Interim organizations with potential for significantly enhanced mobility, lethality, sustainability and survivability, and are gaining a clearer picture of what we will demand of the Objective Force once it becomes reality.

The changes that we see unfolding—in doctrine, in weapons and the target acquisition systems that complement them, and in the training that will develop and maintain the professional competencies of the Infantry—are all part of a commitment that we share. To be sure, our soldiers and our loyal, productive civilian work force are already committed to the defense of our nation, but we must also accept the commitment to fully support this evolutionary process upon which so much depends.

Although the threats facing our nation have changed significantly in just the past decade, our role as Infantrymen in protecting our nation, her people, and our institutions is fundamentally the same as it has been for more than two and a quarter centuries. The values that sustained the spirit and resolve of our forbears at Valley Forge are no less relevant today, as we confront adversaries who operate unrestricted by national boundaries and impelled by motives not easily understood in the context of a free and open society.

The terrorist attacks of September 11, 2001, demonstrated sharply the scope, commitment, and asymmetric nature of the threat against the United States. These

events brought home clearly the need to proceed without further delay in arming and training an Army that can anticipate and neutralize adversaries with similar aspirations, as well as responding to threats of a more conventional nature. We had already selected an azimuth for an orderly transition from Legacy Forces to an Interim structure that would prevail over near term threats, and finally yield an Objective Force to meet the challenges of adversaries whose capabilities are as yet unmeasured. Unfortunately, predictions of violence on transnational and national levels have already come true, and circumstances demand that we waste no time in transitioning to an Army capable of executing even more diverse and demanding missions. We must shorten our time line to build our future force.

During the next year, this Objective Force will start to take shape as our Combat, Materiel, and Training Developers wrestle with putting form to our future Infantry. The exact shape will not come into sharpest focus for several years, but we know now what this force must do. I want to share my thoughts on the need for the Objective Force, what some of its key capabilities must be, and what our role as Infantrymen will be.

We have amply demonstrated our technological lead to those who would challenge us, and the lesson has not gone unheeded. Aware of their vulnerability to U.S. detection and subsequent precision strikes, adversaries will avoid massing their forces in linear offensive and defensive echelons. Instead, they will attempt to employ selective strikes, conduct rapid maneuver from areas of sanctuary, engage in terrorism, incite civil and political unrest, and initiate other asymmetric actions aimed at destabilizing allies and attacking U.S. interests worldwide. From this posture, the enemy will also at-

tempt to marshal attacks against selected targets in the hope of creating a perception of U.S. vulnerability, inflicting casualties, and exerting some degree of influence on world opinion and the way our national resolve is perceived.

An adversary may well plan and time his actions to increase uncertainty and expand their opportunities to surprise us. Conventional lines of communication may be difficult to secure, jeopardizing sustainment operations. Asymmetric tactics will focus on degrading our advantages in engagement standoff. An adversary will also attempt to maintain continuous pressure on our forces and those of our allies in an effort to reduce opportunities for reorganization and maneuver. But we are not without experience in such operations: In virtually every action since our Revolutionary War, we have either encountered—or ourselves executed—partisan operations, and we have also amassed a considerable data base on other armies' successes and failures in similar operations.

This assessment of current and future military operations provides our framework for defining requirements for the Objective Force and allows us to develop a force that is based on both threat and capabilities. Infantry forces must retain a quality of *adaptive dominance*—we will win regardless of situation or enemy actions by retaining the agility and initiative to put our adversary on the defensive and keep him there.

Regardless of the structure of our Infantry forces, we must have the capability to see the enemy first, fix his position, and destroy him in depth and in detail. This will present a technological challenge as well as a training challenge as we train our soldiers to realize the full potential of the digital tools offered by our nation's technological and industrial base.

With this in mind, here are some key characteristics we know our Objective Force Infantry must possess to ensure victory in future conflicts.

Responsiveness and Deployability. We must get there quickly and minimize the reception and staging support requirements. We can no longer afford the luxury of a slow and predictable force build-up such as we enjoyed prior to the Gulf War.

Agility. Our future infantry forces will continue to be able to dominate any tactical situation. As infantry leaders and soldiers, we will need the mental agility to respond to any "come as you are" contingency, and this is a learned skill, one that can be taught, enhanced, and sustained.

Mobility. We will not be constrained by rugged mountains, desert sands, or watery rice paddies. Our transport systems will allow us to reliably get our soldiers to the right place at the right time.

Versatility. Soldiers and leaders will be able to fight and win in the full spectrum of conflict. Our units will dominate all battlespace from low level, stabilization actions to the intensity of a major theater of war.

Lethality. We will dominate the close, personal fight with overwhelming fires. When necessary, we will bring in the full force of our indirect and joint fires to destroy any potential enemy force.

Survivability. Soldiers and systems will be survivable against a full threat array. We will take full advantage of stealth and materiel technologies to make sure that we lighten the soldier's load and reduce his risk.

Sustainability. We have to be able to strike quickly and stay for the long haul. We will lead the assault and stay for the mop-up.

What can we expect as infantrymen preparing to serve in this Objective Force? First and foremost, it will not change the enduring infantry mission of dominating the close, personal fight; rather, it will harness technology to give us enhanced situational awareness, lethality, mobility, and survivability to help us do our job quicker and better. Technology will not give us a silver bullet or a platform that avoids combat, but it will give us more tools in our combat toolbox. Serving in the Infantry of the future, we will need to possess and demonstrate the Infantry "warrior ethos" we've always required to close with and destroy the enemy. The battle does not end until one warrior dominates another warrior.

With these new tools and systems, we will operate confidently and efficiently in urban terrain and deny the enemy his sanctuaries. Our sensors will find them and infantrymen will destroy them. We will not only own the night; we will own the battlefield under all meteorological conditions, and obscurants will be our allies. Our Objective Force will be able to convert low visibility into a force multiplier that no adversary can match. We can expect to lead and serve in units that are more agile, more versatile, and more lethal. New platforms will give us revolutionary freedom of maneuver to get us quickly and securely into our close fight. We also must work harder to ensure that we and our soldiers know how to use the new tools of our trade. We must master both the art and science of war, and we must be smart enough to know the difference.

The Objective Force that we are building will allow our Army to execute the orders of our National Command Authority. It will provide our nation a dominant force, capable of operating equally effectively across the entire spectrum of conflict, and with the ability to defeat any threat in any environment and under any conditions. The architects of this Objective Force know that the soldier is the centerpiece of this structure. The Infantry's unique capability to close with and destroy the enemy will continue to be just as critically important as it has been since the birth of our nation. As Infantrymen, the same qualities and spirit that have made us successful throughout our country's past will continue to lead us to success on tomorrow's battlefields.

INFANTRY LETTERS



IN PRAISE OF THE M79

Most *Infantry* readers probably don't remember the M79 grenade launcher—the predecessor to the M203. One man in each fire team carried this handy, lightweight weapon, which was designed to take out machinegun positions and enemy soldiers in bunkers and rooms. It resembled a small shotgun, was easy to use, and could be carried in one hand, yet could be brought up to a firing position without changing grip. Since the M79 was a single shot, a grenadier carried a .45 caliber pistol as well.

When I reported to the 82nd Airborne Division at Fort Bragg in 1970, each infantry platoon had six M79s. Arriving in Vietnam in 1971, I found that the M79 had been replaced by the M203. This gave me a chance to compare the merits of the two.

The key advantage of the M203/M16 combination was that you could fire the grenade and then function as a rifleman without having to take time to reload. (None of the soldiers wanted to engage the enemy with their .45s.) The platoon got six more rifles without having any more men.

There were several important disadvantages to the M203 as well. First, the combination was heavy. Carrying two weapons in one with both calibers of ammunition was tough. Second, unless specially trained and experienced with the weapon, the M203 gunner tended to fire his loaded grenade, then function solely as a rifleman. The weapon without quadrant sights was less accurate than the M79 and, when the quadrant sights were used on the weapon, they tended to catch on things and break. Finally, in the confusion of the moment. gunners sometimes pulled the wrong trigger. (Once, an M203 gunner to my left rear aimed with his rifle sights at a target beyond me and pulled the grenade trigger, causing a grenade to impact nearby. Fortunately, it had traveled less than the arming distance and did not detonate.)

As an infantry platoon leader I initially carried a rifle, just as the book suggested. Part way through my tour, I was struck by the idea of carrying an M79 and a pistol instead. I could carry it in one hand, with the other hand free to operate the radio—an important duty while in contact. A shot round in the chamber could provide a quick burst of self-protection if needed, and I wouldn't even have to change my grip or take careful aim. Another advantage was that I could use smoke rounds to mark enemy positions for armed helicopters instead of smoke grenades to mark my own position. I could also use smoke or high-explosive rounds to mark targets for my machineguns. I quickly scrounged an M79 (there were plenty still around) and carried it for the rest of my tour. Luckily, I did not have to put my ideas to a real acid test, because things had calmed down after the Easter Offensive in 1972.

Well, all that's very nice, I can hear you thinking, but it isn't relevant to infantry now or in the future. Perhaps—but consider the objective individual combat weapon (OICW). This weapon of the future is a 20mm grenade launcher and a 5.56mm rifle in an over and under configuration; if it is not a son of the M203/M16, it is a close relative. It offers a lot of benefits: long range, integral rangefinding, air burst, etc. It also is heavy, unwieldy, and complex. Would the infantryman be better served by a different combination?

Consider the benefits offered by fielding three personal weapons in the squad: an improved M4 with integral sights and rangefinder from the OICW; a 20mm grenade launcher with the rangefinder, sights, and ballistic com-

puter; and an M9 pistol. Each weapon would be much lighter and less complex and easier to handle under almost any conditions, particularly in confined spaces such as urban areas. Each would be easier and cheaper to build and maintain. The savings could be used to expand the ammunition selection for the 20mm. A shot round and a slug round would allow the 20mm to take the place of the combat shotgun (XM1014). Smoke and illumination rounds could be used the same way I used them in Vietnam. Less-than-lethal rounds could be developed as well.

Imagine the flexibility offered by arming each two-man buddy team in the squad with one M4 and a 20mm. New tactics and techniques would arise to take advantage of this effective combination. And for once, we'd really be lightening the infantryman's load, at least in comparison to the M203/M16 combination or the OICW. So, let's explore this alternative (it's the same technology, after all) and test the concepts, head to head, before a final decision is made.

BG JOHN R. SCALES Clemmons, North Carolina

THE HUMAN ANIMAL CHANGES "NOT MUCH"

Reading Lieutenant Colonel Albert Garland's review of our book, *Dear Harry* . . . *Truman's Mailroom, 1945-1953: The Truman Administration Through Correspondence with "Everyday Americans" (May-August 2000, page 51), I am struck by how different things can look—even for like-minded individuals—when they view a common problem from radically different vantage points.*

Our access to the president's personal papers and senior Administration offi-

cials leads us to conclude that the president did indeed view his actions during the drastic reductions of the armed services as a sort of rear guard in the face of a continual and significant decline in military funding. Though Truman narrowly won the 1948 election, he was painfully aware of the grim budgetary realities imposed by an unfriendly Congress. While one can rightfully criticize some of his decisions, it must be remembered that he had very little maneuver room. And through it all, young professional officers such as Al Garland had to deal with their own set of grim realities at the unit level.

Diary entries by Truman and his boyhood chum Charley Ross, then serving as press secretary, offer some insights into Truman's thinking. It is also worthwhile to remember that the time between the end of World War II and the Korean War was quite brief; far shorter in span, for example, than that between the 1st Armored Division's crossing of the Sava River and today.

When the diary entries were made in late 1946, Truman was in the midst of presiding over a demobilization that speedily culled seven million men and women from the armed services. Returning veterans came home to find that jobs and places to live were scarce. At one point, nearly 100,000 veterans were looking for work in Chicago alone. Rationing was still in force, and inflation was skyrocketing. As more than one million workers walked off their jobs, labor unions, free of their wartime promises not to strike, were demanding—and receiving—large "catch up" As if all this was not pay hikes. enough, the new president had to deal with a rising tide of pacifism and had recently fired his commerce secretary for criticizing the administration's emerging Cold War policy toward an increasingly aggressive Soviet Union.

In September 1946, Ross wrote: "The President showed me today a little piece he wrote yesterday, September 26, the anniversary of the Argonne Offensive of 1918. It was a very simple and vivid piece of writing. The point is that we are now going through the same experiences that followed the last war."

Truman, referring to himself as "a

service man of my acquaintance," wrote that piece as he reflected on mankind's apparent inability to learn from experience:

Sept. 26, 1918, a few minutes before 4 A.M. a service man of my acquaintance was standing before a battery of French 75[mm]s at a little town called Neuville to the right of the Argonne Forest. A barrage was to be fired by all the guns of the Allied front from Belgium to the Swiss border.

At 4 A.M. that barrage started, at 5 A.M. the infantry in front of my acquaintance's battery went over. At 8 A.M. the artillery, including the 75 battery referred to, moved forward. That forward movement did not stop until Nov. 11, 1918.

My acquaintance came home, was banqueted and treated as returned soldiers are usually treated by the home people immediately after the tension of war is relieved. The home people [soon] forgot the war... They began to talk about disarmament. They did disarm themselves, to the point of helplessness. They became fat and rich, special privilege ran the country—ran it to a fall. In 1932 a great leader came forward and rescued the country from chaos and restored the confidence of the people in their government and their institutions.

Then another European war came along. We tried as before to keep out of it. The great leader warned the country of the possibility. He was vilified, smeared, misrepresented, but kept his courage. As was inevitable, we were forced into the war. The country awoke—late, but it awoke and created the greatest war production program in history....

Unfortunately, the great leader who had taken the nation through the peace time and war time emergencies passed to his great reward just one month before the German surrender. What a pity for this to happen after twelve long years of the hardest kind of work, three and a half of them in the most terrible of all wars

My acquaintance who commanded the 75 battery on September 26, 1918, took over. The same elation filled the home people as filled them after the first World War. They were happy to have the fighting stop and to quit worrying about their sons and daughters in the armed services.

Then the reaction set in. Selfishness, greed, jealousy raised their ugly heads. No wartime incentive to keep them down, labor began to grab all it could get by fair means or foul. Farmers began black-marketing food, industry hoarded inventories and the same old pacifists began to talk disarmament. . . . The human animal and his emotion change not much from age to age.

D. M. GIANGRECO
U.S. Army Command and General
Staff College
Fort Leavenworth, Kansas

KATHRYN MOORE Lee's Summit, Missouri

LONG DISTANCE MARCHING

I was very interested in the World War II article on "Vinegar Joe" Stilwell and his walk out of Burma (*Infantry*, May-August 2000).

There is a clear lesson to be learned from this account: The most necessary exercise is long-distance marching. In my view, they ought to scrap the current PT test (pushups, situps, run) for a four-mile march with a standard uniform and weapon.

This would have two immediate results:

First, it would do away with the perception of "gender norming." True or not, the charge remains because of the different standards for men and women. All soldiers should have to complete the march in the same passing time. If my memory serves me correctly, a forced-march pace is historically four miles in 50 minutes. If a soldier can't do that, he or she does not belong in any service!

The second effect of this reform would be to give loyal commanders more flexibility to implement their own PT programs. Right now, most units do the same thing every day—pushups, situps, and run—because that's what's on the PT test. This new PT test re-

quires no special training or facilities; just ramp up the marching one month out from the test.

Finally, while we're at it, let's do away with the photo for the promotion boards—and the weight control program! If you can pass the PT test, who cares what you look like?

Good walking!

WILLIAM M. SHAW MAJ, U.S. Army, Retired Roswell, New Mexico

WHERE THE U.S. LEADS....

In his letter in *Infantry* (September-December 2000, page 6), Ward Wright proposed that infantry units be armed with the ArmaLite AR-10 rifle. Since this weapon fires the 7.62x51mm cartridge, riflemen equipped with it would have urban combat capability superior to that of the 5.56mm M16A2, while using NATO-standard ammunition.

This idea does have considerable appeal, because the AR-10 and M16A2 have the same configurations and some degree of parts interchangeability. One aspect that could be a problem, however, is that the AR-10 uses an M14 magazine that has been altered in such a way that it might not be "G.I.-proof."

A more serious drawback to this proposal lies in the lack of a suitable squad automatic weapon (SAW). An automatic rifle version of the AR-10 would have the same flaws as the M14A1—inadequate controllability in full-automode, and insufficient continuity of fire from the small-capacity, 20-round magazine.

It does not seem possible to build a belt-fed, 7.62mm SAW of the same weight as the M249, but with the requisite durability, reliability, and controllability. The design of the 27-pound

M240B does not lend itself to any appreciable reductions in weight or length, which rules out an M240 SAW. The best that has been achieved to date is the 19-pound M60E3 (which is still used by the Navy SEALs, along with the M14 rifle).

Were it not for two factors, it would make more sense to reissue the venerable M14 to riflemen and use the M60E3 as a squad automatic weapon. However, there are almost certainly too few M14s still available, and it is not likely that the Army would acquire any M60 variant, having only recently fielded the M240B.

The only practical, off-the-shelf 7.62mm weapons are the Heckler & Koch G3 for riflemen and either the HK21 or the G8 for the SAW role. Being belt-fed, the HK21 light machinegun would have better continuity of fire than the nearly identical G8, but the latter can feed from either a 50-round drum or standard G3 rifle magazines.

The G3 and G8/HK21 offer a variable interim solution to the need for greater effectiveness in urban warfare. but would nevertheless still be hampered by the weight and bulk of both weapons and ammunition. For the long term, I still think the 6mm Optimum concept is so superior that it should be developed regardless of the eventual fate of the OICW (objective individual combat weapon) project. [See "Is 6mm the Optimum Caliber? A Common Cartridge for Rifle and Machinegun," Infantry, September-December 1999, *page* 6.]

To those who say we can't "force" another cartridge upon NATO, I must say, "Nonsense." We adopted the 7.62x51mm cartridge, and NATO accepted it. We adopted the 5.56x45mm, and so did NATO. Same for low-velocity and high-velocity 40mm gre-

nade rounds. If the 20mm OICW and 25mm OCSW (objective combat squad weapon) enter service, their bursting munitions will be adopted by NATO. Where the U.S. leads, NATO will follow.

STANLEY C. CRIST Lancaster, California

FIRST INFANTRY DIVISION REUNION

The Society of the First Infantry Division (Big Red One) will hold its 84th annual reunion from 14-18 August 2002 in New Orleans, Louisiana.

The Society of the First Infantry Division is composed of soldiers who served in World War I, World War II, Vietnam, *Desert Storm*, the Balkans, during the Cold War and in peacetime.

For information, please contact: Society of the First Infantry Division 1933 Morris Road Blue Bell, PA 19422.

Phone: 1(888) 324-4733 FAX: 1 (215) 661-1934 E-mail: Soc1ID@aol.com.

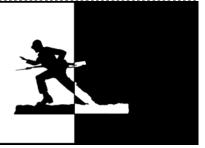
EDWARD J. BURKE Executive Director

45th INFANTRY DIVISION ASSOCIATION REUNION

The 45th Infantry Division Association (Thunderbirds) will hold their annual reunion 29-31 August 2002. Contact me at (210) 681-9134.

RAUL TREVINO San Antonio, Texas

INFANTRY NEWS



THE MILITARY EYE PROTECTION System (MEPS) will soon replace an assortment of protective eyewear.

Since the mid-1990s, the Army and the Marine Corps have used a combination of ballistic/laser protective spectacles (BLPSs), special protective eyewear, cylindrical system (SPECS), and sun, wind, and dust goggles (SWDGs) to shield troops from eye injury.

With the new protective gear, the number of lenses is cut in half, and the level of protection is increased. Troops will have one system in sleek goggles or spectacles, with interchangeable lenses for both.

The new protection system carries over the lightweight but tough polycarbonate used in these earlier spectacles and goggles that passed tests for ballistic resistance. The new spectacles add peripheral coverage that was limited with the SPECS. Like SPECS and BLPS, they also meet the American National Standards Institute requirements for occupational eye and face protection.

BLPS, SPECS, and SWDG use four lenses designed for each item: clear, sunglass, three-line laser protective, and two-line laser protective. When lasers are not a hazard, soldiers can use the clear lens to protect against ballistic and ultraviolet rays day or night. Or they can use a darkened sunglass lens with added glare protection during the day.

When lasers are a danger, soldiers currently switch to a green lens that blocks two wavelengths for use in dim light, or a dark lens that shields three wavelengths for use in daylight. Special coloring and coatings absorb the laser to minimize or eliminate injuries.

For durability, the new system uses two types of laser reflective materials sandwiched between two layers of polycarbonate. It also covers a wider band of near-infrared wavelength energy than the current systems. Separate daytime and nighttime lenses have been eliminated.

Natick is looking at blocking broad bands of laser while minimizing the effect on color vision. This color vision is critical to the soldier's ability to read maps and use such devices as image intensifiers. Also being considered are better light transmission and, ultimately, tunable laser protection that adjusts to the hazard.

Other improvements are in fit, comfort, and logistical efficiency. The BLPS was designed to accommodate wearers of prescription eyeglasses. They were all in one size and difficult to fit the entire user population. SPECS come in two sizes for more precise fit, but they can be worn only by soldiers with normal vision. Military-issued eyeglasses fit inside the SWDG, but often with just enough room.

The new system can be worn by anyone and comes in two spectacle sizes for an improved fit while retaining a single size for the goggles. A prescription lens carrier snaps into the goggles and spectacle frames if needed.

Clear, sunglass, and laser lenses, all with ballistic protection, are interchangeable between the large spectacles and goggles for simpler supply and storage. Spectacles or goggles, along with two extra lenses, are stored and carried in a rigid foam case with a green cloth cover.

The goggles are easy to tighten, or to loosen so they can fall to the chest—a feature important to a gunner looking through a vehicle's internal sights. The currently used goggles have a simple elastic strap and are stowed on the helmet, where they interfere with the proper use of the sighting system in a fighting vehicle or tank.

Goggles are undergoing user evaluation at the Marine Corps Air Ground Combat Center in California; and both goggle and spectacle prototypes are being evaluated at Fort Campbell, Kentucky. Fielding is expected to begin in 2005.

PRECISION AERIAL DELIVERY (PAD) prototype equipment, data processing, and system procedures were tested last summer at the U.S. Army Yuma Proving Ground, aboard an Air Force C-130E. The system provides onboard, real-time modeling of load release, fall trajectory, and aircraft dynamics to improve the accuracy of high-altitude airdrops.

Two container delivery system loads (2,225 pounds and 1,485 pounds)—each with standard 26-foot parachute canopies—were deployed from 10,000 feet above ground level on two separate passes. The impact points were within 98 and 130 meters of the intended point. This is considered good performance, especially for an initial test.

The model that was tested used highresolution atmospheric forecast fields and real-time atmospheric wind profile data received in-flight from a GPSbased free-falling wind probe released from the drop aircraft. This enabled the PAD team to update and refine the Computed Aerial Release Point in realtime while aboard the aircraft.

The system is the result of a four-year development effort of the PAD Team.

Yuma Proving Ground will conduct additional tests and proof-of-concept aerial demonstrations of the prototype system in August and September 2002 at altitudes up to 18,000 feet above mean sea level.

THE HIGH EXPANSION RATIO shelter for long-term deployments has been developed from a new technology in rigid-wall manufacturing. Wood beams assembled on the ground to support plywood floors, and sheets of plywood

for walls and doors, have turned ordinary modular tents into almost-permanent housing.

This shelter is largely composed of 13 modules that are stored and carried in a container measuring 8 feet by 8 feet by 20 feet. Each folded 500-pound module is stored vertically and slides out of the container at four inches thick. Panels connected by hinges unfold on each side to form walls and then a peaked roof. Modules are connected with gasketed aluminum closeouts to seal the roof and walls from the out-doors

Adjustable steel jacks at each end and in the middle of the module support the shelter and lift it off the ground for a smooth floor in uneven terrain. The modules provide an expansion ratio of 12:1 to make a shelter 19 feet wide by up to 96 feet long. Space can be adjusted, however, by adding or removing modules.

Comfort, stability, and noise level in windy conditions are a big improvement over tents, and a hinged door makes it easy for soldiers to enter and exit. Besides the panels—which take up the most space—all necessary beams, jacks, and lights fit inside the container.

A goal of the program is for four soldiers to be able to set up the entire shelter in three and one-half hours. No material handling equipment, such as forklifts, is required—only stepladders and simple tools.

THE U.S. ARMY SOLDIER SYSTEMS Center (Natick) has merged two special-purpose combat rations into a single product, called the Meal, Cold Weather/Food Packet, Long Range Patrol (MCW/LRP).

The new item streamlines production and offers greater operational flexibility than the Ration, Cold Weather, used by soldiers in frigid climates and the Food Packet, Long Range Patrol (LRP), consumed by Special Operations Forces, which shared the same primary components

The meal/packet expanded the variety to 12 menus from the Ration, Cold Weather's six menus and the LRP's eight menus. Aside from all-white

packaging for cold weather locations and tan wrapping for special operators, the products are nearly identical. Still, the features of the products serve different needs.

Freeze-dried food can be eaten as it is, or rehydrated with hot or cold water. It is resistant to storage damage, and with vacuum packing the entrees have a shelf life as long as 20 years. The new MCW/LRP meets or exceeds the military's shelf life standards of three years at 80 degrees F. or six months at 100 degrees F. The process also makes the food lighter and easier to carry.

The new MCW/LRP weighs one pound, compared to the Meals, Ready-to-Eat (MRE's) one and one-half pounds, and it is compatible with MRE production.

It is designed so a soldier can have a good meal without carrying extra weight and bulk. He gets eight ounces of entrée with the MRE, but a rehydrated LRP provides 16 ounces of food. Special Forces like that, because they feel full at least once a day.

This is important because one packet of the new LRP contains 1,540 calories and is intended to give the special operator his food each day for up to 10 days. A study in 1992 concluded that the extra calories provided by an LRP ration over a 1,200-calorie MRE can make a critical difference in physical performance and immune function.

Future changes to the MCW/LRP may include switching to a single pale-green color for easier procurement, standard use of a peel-open seal for the entrée, and replacement of the peanut brittle bar and granola bar with products that have a longer shelf life.

NEW URBAN OPERATIONS DOCTRINE has been published by the Infantry School. Under the Army's new field manual numbering system, this manual is now known as FM 3-06.11, Combined Arms Operations in Urban Terrain. It replaces FM 90-10-1, Military Operations on Urbanized Terrain, dated May 1993 with Change 1.

Worldwide urban growth and population shifts from rural to urban have significantly affected Army operations, both combat and non-combat. All fu-

ture significant military operations are likely to involve the Infantry as part of a combined arms team in urban areas.

This manual provides brigade and battalion commanders and staffs, company commanders, small-unit leaders, and individual Infantrymen with detailed discussions of doctrinal principles as well as tactics and techniques for conducting full-spectrum urban operations.

The new version updates and expands the information provided in the previous manual and adds discussions on the following subjects:

- Stability and support operations.
- Sniper and countersniper techniques.
 - Employment of Army aviation.
 - Operations under limited visibility.
 - Precision room clearing.
- Considerations for coalition operations.
- Hazards of toxic industrial materials
 - Subterranean operations.
- Weapons effects against urban targets.
- Techniques for marking buildings and rooms.

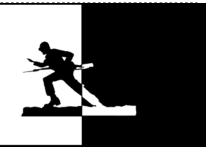
An added appendix provides a discussion of the numerous lessons learned from modern urban operations, not just by U.S. forces but by the Israelis, the French, the Russians, and UN forces.

Although it is primarily focused on the traditional Infantry, Armor, Artillery, and Engineer combat team, this manual may also be used as a reference for other leaders of combat, combat support, and combat service support units who will participate in combined arms urban operations.

The new manual will soon be available on the Reimer Digital Library. The document search form can then be found at http://www.adtdl.army.mil/ atdl.html.

Readers who need to download a copy immediately can log onto the internet and go to the Infantry School's File Transfer Protocol (FTP) site. The web address is <<u>ftp://moutftp: out99tfp@ftp.benning.army.mil/>></u>. Open the folder titled Doctrine, and then the folder titled FM 3-06.11.

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Urban Operations Update

JOHN J. BASTONE

In October 1996 the Defense Science Board concluded that the most likely battlefield of the future would be an urban area. The board also made some recommendations, essentially stating that the armed forces of the United States needed to improve their capabilities for conducting urban operations (UOs). Understanding this need, U.S. Army Infantry School established the Combined Arms MOUT Task Force (CAMTF) in June 1999, with the charter of updating UO doctrine, developing an overall training strategy, and identifying training requirements. This article provides a short synopsis of what the task force has accomplished to date.

Doctrine

The following is an overview of the UO doctrinal update effort throughout the U.S. Army Training and Doctrine

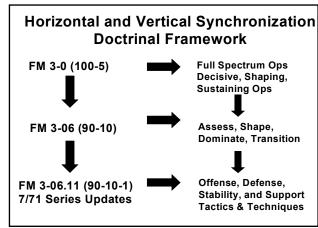
Command (TRADOC). The doctrinal update methodology consists of three efforts on parallel axes:

- Link Field Manual (FM) 3-06 (90-10) to FM 3-0(100-5) and Joint Pub (JP) 3-06; provides all inclusive urban operational doctrine.
- Link FM 3-06.11 (90-10-1) and 7/71 Series FM updates to FM 3-06 (90-10); provides UO combined arms doctrine at brigade level and below.
- Link TRADOC proponent efforts to update respective proponent manuals to the above field manuals; provides branch specific UO doctrine.

In short, published and emerging doctrine is sound and applies to current forces as well as Transformation forces.

The capstone Army doctrinal manual—FM 3-0 (100-5), *Operations*, provides the doctrinal framework for the Army. The keystone doctrinal manual, FM 3-06 (90-10), *Urban Operations* (Final Draft), provides the Army with operational doctrine for conducting UOs. (The current FM 90-10, Military Operations on Urbanized Terrain, written in 1979, focuses on highintensity urban combat against a Warsaw Pact threat in Western Europe.) FM 3-06.11 (90-10-1), Combined Arms Operations in Urban Terrain, formerly An Infantryman's Guide to Combat in Built-Up Areas, and the 7/71 Series FM updates provide tactical level combined arms UO doctrine. Finally, proponent efforts across TRADOC provide branch-specific doctrine for conducting of urban operations.

Figure 1 depicts the horizontal and vertical integration of the doctrinal update methodology, along with the key doctrinal concepts found in the manuals.



DOCTRINE STATUS				
FM No.	TITLE	STATUS		
7-30	Chg 1, App J, Urban Ops, The Infantry Brigade	Posted on Digital Library.		
7-20	Chg 1, App G, Urban Ops, The Infantry Battalion	Posted on Digital Library.		
7-10	Chg 1, App L, Urban Ops, The Infantry Rifle Company	Posted on Digital Library.		
7-8	Chg 1, Ch 6, Urban Ops, The Infantry Rifle Platoon & Squad	Posted on Digital Library.		
7-92	Chg 1, Ch 9, Urban Ops, <i>The Infantry Recon Platoon & Squad</i>	Posted on Digital Library.		
3-06.11 (90-10-1)	Combined Arms Operations in Urban Terrain	Pending posting on Digital Library.		

Figure 1 Figure 2

Figure 2 shows the CAMTF's doctrinal update effort. Note that UO doctrinal updates for FMs 7-30, 20, 10, 8 and FM 7-92 are posted on the General Dennis Reimer Digital Library. Updates to FMs 7-7J and 71-1 are to be incorporated into the revision of both manuals. FM 3-06.11 is in the process of being posted on the digital library.

Training

Equally important was the effort to give the Army an overall UO training strategy. The training doctrine was outlined in Training Circular (TC) 90-1, Training for Military Operations on Urbanized Terrain. The TC described how to use the MOUT Assault Course and the Collective Training Facility (CTF). One of the inherent problems under this system was that no operational and maintenance funds were provided for the upkeep of the facilities, nor was any provision made for live fire. Installations and units often fabricated shoot houses and used hand-held video cameras to collect data for afteraction reviews (AARs). Additionally, targets were often fabricated, and there was no standard targetry that could be used for either long- or short-range precision engagements.

The CAMTF's primary effort has been to revise the live UO training strategy. That strategy—which will be found in the revised TC 90-1, *Training for Urban Operations*—consists of the Urban Assault Course, the Shoot House, the Breach Facility, and the Combined Arms Collective Training Facility (CACTF). The overall cost of each facility includes estimated operation and maintenance as well. The revised TC 90-1 has been approved, and posting on the digital library is now pending.

Urban Assault Course. The assault course (Figure 3) is a five-station facility designed to train individuals, squads, and platoons. It includes a two-story offense/defense building, a grenadier gunnery station, an underground trainer, and two training lanes for tasks and techniques for individual through platoon level. This facility will include an instrumented three-dimensional target package and a conventional live-fire pop-up target package at the grenadier

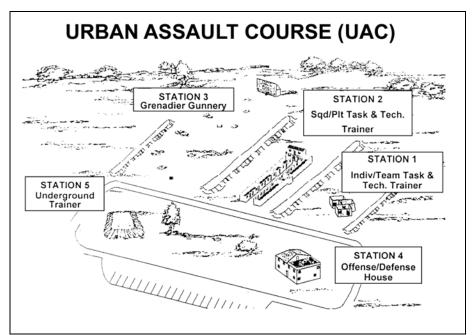


Figure 3

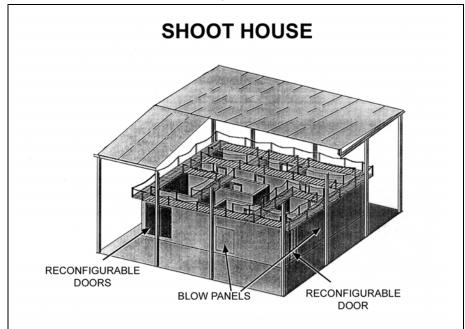


Figure 4

gunnery station. The assault course supports the training strategy as outlined in TC 90-1. The facility is designed for recommended training before using the shoot house or the collective training facility. (Recommended frequency of use: Quarterly for the active components, and during pre- and postmobilization for the reserve components.)

Live Fire Shoot House. The shoot house (Figure 4) is a single-story designed for individual, squad, and building with multiple points of entry, pla-

toon live-fire training. It will have full audio/video instrumentation, portable after-action reviews (AARs), and three-dimensional precision targetry packages. This facility supports the training strategy as outlined in TC 90-1. (Recommended frequency of use: Semi-annually for the active components and during pre- and post-mobilization for reserve components.)

Breach Facility. The breach facility (Figure 5) includes wall, door, and window breach locations. It has no instrumentation and contains only structural

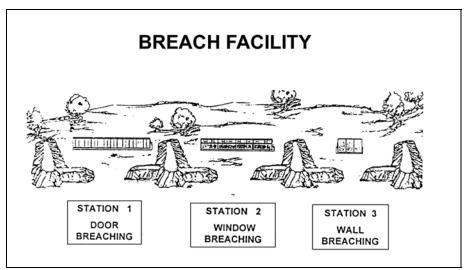


Figure 5



Figure 6

targetry. The facility supports the training strategy as outlined in TC 90-1. It provides training for individuals, teams, and squads in breaching techniques and procedures. It trains the technical tasks of mechanical, ballistic, thermal, and explosive breaching. (The active components would use it semi-annually and the reserve components during pre- and post-mobilization.)

Combined Arms Collective Training Facility. This facility (Figure 6) is a complex of 20 to 26 buildings covering an urbanized area of 2.25 square kilometers. It will contain audio/video

capture instrumentation, three-dimesignal precision targetry, and an AAR facility, and is designed to accommodate expansion.

The facility supports the training strategy as outlined in TC 90-1. It provides combined arms collective training for platoon and company situational training exercises and battalion task force field training exercises. (Recommended training frequency: Semi-annually for active components and during post-mobilization for reserve components.)

The following are the training con-

cepts that will guide the UO training:

Units at platoon level and below will train at home station using the assault course, the shoot house, and the breach facility to achieve squad and platoon level UO proficiency. Infantry and other branches in both the active and reserve components can also use these facilities.

Companies and battalions will conduct live training at home station, while brigades will conduct live training at the combat training centers (CTCs). The combined arms training facility will permit collective combined arms UO training.

The CAMTF's efforts during the past two years have been unique in the sense that simultaneous doctrine and training revisions for the Army have been completed throughout the major commands in both the active and reserve components. Installations will see the construction of these facilities as early as Fiscal Year 2003, and construction will continue through FY 2009.

Facilities have been designed to accommodate full spectrum operations for both Legacy Forces and Transformation Forces. The interim brigade combat teams (IBCTs) have priority of utilization in using the training facilities.

The Combined Arms MOUT Task Force will continue to perform its duties as the Army's primary point of contact for UO training in FY 2002. The emphasis will be on lending its expertise to installations and units during the implementation of the UO training strategy.

For further information contact John Bastone, Project Manager, CAMTF, (706) 545-5827, DSN: 835-5827, bastonej@benning.army.mil; or Jeff Arneson, Training Strategy Implementation, CAMTF, (706) 545-0134, DSN: 835-0134, e-mail, arnesonja@benning.army.mil.

John J. Bastone is a retired infantryman with more than 22 years of active duty experience in mechanized and airborne infantry units and Special Forces. He is currently the Project Manager of the Combined Arms MOUT Task Force, United States Army Infantry School.

Interim Brigade Combat Team

Indirect Distributive Fires Concept

LIEUTENANT GERARD M. ACOSTA
SERGEANT FIRST CLASS CHRISTOPHER MENTON

The expectation that the Interim Brigade Combat Team (IBCT) will fight in a non-linear environment has forced units to develop new tactics, techniques, and procedures (TTPs) to incorporate indirect fires to deliver rounds in a 360-degree zone. Traditionally, most infantry units have trained and fought in a linear environment where—in offensive operations—the mortar platoon has been located at a one-half to two-thirds distance behind friendly troops providing a single direction of fire (DOF) forward of friendly lines.

With the introduction of non-linear operations, a larger battalion area of responsibility (AOR), and the possible requirement to execute simultaneous missions, the 5th Battalion, 20th Infantry, has adopted the 360-degree distributive fires concept to employ its mortar assets in a responsive, accurate, and safe manner.

This concept is predicated on situation dependent tactics, in which the mortar platoon establishes a firing point in the center of

the battalion AOR so it can provide indirect fires in any direction. This technique for employing indirect mortar fires allows the IBCT infantry companies and platoons to operate in a nonlinear environment with maximum freedom of maneuver and with constant and responsive mortar support. In order to provide 360-degree support, new mortar TTPs were developed for occupying a firing position and for fire direction control (FDC) procedures. The following are excerpts from the battalion's mortar platoon's standing operating procedures (SOPs):

Occupation:

- The terrain must provide 360-degree mask and overhead clearance.
- The mortars are placed in a modified "Lazy W" configuration to increase the platoon's depth and limit overhead fire.
- Once the DOF to the priority target is determined, the number 2 gun is placed as the anchor (Figure 1). Number 1 gun is placed at a general direction of four o'clock and 70 meters behind number 2 gun. Number 3 gun is placed at a general direction of seven o'clock and 70 meters to the left and

behind number 2 gun. Number 4 gun is placed 150 meters to the left and on line with number 2 gun.

• The mortars are laid on the primary DOF with referred deflections of 2800 and 0700 mils. Both deflections have aiming stakes placed at 50 and 100 meters. The two sets of poles are positioned to prevent inadvertent sight blockage.

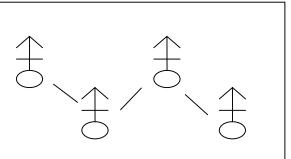
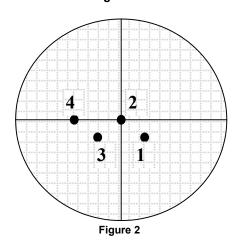


Figure 1



FDC Procedures:

• It should be noted that depending upon the array of the tubes, it is possible to fire above the heads of the gun teams

(Figure 2), which is not permitted during training exercises because of safety concerns. The M16 plotting board allows the FDC to determine which guns will fire during the mission. The plotting board is set up with the base gun representing the pivot point. The other three guns are plotted as positioned on the ground. Any value can be assigned to the intermediate quadrants on the board.

- The 360-degree fire adjustments are conducted in accordance with Field Manual 23-91, *Mortar Gunnery*. During fire for effect (FFE), the FDC determines the firing element, the sheaf's width and attitude, and the bursting diameter.
- The sheaf's width is determined by multiplying the number of guns in the FFE by the bursting diameter of the weapon system. The sheaf's attitude is determined by finding the perpendicular azimuth to the direction of fire. The DOF is indexed on the plotting board outlining the perpendicular azimuth.
 - FFE is computed by entering the

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tactical firing control (TFC) switch on the M23 mortar ballistic computer. The sheaf is changed from PARALLEL to SPECIAL. The adjusting point is changed from FLANK to CENTER. This special sheaf arrangement (Figure 3) allows the rounds to impact *perpendicular* to the gun-target line. Without the special sheaf (Figure 4) targets to the DOF flanks would be engaged with a sheaf *parallel* to the guntarget line.

- The FDC uses two firing batteries in its set-up data to compute the call for fire. The mortar battery is entered in the computer twice, with a referred deflection of 0700 and 2800. The DOF determines which battery to employ in the call for fire.
- The initial fire command is tailored to explain which referred deflection to use in the fire mission and designated Safety T. The following is an example of the firing command:

Section Sergeant (SS): "Section, refer to your 0700 poles and red Safety T data."

Squad leader (SL): "Refer to 0700 poles and red Safety T data."

SS: "Section, deflection 1234, elevation 5678, at my command."

SL: "Deflection 1234, elevation 5678, at your command."

SS: "Section, hang it."

SS: "Section, fire."

The FDC and mortar gun crews modified standard methods of monitoring Safety Ts, registration data, and fire commands to the gun line. If there is not a contiguous 360-degree firing fan, each engagement area may have its own registration data, and *must* have its own Safety T. This data is color coded and placed on the mortar system. Once the FDC receives the fire mission, the FDC refers the gun squad leaders to the color code reflecting the respective Safety T for the fire mission.

The 360-degree distributive fires concept offers both advantages and challenges. Its primary strength is the mortar platoon's ability to provide fires in any direction to any element. Some

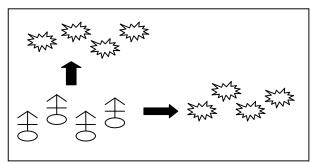


Figure 3

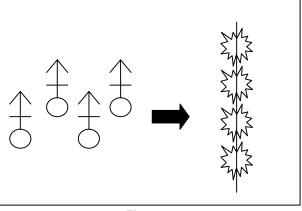


Figure 4

of the challenges lie in the ability to find a suitable firing point location that provides 360-degree mask, overhead clearance, cover, and concealment. The need to fire 360 degrees may also limit the use of camouflage nets.

The mortars have implemented numerous SOPs to increase their survivability. Manning the mortar tubes to provide responsive fires and to provide internal security for the mortar platoon continues to be a challenge. The mortars have conducted numerous breakcontact live fire exercises to practice the task of completing a fire mission while engaged with an enemy element. To maintain proficiency in defending itself from ground attacks, the platoon integrates both blank and live fire breakcontact drills into all mortar LFXs. The mortars rely on constant reconnaissance to locate and occupy new firing positions to avoid counter-battery fire.

The platoon conducted a series of training events to develop and refine the 360-degree concept. The platoon first developed the "Lazy W" formations, fire commands, and determined the referred deflection sight settings by con-

ducting numerous dry fire exercises. After practicing the concept in multiple FTXs, the platoon conducted several LFXs using short-range training rounds (SRTRs) to implement the theory and establish safety guidelines. The SRTR exercises were an efficient way to improve the sheaf and practice maneuvering the mortar tubes at multiple DOFs. The FDC conducted a weeklong battalion mortar certification conference with the company mortar sections to discuss and brainstorm firing techniques to improve the sheaf and fire mission time lapses. Finally, we integrated all of the developed TTPs into several LFXs.

The battalion mortar platoon and company mortar sections recently conducted a 360-degree LFX. The mortars established a firing point in the middle of the Fort Lewis impact area. Numerous forward observer (FO) teams were positioned in obser-

vation points surrounding the impact area. The FO teams called for fires that forced the mortar guns to use both referred deflections.

The 360-degree indirect fire concept provides responsive and accurate fires in any direction to any unit in a nonlinear environment. The FDC and gun crews must continually practice the 360-degree TTPs and platoon SOPs to ensure that the fire missions are conducted precisely and safely. Leaders must be innovative during training events to practice the theory and integrate security measures to increase survivability. By constantly reviewing and improving training and techniques, mortar crews are ensuring that they can deliver timely accurate indirect fires the first time, every time.

Lieutenant Gerard M. Acosta and Sergeant First Class Christopher Menton, when this article was written, were assigned to the 5th Battalion, 20th Infantry, 3d Brigade, 2d Infantry Division (IBCT) at Fort Lewis

Fighting Position, or Deathtrap?

ARTHUR A. DURANTE

All infantrymen must know how to construct solid, functional fighting positions. An improperly constructed position such as the one shown here is actually dangerous for the soldier to occupy. It will not provide the protection from fire that he needs, and it may even collapse onto him at any moment. Such unsafe structures should be torn down and re-built properly; otherwise a position designed to protect may well present an even greater danger.

Throughout history, the Infantry has been called upon to seize key terrain and then dig in solidly to hold it. Infantrymen, assisted by their brothers-inarms the combat Engineers, build the field fortifications and fighting positions that are key to surviving the enemy's fire and repelling his assaults.

Well-constructed bunkers, trenches, and fighting positions protect infantrymen and allow them to fight and survive in the deadly environment of modern combat.

On every battlefield, from the muddy trenches of World War I to the sandy desert of the Persian Gulf, improperly constructed positions have collapsed and killed or injured the soldiers they were intended to protect. Positions collapse in peacetime as well. At each of the combat training centers, soldiers in improperly designed, poorly supported, and badly constructed fighting positions have been injured when the overhead cover came crashing down or the sides collapsed in on them, smothering them even as their comrades struggled to dig them out.

It is the unit leaders' responsibility to prevent this from happening. Each of them, from squad leader through battalion commander, must learn the standards for proper construction of a fighting position, and must supervise and inspect the soldiers under him as they build their positions. The fundamental design of well-constructed fighting and survivability positions is not new. U.S. Army Engineers have validated several basic designs that will survive direct and indirect fire from most enemy weapons, and that will protect the men inside while they return fire.

Field Manuals (FMs) 5-103, Survivability, and 5-34, Engineer Field Data, contain detailed designs that ensure the structural integrity of the position and the safety of the occupants. The Infantry School has published Graphic Training Aid (GTA) 7-6-1, Fighting Position Construction Infantry Leader Reference Card, which contains multiple illustrations and detailed leader checklists. (These references are available at http://www.adtdl.army.mil/atdl.html.)

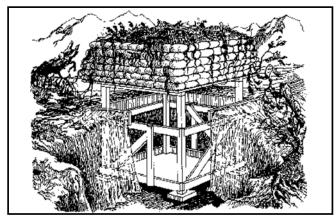
Unless the soldiers constructing a position and the leaders supervising the construction actually follow the design, the resulting position will neither protect the soldiers inside, nor survive enemy fire. Contrast the photo of the poorly constructed position shown here with the well designed, solidly built, functional fighting positions depicted in FM 5-103, shown in Figures 1 and 2.

In the drawings, you immediately notice the sturdy timbers, solidly supported on broad, level footings that hold up the heavy load of overhead cover. You do not see the unstable columns of rotting sandbags found in the photograph. The proper support of overhead cover is a vital aspect of a safe fighting position or observation post.

According to FM 5-103, sandy soil can weigh as much as 100 pounds per cubic foot. The 10' x 4' roof in the photograph, if covered with 18 inches of soil, could weigh 6,000 pounds. That's three tons! Unless the roof is waterproofed, that weight could double as the soil soaks up water during rains. That's nearly six tons balancing precariously over the head of the soldier manning that position.

A properly designed and built position provides 360-degree protection, instead of just shielding its occupants from the front. The position in the photograph clearly does not do that. It





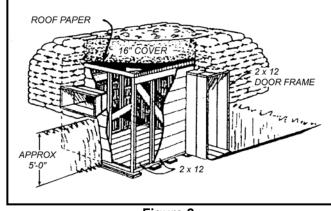


Figure 2

Figure 1

also lacks sufficient overhead cover, and the stringers appear to be too few and too far apart. The center column, along with the 4"x4" post at the right of the photograph, appears to have been added after the position was built, probably because the roof was sagging. It is too short and has been propped up on two sandbags, a totally inadequate footing. This column also would interfere with the soldier if he tried to engage targets from the oversized openings.

The selection, number, and placement of the stringers supporting overhead cover is critical to the safety of a position. Weak stringers, placed too far apart, simply cannot carry the load.

Another key factor is the strength and location of the support base on which the stringers rest. If the base is too weak, or too close to the edge, the sides of the position will slump inward, possibly suffocating the occupants before they can be dug out.

Do not be intimidated by all of this talk of construction standards, footings, timbers, stringers, and spacing. It is not technical information that can be understood only by an engineer. This is simple soldier-skill stuff, and infantrymen have been building good, solid positions since before World War I.

Every soldier and every leader, com-

bat arms or not, must know this. Supervising the construction of fighting positions is one of the fundamental tasks of a noncommissioned officer. It has to be done to standard, because the lives of soldiers and the success of the mission depend on it. Learn how to inspect a fighting position. If you do, you will never have to dig the lifeless body of a soldier out of one that collapsed on him.

Arthur A. Durante, Jr., is Deputy Chief of Doctrine, Combined Arms and Tactics Directorate, U.S. Army Infantry School.

M41 TOW

Improved Target Acquisition System (ITAS)

LIEUTENANT COLONEL CRAIG G. LANGHAUSER

The M41 TOW improved target acquisition system (ITAS) is a block upgrade to the M220 ground/high-mobility multipurpose wheeled vehicle (HMMWV)-mounted TOW 2 missile system. The TOW ITAS is currently being fielded to airborne, air assault, and light infantry forces throughout the active and reserve components of the U.S. Army. The ITAS, in addition to

providing better antiarmor capabilities to antitank units, also has capabilities that make it an integral part of the combined arms team. Even when organized in heavy-light task forces, where the preponderance of antiarmor capabilities traditionally has resided in the heavy elements, TOW ITAS-equipped antitank units can not only destroy threat targets but also provide superior recon-

naissance, surveillance, and target acquisition (RSTA), rear area protection, and urban operations capabilities.

The TOW ITAS consists of three new line replaceable units: the target acquisition subsystem (TAS), the fire control subsystem, and the battery power source; a modified TOW 2 traversing unit; the existing TOW launch tube and tripod; and a TOW HMMWV modifi-

cation kit. The TAS integrates into a single housing the direct view optics, a second-generation forward looking infrared (FLIR) night vision sight (NVS), missile trackers, and a laser range finder. TAS electronics provide automatic boresighting for these components, eliminating both tactical collimation and 180-day verification requirements.

The fire control subsystem, which is the system's brain, contains the software that controls the missile flight, the aided target tracker, passive ranging, and NVS zoom. The tracker enables the gunner to lock onto the thermal image of a target by properly sizing "track gates" on the target. The tracker will cause the missile to fly to the center of mass within the track gates during the brief period of target obscuration after missile launch. These track gates can be used to determine the approximate range to a target on the basis of standard target form sizes. The fire control system also contains the embedded training circuitry for sustainment training, and advanced built-in test/built-in test equipment (BIT/BITE), which provides fault detection and isolation for both operator and direct-support maintenance.

The battery power source gives TOW ITAS a ten-hour dismount capability, a power conditioner for on-vehicle power, and an AC/DC battery charger. The modified traversing unit has an elevation brake to reduce launch transients, and improved "pistol grip" handgrips/controls that provide improved ergonomics. Controls on the left handgrip are for sight select, menu control, field of view and brightness, contrast, and focus. The right handgrip switches control track gate initiation, activating, adjusting, and locking the track gates on a target, ranging the target, and firing the missile. The TOW ITAS fires all existing TOW missile versions and its digital architecture gives it the growth capability to accept future missiles such as the TOW fire-and-forget, the TOW bunker buster, common missile, and compact kinetic energy missile.

After the long-range advanced scout surveillance system (LRAS3), the TOW ITAS is the best RSTA device in the U.S. Army inventory. The second generation FLIR NVS with 24-power digital zoom provides more than twice the detection, recognition, and identification ranges of the TOW 2 in moderate weather conditions. The TOW ITAS offers even greater advantages in harsher weather conditions. During a recent National Training Center (NTC) rotation, 82d Airborne Division soldiers could see movement beyond 10 kilometers, distinguish between tracked and wheeled vehicles at eight kilometers, and identify vehicle types and dismounts at five kilometers. The brigade combat team (BCT) commander used this capability to determine the disposition and intent of the opposing force (OPFOR). In thick vegetation, such as that at the Joint Readiness Training Center (JRTC), soldiers have been able to acquire targets, and again determine the OPFOR's intent. In both cases, the units equipped with the TOW ITAS gathered the priority intelligence requirements to set the tone of the battle to come.

The battery power source will power the TOW ITAS for ten hours of dismounted operations or ten hours of silent watch beyond the capability of the HMMWV battery. Coupled with the extremely silent NVS cooler, the TOW ITAS truly has a silent watch capability that makes it impossible to detect with the unaided ear.

Upon target acquisition, soldiers can use the ranging capabilities of the TOW ITAS to determine target locations beyond the direct-fire weapons' range of any infantry or armor battalion, and relay them to the fire support element for engagement with indirect fire support. This is essential to winning the counterreconnaissance battle. During the first TOW ITAS-equipped JRTC rotation, soldiers mounted an AN/PAQ-4A/C infrared aiming light on the TOW ITAS. Once the OPFOR came within range of the M2HB .50 caliber machinegun and the Mk 19 grenade launcher, the gunners used the TASmounted PAQ-4s to designate targets for their platoon mates to engage. The gunners were also able to designate targets for the OH-58D Kiowa Warriors. The TOW ITAS enabled the brigade task force to win the counterreconnaissance battle without firing a single missile.

The HMMWV provides excellent mobility throughout "rear areas." During an NTC rotation, a HMMWV that was back in the BSA for vehicle maintenance destroyed a lone attacking BMP less than four minutes after a soldier noticed the HMMWV and climbed up on it and powered up the system.

Urban terrain is not traditionally a good environment in which to employ an antiarmor system. The fire control software, though, enables the gunner to fire a TOW 2B missile and guide it line-of-sight to the target. The gunner can literally fly the missile into a window or door to attack a target within a building. Development will soon start on the TOW bunker buster missile, which will make at least a 24-inch diameter hole in a double reinforced eight-inch concrete wall, and provide a breach point for dismounted infantry to enter a building.

When it comes to putting a missile on target, the TOW ITAS offers a vastly improved probability of hit over that of the ground TOW. The first TOW ITAS units have achieved more than a 90 percent hit rate after firing more than 300 missiles. All targets were farther away than 1800 meters, with most of them between 2500 and 3750 meters, both moving and stationary. Many gunners had just completed advanced individual training and had not attended new equipment training with their unit or received TOW ITAS training at Fort Benning. Some of these soldiers trained less than three hours at the range before launching their first missiles. The TOW ITAS's embedded training and improved ergonomics facilitated the rapid training.

A single platoon from an airborne D Company attached to a balanced, heavy brigade task force at the NTC was credited with destroying 20 vehicles of an attacking motorized rifle regiment. Needless to say, the brigade defeated the regiment.

A central design tenet of the TOW ITAS was to reduce required maintenance actions and increase system reliability and availability. This is accomplished through the reduction of the

number of components from 18 to six, compared to the TOW 2, and a modular design that requires no special tools. The BIT/BITE fault isolates to a specific component and eliminates the need for organizational test equipment. The built-in automatic boresight eliminates the 180-day verification test requirement. The only scheduled maintenance action is to replace the BPS batteries at the end of their useful life.

The TRADOC System Manager, Close Combat Missile Systems, and the Close Combat Missile Systems (CCMS) Project Office, are continually working to improve the TOW ITAS. Funded improvements include: a vehicle commander's display for viewing the TAS thermal image, a TAS mount for either the AN/PAQ-4A/C infrared aiming light or AN/PEQ-2A target pointer/illuminator, an improved FCS that will enable the incorporation of enhanced target tracking, and a lithium (Li) Ion

BPS. The Li Ion BPS uses the state-ofthe-art technology of the electric vehicle battery and will reduce BPS weight, provide longer silent watch, faster recharge times, and a greater useful life. By the end of 2002, the CCMS Project Office also plans to demonstrate the versatility of the TOW ITAS by firing a Javelin missile.

A modified version of the TOW ITAS will be used on the antitank guided missile (ATGM) variant of the interim combat vehicle (ICV) for the interim brigade combat team (IBCT). Modifications will be made to mount TOW ITAS components in a turret, remote the video into the vehicle, and accommodate a dual-tube launcher. This system will provide the medium force with all the capabilities the TOW ITAS-equipped light infantry now has. The TOW ITAS and the LRAS3 are the only second generation FLIR systems in the IBCT; as a result, the ATGM com-

pany will find itself assigned many key roles to support IBCT operations.

The TOW ITAS provides the Army's light and medium forces many of the same capabilities currently being fielded on the M2A3 in the heavy counterattack corps at Fort Hood, Texas. Threats, simulated or real, should beware of the immense capabilities TOW ITAS equipped units have to detect, recognize, and identify potential targets and the multitude of ground and air systems that can be summoned to respond.

Lieutenant Colonel Craig G. Langhauser is the Product Manager, Advanced TOW Acquisition Systems, which includes the M41 ITAS and the Improved Bradley Acquisition Subsystem (IBAS) on the M2A3 Bradley. He is a 1982 graduate of the United States Military Academy and holds a master's degree from the University of Maryland, University College.

Get Volcano Mines Into the Fight

COLONEL THOMAS K. LITTLEFIELD, JR.

According to Field Manual (FM) 20-32, obstacle emplacement authority is the jurisdiction that a unit commander has to emplace tactical obstacles. In a theater of operations, theater commanders have the authority to emplace obstacles. In most cases they delegate this authority to corps commanders who further delegate it to division commanders. Division commanders then have obstacle emplacement authority in their area of operations, unless that authority is withheld or restricted by a higher commander. Commanders subordinate to corps and division do not have the authority to emplace obstacles unless the higher commander delegates it for a current operation.

During my time as a combat engineer commander and staff member, I have had difficulty getting authority for using our organic Volcano systems. Often we can get authority for four-hour duration mines. The problem comes when we request 48-hour or 15-day duration mines. I have occasionally received 48-hour permission, but never 15-day permission. At the same time, I have had permission to use conventional handemplaced mines that cannot have a self-destruct capability. These are armed and deadly until removed or destroyed.

Why is permission to use a temporary mine denied while permission to use a permanent mine is routinely granted? The normal reasons that I have been given for denial are concerns about fratricide and constraining future maneuver. Both of these concerns can be mitigated. Before any land Volcano System can be used to emplace a minefield, fratricide prevention fences must be erected, just like those used for conventional hand-emplaced minefields.

The future maneuver concerns can be mitigated with the use of lanes. Lanes can be left in the Volcano minefield, and they can be closed with Modular Pack Mine Systems (MOPMS). They can also be opened with the self-destruct feature of the MOPMS.

As we move to the future we must get used to replacing conventional handemplaced mines with scatterable mines. We need to do this for three primary reasons—reduced logistical requirements, faster emplacement times, and smaller manpower requirements.

From a logistical viewpoint, a Volcano antitank mine weighs about four pounds, as opposed to the conventional M-15's 30 pounds. This is more than an 85 percent reduction in weight for countermobility logistical requirements. Two soldiers with one vehicle can emplace a 1,000-meter minefield in about

10 minutes, while it takes an engineer platoon 10 hours to emplace a surface-laid conventional minefield of the same length.

This is extremely significant when you consider the reduction of the number of sappers in combat engineer companies. When I was a company commander, my company had nine ten-man sapper squads. As a brigade commander, my companies had six eightman squads. The last version of future divisional engineer companies that I saw had four eight-man squads. In combat engineer companies, the 90 sappers have been reduced to 32. This greatly reduces the ability to handemplace mines in a time-constrained situation. We have to depend upon scatterable mines emplaced by the Volcano system.

We need to use Volcano as routinely as we would use conventional mines. We need to let people know it's all right to use them in the 15-day mode if the situation dictates. I have found that the brigade commanders I supported didn't routinely plan 15-day Volcano minefields, because they couldn't count on getting the required authority. Instead their fall-back was to depend upon conventional mines.

RECOMMENDATIONS

Use specific obstacle restrictions for specific reasons; do not use blanket restrictions simply because "that's the way we've always done it" or "that's the way we did it at NTC."

Allow people on the ground to determine the best way to fight their ground, especially if they are assigned a *defend in sector* mission.

Use Volcano to make up for reduced sapper manpower, to provide faster obstacle emplacement, and to reduce the obstacle logistics.

Develop unit rapid mine teams and drills using Volcano.

Mitigate fratricide concerns with protective fences.

Mitigate future maneuver concerns with lanes and closure with MOPMS.

We have an army that is based on decentralized mission command, but routinely restricts the use of Volcano. The same commanders who impose these restrictions don't think twice about delegating conventional mine emplacement authority to the battalion level.

My message to commanders is: Don't unnecessarily restrict subordinate commanders by routinely withholding authority for Volcano. Withhold the authority only as you would for conventional mines. Don't restrict commanders from bringing all their combat multiplier systems into the fight. Let them know what their Volcano assets are and allow them to use them.

Use specific and not blanket restrictions. A commander would never assign a defend-in-sector mission to a subordinate commander while with-holding the use of organic weapons. They need to do the same for Volcano. If they don't, this valuable tool will never be used to its potential. It will not make up for the lack of sapper manpower, and it will not reduce the logistical requirement for tactical obstacles.

Appropriate use of the Volcano system won't get better until maneuver commanders demand it, plan it, and do it. Don't stand for being any more limited than you would be with your main weapons systems.

Colonel Thomas K. Littlefield, Jr., is a 1975 graduate of the United States Military Academy. He has served in various combat engineer units, commanded a battalion in the 101st Airborne Division, and commanded a brigade in the 2d Infantry Division in South Korea. He is currently an instructor in the Department of Military Strategy, Planning and Operations, at the Army War College.

Effectively Using Interpreters

MAJOR PAUL J. SCHMITT

As this country's land-fighting component, the Army has needed and employed interpreters in every engagement throughout its history. And because of increased force projection requirements, the need for skilled linguists is growing.

On the strategic level, the Army has made great strides in developing programs for military interpreters, foreign area officers, and the Korean augmentees to the U.S. Army, just to name a few. But the Army must also improve the tactical education of its leaders on

how to employ interpreters.

Small-unit commanders and leaders in an engagement area are often the ones most in need of interpreters, but also often the ones who have the least idea of how to use them properly. This article will examine issues involving interpreters and address questions pertinent to you, the small-unit leader.

For maximum effectiveness, leaders should consider carefully the selection, preparation, and use of the interpreter in each individual circumstance. The sequential steps, as you will see, influence each other.

Selection can come from two sources—military and local-hire civilian. Military interpreters can be specially trained, uniformed servicemen, or contracted American citizens. A military, uniformed interpreter with a security clearance is the most desirable, but the demand on military interpreters makes them scarce. In fact, you are not likely to encounter one under normal circumstances. As a result, local-hire

interpreters are the most commonly used source.

Locally hired civilian interpreters have their own characteristics. They can be useful in explaining the surrounding environment, situation, and personalities, or may have access to important information that is not available to an imported military interpreter. Be aware, however, that interpreters will inevitably talk with others in their spare time, about what they have seen and done, or worse, are debriefed by hostile counterintelligence agents when they go home. If local-hire interpreters are allowed in your camp's perimeter, they should be kept in a partitioned area to limit their access to and view of your operations. Additionally, due to their increased status, wages, or perception as collaborators, interpreters may face hostility or jealousy from the locals. You may not have much voice in the initial selection process, but you should be aware of the advantages and limitations of both types of interpreters.

If you are given the opportunity to choose from a pool of talented interpreters, there are several factors that should govern your choice. Although the education and language ability of the interpreter should be your primary consideration, you should take into account other criteria, such as age, ethnicity, sex, personal compatibility or character, and security clearance.

Learn early whatever you can about the cultural and social norms of the area in which you are deployed so as to avoid problems later. There may be occasions when a woman, an extremely young person, or an interpreter of a certain ethnicity could be counterproductive or distracting to your message or its tone. In Bosnia, for example, bringing a Bosnian Croat interpreter to talk with Bosnian Serbs about land claims between the two groups could create perceptions of partiality before you even begin negotiations.

After selecting your interpreter and before any negotiations, clearly explain your requirements and expectations. You must be certain that the interpreter understands that he works exclusively for you and assists you in accomplishing the mission. As obvious as it may

seem, most don't take this first step. Make sure your interpreter understands that he is to translate exactly what you say, and that he must suppress any personal feelings he may have. Be aware that many interpreters sign contracts with a contract agency; both of you should be aware of and abide by its conditions. Explain clearly your standards for his appearance. Much like counseling, strictly enforcing standards of conduct and expectations will make it easier for your interpreter to work within your guidelines. Preparation of the interpreter follows self-preparation.

For starters, you must learn everything you can about the culture in which you will be operating, and your interpreter can help you with this. should also take it upon yourself to learn basic phrases and words and how to count in his language in order to avoid misunderstandings. Be careful how you use idioms, and try not to include allusions deeply rooted in American culture that will get lost in the translation. For example, I once witnessed a battalion commander attempting during small talk to explain the finer points of a Road Runner cartoon segment. Meanwhile, his listeners had no idea what a covote was, nor did they really care. Other soldiers have used expressions like "pig in a poke," leaving the interpreter frustrated and confused. Avoid acronyms and military specific jargon at all cost, unless your interpreter has a good grasp of them and can convey their meanings. As part of your interpreter's preparation, you may have to educate him on basic organizational or tactical terminology or the rank structure—ask yourself how many American civilians know the difference between a corporal and a captain or a platoon and a battalion.

In general, it is best to be aware that many cultures are not as business-oriented as we are. In many cultures, our "get down to business" approach is misinterpreted as extreme rudeness. In their culture, real business is accomplished only after an appropriate period of small talk, hors d'oveurs, toasting, or tea. They will expect you to participate, or at least be aware of their traditions.

While working with your interpreter,

remain in control of the situation and the conversation. You can do this best with physical positioning. Many who use an interpreter, perhaps through faulty logic, place the interpreter between the communicating parties, or off to the side. This places too much emphasis on the interpreter and often leads to your counterpart talking directly to your interpreter, having sidebar conversations, or even worse, questioning the interpreter, while excluding you.

To use your interpreter correctly, position him behind one of your shoulders, so he is partially or entirely obscured. You then simply talk directly to the person you are addressing and wait for the interpreter's translation. Additionally, don't talk to your interpreter using such phrases as "Tell him that ..." or "Ask him if. . . ." Simply talk directly to your intended audience and request that the interpreter say exactly what you have said. This way the interpreter conveys your words only and otherwise remains in the background.

Be aware of your interpreter's needs. If possible, interpreters should be given time to rest periodically. They may be poorly adjusted to continuous military operations and could become physically exhausted from wearing body armor and carrying equipment. More important, continuous interpreting is mentally exhausting. Additionally, depending on the ability of your interpreter, speak a sentence or two, and then pause to allow for translation. Be aware that, as a practical matter, conversations will take at least twice as long, since both parties have to wait for their words to pass through the interpreter.

In short, interpreters play an important and sometimes mission-essential role. With attention to the selection, preparation, and employment of interpreters, leaders can develop them into a force multiplier that lets the commander or staff officer communicate clearly and unmistakeably.

Major Paul J. Schmitt, when he submitted this article, was assigned to the Department of Foreign Languages at the United States Military Academy.

Russian

40mm Grenades and Launchers

ADAM GEIBEL

Experiences from the second Chechen War set the tone for future ordnance. The Pribor Research and Production Center announced in May 2001 that it had developed a 40mm "cumulative" round for GP-25 and GP-30 under-barrel grenade launchers capable of piercing 60 to 70mm of armor. In addition to illuminating and training rounds, the Russian Military News Agency quoted Pribor chief engineer Vladimir Eggert as saying that the third new round would be thermobaric.

The effectiveness of a thermobaric 40mm grenade round will be an interesting problem in packaging. The 4.7kg Bulgarian 93mm RPG-7 thermobaric warhead creates a blast wave equivalent to that produced by the detonation of 2kg of TNT. A regular RPG-7 round weighs only 2.5kg, and a VOG-25 round has only 48 grams of high explosive.

Pribor produces the .25kg VOG-25 fragmentation grenade and the .278kg VOG-25P jumping fragmentation grenade. The impact fuse on these grenades is sensitive enough to work on snow, bog, and water surfaces.

However, a VOG-25P "bounces" to explode at the height of 0.5 to 1.5 meters (also reported as 1.5 to 2 meters). On striking the ground, the impact fuse fires a small charge of smokeless powder, blowing the main body of the grenade back into the air. As it does so, a short-delay fuse is ignited and after the grenade has risen about 1.5 meters, the high-explosive charge is detonated.

The "airburst" enhances its effectiveness, since half of the fragments of a regular HE grenade exploding on the ground bury themselves in the soil.

Sketches from *The New World of Russian Small Arms & Ammo*, by Charlie Cutshaw; used with permission of Paladin Press.

This feature is also useful for engaging personnel in open trenches.

The ammunition comes packed in 40-round boxes (known as "zincs"), and the market price of a VOG-25 fragmentation round was about U.S. \$30, while the training grenade was only \$15.

The illuminating round explodes at a height of about 100 meters and illuminates the area for 10 seconds, but the illumination radius was not mentioned.

The VOG rounds have no fixed cartridge case, but have a propellant charge with percussion primer at their base. This cuts down reloading time, because there is no casing to be ejected.

The Russian answer to the M-203 was the BG-15/GP-25 under-barrel grenade launcher "Kostyor" (Fire). Developed by Valery Telesh in 1972, mass production started in 1980. Nine P-25s are issued to each 47-man mechanized infantry platoon, and each grenadier usually has a basic load of 10 rounds.

After the First Chechen War (1994-1996), the Russian command found that its Naval Infantry units had paid little attention in training the marines to fire the GP-25 and considered it a major failure of the command echelon. (In 1997, the training emphasis was changed to rectify that problem as well as a list of other shortcomings).

Under-barrel grenade launchers—M203, GP-25 and GP-30 being the most popular—are considered effective weapons in many armies, but their rate of fire leaves something to be desired. After each shot, they have to be reloaded and are limited to 4 or 5 rounds per minute.

The Russians recognized this need for a greater rate of fire from their squad grenade launchers, particularly when confronted with ambushes initiated by command-detonated mines.

Inspired by the 40mm South African MGL-6, Tula's Instrument Design Bureau State Unitary Enterprise offers a

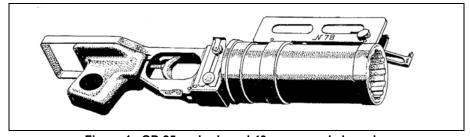


Figure 1. GP-25 under-barrel 40mm grenade launcher.

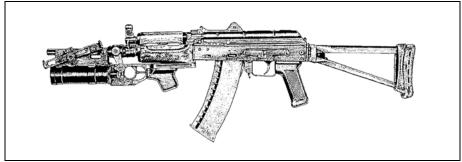


Figure 2. AKS-74U with GP-25 grenade launcher.

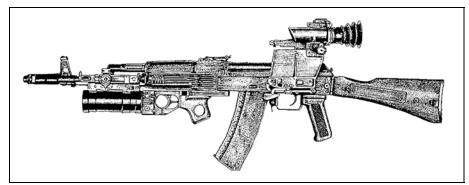


Figure 3. AK-74M with GP-25.

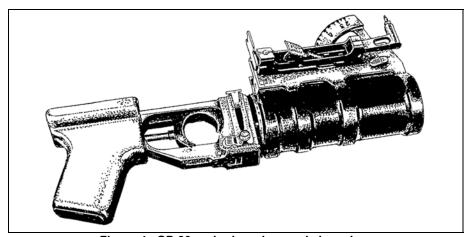


Figure 4. GP-30 under-barrel grenade launcher.

six-shot 40mm hand-held grenade launcher that fills the intermediate position between tripod-mounted automatic grenade launchers and under-barrel launchers. Originally known as the 6G-30, it is now advertised as the RG-6.

With a practical rate of fire of 15–18 rounds a minute, the RG-6 far outperforms its single-shot cousins. The 5.7kg RG-6 resembles a revolver, with the cylinder (or cassette) rotated by a spring.

It also features a self-cocking trigger mechanism and a sliding stock (combat length .78 meter, travel length .57 meter). The maximum effective range is 400 meters, while the GP-30 has a sighting range of 380 meters.

The Russians noted that South Africa's MGL-6 had a slower rate of fire, because the fired casings had to be manually extracted, and claimed that their VOP-25 grenade was three times as effective as the South African one.

But they felt that the most important advantage of the RG-6 over the MGL-6 was that for the same weight, the Russian weapon was made entirely of steel and did not malfunction if it was dropped.

Two RG-6 grenade launchers were used by the Russian army during the first incursion into Chechnya in 1994. Since then, small numbers of the weapon have worked their way into service, and the RG-6 is being heavily promoted for export sales, but with the designation of 6G-30.

Some fans claimed that this grenade launcher could have reversed the outcome of the March and April 2000 ambushes of the Moscow and Perm OMON columns in Grozny.

In early May 2000, a Russian TV program reconstructed the Grozny ambushes. They had set up six wooden targets representing Chechen fighters carefully concealed behind ruins or inside buildings, making them all inaccessible to the flat trajectory fire of the small arms carried by OMON troops. One soldier hit all the targets in 10 seconds with six shots from the grenade launcher. Two of the targets received direct hits from above, while the rest were sprayed by numerous fragments.

Adam Geibel, a National Guard captain, is S-2 of the 5th Squadron, 117th Cavalry, New Jersey Army National Guard. He previously led a tank platoon in he 3d Battalion, 102d Armor. He is a graduate of Drexel University and was commissioned through the New Jersey Military Academy OCS in 1990.

Using Tactical Decision Games To Study Tactics

SUBMITTED BY CAPTAIN FRANK W. BREWSTER II

The use of tactical decision games (TDGs) to train leaders is not new; the technique can be traced back at least to the Chinese general and military theorist Sun Tzu, who was advocating their

use 500 years before the birth of Christ. Today the TDG has assumed new importance in allowing leaders to develop and sharpen their tactical skills without an extensive commitment of resources.

To be sure, experience is one of the most valuable aspects of teaching, but it is also often costly in terms of lives and materiel. The tactical and military history instruction, readings, and digital data bases available to most officers and noncommissioned officers today provide an opportunity to capitalize on the successes, and failures, of earlier warriors, and prepare our future leaders to derive the maximum benefit from participation in TDGs. In the United States, wargames have been widely enjoyed by both military and civilian

devotees of the art for decades, and are now being used to complement smallgroup instruction at the Infantry School.

The tactical decision game shown here—TDG 1-01—is the first of a series that will be run in *Infantry* Magazine. A solution to each TDG will be found toward the back of the magazine.

Recognizing, however, that there are

many ways to approach a problem, we are not limiting the student to one passor-fail school solution. Discussions of this and other possible solutions can be found at the Combined Arms and Tactics Directorate web site at http://www.benning.army.mil/CATD/TDGs/index.htm.

TDG #1-01 LIGHT INFANTRY ATTACK OF A RIDGELINE

Situation—

You are the commander of A/2-87 IN (L) consisting of three rifle platoons, an AT section, a mortar section, and a headquarters element. You are Javelin/240B equipped, and are 100% on personnel and equipment.

For the past two weeks, your battalion has faced strong attacks from a regimental sized enemy light infantry element that managed to cross the Pecos River (northwest of Hill 122 off sketch). Since this was the last significant barrier between U.S. forces and the enemy, our division commander committed our brigade to block the penetration. Our battalion, as a supporting effort, is to seize a ridgeline that overlooks the river to facilitate the brigade (–) attack on the enemy's bridgehead. Hill 122 marks the start of this ridgeline. The battalion commander's intent is to destroy all crew-served and AT weapons, control key hilltops on the ridge, and pass the brigade (–) unhindered along Axis White (which runs to the NW through CPs 2, 3, & 5—CP 5 is to the northwest off of the sketch).

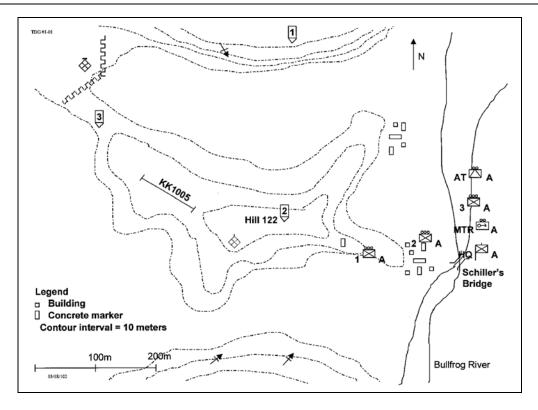
Your battalion has twice failed to seize the ridgeline in earlier attempts the past two days. Since the other companies were a bit weakened from their assaults, the commander has chosen your company to lead this attack. You are to seize the high ground vicinity Hill 122 to secure a foothold in order to facilitate the battalion's seizure of the rest of the ridgeline and pass the brigade main attack.

You are the lead element in the battalion's movement and have priority of fires for FA. The DS artillery battalion (105mm) completed a 15-minute suppression mission on the objective in preparation for your assault. Anticipating a fierce fight based upon B Company's experiences yesterday, you transition into bounding overwatch as you cross Schiller's Bridge over the Bullfrog River. Your lead platoon makes it nearly to the marker atop Hill 122 when it comes under automatic weapons fire from the south.

The battalion commander calls for a Sitrep and informs you that C Company started taking mortar fire east of Schiller's Bridge.

REQUIREMENT—

Take 12 minutes to develop the orders you would pass to your subordinates. Include guidance for supporting arms and a sketch of your plan. Then provide a brief explanation.



Control of Displaced Civilians

A How-To Guide for Infantry Unit Leaders

COLONEL KENNETH H. PRITCHARD

Combat has always affected civilians in areas of operation, from front lines to rear areas. Controlling civilians on the battlefield can be a major problem for infantry units, because they are often the first to face the issue of unplanned population movements. And sometimes they face it alone. Infantry leaders must know what to do and how to do it. I offer here some general guidance and proven processes and procedures for controlling civilians at brigade level and below, in war and in military operations other than war.

Total war will greatly disrupt the lives of civilians, but even small-scale combat may affect local populations. The nature, frequency, intensity, and duration of the effects vary with the interaction of complex factors. It is not simply the point on the spectrum of conflict that matters, and—unlike in some Army and joint force command and staff training exercises at corps and echelons above corps—panicked civilians rarely wait for the post-hostilities phase of an operation. Similarly, an infantry unit that lands, occupies, or advances in the center of a sector may encounter no civilians on the battlefield, while sister units on its flanks could find themselves blocked by them. This was true in World War II, Korea, Vietnam, and to a lesser degree, in Desert Storm and in Afghanistan. We have seen it recently in Europe, Asia, and Africa, but no region, ally, coalition partner, or U.S. military service is immune. The accidental and deliberate effects of future conflicts may be worse, however, in unstable states in the developing world where people are moving to overcrowded cities through unprecedented migration within and between states. Intelligence agencies, think tanks, and other sources predict increasing discontent and instability throughout the developing world in the years ahead, with greatest potential for combat and peace operations in and around large cities and other built up areas.

One of the more purposeful strategies now employed by state and non-state belligerents is the use of massed civilians—indirectly by information or directly by combat operations—to disrupt the military operations of their foes, peace enforcers, and relief agencies. A moderate to heavy flow of civilians can wreak havoc on operations if commanders are unprepared; even a small trickle can be disruptive at key times and places. Mass waves of noncombatants into the battle space—including front lines, forward logistics bases, and rearward staging areas in cities and other terrain—can stop a low-tech war for any high-tech superpower that is not prepared by doctrine, training, and planning to anticipate and quickly handle them the right way.

It is at the division level that a staff typically plans, assigns, and coordinates the tactical control and care of civilians (see Appendix B, Dislocated Civilian Planning, Field Manual (FM) 41-10, Civil Affairs, 2000), but it is the infantry units at and below brigade that must routinely do most of the work early in an operation. This is as true along front lines as it is in the brigade support area. As the logistics footprint hardens and deepens, the division support command's size, supplies, and services tend to attract displaced civilians, but this rarely relieves infantry platoons and squads of their burden; indeed, some infantry units may be part of a special task force designated to control civilians in key areas. Moreover, infantry units on the move rarely have the luxury of fully relying on military police (MP), civil affairs (CA), or the host nation, to control civilians. These assets are often too thin or too late. Therefore, infantry officers and noncommissioned officers must be trained to select and apply the best tactics, techniques, and procedures to control civilians, legally and effectively, across the spectrum of military operations. FM 19-15, Civil Disturbances, is very useful. Recent newsletters and other publications on peace operations by the Center for Army Lessons Learned are helpful, but more help is needed. FM 3-05.401, Civil Affairs Tactics, Techniques, and Procedures, may help, but it is not scheduled to be published until August 2002.

In the meantime, this paper describes measures that were

successfully applied in battle center training program (BCTP) and Joint Readiness Training Center (JRTC) exercises (82d Airborne Division, 1990-2000), as well as *Desert Storm* in Iraq (3d Brigade, 82d Airborne Division, 1991), *Re*-

MEASURES TO CONTROL CIVILIANS				
CONTROL	EFFECTIVENESS	SPECIAL	PERSONNEL RESOURCE	
MEASURE	OF MEASURE	REQUIREMENTS	INTENSITY	
Blocking	Medium - High	Conducive Terrain	Low – Medium	
Clearing	Low - Medium	Dedicated Vehicle(s)	Low – Medium	
Collecting	Low - High	Special Training	High – Very High	

store Hope in Somalia (elements of Joint Task Force Somalia, 1993-94, including advice and assistance to our coalition partners), combat planning (the planned invasion of Haiti, 1994), and *Uphold Democracy* (elements of the 10th Mountain Division, 1994-95) in Haiti.

First and foremost, leaders should prevent or minimize the dislocation of civilians unless there is a contrary policy or operational objective, such as evacuating civilians because a chemical attack is feared, or because the host nation's policy is to move them to the rear for safety *and* the United States has decided to help. (U.S. forces may be in hostile territory or otherwise lack an "invitation." In such cases, there is no host nation to rely on.)

Preventing or minimizing the dislocation of civilians in hostile or contested territory is more problematic for U.S. forces. When temporarily or permanently displaced civilians (DCs) appear in the area, it is best to bypass or ignore them if doing so makes the execution of immediate operations easier without compromising follow-on operations. Mechanized units on the move will want to try this approach first—unless, for example, the trains are to be established near the civilians. Light infantry has a tougher time bypassing or ignoring masses of civilians, if only because they can walk or drive as fast as or faster than the troops, but it should be done if possible. A general exception to the standard policy of bypassing and ignoring DCs arises when there is a need to process them for intelligence information, noncombatant evacuation operation (NEO) eligibility, and so forth.

If actual control is a must, there are three basic approaches—*blocking*, *clearing*, and *collecting*—and each has its pros and cons. In tactical operations below division level, leaders are likely to use all three techniques.

Blocking. Blocking uses roadblocks, which may be supported by checkpoints (see FM 3-19.4, [MP], *Military Police Battlefield Circulation Control, Area Security, and Enemy Prisoner of War Operations)* to prevent DCs from flowing onto key roads or areas and otherwise interfering with operations. The first priority, always, is to block the DCs. The second priority, usually a much harder task, is to persuade them to quit the area and return to their homes or a temporary holding area.

Planning considerations include the following:

- Availability of host nation assets to support operations.
- The likely timing, direction, rate, and flow of DCs, so as to position blocking forces where and when they will be most needed.
 - Terrain that channels the DCs.
 - The ability to reinforce a roadblock under pressure.
 - The flexibility to disengage on order.

Blocking may be hasty or deliberate. In hasty blocking, the blockers do not search civilians or their means of transport. But the blocking force, friendly troops passing by, and any

innocent civilians at the roadblock may be vulnerable in case of a terrorist attack. In deliberate blocking, the force uses well-placed barriers to keep civilians and their vehicles at a distance. Loudspeakers with prerecorded messages, such non-lethal weapons as pepper spray, mass dispersion devices, and other equipment and techniques discussed in FM 19-15 are also used to keep crowds at bay. This enhances the safety and security of all

Clearing. Clearing by mounted troops sweeps DCs from roads—such as main and alternate supply routes and the trains areas—to get them out or keep them from impeding movement, interfering with operations, or concealing a terrorist threat—25 to 50 feet from a roadway may be enough for dismounted civilians, but civilian vehicles should be kept at least 50 meters away from troops. The first priority is to cause the DCs to move in the general direction or to the exact location you want them to go. A larger challenge is to make them continue to comply with instructions when the clearing team is not right behind them.

Clearing is likely to be ineffective if it is not well planned and integrated with other control techniques. Therefore, clearing is usually a part of a larger DC control plan designed to push DCs in specified directions away from military units, routes, and operations. Clearing is an economy-of-force operation, because a clearing team is small compared to a blocking or collecting team.

Some of the planning considerations for clearing are:

- The ability to continually sweep or chase DCs.
- Teaming with MPs, host nation forces, and PSYOPs personnel, whenever possible, to enhance each others' missions.
- The ability to respond in greater force when initial efforts are ineffective.

There are two main drawbacks to clearing:

- Control is fleeting, and sweeps must be repeated as long as the road or area is being used by friendly forces and civilians are close enough to be a problem.
- Mounted civilians present a continuing security concern for friendly forces, such as terrorism by car bomb, because they can quickly breach any safe distance that is created.

All clearing is hasty by nature, but deliberate planning may ensure that loudspeakers with prerecorded messages and mass dispersal devices are available for use on the recalcitrant.

Collecting. Collecting results in hands-on control of 100 or more DCs at a time at a displaced civilian collection point (DCCP) (Figure 2) or other holding area to keep them from interfering with operations, or to foster their care and processing. FM 41-10 says that collecting "is the primary control measure for gaining initial control over DCs." But collecting is not always efficient or otherwise appropriate for infantry. It takes considerable forethought, training, and manpower to

THREE MAIN MESSAGES

STANDARD ROADBLOCK RECORDING:

- 1. This is a roadblock.
- 2. For your safety, you will not be allowed to pass this point.
- 3. Return to your homes.

STANDARD CLEARING RECORDING:

- 1. Stay off the road. OR Get out of this area.
- 2. If you do not comply you will be arrested.
- 3. Return to your homes.

STANDARD CIV RECORDING:

- 1. This is a civilian collection point.
- 2. You will not be harmed.
- 3. Everyone will be searched. Vehicles will be searched and parked. Some belongings may be taken from you temporarily for everyone's safety.
- 4. Water and emergency medical care will be provided to you after you have been searched.
- 5. If we take any of your belongings, you will receive a receipt. If any of your belongings for which you have a receipt are not returned to you, you will be compensated for them.

TEN MAGIC WORDS

1. Go Stand Stop Sit 3. Hands up 8. Yes 4. Right 9 No Left Water

collect DCs and entice them to stay at a collection point without the disincentive of hot combat down the road. Civilians are there voluntarily unless host nation forces are available to detain them. Continuing to hold them, thus preventing operational interference until the time of disposition, is a particularly challenging task.

Disposition includes their release from or closure of the DCCP because units or operations have moved on, and moving them to a displaced civilian assembly area (DCAA)—a logistical step up from a DCCP. There is no book on how to persuade people to stay at a DCAA, but good psychological operations and civil-military support can help. Some helpful means include mass media broadcasts, loudspeakers with prerecorded messages, signs (with culturally correct graphics), and leaflets.

Shown in the accompanying box are, main messages for use in tactically controlling civilians. These messages can be prerecorded for loudspeakers, if possible, but they should also be printed in English and the predominant language of the AO on 3x5 cards that can be used to "point and talk" by number. A well-prepared DCAA will display the same words in the same order on a large sign. Also shown are ten magic words or phrases that every soldier should be able to say in the dominant language. "Put down your weapon" and other phrases are also important, of course, but "hands up" is a simpler way to express surrender and control, and related concepts.

Division usually selects or approves the routes for the movement of DCs, approves collection points identified by brigades, tying them into tentative civilian assembly areas, and plans for personnel and logistics to support DCs at operational sites beyond the capabilities of brigades. A DCCA

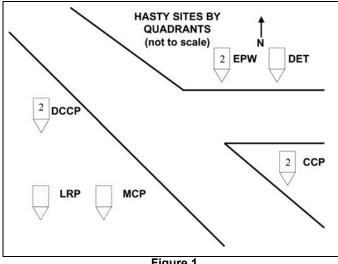


Figure 1

is a short term holding area—a few hours to three or four days. A displaced civilian assembly area, which is typically to the rear of DCCPs, may host DCs for a week or longer. Although an assembly area may evolve into a DC camp, typically, such a camp is very carefully planned as a mid-to long-term facility at corps or echelons above corps, and civilian assembly areas feed people into it.

Infantry units are often designated to operate or support the operation of a DCAA. In some cases, the job falls upon them by flow of action. Infantry leaders at brigade and below can help prepare for this job by standardizing and combining plans and tasks for dealing with non-combatants. In the attack, the quadrant method (Figure 1) is one way to designate hasty sites for controlling noncombatants and other groups. By this method, each quadrant of a crossroads may be designated for a likely group or purpose—such as Northwest for a hasty DCCP, Northeast for a hasty enemy prisoner of war (EPW) and/or a detainee (DET) site, Southeast for a hasty casualty collection point (CCP), and Southwest as a multi-purpose quadrant for maintenance, supplies, and other purposes, keeping the groups 50 to 100 meters from the roads. This keeps the groups sufficiently separated. It improves the safety and security of each group, minimizes manpower requirements, and reduces the potential for terrorism by keeping people a reasonable distance from passing troops. Prior training and rudimentary supplies, including water cans or bottles and large quantities of chemical lights, facilitate the day and night operation of a hasty DCAA.

Once a hasty DCCP becomes operational, transformation into a deliberate DCAA may begin, as appropriate. There are five key tasks at a deliberate DCCP:

- Local security.
- Physical security within the area, to include vehicle search and DC search.
 - DC processing and property control.
 - Services.
 - Resolution or disposition, such as the move-out phase.

The ability to accomplish all five of these tasks in the location of a hasty DCCP may be problematic and require the controlled movement of the facility. This requires controlled

movement of civilians—a task to be avoided, if possible—because effective movement requires more manpower than staying put, and the noise and lights of the DCs location may compromise security, and there may be danger areas to cross. Accordingly, the officer or NCO in charge of the DCCP may need to undertake the five tasks selectively. Even if an infantry unit is able to hand off a hasty DCCP to a support unit just a few hours after it becomes operational, knowledge of the layout and operation of a deliberate DCCP is valuable.

Operation of a DCCP

Local Security.

- Locate the DCCP so that DCs will not suffer any greater exposure to the effects of combat than they would without the DCCP.
- Establish local security to protect the persons operating the DCCP, the occupants, and friendly troops adjacent to it or passing by.
- Post guards at the entrance and exit of the DCCP. Give them special orders, as required.

Physical security and operations within the DCCP:

Step 1, Dismount point/vehicle search. Ensure that all private autos, public conveyances, and the like (including livestock and carts) are parked outside or on the fringes of the facility in the vehicle search area until they have been searched; require all passengers to dismount.

- Direct passengers to the DC search area.
- Make sure the driver remains with the vehicle until it is searched. If you have an undercarriage observation device, use it. When the search is over, the driver and the searchers together

move the vehicle or livestock cart to the vehicle hold area in accordance with the model DCCP layout (Figure 3). Many vehicles will contain household goods, suitcases, and other items. Search them for bombs and weapons if the vehicle holding area is within 50 meters of the people holding area. Although searching for contraband is not standard procedure, it may be mandatory under the OPORD or special orders given to you. Inform the driver that once the vehicle is searched, it will be secure, but placed off limits so that no DC will be allowed to retrieve any of the items from the vehicle. Use an Explanation

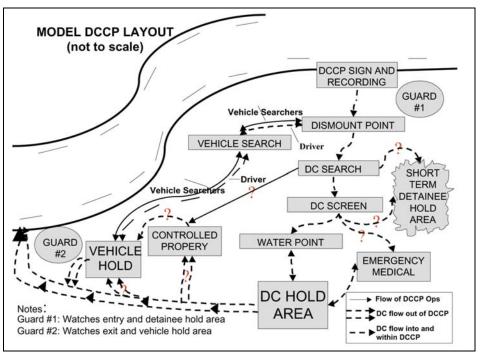


Figure 2. . Sample DC Overlay (From FM 41-10)

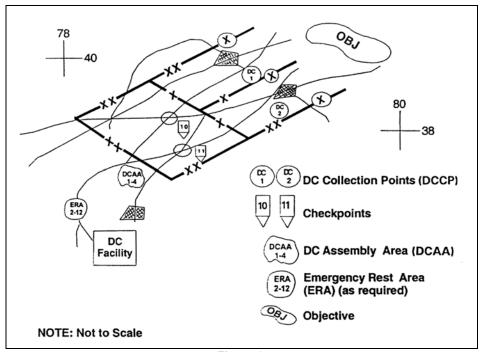


Figure 3

Card, sentence 3, to point-to-communicate, as necessary. Treat livestock as vehicles. Treat pets as livestock—if this does not create more problems than it avoids. If available, affix a Field Property Control Card to the vehicle or animal by using the back of the card to denote the driver/owner as best you can. Give a copy to the driver. Point to sentence 3 on the Explanation Card, as necessary. (Brigades may develop a simple Field Property Control Card that contains lines for the DCCP number, the date, the seized item number, the seized item description, and a signature lock for the DCCP OIC or

ORAL REHYDRATION THERAPY (ORT), WHAT EVERY SOLDIER SHOULD KNOW

Death from dehydration (extreme loss of fluids), especially of infants, the elderly and the sick or injured, is a constant threat in war and military operations other than war. People tend to experience extreme loss of fluids from diarrhea, bleeding, and hot weather. You must be aware of this threat and always prepared to respond to it effectively, especially when operating a displaced civilian collection point, to help carry out the legal and moral responsibilities of the commander.

Be especially aware of:

- Infants (who are burned or bleeding; whose skin has lost its elasticity; who do not urinate or have dark colored urine as opposed to clear urine).
 - Nursing mothers
 - Very thin people, with sallow eyes
 - Persons who are heavily bandaged
 - Persons on litters

World Health Organization ORT formula:

- 1 quart water
- 3.5 grams of sodium chloride (table salt)
- 2.5 grams of sodium bicarbonate (Arm & Hammer)
- 1.5 grams of potassium chloride (Lite Salt)
- 20 grams of sugar.

U.S. military field expedients for ORT:

- MRE salt pack = 4 grams of table salt
- MRE beverage base pack = 32 grams of sugar
- MRE cocoa pack = 1.4 grams of potassium

Water and salt alone are okay in a pinch. In extreme cases, do not "load up" the patient with fluids, especially if the water is cold; this may cause vomiting and the loss of even more fluid. Give small amounts of room temperature water frequently.

Babies will want to suck (not drink) the formula. Use ice chips or a wet, porous raq.

A dehydrated person's blood pressure is low. Get the patient into the shade, with feet up, if possible.

Pedia-Lite is a brand name ready-mix ORT formula for infants.

NCOIC.) In a pinch, however, any handwritten receipt that is clear, complete, and concise will do. Army forms, such as DA Form 3161 (Request for Issue or Turn-In), may also be used.

- A searcher then escorts the driver to the DC search area. *Step 2, DC search.* Search DCs and their belongings for items that are prohibited.
- Vary your search methods. Use a quick pat-down for some people, and do a more invasive search of others. If you have a hand-held metal detector, use it to expedite the searches. Tag any property taken under your control and give a copy to the owner. Use a Field Property Control Card. Use an Explanation Card, as necessary.
- Always use trained personnel to perform searches. If possible, use females to search females, infants, and children. If a female searcher is not at the DCCP but is close enough to get there in a reasonable time, defer these searches until she arrives; set the people aside until then so that they are not a potential danger to others. If a female searcher cannot be ob-

tained, have a *trained* male searcher do the search, using the back of the hand technique, if its use is not contrary to orders *and* if special security concerns require a search.

• Always use a searcher (unarmed) and an over-watcher (armed). They must be trained in these skills and know how to work together.

Step 3, DC processing, to include DC screen and property control. This part of operating a deliberate DCCP may be deferred for a while, but a full waiver is not advisable, as a general practice. DC processing consists of two stages. All persons go through stage one. Stage two may be deferred or delayed, reserved for certain people, or skipped entirely.

• Stage 1 processing. This is the quick screen to identify EPWs and others (civilian internees and detainees) who must be segregated immediately from everyone else. You may be able to do this without a translator. Beware of irregulars and infiltrators trying to pass as civilians. Upon discovery, all EPWs, civilian internees, and detainees are placed in the short-term detainee holding area. Normally, you may detain anyone who is causing a problem at the DCCP. Although civilian internees and detainees should be further segregated from EPWs, you will rarely have the time or the resources to do this.

Consistent with orders, take control of all items that may cause harm to your team, to any friendly forces passing the DCCP, or to the occupants of the DCCP—or items that non-combatants are not to have according to U.S. or host nation policy.

• Stage 2 processing. This stage is to help categorize DCs more specifically (for example, "Is anyone a U.S. citizen?"), to reunite families within the DCCP, to identify persons of influence, and to obtain information (from equipment, weapons, papers, and discussions) that may have intelligence value. Do this when you have the time and resources, but do not put a high priority on it. A translator is almost always required.

Step 4 (Services) Services at a DCCP may range from immediate care (attention to life-threatening conditions) to ancillary care (including food), depending on need and resources. Only water and immediate medical care are mandatory, to the extent they are emergency services provided consistent with the legal and moral obligations of the commander. Do not provide service to a DC until after he/she has undergone the quick screen stage of processing, except for emergency care needed to prevent loss of life (death imminent).

- First, treat life-threatening emergencies, such as giving first aid for traumatic injuries and oral rehydration therapy (ORT) for dehydrated infants.
- Second, provide water as a preventive measure if you have a supply adequate for this purpose.
- Third, allow occupants to relieve themselves. Provide one latrine for men and one for women, and basic equipment (such as shovels and latrine screen expedients) to permit and encourage the occupants themselves to prepare rudimentary sanitation facilities (slit trenches). Supervise.
- Fourth, give out food only to occupants who have been at the DCCP 24 hours or more. Food handed out more generously can become a "pull factor." Also be aware that certain MRE items may be forbidden or inappropriate by religion or

culture and/or too rich for malnourished people and cause immediate sickness. (Yellow-packaged international humanitarian rations are safe.)

• Fifth, provide other services consistent with the commander's legal, moral, and mission-specific obligations and requirements.

Step 5, Disposition or Resolution. Once a DCCP is operational, there are four possible outcomes for the operators:

- Retain control of the DCCP, recognizing that moral obligations to the civilians there will increase with time.
- Close down the DCCP by releasing the DCs from it, if warranted by the tactical situation and other factors.
- Arrange for the movement of the DCs to another holding area, such as a civilian assembly area, or...
- Hand off DCCP operations to other operators (such as a support unit or the host nation)—this is the most likely outcome for infantry units on the move.

Handing off a DCCP. As your unit moves out of an area, you must be prepared to hand off any DCCP in operation to the follow-on forces. Ideally, these forces will include trained CA operators, but they may not. In either case, you must be prepared to give the follow-on forces a full briefing on your operation of the DCCP.

Briefing. Cover the following:

- EPWs.
- U.S. allied and coalition soldiers.
- Civilians who are interned or detained.
- Civilians who are U.S. citizens and/or contractors.
- Civilians who may be useful as centers of influence.
- The tactical situation and intelligence (or unprocessed information) as they concern real or potential threats to the DCCP.
 - Medical emergencies.
- Controlled property, any special, additional information peculiar to the DCCP. The officer or NCO in charge of the facility must give the briefing personally and keep notes for his own records—the date-time group of the hand off, the name/rank/position of the person to whom the hand off was made, and a summary of the information provided.

Controlled property. Depending on the category of property, you may do one of the following:

- Retain control of it.
- Return it to the person(s) from whom it was taken.
- Do a combination of the previous two, or hand the prop-

erty over to other forces or agencies, usually the follow-on forces assuming responsibility for the DCCP. For simplicity, you will usually want to make this an all-or-nothing proposition; that is, either transfer all controlled property to follow-on forces, or retain all of it. (Transfer of property is preferred if your intention all along has been to return the property to the DCs when they left the DCCP; that is, if the property was controlled solely or mainly to ensure security within the facility.)

Transferring control. To transfer control of this property, you must do the following:

- Fill out a property control register, listing all the items controlled.
- Have an official of the follow-on forces sign for the items *and* a copy of the register itself by using DA Form 3161 (Request for Issue or Turn-In).

Retaining control. If you take the property with you (as you must do if no one will sign for it and you do not want to return it), you may have to give an official receipt (such as DA Form 3161) and explain to the owners the U.S. Army's intention to return the property at a later time and their rights for compensation if it is not returned. This reiteration of rights (sentence 5 of the Explanation Card) is intended to reassure the owners and may be needed to ensure a smooth hand-off.

In light of the fact that the primary mission of U.S. forces will be the conduct of combat and security operations, it is obvious that credible, trusted host nation forces be used to the greatest extent possible in controlling and safeguarding their civilians displaced by the currents of war.

This paper has provided general guidance and specific information for controlling civilians on the battlefield. Although some of the information may seem too detailed for infantry leaders, small unit leaders are discovering that practice of the basics, not simply awareness, is a modern military necessity. If we accept and prepare for the eventuality of dealing with population movements in the area of operations, we can better train our soldiers to deal effectively with one of the greatest challenges that can confront a combat leader.

Colonel Kenneth H. Pritchard is an operations research analyst, Policy and Strategy Division, U.S. Special Operations Command, specializing in civil-military issues. He has served in a variety of command and staff positions in the active Army, the Maryland Army National Guard, and the U.S. Army Reserve, including commander, 45th Civil Affairs Battalion (Airborne), which supports the 3d Brigade, 82d Airborne Division worldwide.

The Way Ahead

Lessons from Gnjilane, Kosovo

CAPTAIN LEE A. FLEMMING

Although well trained and focused on our mission in Kosovo, the Task Force leaders knew immediately upon passing through the Kachonic Valley that the mission would be difficult; that our soldiers would tire under the physical and mental stress; and that staying focused would be the challenge of our lives.

Our preparedness to face this challenge would be a combination of institutional knowledge, unit lessons learned. and countless days and hours spent at home station and the Combat Maneuver Training Center (CMTC) in Germany. In essence, we and our predecessors would be writing the book on how to conduct support and stability operations in the peace enforcement environment.

The challenge would be to learn quickly the cultural, historical, economic, and political mores of a populace that existed in something less than a country. That task would be further compounded by the fact that this sub-country was occupied by two distinct groups of people who despised one another, and would in most cases prefer that the other group leave, "dead or alive." We took solace in the fact that our mission began in the winter and the lull in fighting would give us a chance to get our feet wet and prepare for the spring offensive, if there was to be one. Unfortunately for us, this assumption was based on the "Bosnia Model," and the hate and contempt in Kosovo went much deeper and would prove to be a year-round challenge.

My mission was to secure the town of Gnjilane in order to ensure freedom of movement for the ethnic populace. How such a simple mission could have demanded so much of my soldiers and me, only we will ever know. Maybe it was the fact that Gnjilane was populated with approximately 70,000 Albanians, 2,000 Serbians, and 500 Roma; all ethnic groups that have one reason or another to hate each other, but even worse, the resolve to exterminate each other. So dedicating 150 soldiers to the protection of these 2,500 ethnic minorities may have been a bridge too far, but for the professionalism of the soldiers and officers of 2d Battalion, 2d Infantry.

This article is not meant to highlight the differences between the Serbian and Albanian populace of Kosovo, although in some instances it will be necessary. The article is meant to denote a few lessons learned, examine challenges that my unit faced, and take a bit of the discovery out of peace enforcement operations.

One of the most challenging duties of the command was to translate this mission and the responsibility shared by the interim local government and international organizations. Each soldier had to understand that the key to the municipality's success hinged on the abilities of the United Nations Mission in Kosovo (UNMIK), United Nations Civil Police, local Civil Administration, and the United States Kosovo Force (USKFOR). These were the four pillars upon which peace and prosperity had to be built. Ineffective leadership or lack of purpose, the lack of cooperation and shortsighted private agendas of these organizations would precipitate mission failure and seriously reduce the chances of survival for a multiethnic region. Understanding the missions of these organizations became necessary because success in my sector mandated the synchronization of their efforts. We asked a lot of our soldiers. It was not enough just to know the day's required security tasks, patrol routes, and checkpoint duties. The leaders had to have at least a working knowledge of how each pillar might complement or assist in any decision that was made.

I quickly learned that the tactics we applied at the CMTC, and other high-intensity lessons learned, were applicable and could be translated so that each soldier understood how to reference them in regard to peacekeeping. I found that doctrinal terminology such as mutual support, dead space, dispersion, and redundancy applied at all levels of the mission.

We applied five essential elements in Kosovo that I believe contributed to the success of the task force and the company team:

- Identifying the security requirements.
- The use of check points and dismounted patrols.
- Interaction with local leaders.
- Detailed graphical control measures.
- Decentralized execution.

When we first arrived in Gnjilane, the task seemed daunting. What was my mission as it pertained to the overall task force and brigade missions? How was my 150-man company going to secure this town of more than 70,000 people? Could we make a difference? I realized that I would

have to focus on my own efforts and those of my soldiers as well. It was my job to define the company mission and ensure that everyone in the unit understood it. Any deviation from the mission would require swift and decisive action, or we would lose momentum in our chosen task. The company team mission—secure the town of Gnjilane in order to ensure the freedom of movement of the ethnic populace (Serb and Roma)—was born out of the necessity to tailor the mission so soldiers would understand what they had to do.

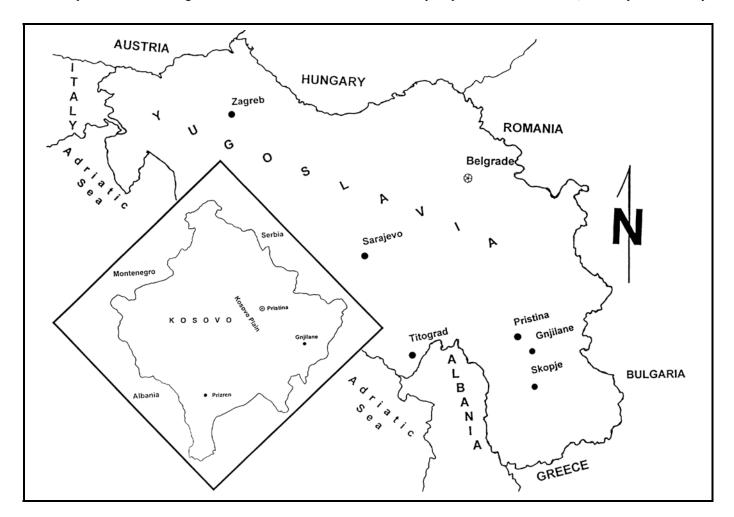
Our primary task before we could secure the ethnic minorities, which we found numbered a manageable 2,500, was to find out where each and every minority in the town lived. Company B was made up of four line platoons (three organic and an engineer platoon from Company A, 82d Engineers). Each platoon had a sector to comb daily. Their tasks were to pinpoint all ethnic minorities in sector, identify current and past problems, and document location on a map for future planning. This first step at gaining a working knowledge of our sector paid dividends for us throughout the entire mission. Not only did we locate the ethnic minorities in town, but we also developed a rapport with the populace by demonstrating that we were concerned with existing and past security problems.

After pinpointing the ethnic populace tasks—such as creating boundaries, identifying a main effort, and locating command posts—became less guesswork and more educated

assessment of the known requirements. Platoons learned such things as ethnic minority movement patterns, known trouble-makers, and past shooting or grenade incidents. Each platoon then created target folders that contained the pictures of the homes and people along with demographic information such as school-aged children, problems, and skills. Documenting Serb and Roma homes, businesses and gathering places on a map and the demographically specific target folders created a visual reference for all soldiers and gave the soldiers of each platoon the confidence they needed to man their sector.

Simply knowing the location and gathering places of the ethnic minorities was not enough. We had to find a way to maximize our newfound knowledge. Three key elements were characteristic of a platoon's sector: checkpoints, dismounted patrols, and a coordinated communications plan. Platoons, in turn, developed their battle rhythm from the number of centrally planned checkpoints and patrols. A carefully monitored battle rhythm was essential to success. Too many sector missions could create problems for the platoon, while too few could create sector issues.

Checkpoints were placed throughout sector in those areas that either had the higher ethnic population density or were more prone to violence. The soldiers at these checkpoints served as a static presence where the ethnic community could report problems and concerns, and they became very



knowledgeable. They could easily recognize who belonged and who did not. Movement patterns and informal leaders of the community also became readily apparent as the people came and went. The populace soon recognized that violence and crime decreased wherever these checkpoints were, and it is no exaggeration when I say that every minority wanted one

We applied certain doctrinal applications to the checkpoints: Each had to be mutually supporting; there was a minimum requirement of two soldiers at each; there had to be one man in and one man out; and each had to have communications. Platoons manned three to five checkpoints 250 to 300 meters apart. The number of checkpoints a platoon could man was based on the criteria listed above (minority population density and history of violent incidents). The soldier inside the checkpoint was in charge of communication, and the soldier outside was responsible for community interaction and presence (weapon at the ready). These requirements created the appearance of mass and, when placed in key locations and choke points, provided us with a tool to control an area that otherwise may have been too large for a company to cover.

While the checkpoints served as the stationary element, each platoon was also required to have a roving patrol at all times, which served as the platoon's maneuver element. These two elements worked together to respond to problems and sector issues throughout their areas of responsibility. The patrols concentrated on tying in the checkpoints, but also served as visible presence along "ethnic fault lines"—areas where ethnic minorities believed violent crime was most likely and, in a lot of cases, rightly so. They generally bordered ethnic neighborhoods. (Although no ethnic neighborhood was purely Serb or Roma, Albanians within these neighborhoods had a better track record for interaction with the minorities.)

Each platoon's roving patrol was tied into its checkpoints at all times. The patrols—four or five soldiers with basic load of ammunition and communication with both the checkpoints and the command post—were invaluable. They gathered information by reading the latest posters (a popular form of information sharing), talking to the populace, and gauging movement patterns. They were the maneuver element for the checkpoints, responding to situations that would take checkpoint personnel away from their posts. The patrols also served as an immediate reaction force for the company in those cases where one platoon could not handle a situation.

One of the key essential tasks that a platoon leader and platoon sergeant had to learn was the management of a battle rhythm. Once I identified the number of checkpoints that each platoon would man, based upon the above criteria, it was essential that the platoon determine how they would meet the minimum manning requirements. Because of the number of soldiers each platoon had, these minimum requirements often became the maximum requirements as well. Every now and then a platoon leader could determine that he needed an extra soldier on a shift to cover anomalies,

but that was more the exception than the rule. Formulating a battle rhythm became the method by which a soldier or leader could determine sleep plan, maintenance, and physical training time. If a platoon had three checkpoints, it required six soldiers, a roving patrol with a minimum of four or five soldiers, and a command post with two or three soldiers quickly became a 14-man sector mission (shift). Each platoon could man two full sector missions and a consolidated after-curfew mission. Curfew was at 2200, and was generally adhered to, except for eight to ten violators per evening.

Although manning the checkpoints and conducting the roving patrols provided the company with a focused mission, security could not be attained without communication with those being secured (Serb and Roma) and the populace from whom they were being secured (Albanian). The task force developed a coordinated communications plan that included key leader meetings (mayors and community representatives), church meetings, and bi-partisan think-tank meetings. These meetings engaged the community and eventually evolved into town hall meetings that gave the people access to decision makers.

The task force commander and S-3 had a very aggressive meeting schedule that complemented the task force area of operations. For example, in Gnjilane I held a weekly church meeting at the Serb Church, which included representatives from UNMIK, UNHCR, OSCE, the Serb Church Council, and Roma community leadership. In this meeting every Friday, I could reinforce Task Force themes on sector problems that may have been discussed in the Serb Mayor's meeting led by the S-3, or the Four Pillars meeting attended by the task force commander.

Along with the Serb Church meeting and Roma community meeting. I had a one-on-one meeting with the appointed Albanian mayor as well as a meeting with a local political party leader. In these meetings I reinforced security priorities, addressed Task Force and KFOR concerns, dispelled rumors, and provided the community with access to the decisions that were being made in their stead. I also learned where I needed to improve my security efforts and concentrate my patrols. Although many of the requests were 911 calls for personal security, genuine needs could also be determined from these meetings. The Serb Church served as the center of gravity for the remaining 2,000 or so Serbs who remained in town; therefore, they were able to present an actual weekly synopsis of problems for the community. I was able to gauge my company's success for the week from the number of complaints I received regarding the Serb community at these meetings.

In my meetings with the Albanians, my theme turned to inclusion. After listening to the stories of torment and abuse at the hands of the pre-war Serbs, we made a bit of headway with the Albanian leaders. After months of meeting with these organizations individually, the Task Force was finally successful in getting a key Albanian leader to attend a Serb town hall meeting. This joint gathering made the months of meetings worth the effort. It left us with the hope that future meetings would be possible and that reconciliation was only

a matter of time.

Although I believe the key to the company's success was mainly encompassed in the tasks of identifying the security requirements, conducting checkpoints and roving patrols, and interacting with community leaders—key subtasks that the company performed extremely well also contributed to our success. One of those tasks was the management of detailed graphical control measures. The task force that preceded us there passed to our task force a system of checkpoints and area management that we used and improved It included a numbered checkpoint system that worked in conjunction with an area that had the name of a state in the United States whose geographic situation corresponded with general area in Gnjilane. This system was understood by all and helped the company master terrain that was foreign and, if not hostile, downright unfriendly at times.

The control measures assisted in reporting, response to sector emergencies, and soldier confidence. The newest private could get on the net and report a problem and vector the quick reaction force to the area that required attention. Everyone could converse about "the problem across the street from the mosque in the bar district vicinity I6 (checkpoint 6 in area Indiana)," and know exactly were the problem occurred. I was very proud of the mastery of terrain and situational awareness that these control measures brought the company and recommend a similar system for anyone involved in long-term peacekeeping security operations.

Decentralized execution is the method in which I took the most risk. Although I personally patrolled from 14 to 16 hours a day, including meetings—and my first sergeant conducted a "midnight run" for four to six hours per evening—platoons still conducted missions with very little supervision. Except for directed checkpoints and patrols, platoons executed missions in accordance with their battle rhythms. My dismounted patrol and the first sergeant's mounted patrol checked standards and reinforced the Task Force mission. Platoon leaders and platoon sergeants were often patrol leaders on different sector missions. The success of the company was in the hands of junior NCOs on checkpoints, soldiers on dismounted patrols, and section leaders at command posts.

The soldiers' interaction with the community was also an important stabilizing factor with the Serbs and Roma who did remain in town. The interaction addressed security—the most essential concern of these people. It also helped KFOR identify the "ethnic fault lines" by increasing sector knowl-

edge through casual and directed conversations and a simple awareness of where the community lived. Many minorities believed that time would heal the wounds between the Albanian and minority populace—KFOR is the mechanism that the populace used to gain this much-needed time. Minorities also remained in the community because of KFOR's willingness to man 24-hour and periodic checkpoints. These checkpoints were the only dependable KFOR operations in sector that were dedicated to increasing the freedom of movement of the Serb and Roma population. Most of the minority population remained in those places where KFOR manned a checkpoint. KFOR's willingness to man these static positions helped the community gain the time needed to heal the festering wounds of hatred and contempt.

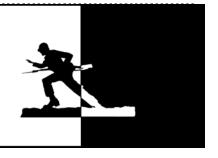
Much more than a dedicated security force is needed to solve the problems in Gnjilane and, on a larger scale, Kosovo. As I have stated, many organizations and groups are trying in their own ways to help. Synchronizing the efforts of the groups to increase the freedom of movement, and the inclusion of ethnic minorities, must remain a priority of the collective peacekeeping mission. Although at some cost, a multi-ethnic environment may be salvaged in Kosovo. Key ingredients to this equation include continued presence along the "ethnic fault lines" to increase freedom of movement, minority participation in local and regional government, and the synchronization of effort between UNMIK, the Civil Police, the Civil Administration, and KFOR.

Both success and failure are summarized in the formula for Gnjilane's short-term and long-term future. Although failure is easily attainable, success is an elusive concept that can be achieved only through the slow erosion of hate and violence. Since success cannot be quantified, participants in the operation will have to evaluate their labors within the collective peace structure over time.

To the soldiers I found at checkpoints at 0200 with weapons at the ready (one man in and one man out in the rain), to the platoon leaders and platoon sergeants chasing down phantom leads to meet the commander's intent, to the section leader who conducted mounted patrol at night in night vision devices for eight hours, and to my first sergeant who never let me or the company fail: "Yours was the hard task."

Captain Lee A. Flemming commanded Company B, 2d Battalion, 2d infantry, in Kosovo with Task Force 2-2, and is currently the plans officer for 1st Brigade, 75th Division (TS). He is a 1991 ROTC graduate of the University of Houston.

TRAINING NOTES



Merging Technology and Training The 82d Airborne Division's Master Gunner Program

MAJOR MALCOLM B. FROST CAPTAIN JOHN C. JACKSON MASTER SERGEANT MICHAEL A. VALDEZ

The 82d Airborne Division recently undertook a bold initiative to improve marksmanship skills and the lethality of the individual paratrooper. Modeled after the mechanized infantry master gunner program, this program is designed to provide a foundation of NCO subject matter experts who are charged with improving marksmanship through training, new equipment integration, and small arms systems maintenance.

Since marksmanship performance has remained high in the 82d, the purpose of this program is not to revive a lost skill. On the contrary, the influx of night vision devices (NVDs), optics, and lasers has given light forces an unprecedented opportunity to own the night in a small arms clash. Yet to date the potential of this increased capability has not been fully realized. The division's master gunner program is simply recognition that if we are to capitalize on this technology and increase lethality at night, we must have a core of experts trained on current capabilities, weapon configurations, and the unique technical aspects that each device brings to our weapons. Master gunners must also be intimately involved in the fielding of new equipment and be responsible for

the challenges involved in integrating each device with the weapon.

Where We've Been

To initiate the program, the leaders first had to define its parameters. The possible weapon systems included the M4, M249, M240B, Mk 19, M2, TOW, Javelin, and 81mm and 60mm mortars. These systems were divided into three groups on the basis of priority and a realistic workload for the master gunners:

Phase I weapons are the M4, M249, M240B, and Javelin—the initial focus of the master gunner program.

Phase II weapons are the Mk 19, M2, and TOW.

Phase III weapons are the 81mm and 60mm mortars.

At the same time, the leaders had to make decisions about personnel. What is the appropriate master gunner rank at each unit level? Should they be given special duty (SD) status so they can fully concentrate on master gunner duties without distractions? Which units need master gunners?

Leaders soon decided that the program would begin with 14 master gunners serving in SD status. One master

sergeant at division, one sergeant first class in each of the infantry brigades, nine staff sergeants in the infantry battalions, and one staff sergeant in the engineer battalion. Additionally, each infantry and engineer company was charged with providing one staff sergeant to serve as master gunner as an additional duty.

Identifying the right personnel to serve as the 14 primary master gunners was considered critical to the success of the program. NCO expertise would be the program's touchstone, and shortterm sacrifices would have to be made to achieve long-term success. This important duty therefore fell onto the division's command sergeants major, who hand-selected NCOs to fill the master gunner positions. Each battalion and brigade master gunner was interviewed by his unit CSM and appointed with the principal duty title of master gunner. Upon selection, each was stabilized in his position for one year.

Where We Are

Once the initial pool of master gunner candidates had been selected, coordination was quickly made with 2d Battalion, 29th Infantry Regiment, at Fort Benning, Georgia, to provide a foundation of institutional training on the key topics ranging from weapon configuration to marksmanship. As the proponent for all small arms systems, 2d Battalion provided the expertise necessary to conduct this training and help the 82d with this initiative.

On the surface this may seem a small point, but during the first phase of the five-week long training, NCOs from the 82d and the 29th exchanged ideas and tested various methods of mounting, boresighting, and firing the M4, M249, and M240B weapon systems. Every aspect of the training incorporated devices from the nightfighting arsenal. During this training, both teams of NCOs learned a great deal, shared knowledge, and dispelled myths about training with night-vision equipment. During the second phase of the training with the 29th, the master gunners concentrated on the Javelin gunnery and training devices, and earned the 2C additional skill identifier (ASI). Additionally, they were able to gain insight and provide input on new developments and upcoming fieldings from the Infantry School's Directorate of Combat Developments.

The first week of training began with the M4 modular weapon system with integrated rail adapter system (RAS). The master gunners received extensive classroom instruction on boresighting procedures for every device integrated into the RAS. This instruction included the characteristics and technical aspects of own-the-night equipment, the various target offsets for each aiming laser, safety considerations of equipment, mounting procedures, and preventive maintenance.

Upon completion of classroom instruction, and before firing a round down range, each master gunner had to display expertise and pass hands-on tests in the operation and boresighting of the laser borelight, AN/PAQ-4C and AN/PEQ2A aiming lasers, AN/PAS-13 thermal weapon site, and M68 close combat optic. Once this segment was completed, training moved to the ranges. The master gunners boresighted lasers and zeroed the back-up iron site and the close combat optic. They con-

PROCEDURES FOR USING THE LASER BORELIGHT TO ZERO OPTICS AND LASER AIMING DEVICES

- 1. Read the associated manual for the laser borelight.
- Use the 10-meter zero lanyard provided in the laser borelight kit as fielded.
- 3. Zero the laser borelight to each weapon before zeroing any of the advanced optics or laser aiming devices
- 4. Use a heavy ruck sack or aiming box to stabilize the weapon while using the borelight to zero optics and laser aiming devices. (NOTE: A hand-held weapon will not allow the borelight to properly zero advanced optics or laser aiming devices.)
- 5. Use the proper offset zero targets for each optic or laser aiming device from the Small Arms Integration Booklet (SAIB) when zeroing weapons with the laser borelight.

 NOTE: The SAIB can be found in the General Dennis J. Reimer Training and Doctrine Digital Library at:

http://www.adtdl.army.mil/cgi-bin/atdl.dll/st/saib/saib.htm.

ducted dry-fire exercises, and practice and record fires with the M4 in various configurations during the day and at night.

The second week of training was dedicated to the M249 squad automatic weapon and M240B machinegun. In addition to reiterating the marksmanship fundamentals for machinegun firing, the lectures introduced the M145 machinegun optic during the day and incorporated the lasers at night. Some of the fundamentals of rifle and machinegun marksmanship were adjusted for firing with night vision devices (NVDs) and lasers. In addition, the instructors provided feedback on how to run fixed-fire ranges more efficiently.

In the third week of training, the master gunner transitioned to the Javelin Training Device Course, and the NCOs were introduced to the Javelin system and training devices. The basic skills trainer (BST)—a computer simulated device—was used to train the NCOs to train soldiers on Javelin firing procedures and target acquisition, selection, and engagement. They also trained with the field tactical trainer (FTT), which uses MILES to simulate firing Javelin at a vehicle at ranges up to 2,000 meters.

During the completion of each training event, significant issues from the small arms and Javelin training were brought up, and any necessary adjustments were incorporated into the process. Upon completion of the training, the NCOs were given copies of all the training materials and lesson plans that were used. This included the results of training, statistics, research material, fielding plans, technical manuals, and

detailed after-action reports from the commander of 2d Battalion, 29th Infantry.

The most important lesson learned—and the common thread that led to increased marksmanship performance for all small arms weapons (M4, M203, M249, M240B)—was the proper use of the laser borelight. The borelight proved to be fundamental in enabling the NCOs to use all of the nightfighting equipment effectively, along with NVDs and advanced optics. Proper use of the borelight as detailed in the accompanying chart ensured that all optics and laser aiming devices were effectively zeroed to each weapon.

Remarkable results were achieved during the first two weeks of small arms training. Upon completion of their training with the 29th Infantry, every 82d Division master gunner had made appreciable gains in live-fire qualification standards. As an example, the following results were achieved at night with 40 to 45 percent illumination: M4 with AN/PAQ-4C—29 of 40 soldiers tested were able to qualify; M249 with AN/PAQ-4C—7 of 11 qualified. Additionally, the average for M68 CCOs during the day was 35 of 40 hits.

To complete the training on Phase I weapons, the master gunners received additional technical training at Fort Bragg on maintenance procedures, fielding, and rigging (for airborne operations) of small arms and OTN equipment. This training was one week long, covered the technical aspects of the Phase I weapon systems and their components, and provided the master gunners with an understanding of the process involved in the fielding, testing,

and maintenance of new weapons and OTN equipment.

Day-to-day, master gunners will continue to observe ranges and provide training assistance to units and soldiers on marksmanship issues and compile marksmanship training data. This will help identify marksmanship training deficiencies and unit trends that can be shared with the division as a whole through the network of master gunners. They will communicate information to commanders on upcoming changes in small arms technology and will present and solve issues on behalf of their units and the division. They will also identify maintenance trends and systemic problems with small arms and OTN equipment. The master gunners will work closely with the G7 (Force-Modernization) personnel and provide valuable insight from the user perspective during new equipment fielding meetings. While the first priority of the master gunner program is to train the initial pool of NCOs, they are already working issues and aggressively disseminating information in an effort to improve marksmanship and meet the challenges of technological evolution in the entire division

Where We're Going

The next step for the 82d is to develop a framework that will ensure the continuity of the master gunner program. This requires a campaign strategy that balances the collective issues necessary to ensure long-term survival of the program with the immediate needs at the small unit and individual level.

As with any new program, command emphasis is vital. Without it, the program would wither away in short order. In the 82d, the commanding general, assistant division commander for operations, and division CSM are firmly rooted in their support of the master gunner program. To illustrate this in more tangible terms, the division is developing a master gunner policy letter that will address the scope of the program, master gunner duties and responsibilities, division events that will be supported, and clear guidelines for the use of this valuable asset. The policy

letter is intended to ensure that master gunners remain proficient, act as a collective body to support large-scale marksmanship events, get ahead of the lag in technical expertise on the fielding of OTN equipment, and proliferate the program over time by teaching and sustaining a core of master gunners at company level.

As this is an NCO-driven program, the division CSM continues to be integral to the program's success. He is behind the program on several fronts. First, he has worked with the Total Army Personnel Command (PER-SCOM) to give one-year minimum stabilization to the initial pool of master gunners from battalion to division levels. Next, he will be the final approval authority for the use of the master gunners. Specifically, he will oversee the master gunners to ensure that their focus remains on marksmanship and night vision equipment, and that units do not overstep their bounds and use master gunners for other duties. Finally, he will chair the division master gunner conferences, where decisions on configuration, programs, supported events, and equipment fielding will be made in a forum that includes the division's CSMs, master gunners, and G4 and G7 Force Modernization personnel.

In order to effectively disseminate the knowledge developed at Fort Benning, the master gunners ran the division's first three-week Company Master Gunner Course in March-April 2001. This course was similar to the training received from the 29th. The first week concentrated on configuration, zero, equipment operation, practice and record fire for the M4. Also critical to the first week of training was training on the proper operation of NVDs, which is too often overlooked. To see targets clearly at night, each soldier must understand how to focus the devices, adjust the diopter, and gain brightness control. The second week focused on the M249 and M240B, and the third week, on the Javelin. This first course primarily centered on training the infantry and engineer line company master gunners. In the short-term, it has helped push expertise down to the soldiers in line units. In the long term, the division plans to run quarterly company master gunner courses to sustain the training base and increase the number of master gunners within companies and battalions across the division.

In addition to bringing some of their expertise to company level, the master gunners will serve crucial roles in leader and unit training. The division's master gunners will be the proponents for all small arms and night fighting equipment related issues in the unit. As the train-the-trainers for small arms and OTN equipment boresighting, zeroing, and firing, they will be a tremendous asset for small unit leaders in the planning, setup, and conduct of fixed-fire ranges. They will participate, advise, and provide oversight for the execution of machinegun weeks and marksmanship densities. By supervising unit armorers and helping coordinate for replacement parts, maintenance, and turnin procedures of all small arms and OTN equipment, they will play a key role during their unit's Operational Readiness Survey inspection before the unit assumes responsibility for Division Readiness Force 1 missions. The master gunners will also work closely with trainers and maintainers to keep units abreast of systemic trends in maintenance deficiencies and apply lessons learned at the user level.

Several initiatives are also being developed that will enable the division to keep up with the pace of change, exchange ideas, and share knowledge. These are included in a master gunner Website (https://airborne.bragg.army.mil/82mastergunner/), a master gunner Newsletter, and a master gunner Biweekly Update.

The master gunner Website will provide information on configuration, maintenance, new equipment fielding, division marksmanship standards, and force modernization issues. Included will be photographs of fully configured weapons and detailed photos with instructions on each piece of equipment that must be mounted on each weapon. It will also provide links to Army websites that are critical to the program, and points of contact, including the division's master gunners and support personnel from the Directorate of Combat

Developments—Project Managers (PM) Small Arms and Night Vision at Fort Benning—2d Battalion, 29th Infantry, and Picatinny and Rock Island Arsenals.

The website will also provide links to the master gunner Weekly Updates and monthly Newsletter. The Weekly Update will provide short-term snap-shots of working issues—training, maintenance, recent force modernization issues, a running eight-week calendar, and a "What's New" section. monthly master gunner Newsletter will take a broader approach to these same areas. It will tell the story of where the program has been in recent months and where the mid- to long-term focus will be in training, maintenance, and fielding. It will also sum up the issues and decisions reached at the division master gunner conferences and any fundamental shifts in the program's azimuth.

Every weapon carried by a light or airborne infantryman is no longer just a weapon or weapon system. Each go-to-war weapon in the inventory is now an ever-changing element of systems that includes the soldier. The individual soldier must be trained on the complexities of configuring, boresighting, zeroing, firing, and maintaining these systems. "Basic" marksmanship is a misnomer. Putting accurate, well-aimed fire down range for one-shot,

one-kill takes a higher level of training in an environment based upon night fighting equipment. To achieve success in this environment, order must replace the confusion that the complexities of technology bring to the forefront. This means we must have expert trainers in our warfighting units. For years, light infantry has needed a program that addresses this problem. The Infantry needs an institutional foundation that can embrace this problem and put solutions into the hands of the primary trainers—the NCO Corps.

The 82d's Division master gunner program, along with the critical expertise of the 29th Infantry, is an initial step toward grasping and solving the issues light forces face as they attempt to merge training with technology. What we need now is for the institutional base to grab hold of this program and exploit it. This is significant because it is not just the light infantrymen who will be using these devices. Every infantry unit and many non-infantry combat arms units will eventually receive them. As we move into the future, this training must be integrated into the NCO Education System (NCOES) so that every NCO has the basic skills necessary to train soldiers at the squad and platoon level.

A good start point is a mirror of the mechanized infantry master gunner

program—an institutional course to train the trainers, an MOS identifier, positions in the MTOE, and recognition from the Infantry community, higher Army headquarters, and the Army that the true experts and best our NCO Corps has to offer must serve in these crucial light, air assault, and airborne infantry master gunner positions.

Major Malcolm B. Frost is a 1988 graduate of the U.S. Military Academy and has a Master's degree from Webster University. He served his first tour in the 4th Infantry Division and has commanded companies in 3d Battalion, 325th ABCT (Italy) and the 3d U.S. Infantry (The Old Guard). He also served as aide to the Chief of Staff of the Army, and is now S-3 for 3d Battalion, 504th Infantry, in the 82d Airborne Division.

Captain John C. Jackson is a 1993 graduate of the U.S. Military Academy. He has served as a platoon leader with 2d Battalion, 502d Infantry, 101st Airborne Division, and the 1st Battalion, 75th Ranger Regiment. He has also served as platoon trainer for the Infantry Officer Basic Course and is currently commanding Company C, 2d Battalion, 29th Infantry.

Master Sergeant Michael A. Valdez was a scout squad leader in the 2d Battalion, 327th Infantry, 101st Airborne Division; a squad leader in the 5th Battalion, 502d Infantry, Berlin Brigade; and the V Corps Readiness NCO in Germany. In the 82d, he has served as a rifle platoon sergeant, battalion operations sergeant, and battalion intelligence sergeant in the 2d Battalion, 504th Infantry, and is currently the 82d Division master gunner

Master Marksmen In the Light Infantry

SERGEANT FIRST CLASS KENNETH WOLFE

Infantrymen today continue to struggle with marksmanship, especially under combat conditions. Trends at the Joint Readiness Training Center (JRTC) continue to document that soldiers do not engage targets effectively. Until unit leaders make marksmanship a command focus instead of a biannual

requirement, it will continue to be unrealistic, less cost effective, and in many cases unsafe. Consider the precious training hours and dollars spent on leadership development and unit training. All of that time and money is wasted if soldiers cannot effectively engage targets. I recommend that all light infantry battalions designate a Master Marksman, and make him responsible for establishing and directing a comprehensive marksmanship program within the unit. The Army's mechanized infantry and armor units as well as the Marine Corps have such programs in place.

The results have been superbly trained individual marksman and gun crews. The Master Gunner programs work.

With the support of his commander, a battalion Master Marksman would improve marksmanship proficiency in the light infantry battalions. A Master Marksman would be the battalion commander's subject matter expert on all weapons organic to the battalion. That alone would provide a single point of contact for improving the unit's corporate knowledge of its organic weapons and their sighting systems. That is no small task, considering that the inventory includes night vision devices (NVDs), laser and optic, 9mm, M4, M203, M249, M240B, M24, M2 .50 caliber machinegun, and Mk 19 grenade launcher. But it is through training that the Master Marksman would really come into play as a combat multiplier. He would plan the battalion's consolidated weapons training in each training cycle and prior to the assumption of any Readiness Force mission, or deployment for war or operations other than war.

The assistant S-3 NCO would be a good candidate for this job. The light infantry battalion military table of organization and equipment (MTOE) already allows for two sergeants first class in the battalion S-3 shop, and one of them should be able to fill this role. As senior NCOs, these sergeants are experienced with all weapon systems within the battalion. Being in the S-3 shop is ideal. They are also placed where they can draw on the knowledge represented in the Department of the Army school system as well as local small-arms schools. The Master Marksman would have direct contact with the S-3—the most important training officer in the battalion. He would interact daily with the battalion training area and ammunition NCO to procure ranges and Class V. Moreover, the Master Marksman would become an integral part of the battalion's training and support meetings along with the battalion and company XOs.

The duties and responsibilities of a battalion Master Marksman would closely resemble those of a mechanized infantry or armor Master Gunner. He

would establish the battalion training plan for all Standards in Training Commission (STRAC) qualification and small arms training. Such duties would encompass scheduling, preparing, and running the ranges. The Master Marksman would attend preliminary marksman instruction, qualifications, zero ranges, and known-distance ranges. He could offer instruction on the fundamental elements of marksmanship, shadowbox, dime-washer drills, Weaponeers, dry firing exercises, and other subjects.

As the battalion became more proficient at these tasks, the Master Marksman could transition into more advanced techniques of fire, close quarters marksmanship (CQM), close quarters battle, reflexive and quick fire, as well as the four positions for firing on a known distance range-sitting, kneeling, off-hand prone, and rapid fire. Flat 25-meter ranges would be used to teach controlled pairs, automatic fires, turning and running techniques—all a part of his duties. As the soldiers and leaders became skilled in marksmanship, the battalion Master Marksman would take marksmanship to the next level, which might include engaging targets in rooms, hallways, and stairwells. These make up a unique phase of CQM. Point-man and quick-reaction drills for patrolling should be incorporated and emphasized. Ranges for crew-served weapons should meet more than the requirements of zero and qualification, and should also include targets with depth, linear, oblique, and enfilade engagements. Traversing and elevation manipulation and the understanding of the traversing bar on a tripod would all be within his sphere of responsibilities. The battalion Master Marksman should establish qualifying standards in each of these tasks so that live-fire exercises would become more meaningful.

Where does the battalion Master Marksman gain the knowledge to accomplish all these requirements? He should already have these skills due to his rank and experience. Sniper School would be a tremendous asset for the pure fundamentals of marksmanship. M249 and M240B courses from the 29th Infantry at Fort Benning would be

another avenue to explore. Mobile training teams (MTTs) could easily be laid on from the Special Forces community or the Army Marksmanship Unit for more advanced shooting at minimal cost to any unit.

Every issue of *Infantry* Magazine offers training tips and notes. Several civilian handguns magazines offer different insights on weapons training that would be beneficial to a battalion Master Marksman. An extensive library of field and technical manuals will be maintained in order to complete the plan, particularly with crew-served weapons. Additionally, the Center for Army Lessons Learned (CALL) newsletter would also be helpful.

A battalion Master Marksman would and should use his expertise everyday. Most units operate on three cycles: Field training (combined arms live fire exercises, range training); deployment readiness force and combat training center deployments; and support (post details, schools, and leave).

In the field, the battalion Master Marksman would observe units during live-fire exercises (LFXs), make recommendations to commanders, and attend after-action reviews. The battalion Master Marksman would focus on improving the hit-to-miss ratio during LFXs and the proper deployment of crew-served weapons.

In range training, the battalion Master Marksman would oversee the battalion's consolidated weapons training. As the battalion commander's subject matter expert, he would ensure that ranges are being run to standard. He would reinforce the proper execution of all tactics, techniques, and procedures (TTPs), in accordance with the battalion commander's intent. The battalion Master Marksman would use feedback from OICs and NCOICs to improve weapons training.

The support cycle would be the most important one for the battalion Master Marksman. Using company and platoon marksmanship training plans, he would consolidate those programs and add his own ideas. That would make him the battalion's coach, teacher, and mentor on all aspects of marksmanship. He would train the units' trainers and

set the battalion up for future success.

In addition, the battalion Master Marksman could help make the marksmanship training safer, more realistic, and more cost effective in several ways. First of all, a constant focus on the use of weapons would make marksmanship Soldiers who have training safer. weapons in their hands all the time tend to be more comfortable with them. Soldiers with a solid understanding of the functions and capabilities of their weapons are more confident with them. Fully versed in the limitations and capabilities of his weapon system, a soldier is more prepared to execute safer more realistic LFXs. Coupled with a regular shooting regime, a superbly confident and safe marksman will emerge.

Engaging the enemy in combat will not be done from behind two sandbags, nor will it be from a culvert buried in ground overlooking a perfectly manicured range. This is not realistic, and our training should reflect the threat. As more of the world becomes urbanized, the distance and reaction times of our engagements will decrease. Our marksmanship training should reflect this as well. In the city or the jungle, a light infantryman's fight starts at his muzzle. He may be prone, kneeling, or standing, all in a matter of seconds. Realistic marksmanship training encompasses those scenarios. The battalion Master Marksman would enforce reality, insisting that units train for combat marksmanship—training as they fight.

A light infantryman must qualify twice a year, which requires 160 rounds of 5.56mm. At 22 cents a round, this amounts to \$35.20 per man per year. If a soldier hits the target only 100 times, that is a loss of \$13.20 in training funds. Multiplied by the 600-man strength of a light infantry battalion, the loss comes to \$7,920.00. Taking this analogy even further, let's look at the company LFX, including breaching the wire to clear a trench and bunkers: Each rifleman starts with 210 rounds, M249 gunner with 600, and M240B gunner with 900.

When it is added up, nearly 30,000 rounds will be expended. If only half of these rounds hit targets, are we truly getting the best use out of our training dollars? In the beginning, a battalion Master Marksman program may use up more ammunition, but over time a command focus on marksmanship training will save training dollars. During the Gulf War, for example, effective marksmanship in the mechanized divisions was attributed to a Master Gunner Program.

Looking at it from another angle, consider all of the training, leader development, and material costs involved in putting a soldier out on the line. We owe every one of our soldiers a fighting chance to survive in combat. If he can't hit what he's aiming at, we as leaders have failed.

Sergeant First Class Kenneth E. Wolfe is an Infantry platoon observer-controller at the Joint Readiness Training Center. He previously served 11 years in the 75th Ranger Regiment and more than two years in the 101st Airborne Division.

Medical Evacuation and Training During Ranger School

CAPTAIN MARC CLOUTIER

It's Day 9 of the 10-day field training exercise (FTX) conducted at the 6th Ranger Training Battalion (RTB), the final exercise of Ranger School. For the past eight days the Ranger students have averaged only two hours of sleep per day. A platoon of 40 Ranger students walks through the swamps along the Yellow River on the Florida Panhandle. The illumination is zero and the nearest road is an unimproved trail two kilometers away, with the Boiling Creek to their back. Suddenly a water moccasin bites one of the Ranger students. Without hesitation the Ranger Instructors (RIs) assess the situation and request a

medical evacuation (MED-EVAC) helicopter for the student. Within 20 minutes the student is extracted from the swamp and is at the Eglin Air Force Base emergency room for treatment.

Today, the 6th Ranger Training Battalion, responsible for the Florida Phase of Ranger School, is expertly supported by aircrews from the XVIII Airborne Corps. The battalion trains MEDEVAC systems and scenarios at least 15 times a year. This training is broken into four different categories: MEDEVAC systems rehearsals, quarterly MEDEVAC training, annual interagency mass casualty (MASCAL) exercise, and student MEDEVAC operations..

MEDEVAC Systems Rehearsals. Systems rehearsals are conducted on the fourth day of each Ranger Class—11 times over the course of a year. The first system to be tested is a jungle penetrator (JP) hoist of a 200-pound dummy off a safety boat on the Yellow River. Before any student conducts waterborne training, this rehearsal is conducted to verify that aircrews, flight medics, boat operators, Ranger medics, and tactical operations center (TOC) personnel can safely extract a casualty from the swamps.

Following the hoist rehearsal, one RI walking team, consisting of four instructors, initiates part two of this sys-

tems rehearsal. Each cycle, a new FTX day is tested. It may be an airborne operation, a waterborne accident, or any number of simulated injuries in remote areas of the Eglin training area. This rehearsal tests MEDEVAC procedures at all levels. An evaluator records significant events, a medical evaluator records actions taken by the RIs to treat the casualty, and the battalion S-3 evaluates the primary instructor (PI) team on actions taken upon notification of a MEDEVAC. As in all Army training, an after-action review (AAR) follows the event, involving commanders, crews, walking teams, medics, and evaluators so that lessons learned can be captured and new procedures developed, if necessary. One of the most difficult types of evacuation, and the most common in a swamp environment, is the JP hoist—an event we always try to incorporate into the systems rehearsals.

MEDEVAC Ouarterly Training. Quarterly MEDEVAC training allows company commanders to train multiple walking teams in the procedures for treating and evacuating a casualty. It also gives air crews invaluable and realistic training. Quarterly MEDEVAC training focuses primarily on the use of the JP hoist or SKEDCO litter hoist from the swamps. Instructors and crews train both day and night scenarios involving a casualty requiring immediate extraction. This training realistically replicates hazards that might occur during upcoming cycles. Hypothermia treatment and evacuation is the focus before winter cycles, and heat stroke and snakebites are most common before spring and summer cycles, but there are always added injuries or surprises to prevent complacency on the instructors' evaluation and treatment of the casualtv.

Annual Interagency MASCAL Exercise. Once per year, the 6th RTB hosts an interagency MASCAL that involves all agencies in the Eglin community, including local hospitals, law enforcement, and fire and rescue personnel. The MASCAL scenario is developed to be the worst case the 6th RTB would have to encounter and overcome. The scenario is driven by unforeseen factors

that cause all elements of the local safety network to be activated and trained.

The annual MASCAL exercise gives several separate agencies an opportunity to conduct MEDEVAC training. In addition to Ranger assets, joint MASCAL exercises involve local emergency medical services from two counties, the local fire department, five local hospitals, the news media, and Eglin AFB's Disaster Control Group.

Student MEDEVAC Operations. Ranger School is designed to train small and large combat arms unit leaders and, more importantly, give them the tools and ideas to take back to their parent units and use in training their own soldiers.

In addition to ambushes, raids, and waterborne operations, 6th RTB sends the Ranger graduate back to his unit capable of incorporating MEDEVAC training as an integral part of battlefocused training. Each of three Ranger training companies routinely conducts MEDEVAC training scenarios during the ten-day FTX. The treatment and evacuation of simulated casualties occurs without notice to the student chain of command, and often requires evacuation by use of the jungle penetrator. Ranger instructors assist students in the proper procedures for a JP extraction, as the procedure itself is difficult and potentially hazardous.

During numerous training events, AARs have brought to light many procedures that save time and prevent confusion. One challenge encountered during MEDEVAC training in the swamps and dense vegetation is signaling techniques. Both the ground personnel and the aircrews must understand each others' signals. Our far recognition signal both day and night is FM communications and a red star cluster (red pen gun flare if the star cluster is not available or is a dud).

When the pilots or our TOC indicate that the aircraft is one minute out, the walking team members fire their star cluster. Smoke, our intermediate signal, is thrown immediately after the star cluster is fired because it takes time to billow and crest the canopy of trees. We use red smoke by day and a white

strobe light by night. As the aircraft approaches, it will indicate by FM radio if the smoke or strobe is visible. When the aircraft is within 200 meters of the casualty, the white strobe must be turned off so it does not create a hazardous situation for pilots flying with night vision goggles (NVGs). If the pilots are having a difficult time identifying the signals, FM communications with a clock direction and distance are used to direct the helicopter to the location.

The near signal used by day is a VS-17 panel, which marks where the hoist or helicopter should land. The near signal at night is a swinging red chemical light tied to the end of a two-foot section of 550 cord. If this signal is swung vigorously overhead, the pilots can readily identify it at night. When the aircraft is overhead, FM communication from the ground to the aircraft must cease. At this point the aircraft is relying on instructions from his crew chief and is busy trying to maintain control of the aircraft in a hover. The added radio communication only aggravates an already challenging situation for the pilot. Also at this point, any white light being used to treat a casualty on the ground must be extinguished as this creates another dangerous situation for pilots flying under NVGs. (If light is critical, a red or blue lens filtered light can be used.)

Finally, during a hoist mission, signals must be used to relay when a casualty is ready to be raised. Only one person should give the signals. During the day, a simple thumbs up overhead is all that is required. At night, the same red chemlite on two feet of 550 cord again lets the crew chief know that the casualty is prepared for the hoist. Since the flight medic will first be lowered to the ground to continue treatment of the casualty, he becomes the primary signalman for the hoist. The flight medic also has FM communications with the aircraft. We also have the aircrew activate a red chemlite and attach it to the jungle penetrator during training. This enables the aircrew and the personnel on the ground to see the hoist as it is lowered to help maintain situational awareness.

Although the JP is the primary means of extraction from the swamp, cross training on the SKEDCO litter is essential for cases involving a back or neck injury. During 6th RTB's most recent training, the flight medic was prepositioned at the extraction location on the ground where he was able to conduct training on the actual terrain where a hoist mission is most likely to become necessary.

We learned several lessons from this training:

First, a SKEDCO should not be used when extracting a casualty from the swamp if a JP will suffice. The dense vegetation of the swamps made it very difficult to find an area large enough to use the SKEDCO. Cable awareness is paramount, especially in night opera-

The cable can easily become entangled with the ground team and cause serious injury. Signals should be made by only one signalman; more than one creates too much confusion and can be dangerous. Rigging a patient for a SKEDCO hoist while under the rotor wash is detrimental to both ground personnel and air crew. Once the necessary equipment is lowered, signal the aircraft off into an orbit, and have the flight medic call the aircraft back overhead once he is ready to extract. Safety goggles and a kevlar helmet help protect the ground crew and the patient from dead-fall blown down by the rotor wash.

Through constant training and evaluation, MEDEVAC training has paid big dividends for our soldiers. Our Ranger

Instructors are now more proficient in MEDEVAC operations, which has translated into better MEDEVAC training for the Ranger students as well. It has also provided the Florida Phase of Ranger School with a stronger safety net in the event we do encounter injuries that threaten life, limb, or eyesight. By dedicating effort and enthusiasm to our MEDEVAC training, we have developed—and continually revalidate—techniques that ensure better, safer, and more realistic training for the Ranger students and cadre of the 6th Ranger Training Brigade.

Captain Marc Cloutier, when he wrote this article, was S-3 Air of the 6th Ranger Training Battalion, at Eglin Air Force Base, Florida.

Integrating Medical Training Into Company Warfighting Training

CAPTAIN LAWRENCE O. BASHA

When an infantry officer takes command of a company, he wants to make it the best fighting force possible. Many of us know how to develop the maneuver aspects of training, but we may not be sure how to improve other areas that support the company's ability to fight.

One essential support skill is the ability of trained combat life savers (CLSs) to perform medical tasks. The training and evaluation of medical personnel is the responsibility of the battalion medical officer. The company commander, in turn, can use the medics to train and evaluate his infantry personnel. This article provides suggestions on how the company commander can improve soldiers' CLS skills.

Any good infantry commander knows the value of correct and timely first aid on the battlefield. The Bellamy Analysis of casualties in World War II, Korea, and Vietnam—a major, comprehensive study of wound effects—found that 80 percent of combat deaths occurred in the first hour after injury. Of these casualties, 50 percent bled to death, half of whom could have survived if the bleeding had been stopped. Saving lives is the fundamental reward from a good medical training program.

Improving life-saving skills yields other benefits as well. An individual soldier gains confidence when he can perform the actions that he knows will save lives, and when he has truly mastered a skill he can use anywhere and any time. Units gain confidence going into battle, knowing that they will be cared for by the soldiers around them. Soldiers will fight harder when they know there is good, competent care and an evacuation program to take the wounded back to a dedicated care giver.

These are not easily quantifiable benefits, but they are important and a good commander will work to improve them.

Ranger CLS Training: A Case Study

The results of a good CLS program are impressive. Recently, I observed a platoon raid conducted by 3d Battalion, 75th Ranger Regiment. A fire team was providing security in an intermediate support-by-fire position. A medical observer-controller (OC) came up from behind and assessed a casualty on the fire team—a Ranger was given a shoulder wound. The OC put a laminated index card specifying the injury on a 550-cord loop around the Ranger's neck. The combat life saver with the CLS bag went to his aid. He prepared the injured Ranger and applied the proper bandages. Without looking up,

he asked the medical OC, "Has the bleeding stopped?" The OC told him that it had, and the Ranger CLS continued to stabilize the bandages and prepare the Ranger for evacuation. "Is the patient conscious?" asked the Ranger. The OC told him yes, but the soldier could not assist him, nor could he walk. This said, the Ranger began to prepare this casualty for movement. The medical OC moved on to assess another casualty. The CLS then moved the first casualty to the platoon casualty collection point (CCP) and helped evacuate him to the battalion aid station (BAS).

To the casual observer, this may seem like a very high-speed process, but when examined, it is the result of four basic training principles:

- The 3d Battalion, 75th Ranger Regiment, uses dedicated medical OCs to evaluate and influence the medical training during blank fire exercises (BFXs) and live fire exercises (LFXs). These OCs assess specific casualties on the force.
- The OC evaluates the care given to the casualties.
- All the Rangers go through CLS training when they arrive at the unit.
- The Rangers have regular medical and CLS refresher training.

It is because of command emphasis and continual training that the 3d Battalion, 75th Ranger Regiment's CLS training program sets the standard and is hence worthy of emulation.

The inclusion of casualty play during an LFX or a BFX puts individual training into perspective and enhances the overall mission training. A typical training evaluation consists of a medical OC who is equipped to assess casualties and is responsible for providing medical coverage for the range. He carries casualty tags (similar to the MILES casualty cards) on 550-cord loops so that when a casualty is designated, the injury and the patient's condition are easily visible to caregivers. The casualty wears this around his neck and does not have to hold it or dig it out of a pocket when a new caregiver comes to him.

When the OC assesses an injury, he observes the treatment until he feels satisfied with it and then moves on to

the next casualty. The Rangers then evacuate the casualty to the next higher level of care (platoon to company, company to battalion).

Following the exercise, a medicalspecific AAR is conducted, and the comments are plugged into the training management cycle. Through this training sequence, the battalion has improved the individual Rangers' medical ability and increased the unit's combat effectiveness and survivability.

Command Emphasis. For the infantry company commander, improving the company's medical treatment is not difficult. Command emphasis on the training program is essential, and this can be achieved in numerous ways.

Commanders can schedule time on the training calendar for the initial and refresher training. They can make sure personnel attend the classes and emphasize 100 percent attendance. Units

The inclusion of casualty play during an LFX or a BFX puts individual training into perspective and enhances the overall mission training.

should develop CLS training kits containing the bandages and other items required for training. Resources for training may include new or improvised supplies (such as cravats made out of fabric). These can be stored in used ammunition boxes or containers from the Defense Reutilization and Marketing Office, thus saving unit funds. The commander should ensure that appropriate medical supplies are available for training missions and make it a policy that he be notified when items are missing and cannot be replaced. Finally, the commander can require that casualty play be integrated into all maneuver exercises, no matter what size element is being trained.

Initial Training. The commander can schedule annual CLS training to be conducted three or four times a quarter, so the entire company can be trained one quarter at a time. Personnel who cannot attend one session should be able to get into another. Although some of the company's soldiers may not

achieve qualification, the commander should closely monitor training to keep this number to a minimum, below 10 percent if possible. Sending personnel to other courses on the installation may also reduce the number of unqualified soldiers. This may be an inconvenience to some, but it will clearly demonstrate command emphasis. The object is to see that all personnel are CLS certified. Since each course can be run for about one-third of the company, sessions can be scheduled around prime training times.

The CLS course itself should focus on trauma. The instructors should emphasize the type of trauma the company would see in combat, such as gunshot wounds. Explaining what the CLS can expect in a real-life situation will focus the soldiers on the course. Subjects to be emphasized should include trauma care, tactical field care, and casualty evacuation. Since this course will be geared for one company, instructors can cover company SOPs and teach everyone the proper techniques and procedures for CLS treatment, evacuation procedures, and the CCP setup.

Sustainment Training. Following the initial training, the company can have medical classes en masse or for a sub-element (platoon, squad, fire team, or two or three individuals). The classes can be conducted in a formal classroom setting or in the field. They should combine instruction and practical application. The smaller the number of soldiers trained at one time, the greater the value of the training, and the less time the soldiers waste waiting for evaluation.

Since many of our leaders and soldiers have never been in combat and do not know first-hand what to expect, the commander can have a former combat veteran give a talk to the unit about what types of injuries he has seen in battle. The 3d Battalion, 75th Ranger Regiment, has had good results with this type of briefing. It adds emphasis to the medical training and gives the men a better idea of what to expect. It also gives the medical personnel and the 11-series CLS ideas for setting up the training for the upcoming medical refresher training.

Trauma Lanes. Trauma lanes are simply a means of hands-on evaluation for the CLS, allowing him to practice and be evaluated on his skills. These lanes can be as simple or as complex as the trainer desires. The most basic trauma lane consists of one evaluator, one casualty, and one CLS trainee in a static location with minimal medical resources. This can be expanded as far as the trainer's imagination and resources will allow. An important aspect of the training is an evaluator who can both teach and evaluate the CLS. Together, the platoon medic and the battalion aid station (BAS) personnel can determine the focus of the trauma lane (blunt trauma, evacuation, bones).

The duration of training can also be varied. Individual CLS can treat single or multiple injuries. Additionally, the duration of tasks may be increased by having the CLS conduct a sequence of treatments. Since this training and evaluation is a one-on-one process, training in smaller elements reduces the time soldiers wait for instruction and practical application. An iteration will usually take about as long as most complex EIB or NBC station tasks.

The location of the trauma lane can also be adjusted. The basic trauma lane can be conducted in a day room or the company area. Obviously, the trauma lane would be more complex and difficult in a training area or on a range (for example, by conducting the basic trauma lane on a qualification or static range). The platoon or company medic who covers the range can act as the evaluator. If a medical emergency arises, the medic can react without delay.

As with all skills, some soldiers develop better competencies more quickly than others. These soldiers should be identified and given the responsibility of being the CLS for the fire team or squad. All soldiers should undergo CLS training, but the more adept ones should be designated primary CLS for the unit. Once these soldiers have had some experience as primary CLSs, they should be rotated out so that another soldier can benefit from the responsibility of the position.

CLS Equipment Bags. One of the pre-combat inspections (PCIs) should be to check and restock the CLS bags. This inspection should be supervised by the company senior medic or a representative from the BAS. This gives the CLS the responsibility for maintaining "his" equipment. Having the senior medical personnel supervise the PCI increases the interoperability of the chain of medical care and treatment. It gives the senior medical personnel another opportunity to mentor and train the CLS. This increases the unit's medical capability and confidence.

Medical Rehearsals. Another important step is to have medical rehearsals on ranges before training. These rehearsals should incorporate the expected type of injuries, the anticipated level of care, and the evacuation procedures. A BFX will be different from an LFX or a static fire range. The rehearsal should incorporate as many CLSs and dedicated medical personnel as possible. Once again, this gives soldiers a sense of ownership and makes them more eager to participate.

Casualty Play. A key to improving medical training is the integration of casualty play in BFX and LFX training. This gives soldiers the closest idea of what they can expect during combat and the opportunity to use their CLS training in the proper sequence when they have finished their primary infantry tasks. The company should designate a member of the BAS as a medical OC. This requires that the commander make full use of the BAS personnel. The commander should outline and supervise the medical personnel's preparation for training and evaluation. preparation should include the use of moulage kits for casualties (OPFOR during blank fire), a detailed list of injuries they plan to assess on the soldiers. the standard by which they will evaluate the care and evaluation process, the proper means of identifying casualties, and the specifics for the AAR.

The medical personnel will be responsible for the preparation and evaluation for the exercise, but the commander must supervise the process to tailor it to his goals for the company. Checking the types of injuries planned

will eliminate irrelevant and distracting training. Ensuring that casualties are marked by an easily identifiable information card will eliminate any confusion about the injury, and keep a soldier from forgetting that he has an injury and getting up to go back to the fight. The medical briefback on the evaluation process and the AAR will provide a better working relationship with the medical support personnel and allow the commander to ensure that training is conducted in accordance with his intent.

Post-exercise Assessment. The medical training continues after the exercise has ended. The Medical AAR should be sequenced to follow the unit AAR and cover the standard AAR format. This will lead to improvements in individual skills and the company's medical SOPs and give the CLSs feedback in the environment where they will be expected to perform. No commander would think of conducting an exercise without having a unit AAR afterward. The infantry commander should give feedback to the medical personnel about their integration with the unit, including comments—to sustain and improve performance—about the exercise casualty play, the OCs' conduct, and the evaluation process. This feedback will help the BAS personnel improve their own systems for supporting the unit in combat.

These are some tried and true methods for improving the infantry company's ability to provide aid on the battlefield. Improving the company's CLS program will result in the most important reward for the commander: saving soldiers' lives. In addition, helping individual soldiers and their units gain confidence and skills in life-saving will have benefits that extend far beyond just putting the bandages in the right places.

Captain Lawrence O. Basha served in the 3d Battalion, 75th Ranger Regiment, at Fort Benning, and as a senior engineer sergeant in a Special Forces detachment. He is a 1988 graduate of the University of New Mexico and was commissioned through the Officer Candidate School in 1995.

Sharpening the Warfighter's Edge Through Peace Support Operations

LIEUTENANT RICHARD L. SCHWARTZ SERGEANT FIRST CLASS RICHARD A. MORIN

Few would disagree that a six-month deployment to Kosovo with the mission of bringing peace and stability to a troubled region would bond soldiers in a way that no duration of training center exercises can approach.

Even fewer would argue against the notion that an undivided focus on a real-world mission allows us to develop more cohesive soldier teams. Until recently, however, there has been ongoing debate on the damage combat skill proficiency suffers during a prolonged emphasis on peace support.

Since elements of what is now the 2d Battalion, 6th Infantry, deployed to Bosnia more than six years ago (and again in 1998), senior leaders have been steadily developing ways to combat this erosion of skills. The same battalion's recent deployment as part of the U.S. Kosovo Force was programmed to include modified gunnery tables for both Bradley fighting vehicle and dismounted infantry live fire exercises, as well as numerous day and night weapon proficiency ranges and train-the-trainer events. The resources themselves are being improved, and the training management of individual soldier and mission essential tasks has been a priority at both platoon and company level, with no reduction in steady-state operations.

Still, with all the improvements to training resources and the addition of exercises devoted solely to maintaining proficiency in high-intensity conflict, the greatest returns have come from the emphasis on using every day to give teams, squads, and platoons the ability to fight. Instead of viewing the development as an obstacle to combat readiness, commanders are now giving jun-

ior leaders the tools to make peace support operations a testing ground for the techniques and attributes required at the collective, leader, and soldiers levels to succeed in the high-intensity fight.

In nearly six months of continuous mounted and dismounted patrols to interdict the movement of weapons, materiel, and personnel belonging to ethnic guerrilla factions, the learning curve for collective tasks has been steepest in night operations. The daily movement of squad size elements in limited visibility over rugged mountain terrain has been vital in bolstering the claim that we own the night. Knowledge of the limitations and proper employment of night vision goggles, close combat optics, and infrared aiming lights is appreciated to a far greater degree in the firsthand knowledge that our armed opponents are blindly stumbling along The repetitive execution of react-to-contact drills and non-verbal fire control techniques on patrol is effective without firing a single shot or adversely affecting the mission. The platoon and squad leaders' nightly use of these exercises develops the certainty of action that is then capped by periodic live-fire ranges, while expending less time and fewer resources than at home station.

Crew drills and effective scanning techniques for the BFV integrated sight unit are actually made more important by the absence of a threat force that is a mainstay of conventional maneuver training. When objects of interest are tractors on the remote trails of a valley floor or horse-drawn carriages cresting a ridgeline, the gunner's eye becomes all the more discerning. After all,

doesn't our ability to intercept such quarry depend on the same night-driving skills and use of terrain that must mask us in force-on-force engagements? Once again, the insight into the limitations and particular response of these assets to temperature, altitude, precipitation, and illumination variables becomes institutional knowledge after continual exposure.

There is no excuse for failing to develop precision squads and platoons collectively for use in an urban environment. The opportunity rests at every abandoned doorstep. A reliance on thorough searches and the mutually supporting movement of elements in confined spaces is much the same in the peace support role. Though we may assume a more civil approach in our official cordon and search missions, the first priority of safety and security ensures that we continually rehearse and practice techniques for survivability in a fight. More common, though, is the hasty occupation and search of abandoned structures in the towns that have become part of regular patrol routes, in much the same manner as the react-tocontact drills in wooded terrain. Local civilians benefit from the stability our presence provides at the same time we hone our execution in the most realistic of environments. That experience was ultimately showcased in a live-fire exercise on an improvised MOUT complex to a degree that would be hard to replicate from a home station train-up.

Perhaps more valuable is the abundance of junior leader training. After all, the single greatest advantage of our army over others on the battlefield is the initiative and ability of the professional

noncommissioned officer. This is daily a squad leader's and team leader's mission. The emphasis on deliberate planning and troop-leading procedures for operations at the most vital level guarantees that much of the insight and experience they gain here can be recalled when time constraints and pressures are greater on a conventional battlefield. The responsibility for everything—from the orders process to thorough precombat inspections—rests squarely on a new generation of sergeants, with senior NCOs there to mentor and provide after-action reviews. A solid foundation in these processes through repetitive use in this environment is the essential element that can then be applied successfully to any given mission.

At the company level, we must continue to hone our techniques for the timely and effective reporting of situations that develop in our area of responsibility. The need for concise, accurate, and current spot reports gives a realistic view to information flow between leaders. Couple that almost daily with the subsequent requests and coordination with other assets, and a synergy is created that would be essential to the modern battlefield. Squads and platoons

find themselves directing aircraft onto potential targets, working with scout elements to interpret suspicious traffic, and debriefing staff sections in a manner and frequency that would initially be a painful yet necessary process in combined arms operations.

Lastly, in peace support operations there is the unique value of soldier training that does not come from the tasks we execute as part of a training matrix. The essence of the individual infantryman's responsibility here is also his single greatest benefit in preparation for the battlefield—the demand for a disciplined, confident professional who is flexible in response and effective in the use of minimal force. Soldiers here display the confidence and aggressiveness, even when confronted, that can come only from knowing that they have the necessary skills to succeed in any given situation. They see their leaders adapting to challenging demands and know that the respect this unit is accorded here is won on the merits of each individual every day.

Commitment to operations other than war—especially in troubled areas such as the Balkans—is likely to move forward at a speed governed more by national interest than by the need to accommodate the Army's training goals. Since these deployments are unavoidable, small units must make maximum use of the training opportunities they offer. It is a commitment by the chain of command and a concern not just to separate high intensity conflict goals, but to approach peacekeeping as a bridge that leads to sharper warfighting skills.

While the debate goes on around us, small-unit leaders must employ the creativity and techniques to make sure the deployment places maintaining readiness on an equal footing with operational success.

Lieutenant Richard L. Schwartz was a rifle platoon leader in the 1st Armored Division on peacekeeping duty in Kosovo, and is now assigned to the 2d Battalion, 6th Infantry, 1st Armored Division, in Germany. He is a 1999 ROTC graduate of the University of Notre Dame.

Sergeant First Class Richard A. Morin was a rifle platoon sergeant in the 1st Armored Division on peacekeeping duty in Kosovo. He previously served as a mechanized rifle company master gunner, drill sergeant, and Bradley fighting vehicle instructor. He also served in the 1st Cavalry Division during Operation Desert Storm.

ScoutsTheir Selection, Training, and Operations

MAJOR MICHAEL T. WILLIAMS

Ever since the first adversaries took to the battlefield to settle their differences, opponents have sought tactical advantage over each other. Tactics seek to exploit those advantages, and they vary from era to era, war to war, and battle to battle. Reconnaissance—seeing and understanding the enemy—is a fundamental issue that drives that evolution.

Here we will revisit the age-old use of the tactical reconnaissance element—

the selection, training, and operations of the scouts. As the Israelites did when they ended their 40 years of wandering in the Sinai, commanders continue to dispatch scouts to gather information about their prospective enemies. Joshua, as a wise commander, recognized that intelligence drives operations, and today's leaders should be no less perceptive.

At the Joint Readiness Training Center (JRTC), tactical reconnaissance

operations vary from one rotation to the next. Some units deploy their scouts forward, while others do not. Generally, the commander's preference and the abilities of the scout element determine the employment. When time is plentiful, scouts typically receive detailed guidance and instructions for the upcoming mission during intermediate staging base operations, but even then, they rarely get a detailed reconnaissance order. Still, they go forward with an

adequate mission load to gain intelligence for the maneuver commander. In all too many cases, this is their only opportunity to perform as the commander's eyes on the battlefield.

As the operational pace intensifies and compresses planning time, other challenges capture the commander's attention. The battle is joined. Logistics threatens to become a ball and chain to operational flexibility. Personnel losses challenge unit effectiveness. In all the turmoil, the unit may become reactive, surrendering tactical initiative to the opposing force. A key indicator of this confusion is when the scout platoon is overlooked in the planning and execution of follow-on missions.

Observer-controllers (OCs) at the JRTC have learned to look at the scouts to see how well or how poorly a unit is doing. Here are several things OCs consider and reasons they are important.

Scouts continue to watch named areas of interest (NAIs) that no longer help the commander in his decision-making process. The problem may simply be their poor communication skills. On the other hand, it may be that the scouts have not received a change of mission that would have allowed them to shift to newer NAIs. Both of these factors suggest that the battalion, overwhelmed by events, has lost touch with its scouts. The scouts are not being used to gather intelligence on the enemy's strength and weaknesses. The battalion has gone reactive.

The scouts are not properly positioned on the battlefield, and their location takes them out of the battle. The scouts' ability to be out front is limited by the battalion's ability to transport them. The time required for them to react hinders their ability to affect the outcome of the battle. Again, the battalion has lost sight of its single most important reconnaissance asset—its eyes on the battlefield. A battalion that is not seeking out the enemy is allowing the enemy to seek it out.

The scouts are used to defend the tactical operations center (TOC) or the battalion trains. Both of these are vital assets that need protection, but other elements in the unit are better suited for defending them. All too of-

ten, scouts are given this mission as an afterthought, tacked on to the end of the planning process to answer the belated question, "What do we do with the scouts?" The commander who is not thinking reconnaissance is not thinking, he is reacting.

While many of these reasons generally stem from command and staff planning factors, others come from the selection and training of the scouts themselves. Although most scouts are in excellent physical condition, they are not always tactically and technically proficient in reconnaissance and surveillance.

OCs often notice that scouts who are deployed forward of the battalion spend more time looking for and moving to their NAIs than performing reconnaissance and surveillance on these areas.

Scouts are routinely assigned more NAIs than they can observe effectively, and no priorities have been assigned to them. Scouts can either cover a few NAIs effectively or cover a lot of NAIs ineffectively.

Several factors influence this trend. First, scouts are routinely assigned more NAIs than they can observe effectively, and no priorities have been assigned to them. Scouts can either cover a few NAIs effectively or cover a lot of NAIs ineffectively.

Even though part of this problem lies with the staff and planning process, the scouts themselves must recognize and react to their own capabilities and limitations. This recognition comes with experience based on training, with little or no guidance on priorities, along with inadequate training, the scouts do not have the time or the manpower to conduct the mission successfully. In the absence of guidance, scouts must ask for it.

This initial factor flows into the second—the same lack of guidance to the scout platoon leader cripples his ability to plan a detailed mission. Additionally, a lack of planning time results in inadequate orders, no rehearsals, and poor tactical reconnaissance—and most important, a commander who doesn't see the battlefield.

Given the first two factors, scout leaders at platoon and squad level tend to focus on avoiding detection. Force protection is a priority, of course, but the scout mission of reconnaissance and surveillance remains the most important goal. If the scouts are merely out there trying to move around and cover too many NAIs, they are needlessly putting themselves at risk.

Even if the scouts are given a well-planned and resourced mission, they may not be trained to get out there, gather, and report all the commander's critical information accurately and promptly. A good scout is more than a remote video; he is a forward deployed military analyst. He recognizes the indicators that an enemy is preparing to attack, defend, or withdraw, and he can relay that information to the commander, who can best use it to make a critical tactical decision.

Besides following the logic of training scouts, giving them a good mission, and teaching them what to look for, their training must teach them how to get this information back to the commander. The very nature of the scouts' mission suggests that they need special communications gear and training on how to use it. OCs at JRTC report that this vital link is often overlooked.

Let us pause here. We can talk on and on about the scouts' shortcomings and why certain things happen at the JRTC, but one of the recurring trends is the lack of proper training.

A well-trained scout can analyze terrain, tell where the enemy is likely to be, and know how the friendly forces can exploit that information. All too often, however, scouts are not well-versed in identifying these indicators, much less in analyzing their meaning.

We need to examine the selection process and the training of a scout platoon soldier, as follows:

In the typical infantry battalion, a vacancy appears in a position in the scout platoon in the course of normal attrition. The scout platoon leader and the headquarters company commander, raise the need for replacements with the operations officer and the battalion

commander. The scout platoon leader proposes a selection process, and the commander is free to make changes. The commander then issues his guidance for the selection of the new members and the course of their training.

Once the process is approved, the operations officer and the scout platoon leader prepare the tasking for the company commanders. This step is vital to the success of the selection. The tasking includes the number of prospective candidates per company, what the selection process entails, and the training schedule. Although soldiers are often encouraged to volunteer, the company commander is the approving authority when choosing qualified candidates.

During the selection phase, the prospective candidates are put through rigorous physical and mental challenges. These challenges include an Army Physical Fitness Test, an Army Swim Test, a foot march of 12 to 15 miles, day and night land navigation, physical training of various sorts used to test upper and lower body strength, running events ranging from four to ten miles, memorization games that test soldiers' ability to assimilate and recall information and basic infantry skills. After the selection process, there is no doubt that these soldiers are physically fit and capable of handling the physical demands of being scouts. That's a good start.

Next, the newly selected members must be trained as scouts. This means they have to be transformed from fighters into observers—the eyes and ears of the battalion. This training entails teaching the potential scout the art of closing in on the enemy undetected and observing his every visible and audible move. Upon completion, the soldiers join their respective teams where they will get most of their scout training from veterans in the platoon, including a few who have attended sniper school.

Therein lies a potential pitfall. These "seasoned" professionals have learned through much trial and error. On-the-job training is valuable and can offer many lessons if it is used properly. But it is extremely important that the trainers and the trainees experience and see what works. Unfortunately, this does not routinely occur in an internally

driven scout training program. Once the soldiers' initial orientation is complete, they are catapulted into situational and field training exercises that test and evaluate their newfound craft. At the end of a 30- to 60-day grace period, they at least receive the title of "scouts." But they may or may not know what they're doing.

Their brethren in the reconnaissance community, the long range surveillance (LRS) elements, offer an interesting contrast to the infantry scouts. These soldiers undergo the same selection process and rigorous training—with two major exceptions:

The first is that all the trainers of the new recruits are graduates of the Long Range Surveillance Leaders Course (LRSLC). This course was designed with the reconnaissance leader in mind, based in the heart of the Ranger com-

The LRSLC training system is now open to infantry scouts, and we must revamp our training to take advantage of it.

munity with its own company structure and program of instruction. Each student attends the 33-day course and undergoes a vigorous physical, mental, and academic challenge. The LRSLC begins with an Army Physical Fitness Test, Army Swim Test, and day and night long-range land navigation test.

Students then swiftly move into the academic portion of the course. They are taught and tested on vehicle recognition, both of the former Soviet Union and American; communications with HF and FM radios including propagation and antenna theory; and intelligence preparation of the battlefield. The students are then taught and graded on their ability to receive and properly write a detailed reconnaissance or surveillance order. Additionally, they learn the planning and construction of hide sites and mission support sites, conduct tracking and countertracking in the field, and basic survivability, including standards of escape and eva-

To complete the course, the students are graded in a situational and field

training exercise on all the above skills to determine whether they will qualify and graduate. In most cases, 50 to 90 percent of the members of the team have graduated from the LRSLC. That means that the "seasoned professionals" inside the LRS detachments not only know what *right* looks like, they know how to *do* it. The institutional knowledge within the unit sustains itself and at the same time expands from external training.

The LRSLC training system is now open to infantry scouts, and we must revamp our training to take advantage of it. Until now, units have selected the most physically fit and brightest young men in the battalion, have placed them in the scout platoon, but have not equipped them with the training they need to succeed on the battlefield. These young soldiers will give it their best and work very hard to accomplish the mission. Commanders must train their men for success. Leaders should look closely into the training and development of our scouts. The LRSLC cadre is determined to provide quality training, not only to the LRS community, but to the entire reconnaissance family. For more details on the course, leaders should visit the Fort Benning web site or contact their division's LRS detachment or Corps' LRS company. I am sure they will be happy to share whatever manuals and training they can.

In conclusion, the need for reconnaissance never ends. Satisfying that need means understanding what reconnaissance can provide and incorporating it into the planning process. The commander who strikes out with inadequate reconnaissance may join the rolls of Custer and the 7th Cavalry at the Little Big Horn or the ranks of the 106th Infantry Division at St. Vith. The commander who wins the reconnaissance fight wins the battle!

Major Michael T. Williams served as a scout and tactical operations center observer-controller at the JRTC, and is now Chief of the JRTC, Center for Army Lessons Learned (CALL). He previously served in the 504th infantry Regiment, 82d Airborne Division, and the Division Long Range Observer Controller for the JRTC. He is a 1990 ROTC graduate of South Carolina State College.

"Go Find the Enemy!" Use of Available Time During Movement to Contact

MAJOR SCOTT W. HEINTZELMAN

The purpose of a *movement-to-contact* is to gain or reestablish contact with the enemy. However, rotational units at the Joint Readiness Training Center (JRTC) tend to spend most of their time during this phase conducting force protection tasks.

They remain stationary far too long, thus relinquishing the initiative to the enemy and allowing him to set the terms of battle. Naturally, the enemy attacks only when those terms are favorable, and the vast majority of direct fire contacts end in his favor.

Units must understand that the operative word in movement to contact is *movement*. Stationary units are targets. But there are measures unit leaders can take to avoid that trap as they prepare for future JRTC rotations.

Because rotational units face a dispersed enemy, most choose the *search-and-attack* technique to locate the enemy during the *movement-to-contact* phase. Field Manual (FM) 7-20, *The Infantry Battalion*, states that the purpose of a search and attack is focused on four primary areas: *Destruction of the enemy, area denial, force protection*, and *information collection*.

When rotational units begin the movement-to-contact phase, OCs track the way each maneuver platoon uses its time in each of these areas. Using FM 7-20 as a guide, senior analysts have further defined the areas in greater detail: We then use this information to facilitate discussion in after-action reviews (AARs).

Destruction of the enemy—killing or capturing the enemy. Actively searching for enemy forces or being in physical contact with them.

Area denial—preventing the enemy from operating unhindered in an area, such as cordons, blocking positions, traffic control points, ambushes, security patrols.

Force protection—protecting key facilities such as the brigade tactical operations center, Q-36 radar, Sentinel air defense radar, forward arming and refueling point, and the reverse osmosis water purification unit. Additionally, time spent in patrol bases, as well as conducting resupply operations and casualty evacuation.

Information collection—observing named areas of interest, reconnaissance patrols, questioning civilians.

OCs routinely coach units to spend most of their available time actively

A study of six rotations revealed that units spend an average of eight percent of their time conducting destruction of the enemy and 60 percent conducting force protection.

searching for the enemy. This gives priority to the areas where the enemy can be fixed and destroyed, area denial, and information collection. Protecting key facilities is a legitimate task, as is the requirement to conduct patrol-base activities so soldiers can sleep, eat, and clean their weapons. In addition, planning and preparing for upcoming operations frequently takes place during patrol base activities, but these activities support only the mission of movement to contact. Spending most of the available time in patrol bases surrenders the

initiative to the enemy. That means rotational units lose freedom of action and consequently can only react to the enemy's initiative. Units should spend more than half of the available time on finding the enemy. That is the purpose of a movement to contact. It will allow rotational units to maintain the initiative and set the tempo of battle.

Unfortunately, data collected at the JRTC shows that units spend most of their time conducting force protection tasks. A study of six rotations (three light infantry, two air assault infantry, and one airborne infantry) revealed that units spend an average of eight percent of their time conducting destruction of the enemy, 27 percent conducting area denial, 60 percent conducting force protection, and five percent collecting information.

Additionally, units spend a significant portion of the force protection time in patrol bases, not guarding key facilities. Thus, units spend more time protecting themselves than they do searching for and attacking the enemy.

Stationary units allow the enemy to gain the initiative, deciding when and where to make contact and under what terms. The enemy initiates an attack only when all the conditions are favorable; in these six rotations, the enemy initiated contact nearly 70 percent of the time. As a result, the rotational units were seldom prepared to use combined arms—indirect fires, attack aviation, armor/mechanized infantry, and close air support—in response. Rotational units-using direct fire plus one other system as the standard for combined arms—employed combined arms in only 23 percent of the contacts. This

lack of combined arms also allowed the escape of almost 75 percent of the enemy encountered. Furthermore, units maneuvered against the enemy only 21 percent of the time, another principal factor in allowing the enemy to escape. Lastly, since most of the contacts at the JRTC are infantry-against-infantry fights, the enemy causes four friendly casualties for every one he sustains. When units remain stationary, the enemy gains a tremendous advantage.

There are two primary reasons that units remain stationary so much of the time: The first is that logistics often drive maneuver. The average rifle company spends much of each day waiting for supplies, especially water. In the summer, water is often critical to continued operations. Unit logisticians fail to anticipate the resupply needs of rifle companies, and the companies seldom send logistical status reports to the logisticians. Units run out of supplies and must cease operations while waiting for emergency resupply. In addition, units often wait far too long for casualty evacuation.

The other reason units spend so much time in patrol bases is that they are waiting for missions from battalion. After the initial insertion, most battalion staffs fail to plan 24 hours ahead. Instead, they wait for the enemy to act, and then react to these events, sending rifle companies all over the battlefield without much planning or preparation. If there are no current enemy events,

companies simply wait in patrol bases for the next mission. Retaining the initiative requires thinking ahead and planning past the initial operation.

To solve the logistics problem, units need to establish a battle rhythm where the staff is able to deliver the next day's mission to the companies approximately 24 hours before execution. This keeps units from waiting for missions, and thus becoming lucrative targets for the enemy. It also allows the company commanders to complete their current operations and still have time to plan for the next day.

A useful technique is to establish a daily rhythm for the battalion commander's delivery of a fragmentary order for the next day's operations during battlefield circulation.

Anticipation and reporting are the two fixes for the supply problem. The battalion S-4 should be able to anticipate what the average rifle company needs each day. By establishing a list of standard daily requirements (water, rations, batteries, ammunition), the battalion S-4 can at least ensure that each company gets enough supplies to continue to operate, whether they have requested those supplies or not. Additionally, a daily battle rhythm of logistical resupply, such as one resupply delivery every morning or evening, would allow company commanders to include this daily resupply when planning their operations.

Even with accurate anticipation of

needs, reporting is still important. Companies must submit daily logistical status reports, with special emphasis on any supplies not included on the daily requirements list. If the S-4 is not receiving timely reports, for whatever reason-such as lack of FM communications—he must go get them in person. The support platoon leader might collect the reports during the daily logistical package deliveries. In addition, the battalion executive officer should track the daily submission of reports as well as the status of supplies for each company. His oversight of the logistics system should enable any company to continue operations.

Rotational units at the JRTC need to spend more time searching for the enemy and less time in patrol bases. Failure to do this gives the enemy a tremendous advantage. To maintain the initiative, units must anticipate and report logistical requirements and plan for operations in advance.

In short, the units that go find the enemy first will succeed.

Major Scott W. Heintzelman is a senior battalion analyst at the Joint Readiness Training Center, where he previously served as a platoon, company, and assistant operations observer-controller. He served as a platoon leader, company executive officer, and battalion and brigade staff officer in the 7th Infantry Division, and as a rifle company commander and battalion and brigade staff officer in the 25th Infantry Division. He is a 1989 graduate of Indiana University of Pennsylvania, and holds a master's degree from Louisiana State University.

INFANTRY CAREER NOTES



EXPERT INFANTRYMAN BADGE CHANGES

As the Infantry changes, so must the EIB program. The Army's Transformation program, the Infantry MOS consolidations, and emerging technologies have led the Infantry School to make some changes in the EIB test program.

The goals of the new test are to maintain the traditions, support unit mission essential task lists, use training resources wisely, and test the modern Infantry soldier's high-tech skills.

The Infantry Center asked infantry units world-wide how the EIB program could be improved, and incorporated the unit feedback into the new program.

The major changes are in the 12-mile road march, land navigation, PT test, and day and night qualification on individual weapons, which are now prerequisites for taking the EIB test. The revised program is now eight days—five training days and three testing days.

Soldiers will test on 63 different tasks at 22 sites. Some new tasks include the Javelin antiarmor system and the ASIP radio. Arm-and-hand signals will include both dismounted and mounted signals. EIB candidates must demonstrate proficiency with the AN/PSN-11 (the precise lightweight GPS receiver) under day and night conditions.

Young soldiers respect a soldier wearing the EIB as a man of accomplishment and skill. The new test ensures that the Expert Infantryman Badge will continue to represent the highest standards of professionalism.

OMPF ONLINE SAVES MONEY

Official Military Personnel files (OMPF) Online began in November 2001 for sergeants first class being considered for promotion, and is expanding to include more of the force.

Captains being considered for promotion have been able to look at their records online since 1 February 2002, and staff sergeants being considered by the June board could look at their records online as of 1 March 2002.

In its first three months, OMPF Online has already proved to be a cost-saving initiative for the Army Enlisted Records and Evaluation Center (EREC). About 10 percent of the 20,000 sergeants first class who reviewed their records online chose not to request their microfiche records. Since it costs about \$1.40 to produce a microfiche, this was a saving of \$2,800. By fiscal year 2003, EREC's goal is to eliminate the need for soldiers to request microfiche, which will save the Army a significant amount of money each year.

The goal is for the entire Army to be able to view military records online by June. New software for the complimentary feature "Field-to-File" will enable a soldier to send official military personnel documents—such as awards and Noncommissioned Officer Evaluation Reports (NCOERs)—directly from a battalion or brigade S-1 to his own OMPF at PERS-COM.

There are now 19 digital senders throughout the Army. These are difficult to manage and maintain, however, and EREC wants to enable the soldiers to send in their documents from their own computers.

BIG IMPROVEMENTS IN OFFICIAL PHOTO PROCESS

Official military photographs can now be sent digitally. And it may be just in time for thousands of NCOs otherwise eligible for promotion, but lacking photos in their files.

The Department of the Army Photograph Management Information System (DAPMIS) receives digitized, official DA photos directly from the Army's worldwide photo labs. The system is specifi-

cally designed to eliminate accountability problems with photos, such as lost, incorrect, or damaged hard-copy prints.

This initiative supports both Personnel Transformation and the Army's Knowledge Management Strategy. At the same time, this system supports the Army's routing and transfer of business and customer support applications to Army Knowledge Online (AKO), the Army Portal. The goal is to use AKO as the one-stop information site for the Army.

Until DAPMIS is fully implemented this summer, there will be a transition period during which hard-copy photos will still be printed. During a three-to-sixmonth transition period, soldiers will be given hard-copy photos to mail to PER-SCOM.

. Some personnel initially will be able to do both—view photos online and receive photos to mail in for their files. The rule of thumb is that a soldier who is given photos should turn them in.

This system eliminates trips back to the studio to review printed photos. In addition, soldiers will no longer be responsible for taking approved photos to their nearest services battalion for mailing to PERS-COM on their behalf.

A soldier's photo is automatically forwarded to the centralized data base used by Army selection boards, branch-assignment officers, soldiers, and commanders.

The soldier is given three days in which to approve the stored photo through his AKO account on the Army Portal, www.us.army.mil. The photos are part of the AKO's password-protected section for Official Military Personnel Files.

DAPMIS began in late 1999, using barcoding of hard-copy photos to help keep track of photos. In the next phase, the Army designed and validated the concept of a digitized photo-processing system. The third phase implements the system worldwide.

BOOK REVIEWS

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MacArthur and the American Century: A Reader. Edited by William M. Leary. Nebraska: University of Nebraska Press, 2001. 522 Pages. \$40.00, Softbound.

MacArthur's War: Korea and the Undoing of an American Hero. By Stanley Weintraub. Simon & Schuster, 2001. 385 Pages, Softbound. Audio tape (ISBN: 0-7435-0535-2), \$25.00. Reviewed by Colonel Cole C. Kingseed, U.S. Army, Retired.

No American general in the 20th century has generated more controversy than General of the Army Douglas A. MacArthur. In a military career spanning five decades, MacArthur was the preeminent combat general of World War I, the resourceful commander of the Southwest Pacific theater in World War II, and the enigmatic Supreme Commander for the Allied Powers in Japan at the outset of the Korean War. Following his abrupt dismissal from command by President Harry S Truman, MacArthur returned to the United States amid a tumult reminiscent of that of a Roman emperor two millennia ago. Two recent books explore the contentious general who was both reviled and deified by millions of his fellow soldiers and countrymen.

In MacArthur and the American Century, editor William M. Leary has compiled a comprehensive anthology of essays that address virtually every phase of MacArthur's remarkable career, with World War I being the notable exception. Contributors include renowned historians: Stephen Ambrose, D. Clayton James, and Russell Weigley, as well as the general himself. whose essays and speeches provide contemporary insight into the man and his times. To his credit, Leary also includes a separate section that not only places MacArthur's illustrious career in perspective, but also takes his numerous biographers to task for presenting MacArthur in an overly subjective light, virtually ignoring the general's frequent lapses into egotism and insubordination. Still, one cannot read this anthology without reaching the conclusion that Douglas MacArthur imprinted his personality, for better or worse, on both the U.S. Army and the American century.

One essay merits special scrutiny. Barton F. Bernstein of Stanford University reex-

amines American policy during the Korean War in light of new documentary evidence, and concludes that the relationship between MacArthur and Truman was far more complex than originally viewed. Given recently declassified documents concerning the Truman Administration's position bombing across the Yalu, the attitude of the Truman and Eisenhower Administrations toward atomic war in the Pacific, and the Eisenhower Administration's uneasiness about the armistice, Bernstein demands additional scholarly research into the conduct of the Korean War. Discussion concerning the use of the atomic bomb, for example, is clearly revealed in Joint Chiefs of Staff documents as early as November 1950. Bernstein also states that despite Truman's claim that he despised MacArthur long before the spring of 1951, he hesitated to remove him from command; he was deterred chiefly by his fears of provoking a political battle at home that would further aid the Republican Party in attacking the administration's unclear China policy.

In contrast to Leary's balanced assessment of MacArthur, Stanley Weintraub joins an increasing number of historians who paint a highly unflattering portrait of his controversial subject. In an attempt to remember the Korean War's first eleven months, which he dubs "MacArthur's war," Weintraub begins his study of the war with MacArthur's triumphant return to the United States following his abrupt dismissal from command by Truman, then back-pedals to the events foreshadowing North Korea's premeditated attack on its southern neighbor on 25 June 1950. The MacArthur who emerges from these pages is an egotistical field commander, unwilling to consult with the Pentagon; an indecisive general reluctant to confront bad news; and an imperial shogun, completely out of touch with the combat readiness of the troops entrusted to his command.

Like Michael Schaller's Douglas MacArthur: The Far Eastern General, Weintraub leaves no stone unturned in his attempt to discredit MacArthur. "More glorious than the Cote-de-Chatillon in 1918 or Leyte in 1944 was Inchon," which Weintraub credits as much to luck and prior con-

tingency planning as to MacArthur's alleged military genius. Particularly galling to the author is MacArthur's efforts to run his war, except for photo-opportunity flying visits, from 700 miles away in Japan.

Weintraub is equally critical of MacArthur's principal subordinates, the "unsteady" Walton Walker, commanding Eighth Army, and the "incompetent and abrasive" Ned Almond, commanding X Corps, as well as the senior Army leadership at the Joint Chiefs of Staff level. Both Chairman Omar Bradley and Army Chief of Staff J. Lawton Collins seem weak and unwilling to confront MacArthur, who had been Army chief of staff when Bradley and Collins were junior officers. Only Lieutenant General Matthew Ridgway receives high marks from Weintraub for his success in restoring Eighth Army's fighting spirit after the disaster on the Yalu and its subsequent retreat south of the 38th Parallel.

What Weintraub does do well is his analysis of MacArthur's removal from command. Giving little heed to restrictions imposed a hemisphere away, and deliberately setting himself on a collision course with the Truman Administration, MacArthur courted dismissal by "intimating to sympathetic listeners that a limited war fought to sustain a semblance of the status quo failed to justify the sacrifices" already made in the field. Such talk about ideological war was treachery in Truman's eyes and left the President no recourse but to relieve the insubordinate MacArthur.

In the final analysis, both Leary and Weintraub have provided readers with an indepth look at America's most controversial general. In some sense, the real MacArthur remains wrapped in mystery. Borrowing Lord Clarendon's description of Oliver Cromwell in his own consideration of Napoleon Bonaparte, David Chandler ponders whether "the 'Man of Destiny' was a good or evil man—or both—a 'great bad man'." Perhaps. But Napoleon indelibly marked History. The same can be said of Douglas MacArthur.

Combat Operations: Stemming the Tide: May 1965 to October 1966. By John

M. Carland. U.S. Army Center of Military History, 2000. 410 Pages. \$43.00. Reviewed by Dr. Joe P. Dunn, Converse College.

The United States Army Center of Military History produces excellent work, and this eighth volume in the Vietnam series is another outstanding contribution. The volume focuses on the first 18 months of action as the United States changed its mission from advisory to combat operations. Chronologically, it is the first of four Vietnam battle histories.

By March 1965, Communist forces were posed for a military victory. Only a major U.S. commitment could prevent it. General William Westmoreland sent in American infantry units to engage the enemy and blunt their offensive until enough troops could arrive to effect a more positive military situation in the country. The initial response to the emergency was successful. As the U.S. attempted to take the war to the enemy, search and destroy missions became the means. U.S. forces prevented the communists from massing for a major assault, demolished supply caches and base camps, disrupted infiltration into the South, and thwarted attempts to seize harvests. Despite the escalating growth of American troops during the period, however, the U.S. remained essentially on the defensive throughout 1966. Much of the American commitment was devoted to providing security to protect the building of an American infrastructure to conduct larger warfare. And the enemy maintained the ability to control the pace and intensity of combat. To a large extent, the communists decided when to engage the Americans and to what degree.

The multi-dimensional nature of the war, as both a large unit conflict and a counterinsurgency effort, demanded a complex strategy and the elusiveness of the enemy called traditional war-making doctrines into question. The helicopter literally changed the nature of ground warfare, but it had negative as well as positive impacts.

The conflict in 1965 and 1966 was Westmoreland's war. President Johnson allowed his commander full authority to develop strategy and battlefield tactics, albeit under strict geographical constraints and with limited American manpower. In the elusive quest for a means of determining success, attrition became the goal of military operations. Although a "strategy in disrepute" since World War I, Westmoreland argued that there was no alternative and that despite the horrible costs, it would prove successful. At least through 1966, Westmoreland and the rest of the command structure

believed that they had a successful formula that needed only greater tempo and mass.

Whether Westmoreland was ultimately proved wrong or whether the events of 1968 substantiated his belief is beyond the scope of this particular volume. Carland does address the question of whether search and destroy or pacification should have taken primacy when adequate manpower did not exist to seriously attempt both. In the early period, the limited and inconsistent American efforts on the pacification front were not particularly successful. The issue and the problem would continue to grow throughout the war.

An extensive literature exists on the decision process to undertake the combat role in 1965. Among the best recent studies are the works of Brian VanDeMark, H.R. McMaster, and Frederick Logeval. But for the war on the ground during this crucial period, *Stemming the Tide* is an essential source. Well researched, clearly written, and supported with exceptional pictures and combat maps, this is an extremely valuable resource.

Hitler's Traitor. Martin Bormann and the Defeat of the Reich. By Louis Kilzer. Presidio Press, 2000. 307 Pages. \$29.95.

Inside Hitler's High Command. By Geoffrey P. Megargee. University Press of Kansas, 2000. 327 Pages. Reviewed by Colonel Christopher Timmers, U.S. Army, Retired.

As one might expect, Adolf Hitler is the central character in both of these excellent studies. Louis Kilzer painstakingly establishes a convincing case that Martin Bormann, the Fuehrer's top advisor and confidant, was actually a spy working in the service of Russian intelligence. Geoffrey Megargee advances the not implausible theory that the German general staff was of the collection of military intellectuals most of us have commonly accepted. In fact, after reading these two works, one is almost moved to remark, sarcastically, that it was a miracle (and a tribute to the German fighting man) that the Reich lasted as long as it did, especially after Stalingrad.

Hitler's casual regard for intelligence security made him and his staff almost blind to the machinations of a mole, "Werther" was his code name, and ultimately brought the Reich to grief on the battlefield. Kilzer's tale of network spies operating from Switzerland, Germany, and the USSR, and feeding Russian intelligence critically important details of German high command plans and intentions (often disregarded by Stalin) is proof that fact is often stranger

than fiction. To help us understand all the players in this drama, Kilzer provides a compendium of 28 spies, networks, and abbreviations at the opening of his book. This is a needed feature as it is difficult to follow the narrative without a listing of the players who were part of this intelligence effort. At first, one cannot tell these players without a program.

The Red Army sometimes knew movement orders to German units in the field within hours of their release to German commanders. Stalin's paranoia at times prevented him from trusting these reports, and Kilzer offers the often repeated example of Stalin's mistrust of his subordinates that justified his purges: The fact that there was no evidence of a conspiracy against him was absolute proof that there was a plot to depose him. Indeed, Stalin doesn't come off much better than Hitler in terms of his inability to differentiate valid information from misinformation or propaganda. The Wehrmacht's initial successes on the Russian front, as both authors point out, was due in no small part to Stalin's liquidation (read: mass execution) of many top officers in the Soviet army during the late 1930s. Without experienced leaders and competent staff officers in the field to lead and guide Russian soldiers, the Red Army was a fruit ripe to be plucked by German forces.

While scholars have speculated on a highly placed traitor within Hitler's inner circle, Kilzer is the first to come out and identify him. His case is as compelling as it is complete. Megargee, on the other hand, also breaks new ground in a way that may dismay fans of the vaunted German General Staff. For his contention is that Hitler's generals, far from being detached intellectual soldiers who only followed the Fuehrer out of loyalty—or in some cases fear—were themselves frequently complicit in the schemes launched by the Wehrmacht that frequently ended in failure (Stalingrad comes to mind). The generals might have been hesitant in various campaigns, but had an undying faith in their soldiers, not entirely misplaced; this faith clouded their judgments, especially in regard to the fighting ability and sheer tenacity of the Russian soldier. A contempt of one's enemies can often be the precursor to defeat.

Both books are highly readable and, in publishing terms, are "page turners." Buy both, read both, and be enlightened.

With Alex at War: From the Irrawaddy to the Po, 1941-1945. By Rupert Clarke. Leo Cooper, 2000. 242 Pages. \$30.00).

Reviewed by Lieutenant Colonel Harold E. Raugh, Jr., U.S. Army, Retired.

"'General Alex' or 'The Chief,' as we all knew him," wrote Rupert Clarke about British Army General Sir Harold Alexander, "was a man in a million." To be sure, Field Marshal Earl Alexander of Tunis, as he later became known, was one of the outstanding British military commanders of the 20th century. Professional, optimistic, and self-confident, "Alex" played a significant role in virtually every theater where British troops fought during the Second World War.

Clarke served as aide-de-camp and personal assistant to Alexander from April 1941 to early 1945, and recorded in this book his interesting and insightful observations of and experiences with Alexander. In a short preface, the author chronicles the early life of Alexander from his birth in 1891 until 1941. He was commissioned in the British Army in 1911 and during World War I commanded in frontline action at every echelon from platoon to brigade. Alexander emerged from the crucible of combat with an enhanced reputation for courage, sound leadership, and imperturbability.

When Clarke reported for duty with him in April 1941, Alexander had already commanded a division in France (and the rearguard at Dunkirk) and subsequently a corps, and was serving as General Officer Commanding Southern Command. Alexander's mission was to prepare defenses to thwart a possible German invasion of England. Two months after the Japanese attack in December 1941, Alexander became Commanderin-Chief, Burma. It was virtually impossible to halt the Japanese onslaught and save Burma. Only by conducting a difficult retreat—the longest retreat in the history of the British Army-was Alexander able to save his force.

Although the defeats of Dunkirk and Burma would have ruined the career of an ordinary general, Alexander became Commander-in-Chief, Middle East, shortly after returning to England in July 1942. Fighting against Rommel, Alexander accomplished his mission of clearing North Africa of enemy forces by May 1943. Alexander then commanded the 15th Army Group during the invasion of Sicily, then became commander-in-chief of the polyglot Allied armies in Italy during the difficult advance up the well-defended peninsula. The apex of Alexander's military career was the capture of Rome on 4 June 1944, for which he received his field marshal's baton. On 12 December 1944, Alexander was appointed Supreme Commander, Mediterranean, and the following month Clarke returned to regimental duty. After the success of Alexander's Po offensive and the capture of a million German prisoners, Alexander, as narrated by Clarke, accepted the first unconditional surrender signed by the Germans on 29 April 1945.

This enthralling, easy-to-read book is lavishly illustrated, with more than 70 photographs of Alexander spread throughout the text. There are five excellent appendices, including the delightful "Alex: Family Man," which includes copies of letters Alexander wrote to his family and illustrated with drawings and cartoons.

Clarke's memoirs open a unique window, hitherto closed, on Alexander's generalship, and more importantly, on Alexander the man. The image that emerges is of a man with great inner strength, character, integrity, and concern for the welfare of his soldiers, and a superb fighting soldier.

A Youth in the Meuse-Argonne: A Memoir, 1918-1919. By William S. Triplet. Edited by Robert H. Ferrell. University of Missouri Press, 2000. 326 Pages. Reviewed by Lieutenant Colonel Albert N. Garland, U.S. Army, Retired.

Veterans of World War II and particularly those who fought in northwest Europe in 1944 and 1945 have been publishing their memoirs in seemingly ever-increasing numbers. I have a feeling that many of those veterans took their cue from Stephen Ambrose's many writings on the war in Europe.

In recent months I have read at least a half-dozen such memoirs. And with one exception, they were published by infantrymen. The main theme of all of them seemed to me to be a reiteration of that old adage: "War may be hell, but infantry combat is worse." Much gore, shrapnel decapitations, and "88s", which, to those individuals at least, was the only artillery piece the Germans had.

And so I was pleasantly surprised to receive this book for review. True, it was written by a combat infantryman, and true, the author stresses the difficulties of infantry combat. But it is not about World War II; it is about World War I. Memoirs from that war, which has gone on our list of "forgotten wars," are seldom seen today even though there has been a slight resurgence of interest in "the war to end all wars."

I have always thought our Army's lack of interest in WWI, and particularly at The Infantry School, was strange. For it was the School, after all, that published *Infantry in Battle* in May 1934 and revised it for a second edition published in September 1938.

There is a story behind this book, of course, but that is best told somewhere else. Suffice to say, George Marshall wrote in the first edition's Introduction: "This book treats of the tactics of small units as illustrated by examples drawn from the World War. It checks the ideas from peacetime instruction against the experience of battle." (*Infantry* Magazine's book, *Infantry in Vietnam*, 1967, followed the same general design used by its predecessor.) I still believe today's infantrymen could learn from the WWI doughboys.

I was quite pleased with Triplet's memoir. He served as an enlisted man (platoon sergeant) in WWI, attended West Point after the war, graduating with the class of 1924 and going into the Infantry. He had at least three tours at Benning before the outbreak of WWII, but eventually commanded an armor combat command in Europe during the closing months of the war. He retired in 1954 and died in 1994.

His memoir was readied for publication by Robert H. Ferrell, a professor emeritus of history at Indiana University in Bloomington. Ferrell discovered the memoir, which was in xeroxed form, while searching through the Army Military Institute's archives at the Army War College.

He became interested in having Triplet's manuscript published, because he believed its "literary quality was remarkable." Triplet's surviving family members (two daughters) gladly gave their permission. Ferrell decided to publish the manuscript in two parts, one covering Triplet's WWI career, the other his WWII experiences. (The second part was published in 2001 by a different university press.)

In the book under review, I found it historically sound, well written, and indicative of a sure hand at the other end of the pen. It is as much an account of an Army National Guard division (the 35th), called to active duty and struggling to find itself during a chaotic mobilization period, as it is about Triplet. Leaders were hard to come by and the author, despite his youth, (17 when he enlisted, falsifying his age). He soon found himself the platoon sergeant of the 2d Platoon, Company D, 140th Infantry Regiment, with which he remained until wounded. He returned to the company before the Armistice, and remained with it until it returned to the States in 1919.

Triplet learned much about the U.S. soldier, the men he led, his weapons, and above all else, leadership qualities, sometimes the hard way. He had an uneasy relationship with his company officers but worked his way through these times. For me, person-

ally, I was happy not to have to read page after page of blood, guts, and tears—and 88s.

I put the book down, impressed with the similarities between my WWII company's experiences and those endured by Triplet's unit. He had one problem we were happy not to have faced—poison gas. He worried Hitler would turn loose everything he had left in order to do as much damage as he could to the Allied armies on both fronts.

The book contains a good introductory note and an equally good bibliographical essay. It has footnotes, although these are few in number and used sparingly and effectively, and a useful index.

This memoir should go a long way toward rekindling our interest in WWI and in one of our Army's all-time major combat engagements.

Broken Soldiers. By Raymond B. Lech. University of Illinois Press, 2000. 330 Pages. \$27.95. Lieutenant Colonel Michael F. Davino, U.S. Army.

The conduct of American prisoners of war in Korea left much to be desired. Shortly after the conclusion of the Korean War, the United States adopted the Code of Conduct to make it clear exactly what was expected of servicemen captured by the enemy in some future conflict. This was necessary because, unlike previous enemies, the Chinese and the North Koreans continued their war effort in the prison camps. Not satisfied with simply mistreating American prisoners, this new type of enemy relentlessly sought to indoctrinate them on the benefits of the Communist system while simultaneously encouraging them to commit numerous disloyal acts and undermine the U.S. war effort.

Broken Soldiers examines this disturbing episode of American military history in great detail. Using the transcripts from the courts martial of the 14 soldiers tried for collaboration and other crimes, Raymond Lech covers the comprehensive program of mistreatment these men received from their captors as well as the way their own government dealt with them when they returned from captivity.

It is not a pleasant story. Tortured mentally and physically by sadistic enemies, hundreds of American servicemen collaborated with the enemy and mistreated their fellow prisoners. Discipline broke down in the camps as many leaders failed to exercise their authority. Even more puzzling is that 21 Americans chose to refuse repatriation and remain with their Chinese captors.

Lech also details the seemingly arbitrary

treatment the prisoners received on their return to the United States. The Air Force centralized the decision-making process and handled all cases administratively. Army, on the other hand, left the court martial decision to the three-star commanders of the armies in the United States. This resulted in significantly different treatment for the accused soldiers. Many soldiers were discharged before any disciplinary action was possible and, incredibly, the 21 turncoats who eventually returned to the United States escaped prosecution on a technicality. The Navy conducted a single court of inquiry to examine the conduct of one Marine Corps aviator.

This book presents an excellent account of the behavior of U.S. soldiers under extremely trying conditions and of their subsequent treatment by their own government. Lech based his research on more than 60,000 pages of official documents produced mainly by the Army and the Navy. Because of what the author characterizes as a lack of cooperation from the Air Force, he was not able to examine the conduct of airmen in the same detail as the other services. Additionally, he specifically chose not to conduct any interviews to supplement the official record. It would have been interesting to find out what happened to these exprisoners later in life.

For readers who are interested in the Korean War and its aftermath, *Broken Soldiers* is an excellent book. It also can provide some valuable insights to other readers on how the Chinese and North Koreans chose to treat American prisoners.

RECENT AND RECOMMENDED

Keystone: The American Occupation of Okinawa and U.S.-Japanese Relations. Foreign Relations and the Presidency Series. By Nicholas Evan Sarantakes. 287 Pages. \$34.95.

An Attack on Duffer's Downtown. By Russell W. Glenn. Rand Corporation, 2001. A booklet on the challenges of urban combat. 38 Pages. Free for military personnel; \$12.00 for others. To order, call 1-877-584-8642; FAX: 310-451-7002; or e-mail: order@rand.org.

Hidden Heroism: Black Soldiers in America's Wars, from Colonial Times to Today. By Robert B. Edgerton. Westview Press, 2001. 296 Pages. \$25.00.

Through Ordinary Eyes: The Civil War Correspondence of Rufus Robbins, Private, 7th Regiment, Massachusetts Volunteers. Edited by Ella Jane Bruen and Brian M. Fitzgibbons. Praeger, 2000. 248 Pages. \$39.95.

Leadership for NCOs. By J.D. Pendry, Command Sergeant Major, USA Retired. Presidio, 2000. 256 Pages. \$17.95, Softbound.

The Infantry Soldier's Handbook: The Classic World War I Training Manual. By Major William H. Waldron. Lyons Press, 2001. 256

Pages, photos, illustrations. \$12.95, Softbound.

Americans Behind the Barbed Wire: World War Two Inside a German Prison Camp. By J. Frank Diggs. Vandamere Press (P.O. Box 5243, Arlington, VA 22205), 2000. 176 Pages, \$24.95.

Strike and Hold: A Memoir of the 82nd Airborne in World War II. By T. Moffatt Burriss. Brassey's, 2000. 218 Pages. \$24.95.

The Korean War. By Peter Lowe. St. Martin's Press, 2000. 147 Pages. \$15.95, Softbound.

The Korean War. Volume 1. By the Korean Institute of Military History. University of Nebraska Press, 2000. 941 Pages, photos, maps. \$29.95, Softbound.

The Korean War. Volume 2. By the Korean Institute of Military History. University of Nebraska Press, 2001. 821 Pages, photos, maps, charts. \$39.95, Softbound.

Land of Tears: In Vietnam 1967-1968. Harry C. Graham. Burd Street Press, 2001. 109 Pages. \$7.95, Softbound.

On Seas of Glory: Heroic Men, Great Ships, and Epic Battles of the American Navy. By John Lehman. The Free Press, 2001. 436 Pages. \$35.00.

German Boy: A Child in War. By Wolfgang W.E. Samuel. Broadway Books, 2001. 445 Pages. \$15.95, Softbound.

An Uncertain Trumpet: The Evolution of U.S. Army Infantry Doctrine, 1919-1941. By Kenneth Finlayson. Greenwood Press, 2001. 208 Pages. \$62.50.

A Command Post at War: First Army Headquarters in Europe, 1943-1945. By David W. Hogan, Jr. Center of Military History, 2001. 360 Pages. \$40.00, Softbound.

Yanks: The Epic Story of the American Army in World War I. By John S.D. Eisenhower. The Free Press, 2001. 252 Pages. \$26.00.

Falcon Brigade: Combat and Command in Somalia and Haiti. By Col. Lawrence E. Casper (U.S. Army-Ret.) Lynne Rienner, 2001. 277 Pages. \$35.00, Hardcover.

Desert War: The North African Campaign, 1940-1943. By Alan Moorehead. Originally published in U.S. as March to Tunis, by Harper & Row, 1965. Penguin, 2001. 653 Pages. \$19.00, Softbound.

Enemy at the Gates: The Battle for Stalingrad. By William Craig. Originally published by Readers Digest Press, 1973. Penguin, 2001. \$14.00, Softbound.

Long Day's Journey Into War: Pearl Harbor and a World At War—December 7. 1941. By Stanley Weintraub. First published in 1991. The Lyons Press, 2001. 736 Pages. \$19.95, Softbound.

The Navy Times Book of Submarines: A Political, Social, and Mililtary History. By Brayton Harris. Berkley, 2001. 405 Pages. \$15.00, Softbound.

Burnside's Bridge: Antietam. Battleground America Series. By John Cannan. Leo Cooper, 2001. 155 Pages. \$16.95, Softbound.

Flags of Our Fathers. By James Bradley with Ron Powers. Bantam, 2001. 384 Pages. \$12.95, Softbound.

Body of Secrets: Anatomy of the National Security Agency From the Cold War Through the Dawn of a New Century. By James Bamford. Doubleday, 2001. 721 Pages. \$26.95

War and Our World. By John Keegan. Vintage Books, 2001. Originally published 1998. 102 Pages. \$10.00, Softbound.

SOLUTION



Tactical Decision Game #1-01

Assumptions:

Hill is rocky and devoid of vegetation.
We will get both 105 & 81mm priorities of

Must get a sizeable element west of the hilltop to close the range so I can get effects on the enemy and pass the remaining elements in the battalion/brigade.

FRAGO follows:

Enemy contact with 2 machineguns south of CP2. Enemy crew served weapon sighted west of CP1. Dug-in enemy, estimated at platoon strength, vicinity north of CP3. C Co receiving indirect at the rear of the battalion formation.

Company mission—no change.

My intent—Retain control of Hill 122, destroy the crew-served weapons, suppress OBJ CAT, and pass the battalion (–) along AXIS WHITE.

Mortars—Immediate suppression south of CP2, 2 crew-served weapons in the open.

1st Plt—Suppress enemy machineguns south of CP2 in order to prevent direct fires on 3rd platoon. 60mm priority of fire. 81mm priority of fire once 3rd in SBF 3.

2nd Plt—Move to the spur northeast of CP 2 and occupy SBF 2. Suppress enemy between CPs 3 and 1 in order to facilitate movement of 3rd platoon along AXIS DOG. 105 & 81mm priorities of fire. O/O, guide B Co along AXIS WHITE.

3rd Plt (ME)—O/O, move west past the crest of Hill 122 and establish SBF 3. Fix the enemy on OBJ CAT in order to pass the battalion (–) along AXIS WHITE. 105mm priorities of fire once in SBF 3.

Fires:

FA—Disrupt dug-in enemy on OBJ CAT so that they can't place effective direct fires on 3rd platoon.

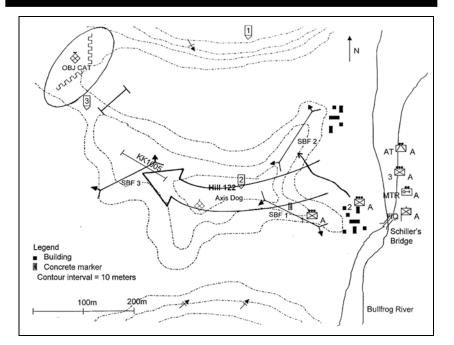
Mortar (81mm)—Obscure 3rd platoon's movement to SBF 3 from the enemy on CAT.

Mortar (60mm)—Destroy crew-served weapons south of CP 2.

AT—From SBF 2, destroy crew-served weapons position/bunkers to facilitate 3rd platoon's movement to SBF 3.

XO-Move with 2nd.

1SG—Establish the company CCP vicinity 2nd platoon's current location.



Rationale:

In order to give 1st platoon time to seek better cover and start massing fires on the machineguns, it was necessary to place some immediate fires on the two crew-served weapons to the south with my own co mortars. I moved 2nd platoon into SBF 2 in order to set the conditions for my main effort's movement west. Accurate small arms fires on the enemy will be difficult, due to the distance, but the crew-served weapons can still fire effectively. Furthermore, I'll engage one or more bunkers with Javelin in order to allow my main effort to close the distance without being under fire from the dug-in enemy. The 2nd platoon would have the time to work the FA and BN mortars onto CAT, and any other crew-served positions to the north as well. This is necessary to set the conditions for 3rd platoon's move west along AXIS DOG.

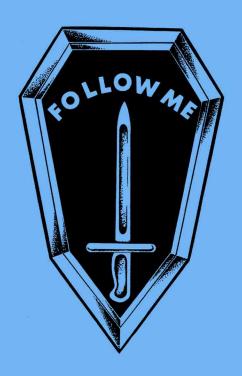
I saw it decisive to get an element on the western side of the hilltop to place effective fires on CAT so that the battalion could still maneuver. Simply seizing the hill top on 122 is not enough to accomplish the purpose the battalion commander assigned me. I can foresee a need for Class V resupply and anticipate enemy indirect fires on my positions (especially 2nd) given how long it will take to pass the brigade, let alone the remainder of the battalion.

Although time is critical, I would call the battalion commander and recommend to him that once I get 3rd platoon set in SBF, I could pass the next company in line (assuming it was B Co) to destroy the enemy on CAT. The other concern I had was the two enemy machineguns to the south. I'm sure I could destroy the crews for them, but it is likely that they are supported by infantry. If I encountered more enemy to the south, I would not have had 3rd platoon move west of the crest of the hill, but to orient more to the south to pass the battalion. The other option I considered was pulling a squad from 2nd to form a company reserve, since the range from SBT 2 to OBJ CAT would reduce the effectiveness of small arms fire. My first planning priority would be reinforcing 1st in the south, and my second would be reinforcing 3rd in SBF 3.

Even with the presence of the enemy, I still saw myself as terrain oriented, given the commander's guidance. I tried to focus on the necessity of getting to vantage points where I could, as a minimum, suppress the enemy to permit the battalion to pass. Naturally, these orders would need to be amended after things started to develop. They were intended to get us through the initial contact and get arrayed to start massing the effects of our combat power to achieve our purpose.

COMING ARTICLES:

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