PB 7-98-2

Infantry

May-August 1998

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

By Order of the Secretary of the Army:

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General, United States Army
Chief of Staff

Official:

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Administrative Assistant to the Secretary of the Army
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Infantry

May-August 1998 **Volume 88, Number 2**

COVER: A U.S. Army machinegun crew keeps watch over a partially destroyed bridge in Korea, in 1951, as part of a concerted effort to deny its use to dismounted Chinese Communist infantry.

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Commandant's Note

MAJOR GENERAL CARL F. ERNST Chief of Infantry

Infantry at the Crossroads

This century began with Infantrymen serving as the most significant statement of American policy around the world, keeping uneasy peace in numerous locales at home and abroad, fighting low-intensity conflict in the Philippines, and engaging in coalition warfare—at times under MOUT conditions—during the Boxer Rebellion. As we prepare to enter the next century, the nation continues to call on her Infantry. Grunts still shoulder the responsibility for much of the Army's mission and will continue to do so for the immediate future. Though much has changed between scaling the walls of Peking to patrolling the streets of war torn Balkan towns, our culture remains timeless. We are the keepers of the Warrior Ethos. Our disposition and our very character must embody the mental and physical toughness required to dominate the personal and brutal close fight. This means the Infantry, more than any other branch, finds its focus and fundamental values completely on the individual Soldier. As we enter the third millennium, still at the tip of the bayonet, I believe we are at a crossroads. Together, we have some decisions to make about where to take the Infantry while staying true to our culture.

The ongoing reorganization efforts for the heavy force and the upcoming experiments to find the right modernization plan for the light forces certainly raise questions in all of us, and we want to be convinced we are doing the right thing for our Army. The complexity of modernization and the hectic pace of current operations could cloud our choices and cause us to take the wrong road. As simple as it sounds, I am convinced that keeping a steady eye on fundamentals and on our reason for being—the individual Soldier—will guide us in our decisions. We here at the Infantry Center and School want to include you in these decisions on key issues. I would like to use this Commandant's Note to outline some of these issues for which we ask and value your input.

What is it we expect of the Infantryman of the future? We want a physically and mentally tough soldier who can ruck or ride anything to the fight and who, when he arrives, has an expected level of expertise in certain tasks and an expected level of expertise in the effective use of any number of common weapons and weapon systems. He is a Soldier who can dominate the close fight under a variety of conditions in any environment. To achieve this expectation, we have some issues to tackle.

Again, back to the fundamentals. The platoon is the basic building block of our force. The additional structure won in the reorganization of the heavy force, the 3x9 platoon, finally brings a robust and resilient rifle or maneuver element to heavy outfits. Now all Infantry platoons are organized with three squads plus an antitank capability and the ability to lay down a base of fire. The only differences among the five types of Infantry are in their mode of transport and the composition of their base of fire. The heavy platoon's base of fire are its Bradley fighting vehicles (BFVs). Airborne, Air Assault, Light, and Ranger Infantry, on the other hand, rely on weapons squads or machinegun teams for their base of fire. To be successful, our platoons must train with their three-squad maneuver element and base-of-fire element together, as a system. To this end, we offer options for the revision of training emphasis and doctrinal terminology. These options will be ex-

panded for the heavy force in an article in the next issue of Infantry and for the light force in the subsequent issue. I urge you to read these articles and tell us what you think.

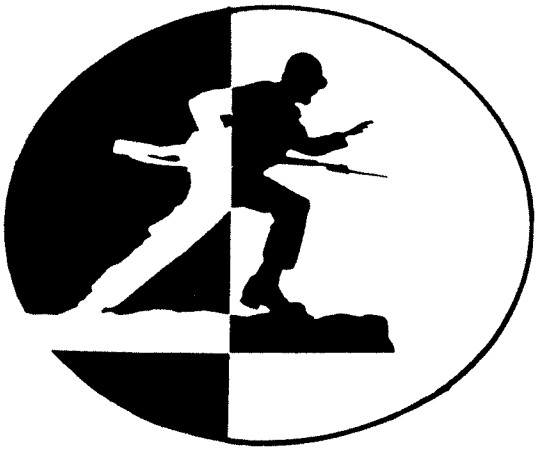
Manning the platoon has always been a challenge. The percent of fill, the diversion of 11-series Soldiers to perform duties of unassigned low-density MOSs, and a variety of other reasons contribute to unmanned squads. Our Army currently has no forcing function to drive the manning of these squads. Vehicles and key weapons are crewed, low-density positions are filled, and POL trucks are manned, all with Grunts, but the maneuver elements remain weak, with essentially no tough incentive to reverse the process. Recognizing the needs of the force and keeping our eye on the horizon as we move toward the expectations of that future Infantryman, we have proposed redefining our readiness requirements in terms of training frequency for certain critical tasks and add teeth to readiness reporting for squad strength. What is the best way to define requirements and measure true readiness? No doubt a tough issue, but one we should take on. We would value your suggestions on this topic.

A first step in building this future Infantryman and developing his NCO leadership would be the convergence of the 11-series MOS. Consider no Bravo, Mike, or Hotel identifier for soldiers in the rank of Sergeant (E-5) and below. For Private through Sergeant, 72 percent of the Infantry force, every man would be a rifle Infantryman, potentially capable of trained proficiency in light and medium machineguns and light, medium, and heavy antiarmor weapons. It would open up tremendous assignment opportunities and eliminate promotion disparity. It also recognizes that our MOS structure is not robust enough due to downsizing. A Soldier, in his first six years of service, could conceivably go from Fort Drum, New York, to Germany, or from Fort Hood, Texas, to Airborne School at Fort Benning and volunteer for assignment to the 82d Airborne Division. We are considering 11-C Soldiers exempt from this initiative because of their particularly unique skill requirements and the fact they can now be assigned to all five types of Infantry.

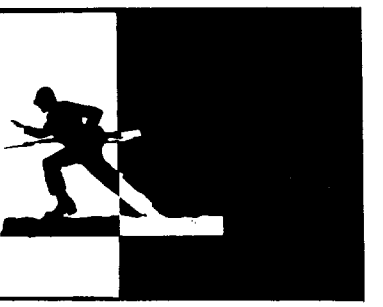
One option we are looking at closely would then have promotable sergeants entering the Basic NCO Course requesting a specific track—heavy or light—with follow-on assignments to that track for their staff sergeant through sergeant first class years. The strength of the force would remain with specialized NCO expertise in those critical positions of squad leader, Bradley commander, and platoon sergeant and key positions such as jumpmaster and master gunner. Those NCOs selected for master sergeant would then once again be eligible for assignment to any type of unit, assuming that they had experience in it.

Do not think for a moment we are trying to make "generic" Infantry. Each of the five types of Infantry, by virtue of their entry means or mobility, brings unique capabilities to the battlefield. It is actually a step back to a time not too long ago when all Infantrymen were riflemen first and 11Bs could be mechanized or one or more of the lighter types. But at squad level, in the close fight, there is commonality of purpose, requirements, and now structure. The MOS convergence discussion has been ongoing for well over five years, and now is the time to make the decision. I will put more details of this proposal in a message to commanders, and again, I ask for your input.

Any good Grunt knows a crossroads is a danger area. We approach this one with the same way a prudent and thoughtful Infantryman would: with reliance on our experience, training, a fair read of what is ahead, and, most importantly, our fellow Infantrymen, for the best way to cross. We want to decide on these key issues with some degree of consensus from the field, because the burden of implementing any decision will rest on you. We look forward to hearing from you over the coming months.



INFANTRY LETTERS



RESTORE THE BALANCE

I want to comment on Lieutenant Colonel Martin N. Stanton's article, "The Javelin and BFV Infantry" (*Infantry*, January-April 1998).

I agree with his assessment that BFV infantry is too overloaded with heavy weapons, but I disagree with his solution of creating a battalion-level Javelin platoon. I suggest that the real solution is to have fewer infantrymen mounted on BFVs and more mounted on APCs to restore balance to the mechanized infantry battalion.

Combined arms is a proven concept and needs no debate. But with BFVs we combined the arms at too low an echelon. A BFV is not so much a squad carrier as it is a light tank with a stowed security element. The BFV and its infantry are too close to be mutually supporting. Instead, they form a single combined target.

If you want more infantry in the mechanized battalion, bring back the APC and keep fewer BFVs, to serve as fire support systems. I propose one-third BFVs and two-thirds APCs. Whether this mix is at company level, battalion level, or higher really doesn't matter, and you can always task organize as needed. The key is to get infantrymen out of their vehicles, away from the excess crew-served weapons, and put them back on the ground where they are needed.

There is a precedent for this move:

Early World War II experience revealed that armor divisions had far too many tanks and far too few infantrymen. The solution was a division with three tank, three infantry, and three artillery battalions organized into two (later three) "combat commands" (later brigades).

Likewise, World War II tank destroyer (TD) battalions were conceived under a flawed doctrine that could not be executed, but they were far too potent to ignore. As combat continued, TDs were used more and more as infantry-accompanying assault guns, a role that proved successful.

After World War II, when TDs were replaced by tanks entirely, infantry regiments had tank companies (standard tanks) and cannon companies (tanks with 105mm howitzers). Likewise, the infantry division had an organic tank battalion. Altogether, the infantry division had almost as many tanks as an armored division, but they were distributed throughout the regiments where they could most effectively support the infantry battalions.

We must restore mechanized battalions to the infantry role, and use the BFV as an infantry support weapon (assault gun) to balance the combined arms team.

CHESTER A. KOJRO
LTC, Armor, USAR
Rolla, Missouri

13-MAN RIFLE SQUAD

I was pleased to see the letter on the 13-man rifle squad (*Infantry*, July-December 1997, page 3).

When I was a squad leader in the 511th Parachute Infantry, 11th Airborne Division, in Japan in 1948, our rifle squads consisted of 13 men. The squad was broken down (as best I remember) into three elements, Able, Baker, and Charlie. The squad leader was #1. The Able team (#2 and 3) acted as scouts when the squad was on the point and as flank guards when the squad occupied the platoon flank. Baker team (#4, 5, and 6) was the fire support team, consisting of an M1919A6 machinegun, with gunner, assistant gunner, and ammunition bearer. Machineguns were sometimes supplemented by two Browning automatic rifles. Charlie team (#7-13) was the maneuver element, directed by the assistant squad leader. The 4th Squad was a six-man 60mm mortar squad that was in direct support of the platoon but could be pulled back to be in direct support of the company. Upon contact, Baker team joined Able as a base of fire, under the squad leader. Charlie, under the assistant squad leader, conducted the maneuver. One or two squads could be designated the platoon base of fire or the maneuver element, as the situation dictated.

Later, during the Korean War we often heard someone say, "Let's go back to the 13-man squad." While serving in Special Forces as a civilian irregular defense group company commander early in the Vietnam War, I juggled the TO&Es and reorganized my rifle squads along these lines. Again they were effective.

I can clearly remember returning to Camp Campbell, Kentucky, from Japan in 1949 and reorganizing into the new airborne regiment with its nine-man squad. When asked why nine men, a fellow squad leader who had fought in World War II replied, "Somebody who has never been a squad leader decided nine men was the most one man can lead, that's why."

As a range officer at the MPRC in Korea, I now see the understrength squads training daily and think how nice it would be to have the old 13-man squads back, where a few missing members would not affect the mission.

JASON T. WOODWORTH

WORST DEFEAT

I am writing in reference to a statement in "From the Editor" in your July-December 1997 issue: General Custer's defeat was *not* the U.S. Army's worst defeat in Indian warfare

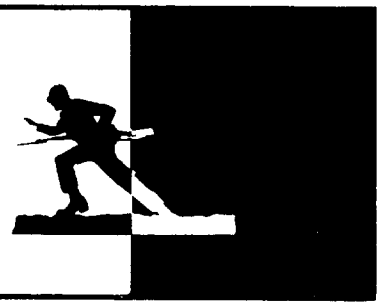
Major General Arthur St. Clair lost 657 killed and 271 wounded out of approximately 1,400 men in a battle on 4 November 1791. That battle took place on the Wabash River, just east of what is now the Indiana--Ohio border. This defeat is magnified by the fact that most of the entire U.S. Army was involved in the battle.

DAVID B. LEBER
MSG, U.S. Army Retired
Conley, Georgia

EDITOR'S NOTE: You are absolutely correct. While the loss of Custer's command may be the best-known U.S. Army defeat at the hands of the Indians, General St. Clair's was far greater, both in terms of the losses suffered and in the involvement of a greater percentage of the then-extant U.S. Army.

Thanks for keeping me honest!

INFANTRY NEWS



THE STANDARDS IN TRAINING Commission (STRAC) Council of Colonels met at Fort Eustice, Virginia, in October 1998. At that meeting, U.S. Army Infantry School representatives presented several issues:

60mm Mortar. The 60mm STRAC table currently authorizes short range training rounds (SRTRs) to be substituted for high explosive (HE) rounds in both external evaluation (EXEVAL) live fire training and EXEVAL ARTEP live fire events. The suggested corrective measure of issuing an additional 50 percent of the presently authorized SRTRs to compensate for HE shortages authorized in the 60mm STRAC table was not acceptable to the Infantry School. The School has requested that the Department of the Army initiate an immediate contract to relieve the current shortage of 60mm HE ammunition.

120mm Mortar. Shortages of 120mm training ammunition have been reported throughout the force. The use of the M303 insert firing the 81mm SRTR has been the alternative to 120mm HE for training. This problem has been corrected with the immediate authorization of 31 additional rounds of HE until the M931 full range training round (FRTR) becomes available in January 1999. This will alleviate the current "extra high risk" program under which the field has been operating since 1992.

M249 Machinegun. Currently, the M249 is being fielded as both an automatic rifle and a light machinegun (LMG) but has been assigned only one line item number (LIN). This has resulted in considerable confusion and additional worldwide shortages of 5.56mm linked ammunition to support the M249 in the LMG role. The Department of the Army has asked that a new LIN be assigned to the M249 LMG to make tracking and resourcing easier.

M203 Grenade Launcher. Because of the shortage of M203 40mm training practice (TP) ammunition, the only M203 gunners authorized to qualify are those entering Division Ready Brigade status, or deploying. All other gunner qualification requirements will be waived through September 1999. Training and Doctrine Command units (including Infantry) will continue to be allocated 40mm TP ammunition based on availability.

The Infantry School point of contact is Mr. Ron Martere, Systems Division, Directorate of Training, at (706) 545-3847; DSN 835-3847.

SOLDIER ENHANCEMENT PROGRAM (SEP) proposals are submitted each year by the TRADOC System Manager-Soldier. The executive council meets in February to select SEP new starts for FY 00 from 129 submissions. The new start proposals submitted in August 1999 will be for FY 2001.

An SEP candidate must meet the following criteria:

- Be an item of equipment that is worn, carried, or consumed by the soldier for his or her individual use in a tactical environment.
- Be commercially available (off-the-shelf with little or no modification for field military use).
- Satisfy an operational need or battlefield deficiency.

Any item that makes the soldier more effective or efficient on the battlefield—reduces his load (in either weight or bulk) or enhances lethality, survivability, command and control, sustainment, mobility, safety, training, or quality of life—or if soldiers are already spending their own money to buy it, may well be a strong SEP candidate.

During the February 1998 Annual SEP review, the executive council approved the following 13 programs as Fiscal Year 1999 new starts:

- **40mm (M203) improved munitions.**
- **M240 MG dismount kit.**
- **Medium sniper rifle system.**
- **Improved entrenching tool.**
- **Stab protective body armor.**
- **Individual camouflage system.**
- **Land mine probe.**
- **Thermal camouflage face paint.**
- **Improved pistol holster/harness for soldiers.**
- **Cold weather fuel-handler's glove.**
- **Tactical search/inspection mirrors.**
- **Low-cost absorbent/moisture transfer undershirts.**
- **Individual riot control agent neutralizer.**

Along with the FY 99 new starts the following programs are in progress and will continue into the next year:

- **Fighting position revetment.**
- **Weapon flashlight mount.**
- **Boresights for aiming lights and thermal systems.**
- **12-gauge non-lethal point and crowd control.**
- **IR illumination hand grenade.**
- **40mm high-velocity canister cartridge.**
- **Long-range sniper rifle.**
- **12-gauge breaching round.**
- **M203 enhanced fire control system.**
- **Tactical cartridge for long-range sniper rifle.**
- **Lightweight fragmentation hand grenade.**
- **Short-barrel M249 squad automatic weapon.**
- **Lightweight low-profile voice amplifier.**
- **Micro rappel system.**
- **Protective gloves.**
- **Improved combat shelter.**
- **Canteen insert water purifier.**
- **Multi-purpose cart.**
- **Blast protective boots.**

In addition to these new starts, there were six programs that completed research, development, test, and evaluation phases during FY 97:

- **Modular weapon system.**
- **Small-unit shower.**
- **Improved personal flotation device.**
- **Shin/knee guards for riot control.**
- **M4 improved buttstock.**
- **Blacklight.**

Nine additional programs are ex-

pected to conclude soon, and fielding should begin in a few months:

- **Stabilized binoculars.**
- **Soldier intercom.**
- **Compression sack.**
- **Combat medic vest.**
- **Anti-reflection device.**
- **Equipment belt extender.**
- **Knee and elbow pads.**
- **Ballistic shin guards.**
- **Ballistic/nonballistic face and body shields.**

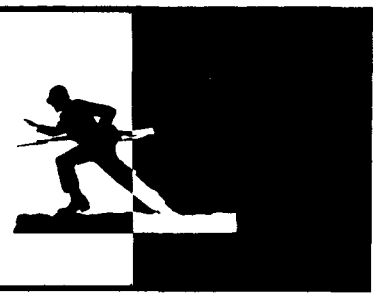
Anyone who has an idea for SEP should understand that it is not an incentive award program. No monetary awards are given for proposals that are adopted for use and result in a cost saving to the Government.

A form for use in submitting SEP proposals may be requested from TRADOC System Manager-Soldier, ATTN: ATZB-TS, Fort Benning, GA 31905-5000; telephone (706) 545-1189 or DSN 835-1189; FAX (706) 545-1377 (DSN 835-1377). Or E-mail: suttonk@benning.army.mil.

THE FOLLOWING TABLE offers a complete update on the Infantry School's field manuals and training circulars, their proponent departments or units, and their current revision and publication schedules.

PUB NUMBER	PUBLICATION TITLE	USAIS PROPONENT	PUB DATE	CHANGE DATE	PUB STATUS	ACTION PENDING	EXPECTED PUB DATE
FM 21-150	COMBATIVES	RANGER TNG BDE	9/30/92		CURRENT	NONE	
FM 21-18	FOOT MARCHES	CATD	6/1/90		CURRENT	NONE	
FM 21-20	PHYSICAL FITNESS TRAINING	PHYS FIT SCHOOL	9/30/92	10/1/98	CURRENT	NONE	
FM 21-26	MAP READING & LAND NAVIGATION	2-29TH INF REGT	7/5/93		UNDER REVISION	CHANGE 1	1Q00
FM 21-60	VISUAL SIGNALS	CATD	9/30/87		CURRENT	NONE	
FM 21-75	COMBAT SKILLS OF THE SOLDIER	CATD	8/3/84		WAITING REVISION	DIGITAL VERSION	
FM 22-5	DRILL & CEREMONIES	CATD	12/8/86		WAITING REVISION	DIGITAL VERSION	
FM 22-6	GUARD DUTY	CATD	9/17/71	1/15/75	CURRENT	NONE	
FM 23-1	BFV GUNNERY	1-29TH INF REGT	3/1/96		UNDER REVISION	CHANGE 2	4Q00
FM 23-10	SNIPER TRAINING AND EMPLOYMENT	2-29TH INF REGT	8/17/94		UNDER REVISION	CHANGE 1	3Q99
FM 23-11	90 MM RECOILLESS RIFLE	2-29TH INF REGT	7/6/65		CURRENT	NONE	
FM 23-14	SQUAD AUTOMATIC WEAPON	2-29TH INF REGT	1/26/94		CURRENT	NONE	
FM 23-23	AP MINE, CLAYMORE	2-29TH INF REGT	1/6/66		CURRENT	NONE	
FM 23-24	DRAGON MISSILE SYSTEM	2-29TH INF REGT	4/3/90		UNDER REVISION	REVISION	30 JUN 99
FM 23-25	LIGHT AT WEAPONS	2-29TH INF REGT	8/17/94		CURRENT	NONE	
FM 23-27	MK 19 40 MM GRENADE MG	2-29TH INF REGT	12/27/88		UNDER REVISION	REVISION	31 MAR 99
FM 23-30	GRENADES & PYROTECHNICS	2-29TH INF REGT	12/27/88		UNDER REVISION	REVISION	30 JUN 99
FM 23-31	M203 GRENADE LAUNCHER	2-29TH INF REGT	9/20/94		CURRENT	NONE	
FM 23-34	TOW ANTITANK MISSILE SYSTEM	2-29TH INF REGT	8/17/94		CURRENT	NONE	
FM 23-35	PISTOLS & REVOLVERS	2-29TH INF REGT	10/3/88		CURRENT	NONE	
FM 23-65	BROWNING MG, M2, .50 CAL	2-29TH INF REGT	6/19/91		UNDER REVISION	REVISION	30 JUN 99
FM 23-67	MACHINE GUN, M60	2-29TH INF REGT	2/29/84	3/17/87	CURRENT	NONE	
FM 23-68	MEDIUM MACHINE GUNS	2-29TH INF REGT			NEW		31 DEC 00
FM 23-9	M16 RIFLE MARKSMANSHIP	2-29TH INF REGT	3/7/89		UNDER REVISION	REVISION	31 MAR 99
FM 23-90	MORTARS	2-29TH INF REGT	9/19/90		UNDER REVISION	REVISION	31 DEC 98
FM 23-91	MORTAR GUNNERY	2-29TH INF REGT	12/6/91		UNDER REVISION	REVISION	31 DEC 98
FM 23-999A	LOSAT ANTITANK SYSTEM	2-29TH INF REGT			NEW	START APR 99	
FM 23-999B	JAVELIN ANTITANK MISSILE SYSTEM	2-29TH INF REGT			NEW		30 JUN 00
FM 23-999C	MULTIPURPOSE INDIVIDUAL MUNITION	2-29TH INF REGT			NEW	START FEB 00	
FM 57-38	PATHFINDER OPERATIONS	1-507TH PARA REGT	4/9/93		CURRENT	NONE	
FM 57-220	INDIVIDUAL PARACHUTING TECHNIQUES	1-507TH PARA REGT	8/19/96		WAITING REVISION	DIGITAL VERSION	
FM 7-10	THE INFANTRY RIFLE COMPANY	CATD	12/14/90		UNDER REVISION	CHANGE 1	1Q00
FM 7-20	THE INFANTRY BATTALION	CATD	4/6/92		CURRENT	NONE	
FM 7-30	THE INFANTRY BRIGADE	CATD	10/3/95		CURRENT	NONE	
FM 7-7	MECH INFANTRY PLATOON & SQUAD (M113)	CATD	3/15/85		CURRENT	NONE	
FM 7-7J	MECH INFANTRY PLATOON & SQUAD (BFV)	CATD	5/7/93		UNDER REVISION	REVISION	3Q00
FM 7-8	INFANTRY PLATOON & SQUAD	CATD	4/22/92		CURRENT	NONE	
FM 7-85	RANGER UNIT OPERATIONS	CATD	6/9/87		WAITING REVISION	DIGITAL VERSION	
FM 7-90	TACTICAL EMPLOYMENT OF MORTARS	CATD	10/9/92		UNDER REVISION	CHANGE 1	1Q00
FM 7-91	TACTICAL EMPLOY OF ANTITANK UNITS	CATD	9/30/87		UNDER REVISION	REVISION	1Q00
FM 7-92	THE INFANTRY RECONNAISSANCE PLATOON	CATD	12/23/92		UNDER REVISION	REVISION	1Q00
FM 7-93	LRSU OPERATIONS	RANGER TNG BDE	10/3/95		UNDER REVISION	REVISION	2Q00
FM 7-98	OPERATIONS IN LOW INTENSITY CONFLICT	CATD	10/19/92		UNDER REVISION	REVISION	2Q99
FM 71-2	TANK & MECH INFANTRY BN TASK FORCE	CATD	9/27/88	8/17/94	UNDER REVISION	REVISION	2Q99
FM 90-10-1	COMBAT IN BUILT-UP AREAS	CATD	5/12/93	10/3/95	UNDER REVISION	CHANGE 2	2Q99
FM 90-26	AIRBORNE OPERATIONS	CATD	12/18/90		CURRENT	NONE	
FM 90-4	AIR ASSAULT OPERATIONS	CATD	3/16/87		UNDER REVISION	REVISION	2Q99
FM 90-5	JUNGLE OPERATIONS	CATD	8/16/82		CURRENT	NONE	
FM 90-8	COUNTER GUERRILLA OPERATIONS	CATD	8/29/86		CURRENT	NONE	
TC 21-21	WATER SURVIVAL	PHYS FIT SCHOOL	6/30/91		CURRENT	NONE	
TC 21-24	RAPPELLING	RANGER TNG BDE	9/10/97		CURRENT	NONE	
TC 21-3	COLD WEATHER OPERATIONS	CATD	3/17/86		WAITING REVISION	NONE	
TC 23-11	STARLIGHT SCOPE	2-29TH INF REGT	11/17/66		CURRENT	NONE	
TC 23-13	LARGE NIGHT VISION SIGHT	2-29TH INF REGT	1/29/67		CURRENT	NONE	
TC 23-18	NIGHT OBSERVATION DEVICE	2-29TH INF REGT	8/24/67		CURRENT	NONE	
TC 23-2	M202 FLASH	2-29TH INF REGT	4/7/78	4/25/80	CURRENT	NONE	
TC 7-98-1	SASO TRAINING SUPPORT PACKAGE	CATD	5/6/97		CURRENT	NONE	
TC 90-6-1	MILITARY MOUNTAINEERING	RANGER TNG BDE	4/26/89		CURRENT	NONE	

PROFESSIONAL FORUM



The RPG-7

On the Battlefields of Today and Tomorrow

LESTER W. GRAU

The RPG-7 antitank grenade launcher is one of the most common and most effective infantry weapons in contemporary conflicts. It is rugged, simple, and lethal. Whether downing U.S. Black Hawk helicopters in Somalia, blasting Russian tanks in Chechnya, or attacking government strong points in Angola, the RPG-7 is the weapon of choice for many infantrymen and guerrillas around the world. U.S. soldiers therefore need to be aware of the RPG-7 and ways in which it has been deployed in the past.

The RPG-7 is the lineal descendant of the World War II German *Panzerfaust*. It is relatively cheap, quite effective, and found everywhere. The Soviet Armed Forces adopted the RPG-7 in 1961. Today, it, and several of these countries, besides Russia, are licensed to build their own. Other manufacturers include Bulgaria, China, Iran, Iraq, Romania, and Pakistan.

The RPG-7 is a shoulder-fired, muzzle-loaded, antitank and antipersonnel grenade launcher that fires a variety of fin-stabilized, oversized grenades from a 40mm tube. The launcher with optical sight weighs 6.9 kilograms (15.2 pounds) and has a maximum effective range of 300 meters against moving point targets and 500 meters against stationary point targets. The maximum range for antitank grenades against area targets is 920 meters, at which point the round self-destructs after its 4.5-second flight. The antipersonnel grenades reach over 1,100 meters. Among the production grenades are the PG-7, PG-7M, PG-7N, and PG-7VL antitank grenades with armor penetrability of up to 600mm of rolled homogeneous steel. The PG-7VR is a tandem warhead designed to penetrate explosive reactive armor and the armor underneath. The OG-7 and OG-7M are high-explosive antipersonnel grenades.

The RPG-7 is part of the organization and equipment of the armies of more than 40 different countries

The Soviet Army assigned one RPG-7 launcher per motorized rifle squad. Forces involved in regional conflicts have tended to add more RPGs to their organizations. In the Iran-Iraq War, the Iranian 11-man squad had two RPG-7 gunners. In the Soviet-Afghan War, the *Mujahideen* guerrillas averaged one RPG for every 10 to 12 combatants in 1983-1985 and had doubled this number by 1987. The *Mujahideen* formed special armored vehicle hunter-killer teams in which 50 to 80 percent of the personnel were armed with RPG-7s, which could number up to 15. When mortars were not available, these groups also used their RPG-7s as a form of pseudo-artillery and conducted RPG preparation fires.

Constricted terrain (mountains, forest, jungle, and population centers) leads to close combat—a direct-fire brawl in which the RPG-7 excels. When the combatants are 10 to 30 meters apart, artillery and air support are practically nonexistent because of the danger of fratricide, but the RPG-7 nicely meets the combatants' requirements for antipersonnel and antiarmor fires.

Combat in the High Desert. The Soviet-Afghan War, which lasted from 1979 to 1989, pitted the local *Mujahideen* against the Soviet occupiers and the Afghan communist government. Afghanistan is a rugged land of towering mountains, vast deserts, "green zones" (fertile, agricultural regions of gardens and vineyards bisected by a network of irrigation ditches and adobe walls), and an occasional forest. Guerrilla warfare favors the use of light in-

fantry. The Soviets never fielded enough light infantry to match the quality light infantry of the *Mujahideen.* The RPG-7 was the *Mujahideen* weapon of choice, and they proved its value as a lightweight killer against Soviet tanks, armored personnel carriers, trucks, and helicopters. The Soviets tried to stay at least 300 meters away from the *Mujahideen*—close to the effective range limit of the AK-47 Kalashnikov assault rifle and out of moving target range of the RPG-7. The *Mujahideen,* on the other hand, tried to get in close and "hug" the Soviet forces to escape Soviet artillery and air strikes while using their RPGs to good effect.

Among the forces that the Soviets deployed to Afghanistan were two *Spetsnaz* (special operations) brigades (a blend of long-range reconnaissance and commando forces), which were not authorized RPG-7s. Instead, they were issued RPG-16s or RPG-22s, which lacked the range and punch of the RPG-7s. These forces therefore used captured Chinese and Pakistani RPG-7s. They preferred these weapons to the Soviet-manufactured model since they are lighter, and have a folding bipod and a convenient carrying handle.

The *Spetsnaz* found that the RPG-7 was ideal for taking out *Mujahideen* firing positions dug into mountain slopes. They would aim the weapon to hit above and behind the firing position, showering the position itself with shrapnel and rock fragments.

The *Mujahideen* used the RPG antitank grenades against both vehicles and personnel. The antitank round has a lethal bursting radius of some four meters and can kill with blast and shrapnel. The *Mujahideen* learned that the best way to destroy a vehicle was to engage it with two or three RPGs simultaneously from a range of 20 to 50 meters. This method greatly increased the chances of hitting the target and also gave the vehicle under attack less opportunity to react.

The rebels in Tadjikistan in 1992 applied this same technique when attacking T-72 tanks equipped with reactive armor. Since they lacked the anti-reactive armor PG-7VR tandem warhead, the first gunner would hit the tank to blow a hole in the reactive armor, and the second and third gunners would fire the kill shots at the exposed area. This "double-teaming" also usually took out the tank's vision blocks, so that even if the tank survived, it was blind, allowing the RPG gunners time to reposition, reload, and reengage. Another trick of the trade was to throw a fragmentation grenade on the T-72's front deck to take out the driver's vision block before the massed RPGs opened up on the tank. The optimum shot for the Tadjik rebels was against the rear section of the T-72 turret.

Since the greatest danger to the RPG gunners was from the infantry accompanying tanks, they tried to take out the tanks that were out of range of their immediate infantry support. Further, these gunners usually were accompanied by supporting snipers, along with machinegunners and an assistant RPG gunner carrying an assault rifle to protect the RPG gunner from enemy infantry. If the RPG gunners were not firing from prepared positions, it was absolutely necessary that they change firing positions after each shot. This was especially true if they failed to kill their target with the first shot or if the target had a supporting vehicle in overwatch. Any RPG gunners who were caught up in the heat of the moment and stood their ground were quickly killed.

The Mujahideen learned that the best way to destroy a vehicle was to engage it with two or three RPGs simultaneously from a range of 20 to50 meters.

RPG-7s were especially valuable in executing an ambush. RPG positions were selected with particular care, then dug-in, reinforced, and camouflaged. The areas behind the firing positions were soaked with water for two to four meters in depth to prevent a tell-tale cloud of dust. The firing position was hidden in local foliage—brush, reeds, corn, and tall grasses up to two meters high. All a gunner needed was a clear view of the target and an unimpeded pathway where the grenade could fly without being deflected by twigs and foliage.

No matter how well camouflaged and watered-down a position might be, however, the launching signature of an RPG is unmistakable. The flash and the whitish blue-grey smoke are a clear give-away, and the RPG gunner who survives is the one who quickly shifts positions or dives deep into a hole.

Helicopter Hunting. While the RPG was designed to kill tanks and other combat vehicles, it has brought down a number of helicopters as well, including the two U.S. Army Black Hawk helicopters shot down during the fighting in Mogadishu, Somalia, in October 1993. In Afghanistan, the *Mujahideen* found that the best anti-helicopter tactics were ambushes. The first variant on the ambush was to identify likely landing zones and mine them. Then the *Mujahideen* would position machineguns and RPGs around the landing zone. As a helicopter landed, massed RPG and machinegun fire would tear into it. A second variant of the ambush was to position heavy machineguns in caves dug into canyon walls where they could fire horizontally across the narrow canyon. They would then bait the aircraft by positioning an attractive target on the canyon floor, where multiple machineguns would open up on its flight path.

Even if the *Mujahideen* could not lure helicopters into an ambush kill zone, the RPG could still engage helicopters. The *Mujahideen* found that a frontal shot at a range of 100 meters was the optimum against an approaching helicopter. Again, the more RPGs firing at the same time, the better the chance of a hit and escape from an avenging wingman. If the helicopter was farther away, it was better to wait until it was at 700 to 800 meters and then fire, trying to catch it with the explosion of the round's self-destruction at 920 meters. Although the chances of hitting a helicopter at this range with the self-destruct mechanism were very limited, the effort served to discourage reconnaissance helicopters and air assault landings, particularly if an SA-7 *Strela* or a Stinger shoulder-fired surface-to-air missile was also firing.

Combat in Cities. The Russian Army, in December 1994, entered the breakaway Republic of Chechnya and tried to seize the Chechen capital of Grozny from the march. After this attempt failed, the Russian Army spent two months in deliberate house-to-house fighting before finally capturing the city. During the fighting, the Russian conscript force was badly mauled by the more mature and dedicated Chechen force. During the first month of the conflict, Russian forces wrote off 225 armored vehicles as nonrepairable battle losses. This represents more than 10 percent of the armored vehicles initially committed to the campaign. The bulk of these losses were from shoulder-fired antitank weapons and antitank grenades.

Not only were the Chechen forces armed with Soviet and Russian-produced weapons, but most Chechens had also served in the Soviet Armed Forces. The Chechen lower-level combat group consisted of 15 to 20 personnel subdivided into fighting cells of three or four men. These cells had an antitank gunner (normally armed with the RPG-7 or the RPG-18 shoulder-fired antitank rocket launcher), a machinegunner, and a sniper. Additional personnel served as ammunition bearers and assistant gunners. Chechen combat groups deployed these cells as antiarmor hunter-killer teams. The machinegunner and sniper would pin down the supporting infantry while the antitank gunner engaged the armored target. The teams deployed at ground level, in second and third stories, and in the basements of buildings. Normally five or six hunter-killer teams simultaneously attacked a single armored vehicle. Kill shots were generally made against the top, rear, and sides of vehicles. Chechens also dropped bottles filled with gasoline or jellied fuel on top of vehicles. The Chechen hunter-killer teams tried to trap and destroy an entire vehicle column in a city street by destroying the first vehicle and the last.

The elevation and depression angles of the Russian tank cannon were incapable of dealing with the hunter-killer teams that fought from basements and second or third-story positions, and the simultaneous attack from five or six teams negated the effectiveness of even the tanks' machineguns. The Russians attached ZSU 23-4 and 2S6 track-mounted antiaircraft guns to armored columns to respond to these hunter-killer teams.

Staying Alive. The Soviets were not the only modern army to worry about the effectiveness of the RPG. South African and Namibian forces fighting Angolan guerrillas in Namibia during the 1980s learned to give the RPG a wide berth. Their standard drill, when traveling in an armored personnel carrier and encountering Angolan guerrillas with an RPG, was to begin driving around the guerrillas in an ever-widening circle and fire into the circle with automatic weapons. The moving vehicle was harder for the guerrilla RPG gunner to hit, and the soldiers were able to exploit their mobility and firepower. While the stationary personnel carrier provides supporting fire, stopping long enough to dismount troops to advance on guerrillas is a good way to lose the carrier.

Tanks and other ground combat vehicles need to be protected against the RPG. Sandbagging and mounting reactive armor were reasonable solutions until the introduction of the anti-reactive armor PG-7VR tandem round. Now, the best short-term solution appears to be fitting combat vehicles with a lightweight stand-off screen.

When the Soviets moved through heavy vegetation in Afghanistan, they would sometimes walk a wall of high-explosive fragmentation rounds in front of the vehicles to keep the RPG gunners at bay—or at least ruin their aim. Although this is an expensive option in terms of artillery or mortar rounds, it does work.

When practical, the best way to protect ground vehicles from the RPGs is to put infantry well forward of the vehicles to find and destroy the gunners. Combat vehicles should stay out of urban areas, or areas dominated by overwatching terrain and tall trees, until the infantry has cleared and posted the area. Moving under smoke or at night also helps protect ground vehicles. Convoys help protect ground vehicles. Convoys should have a security escort, a smoke-laying capability, and helicopter coverage. All vehicle drivers should have several smoke grenades.

The following methods will help protect helicopters from the RPG:

- Vary the take-off and landing directions from the helipads.
- Never fly a "race-track" or other identifiable pattern.
- Never follow streets, roads, canyons, or river lines for any distance.
- Always allow 500 meters between the helicopter and its wingman. This allows the wingman full range of his weaponry to engage RPG gunners.
- Vary the flight tactics and flying pattern, sometimes flying with two helicopters and sometimes with three.
- Prepare a landing zone (LZ) with an over-pressure system (fuel-air) before landing.
- Use pathfinders on any LZ before committing the full landing force.
- Never set patterns by time, formation, or sequence of events.

The RPG-7 and Future Combat. The RPG-7 will be around for a good while yet. It is a proven, inexpensive killer of technology that will continue to play a significant role—particularly when conventional units are pitted against irregular forces. Russian veterans are enthusiastic about the RPG-7; and they have suggested that the Russians need to develop antipersonnel, incendiary, smoke, and illumination rounds, along with other special-purpose rounds to give this weapon more flexibility in future combat.

Whenever U.S. soldiers are deployed to a trouble spot in the future, the RPG-7 is likely to be part of the local landscape, and we need to be ready to deal with that harsh reality.

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The Fourth Estate and You

A Guide to Relations with the News Media

CAPTAIN CHRISTOPHER C. GARVER

The graphics on your map depict your command, arrayed across the battlefield. You think about the hundreds of pre-battle preparations your unit has accomplished. You know that within minutes the enemy will enter your sector and attack your soldiers. As you ask yourself whether you've considered every contingency—every possible situation—the executive officer approaches and says, "CNN is here."

Recent operations in Panama, Iraq, Somalia, Haiti, and Bosnia have demonstrated that the involvement of news media is an inescapable element of the operational environment. In today's global information environment, public opinion and government policy can be formed within minutes of the broadcast of live images from the battlefield.

Field Manual (FM) 100-6, *Information Operations*, acknowledges the importance of telling the Army story: *DOD and Army policy for principles of combat coverage require Army commanders to provide open and independent coverage by the news media as the standard means of providing the American public information about the employment and capabilities of their armed forces.* The manual further charges all commanders and leaders with "preparing their soldiers to effectively deal with the media before, during, and after all operations."

If you are a commander at company, battalion, or brigade level, you have no special staff to address public affairs issues. But this does not relieve you of public affairs responsibilities, because units at these levels often have to house, support, and escort reporters. They must therefore be trained and ready to provide this support and tell the Army story without the presence of public affairs specialists.

Helping media personnel get their story may seem like a distraction and a drain on resources. But a commander with a well-defined *information strategy* will recognize a media event for what it is—a chance to tell his unit's and the Army's story to the American public.

Your information strategy begins with a designated unit media facilitator (UMF) and a media facilitation process.

Unit Media Facilitator

The UMF should be identified at home station before deployment. You may appoint him on orders as an additional duty. This will enable him to seek additional media relations training from home station public affairs personnel.

Choose your UMF carefully, keeping in mind that he will be spokesman for the unit when he escorts the media. The following criteria will help you select the right person:

- He must have the experience to explain events reporters may see, and translate these events into language civilians will understand.
- He must be able to plan and allocate resources, such as transportation and time, to meet your intent for the interview.
- He must be able to move around the battlefield to meet the media personnel. This includes greeting them for scheduled events and intercepting them during unscheduled events.
- Consider a UMF candidate's personality and disposition. Everything he does when he is with a reporter can affect the story.

The UMF is responsible for all media facilitation planning and oversees the execution of media events. To ensure that all aspects of the operation run smoothly, he must have your full support.

Media Facilitation Process

The media facilitation process, which is a part of a unit's information operations, attempts to narrow the inevitable gap between what you know to be true and what the news media have reported. You and other unit leaders can narrow this gap by providing timely, accurate information about your unit and its actions.

It is important to remember that the reporter owns only half the interview; you own the other half. A unit leader not only answers the reporter's questions, he also ties in messages to specific audiences he wants to reach, such as family members or the American public as a whole.

The media facilitation process is a four-step drill that considers the media event from beginning to end—from planning and wargaming the impending event, through the interview itself, to reporting the results to higher headquarters. Planning for the entire event is critical, because the interview does not start when the camera starts recording—it starts when the first member of the unit shakes the reporter's hand, and it ends when the reporter drives away. Everything the unit does with the reporter between those two points can influence the story, positively or negatively.

The drill described here is for a *scheduled* media event with approximately 24 hours of planning time. Like

other drills, however, the amount of time available will dictate the level of detail that can be given to each step. When media personnel arrive unscheduled, a unit can execute these four steps within minutes:

Planning and Wagaming. When planning media facilitation operations, consider first your intent for the interview. Decide before the event the basic themes for the interview and the intended audiences for them. These themes will guide the interviewees in what to say to the reporter and also guide what the UMF shows to the reporters for footage.

The second consideration is the background of the reporters requesting the interview. Research those who are scheduled to come to your unit. A reporter's experience in covering military operations may determine the amount of explaining and translating that will be required. The news organization they work for may provide information on what they want to know. Higher headquarters public affairs elements should provide a fact sheet on each reporter. If they don't, ask for it. Also contact other units within the area of operations that may have dealt with this reporter.

Next, consider "what's the news" in the unit area. Reporters tend to focus on certain issues during any conflict. These include actions against the enemy, friendly casualties, fratricide, protection of American soldiers, collateral damage, necessity for our nation's involvement, and potential future operations.

Examine every event in the unit's area within the past 48 to 72 hours for its potential news value, and consider any "dirty laundry" a unit may have. Never assume the news media won't know about a specific event. Also examine what is in the news around the world, especially any other operations the United States is conducting. Events in another operation may affect a reporter's line of questioning.

Finally, determine any "good news" stories in the unit that can be offered to the reporter, such as a recent award to a hero of the battle or successful dealings with the local population. A good human-interest angle may cause a reporter to change his story altogether.

Wargame questions the reporter may ask and then develop appropriate responses. These questions derive from the "what's the news" topics. Make them tough—it's better to ask yourself the tough questions and develop satisfactory answers than to get the same questions from the reporter first. When developing appropriate responses to the questions, consult the Public Affairs Annex and Guidance to the current operation order. For particularly difficult questions, also consult the higher headquarters public affairs officer (PAO). Do not try to memorize long, exact sentences as answers. Instead, develop a command message matrix with bullet comments to guide the answers of the interviewee. (A sample matrix is shown here.)

Next, identify the media support requirements. Determine these requirements by using the standard mission analysis techniques of identifying specified and implied tasks. Carefully consider your themes for the interview and any support requirements they may generate. Also consider conducting a rehearsal and a "murder board" of the interviewees as time allows.

The final planning consideration is developing a proposed itinerary for the reporters. Ensure that all supporting elements—such as transportation, convoy security, and designated interviewees—have the itinerary and are ready at the designated time. Identify ahead of time the areas to which access will be granted on the basis of security concerns and your understanding of what reporters need: Video and still photographers need supporting action footage that defines their story; print reporters need additional time with the interviewees; and radio reporters need supporting action sounds and more descriptive language from the interviewees.

Greeting the Reporter. Since the interview actually starts when you meet the reporter, the greeting can set the tone for the entire interview.

Ensure that any perimeter guards or security forces know of the reporter's impending arrival. Expedite his passage through the unit's security procedures. Because reporters operate on stringent deadlines, time is literally money for them, and unnecessary delays can instill a hostile attitude toward the unit. Be friendly! A pleasant smile and a handshake can go a long way. Offer any appropriate pleasantries, such as coffee, juice, or a chance to warm up in a tent. Use first names with the reporter.

Ask the reporter what story he is investigating and how the unit can assist him. Brief him on the proposed itinerary and what is planned for him to see. Set a time limit for interviewing commanders and primary staff, and establish which person will be able to answer the more in-depth questions. Explain any specific rules and safety or security concerns while in the unit area.

Conducting the Interview. The UMF should monitor the interviews. He acts as the timekeeper for the interview, listens for operational security violations, and watches the reporter for any signs of confusion. After the interview, the UMF asks the reporter not to use any operational security disclosures,

SAMPLE COMMAND MESSAGE MATRIX

If a reporter asks about:	*Formulate your answer with:*
Casualties	1. Condolence to families. 2. Classify as light/medium/heavy. 3. Best combat medical care.
Fratricide	1. Condolence to families. 2. Incident under investigation.
Rules of Engagement	1. Can't discuss specifics; would give advantage to enemy. 2. Soldiers trained to protect selves.
Future Operations	1. Can't discuss specifics; would give info to enemy. 2. Soldiers trained for any mission.
Collateral Damage	1. Sympathy to civilians. 2. Soldiers trained on minimizing damage.
Enemy use of Weapons of Mass Destruction	1. Soldiers trained to protect selves. 2. Condemn enemy for use.

interprets or translates any confusing military terms, and corrects any inaccuracies an interviewee may have stated. The UMF also acts on any commitments the interviewee may have promised, such as access to a certain soldier or area.

Make sure that the camera doesn't inadvertently record anything behind the interviewee that could violate operational security. Ask the camera operator to move the interview, if necessary; but such pictures as the outside of a command post, two soldiers digging a hole, and a vehicle's bumper number are generally not secret.

This article is not intended to present a treatise on interview tactics, techniques, and procedures. Several excellent graphic training aids containing interview tips are available. Installation PAOs should be able to provide these training aids and any in-depth media training your unit may need.

There are, however, several interview tips that are fundamental to media relations:

- Concentrate on what you *can* say, not what you can't. Public Affairs guidance, proper planning, and wargaming prior to the interview will identify what you can say.
- Stay in your lane. Discuss only those things for which you are directly responsible.
- If you can't tell the reporter something, explain why.
- If you don't want the media to report it, don't say it or show it. If there is a possible operational security violation, ask the reporter not to use that information, and report it to higher headquarters immediately.
- Never lie to the media. It will come back to haunt you.
- If you don't know an answer, say you don't know. Don't speculate or guess.
- *Everything* is "on the record."
- Be absolute only if you're sure that what you're saying is true.
- Remain calm and in control throughout the interview, even if the reporter is belligerent or aggressive. Reporters can edit out *their* antagonism and show only *your* hostile attitude to the American public.
- Always tie the interview back to one of the messages that support your themes.

Reporting the Results. After the event is complete and the media personnel have left, report the results of the interviews to higher headquarters. This report should include the following information:

- The reporters' lines of questioning.
- The reporters' prevailing attitudes.
- Any possible operational security violations.
- Possible slant to the reporter's story.
- Your overall impression of the interviews.

Share this information with other units through daily situation reports and tactical updates. Do not assume that a higher headquarters public affairs escort will submit them.

FM 100-6 recognizes that the military services and the news media are often at opposite ends of the spectrum when dealing with information. But the FM also says that the Army "accepts and fully endorses the healthy tension that exists between the normal desire of the media to inform the public as much as possible about military operations and the normal desire of commanders to control the information environment about those same operations to the greatest possible degree."

As a commander, you can't control the final product of an interview—the news piece itself—but you can influence its development, either positively or negatively. If your unit has an effective information strategy and a media facilitation plan, you can positively influence the reporters' final product and effectively tell both their story and the Army's story.

The next time the executive officer announces, "CNN is here," you'll know you've considered every contingency, every possible situation, when you answer, "Execute the media facilitation plan."

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Let's Replace Battle Drill 6

CAPTAIN DREW R. MEYEROWICH

Many of the techniques Infantrymen use are based on doctrine, but basic infantry tactics boil down to one thing—battle drills. Unfortunately, doctrine has evolved over time while our battle drills have not—Battle Drill 6, *Enter a Building and Clear a Room*, in particular. On the basis of my experience as a rifle company commander in Somalia, I believe that Battle Drill 6 in ARTEP 7-8 DRILL, *Battle Drills for the Infantry Platoon and Squad*, is an outdated method of clearing a room for any type of military operation.

The drill manual describes the basic room clearing technique by first positioning a clearing team on either side of the room entrance. Once the team is in position, the lead man "cooks-off" a hand grenade and throws it into the room. Following the explosion, the lead man enters the room by engaging all "identified or likely enemy positions with rapid, short bursts of automatic fire and scans the room. The rest of the team provides immediate security outside the room." Following the initial entry, the lead man is responsible for positioning the other members of the team as he calls them into the room with the command, "Next man in, left (right)." Depending on the enemy situation, this battle drill can be done with two men entering the room at the same time from opposite sides of the entrance with one high and one low to prevent fratricide.

As commander of a company, I had concerns about Battle Drill 6 before leaving for Somalia for Operation *Continue Hope*. The unit leaders and soldiers were ready, but hostile activity had escalated since my first tour in Somalia during *Restore Hope*. This escalation led to many conversations within my company and in the battalion about small-unit tactics in urban terrain. Because of the rules of engagement, we knew we couldn't just enter a room and spray it with automatic weapon fire. Even if we could, the tile floors and substandard building construction typical in Mogadishu might cause ricochets and fratricide.

These initial concerns became reality when my company conducted a raid in Mogadishu to capture an enemy mortar tube. We entered the building by first clearing a hallway with a fragmentation grenade. The resulting explosion made the building almost impossible to clear because of poor visibility and obstructions from the collapsed roof. The mortar cache was never found in the rubble, and because of the extra time needed to clear the building, we received RPG and small arms fire from enemy reinforcements. Following this raid, our internal after-action review concluded that we needed to modify Battle Drill 6 or risk the mission and, more seriously, the lives of our soldiers.

Fortunately, a truly professional squad leader from the 3d Battalion, 75th Ranger Regiment, part of Task Force Ranger, brought his squad members to my company area in Mogadishu and taught us the room clearing method they called "The Stack." My First Sergeant and I then took their technique a step further and developed a room clearing drill with a three-day training plan to teach it to every man in the company. This drill applies not only to the limited operations typical in peacekeeping, but also to operations as intense and hostile as those my unit would soon face.

Understanding the basic layout of a room is critical to understanding this drill. In Somalia, more than 95 percent of all engagements inside a building were within 25 feet. Additionally, the entrance to a room was the most vulnerable and critical point (decisive point), because that was where the enemy expected us to enter. Figure 1 shows a basic room with this decisive point or "Fatal Funnel." We also identified four "Points of Domination" (PODs) and a direction of fire ("No Man's Land") using the four corners of the room. The side of the room entrance from which the clearing team enters determines the location of No Man's Land. The key to this battle drill is to mass the maximum amount of firepower possible at the fatal funnel and quickly move through it to the assigned PODs, orienting all weapons toward No Man's Land. Each man has one mission: *Secure your POD*. A soldier engages any perceived threat along the route to his POD. Fragmentation grenades should be used only upon encountering heavy resistance, and stun grenades are preferred because they offer less obscuration and less potential for fratricide. Both types of grenades should be used sparingly to avoid establishing a pattern that tells the enemy when a room will be entered.

The stack of personnel outside the room is vital in getting firepower

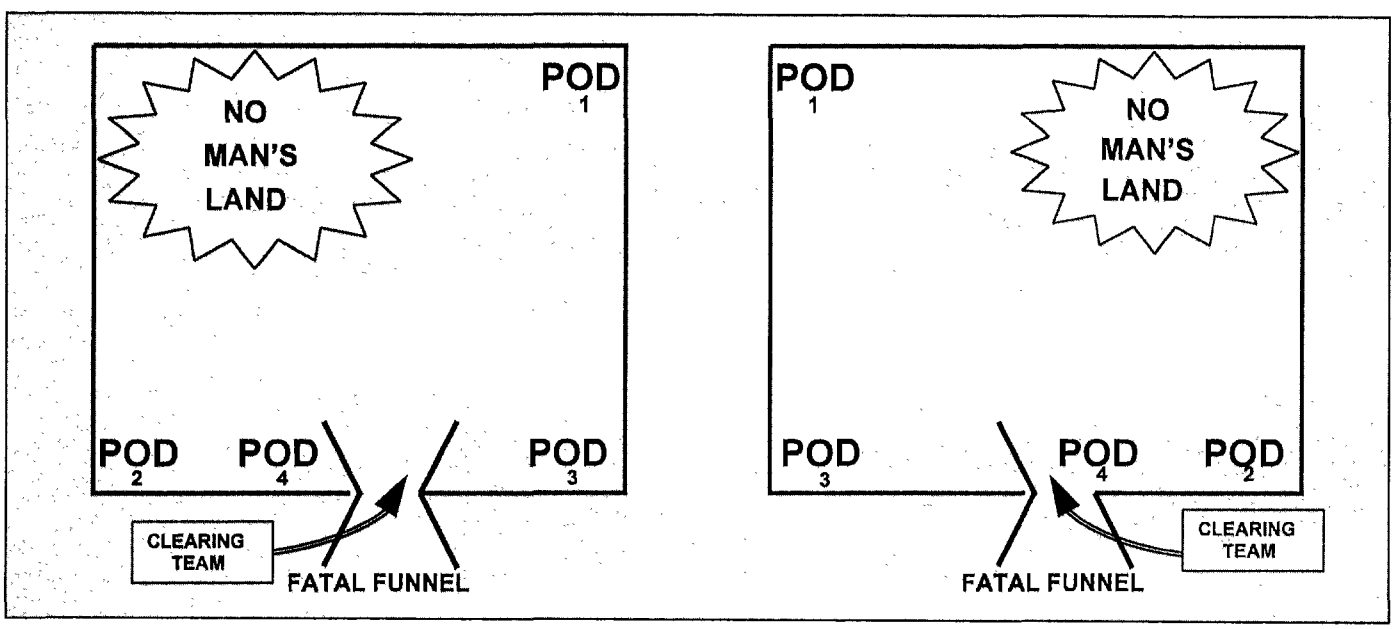


Figure 1

quickly through the fatal funnel. Each soldier is responsible for a POD determined by his position in the stack. Unlike the current Battle Drill 6, this drill does not try to synchronize and push two men with equipment through a doorway at once or send one man in to fight a room alone. The physical contact of the men as they flow into the room provides the synchronization and confidence they need.

Knowing the responsibilities of each position in the stack is essential in actual combat situations. The casualties, fatigue, dangers, and confusion associated with actual combat makes it difficult to maintain even *platoon* integrity. It was not uncommon in Somalia for soldiers from different platoons to be tasked to clear a room or series of rooms, and it was knowing all the positions of the stack that made this possible.

Figure 2 describes the responsibilities for each man in the stack. Regardless of which side of the entrance the stack goes through, the duty of each man remains the same. The two primary positions, the #1 Man and the #2 Man, are responsible for the left and right limit PODs. Depending on which way the door opens, one of these men must ride the door all the way to the wall to make sure no enemy are behind it. The #1 Man always moves across the doorway and goes to the deep corner of the room (straight and long). The #2 Man always buttonhooks the doorway and moves to the near corner (buttonhook and short). The #3 and #4 Men follow #1 and #2, respectively, and establish their PODs. Additionally, each man must complete his lead man's mission in the event he is wounded or a weapon malfunctions (signaled by dropping to one knee). The #4 man has the additional duty of placing the door charge in the event the door is blocked.

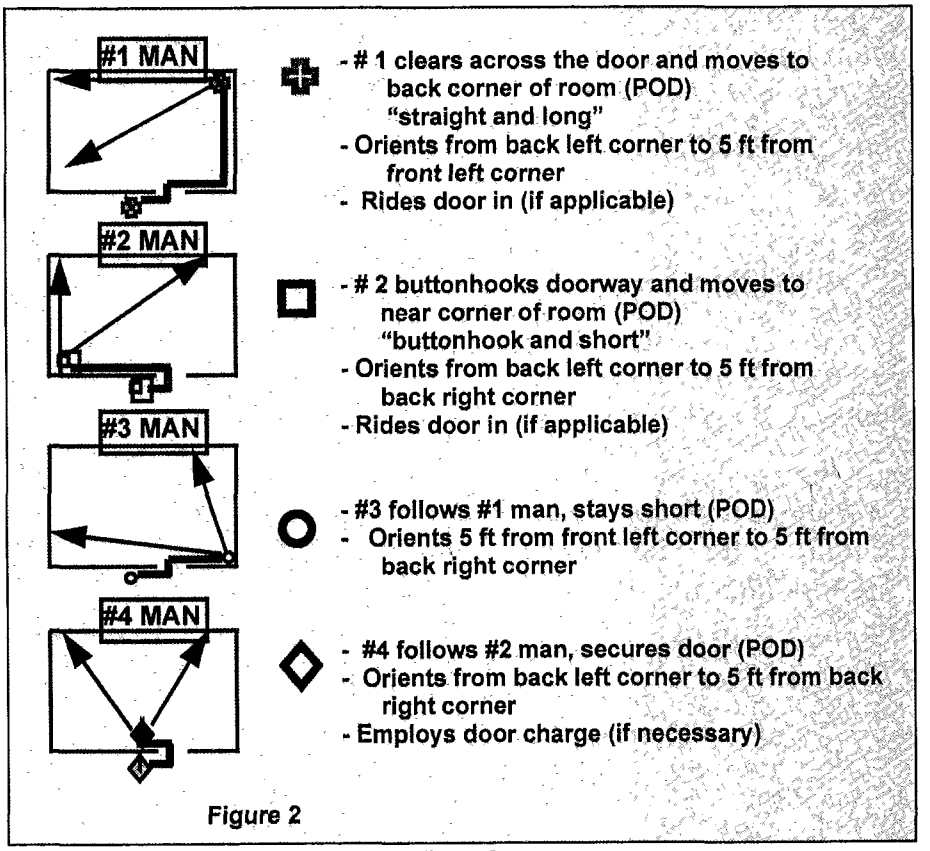


Figure 2

While it is possible to conduct this battle drill with only three men, using four is preferred. Four men clearing a room gives a team the flexibility required in the event there are additional, unknown rooms or casualties. In Somalia, rooms were typically cluttered and extremely difficult to move around in, and the fourth man was a big help in clearing each room. In actual combat, the probability of success decreases greatly with less than three men. Two men should attempt to clear a room only under the most extreme circumstance, and one man should never attempt the task alone. Figures 3 and 4 illustrate

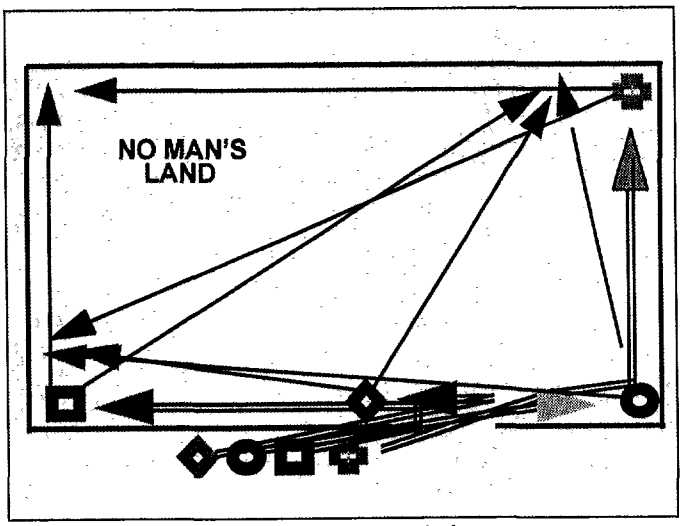


Figure 3. Four-man technique.

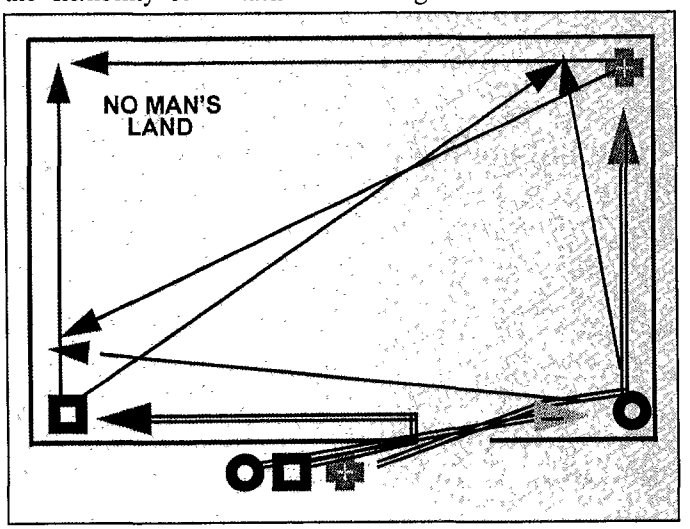


Figure 4. Three-man technique.

this battle drill using four or three men.

All soldiers in the stack must understand several key points when executing this battle drill. Massing combat power at and through the fatal funnel does not mean running through the doorway. Movements by the members of the team must be deliberate and synchronized. This is why physical contact between members of the team is critical. Each man stacks up outside the entrance as tight as he can with the man to his front. Weapons are pointed downward, with the exception of the #1 Man, who provides front security. Once the #4 Man is ready to move into the room, he pushes his knee into the #3 Man to signal he is ready. The #3 Man does the same to the #2 Man and the #2 the same to the #1 Man. Once the #1 Man feels the tap of the #2 Man, he moves into the room and quickly focuses on the route to his POD. Any threat he sees that prevents him from getting to his POD is engaged with two rounds using the basic quick-fire technique from FM 23-9, *M16A1 and M16A2 Rifle Marksmanship*. Developing this tunnel vision—as well as trusting himself, his buddy, and his equipment—is essential for success in this battle drill.

Understanding the concept of this battle drill, and given the constraints placed on us in Somalia, my First Sergeant and I began to develop a plan to train the company. Since we operated on a three-day rotation between training, main supply route security, and the quick reaction company (QRC), we had to either train the entire company in three days with pre-range instruction during the QRF cycle or train over several three-day training cycles. While tasked as the QRC, the unit could conduct some training similar to that normally conducted in garrison. The result of our planning was five phases of training over a four-day period.

Before the three days of range training, we conducted Phase I training. This training can be conducted anywhere with nothing more than engineer tape to outline different room layouts. Soldiers performed the battle drill in these rooms while leaders evaluated to make sure they understood it. Stressing the importance of box training is critical

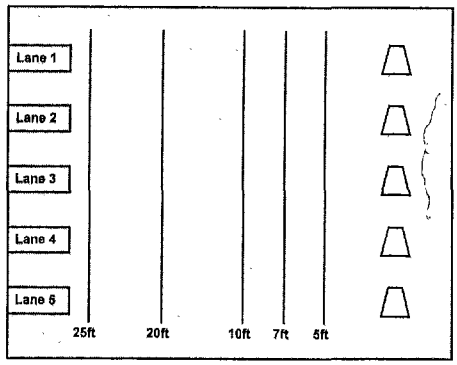


Figure 5. Quick-Fire Range

to this plan because it allows soldiers to see what is being done inside the room without actually being in it. This allows the leader to show his soldiers different situations with everyone viewing the battle drill from outside the room. By using different types of room layouts, leaders ensure complete understanding of the battle drill before getting on the range. During my company's three days of QRF, we continually conducted this training, and junior leaders went a step farther by rearranging our barracks to further help men understand the technique.

The three days of range training gave the company more than enough time to become proficient in this battle drill. The buildings that made up the range layout were outside the city of Mogadishu and allowed for 360-degree fields of fire. They were constructed of cement and consisted of a series of rooms with tile floors. Additionally, they had no roofs that might have caused falling debris. The area used for the quick-fire range was an open field, approximately 200 square meters in size, across from the buildings. With minimal resources and effort, the training area was cleared by battalion assets in less than one day and ready for training.

Phase II or quick-fire training is based on the individual technique discussed in FM 23-9. Every soldier fired an M16 for live fire training. Soldiers first practiced the technique using the dry fire method. Leaders ensured that each man correctly identified the target from the low ready position, simultaneously lifted the weapon and used his thumb to move his M-16 selector switch to semiautomatic, engaged the target from above his sights, and switched his weapon back to safe. Only after correctly executing this sequence was the soldier allowed to move to the live-fire area (Figure 5). Once on the live-fire range, soldiers executed the quick-fire drill from the stationary position and while moving forward, left, right, and backward. Soldiers had to hit all of the E-type targets at the 5-foot, 7-foot, and 10-foot lines before advancing to the next line. Eighty percent target hits were required at the 20-foot and 25-foot lines. The squad leader's assessment of the soldiers' confidence in the drill was also required for advancement to Phase III.

We conducted Phases III-V all in the same buildings. Each building was set up in the same manner, with half of it designated a dry-fire area and half a live-fire area (Figure 6). Targets were set up using sand bags as a backdrop and also to frame windows. A wooden pallet was placed against the backdrops with E-type silhouettes stapled to them. Although there was a concern about safety due to the tile floors in the buildings, the leaders maintained strict quick-fire performance standards, and

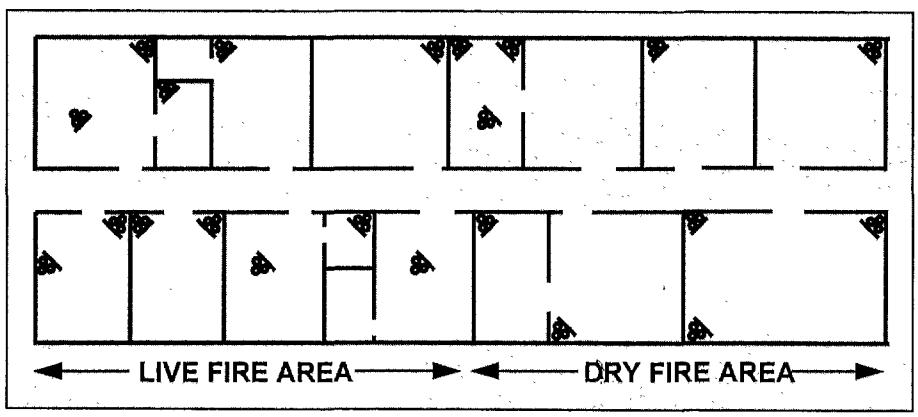


Figure 6. Building Layout

no training accidents occurred. Each room contained either two or three targets. To maintain the element of surprise, the targets were moved frequently. When time permits, furniture and different rules of engagement can be added to increase the difficulty.

Phase III training is conducted as an individual drill. Each soldier performs the duties of the 1-Man for every room of the dry-fire area and then the live-fire area. The leader evaluates the soldier by following him into the room, staying behind him to ensure that he performs the same drill he used on the quick-fire range. (In our training, all leaders conducted the drill before any soldiers, maintaining unit integrity and understanding of the standards.) Soldiers engaged each target with two rounds to ensure that it was disabled. Any stray bullets that missed the target area (sand bags) resulted in retraining on the quick-fire range. Leaders also assessed the confidence of each soldier on this drill before allowing him to move to Phase IV of training.

The standards for Phase IV, the 2-Man quick fire-drill, were the same as for Phase III except that Phase IV also included a night fire. Each two-man team had to complete the dry-fire rooms event before executing the live-fire rooms sequence. Leaders ensured that each man was proficient at both the 1-Man and 2-Man duties. Only after successfully completing the day fire were soldiers allowed to conduct the night fire.

The night fire was conducted with flashlights taped to the M16s and turned on as the team entered the room. On successful completion of Phase IV, *Night Fire*, the company was ready to conduct the battle drill *Clear a Room*.

The training events for the final phase of training were identical to those for Phase IV. Platoon leaders and platoon sergeants evaluated their own platoons. Fire-team integrity was maintained throughout both the day and night fires. The battle drill was validated at the platoon level by having soldiers from different squads execute the drill as a team. Company validation was done in the same manner, using soldiers from each platoon to execute the drill.

The results of this training were significant. The soldiers' accuracy in hitting each target was well over 90 percent with the first round and close to 100 percent with the second round. Inspection of the targets following the three days of training showed that well over 95 percent of the hits were at center of mass on the silhouette. The lethality and precision that every clearing team developed left no doubt that they could effectively clear a room.

The company conducted this training in Somalia from 30 September 1993 through 2 October 1993 and returned to the battalion area the next morning, unaware of just how important this training would be to us that evening.

In late afternoon on 3 October, my company became the lead element from 2d Battalion, 14th Infantry, to break through and rescue Task Force Ranger from deep behind enemy lines. For more than eight hours, we fought our way through intense enemy fire down the streets of Mogadishu, secured a shot-down UH-60 helicopter, and rescued more than 90 members of Task Force Ranger. When we reached the Ranger perimeter, we had to increase its size to accommodate an additional company. The downed UH-60 was currently outside the perimeter with U.S. soldiers still trapped in it. It was my plan to expand the perimeter around the aircraft and assist in cutting free our trapped soldiers. My men quickly secured the necessary buildings and kept the area secured while all the wounded and dead were evacuated.

The confidence and proficiency the company's soldiers demonstrated were even greater than my First Sergeant and I had hoped for. All issues were quickly resolved by conducting box training before going to the range. Every soldier, regardless of his position or weapon system, was required to pick up an M16 and execute the drill to standard. Soldiers received effective training that was both realistic and challenging. Following the events of 3-4 October, the company after-action review discussed the new drill at length and compared it to the old one. Without exception, the leaders felt more confident in this drill. The building clearance necessary to secure the area around the downed aircraft had gone quickly and efficiently, despite the confusion and the hostile presence. The new drill was proved in combat, and the end result was a company completely confident in its ability to clear a room in any situation.

Although the stack task is a difficult one on which to train and maintain proficiency, it is still a useful drill. With today's operational tempo, maintaining proficiency on even Battle Drills 1 and 2 is a challenge. Troopleading procedures take all this into account by ensuring that the unit conducts rehearsals before any mission, and units must effectively train on mission essential battle drills before deploying to a theater of operation. Urban operations are vastly different from the normal light infantry operational environment. The Rangers, who must be prepared to conduct urban operations, train on this regularly and are unquestionably the light infantry experts on it. But regular units must also be familiar with urban operations and be prepared to conduct them.

I believe that this combat proven technique should replace the current Battle Drill 6, but other infantrymen may have versions that are equally effective. The point is that Battle Drill 6 needs to be replaced with a drill that is simpler and more effective.

Captain Drew R. Meyerowich commanded Company A, 2d Battalion, 14th Infantry, in Somalia and recently completed an assignment as a company commander in the 1st Battalion, 509th Infantry, at the Joint Readiness Training Center. He is a 1987 graduate of the United States Military Academy.

Stability and Support Operations at the Turn of the Century--1899

EDITOR'S NOTE: Today's stability and support operations resemble many of the operations short of war that our Army has had to perform throughout our history. The infantryman has always been in the forefront of such contingencies, and soldiers thus deployed have served in the knowledge that with little or no warning they could be called upon to employ force of arms. This was as true a century ago as it is today. This article illustrates the importance of constant alertness and shows how well-trained, disciplined infantrymen can overcome a treacherous, implacable enemy, even against overwhelming odds.

We are indebted to Mr. Walter James Bertholf, whose diary gives us this first-hand account of the Balangiga Massacre and subsequent events. Walter Bertholf returned to the United States several months after the action, and was discharged from the service on March 20, 1902. After a long and successful life, he died on March 18, 1964.

I want to thank Mr. David P. Perrine, a retired Army officer, for his invaluable assistance in the research and preparation of this article. Mr. Perrine is presently completing a book on the experiences of Company C, 9th U.S. Infantry Regiment, during the Spanish-American War era, including its service in the Philippines and China.

In October 1898 the war with Spain had been over for about two months, but the natives of the Philippines were becoming belligerent, and trouble seemed to be brewing for the small force of American soldiers holding the islands.

The forces there were all State Volunteers who had enlisted for the Spanish-American War. This war having been brought to a successful ending, these men were entitled to be mustered out, but first they had to be relieved by members of the Regular Army.

On October 22, 1898, I was 19 years old and eager to join the service and see the world. When my father refused his consent, I took it upon myself and enlisted, giving my age as 21. I enlisted in Battery C, Sixth U.S. Artillery, and was sent the same day to Fort McHenry at Baltimore, Maryland. After a week there, I was sent to my battery at Fort Caswell, North Carolina.

In December 1898 the trouble in the Philippines seemed to be over, and it was decided to reduce the Army by several thousand men—all men who had enlisted between April 21 and November 1, 1898 could receive their discharges on request. As this outfit was a heavy battery doing duty as Coast Guard, it seemed unlikely that it would ever be moved to another post, and, as the Infantry was being sent to the Philippines to relieve the Volunteers—and my greatest desire was to get over there—I requested my discharge and secured it on January 20.

I returned to my home in Watkins, New York, and on February 10 went to Syracuse and reenlisted in C Company, 9th U.S. Infantry, and was sent the next day to Fort Ontario at Oswego, New York, to join my company. I remained there until March 17 when we entrained for San Francisco and the Philippines. We were a week crossing the country. On March 28, 1899, six companies of the 9th went aboard an old horse ship, the *Zealandia*, en route to Manila. We landed in Manila April 26.

The second night we were in Manila we were marched out to Pateros, a small town about 18 miles inland. We garrisoned this town and had a night attack, on the second night we were there, in which one man was killed. We remained there until June 9 and then went into the Battle of Guadaloupe Ridge. We fought several hours in the intense tropical heat and had several cases of sunstroke. (We were still wearing the winter clothing we wore in Ontario and were in the tropics two months before we drew tropical clothing.)

We got the Filipinos on the run about noon that day and then pursued them about six miles to Ford de Las Penas, where they made another stand. They were well entrenched, and our company was greatly reduced in size due to the sunstroke. As there were only 19 of us left out of 110 men in my company, we had quite a time capturing the trenches, taking two hours and losing two men wounded. We were under the command of Captain Charles Noyes.

On June 13 we advanced south about eight miles and stopped at the Zapote River. On the south bank of this river, the Filipinos had heavy trenches and only one bridge. The river was deep and unfordable and we had to capture this bridge or build one. The 21st Infantry got the job of capturing the bridge while we in the 9th built a bamboo foot bridge down the river about a mile. This was one of the hardest fights the Filipinos put up during the entire campaign. We had one man wounded but none killed in our company, but the 21st lost quite a few, both killed and wounded, and we were all day taking the position.

On June 17 we were transferred to the 2d Division, 8th Army Corps, or what we called the North Firing Line under General Arthur MacArthur (father of Douglas MacArthur). We were stationed at San Fernando and Santo Tomas from June 18 to August 9, then advanced, fought a hard fight, and captured Santa Rita. We were there until September 28 and advanced and captured Porac, then on to Angeles. We remained there until October, and during that time had 11 night attacks, some of them very severe.

In November we again advanced to Tarlac, fighting at Bamban Bridge, Capas, and Mabalacat. We stayed at Mabalacat Christmas day when we returned to Bamban and were there until June 1900 without firing a shot.

On June 18 we received orders to pack up and return to Manila. We remained in Manila a week then embarked for China via Japan, as the Boxers were getting out of control in China. We arrived in Taku, China, on July 9 and took barges up to the Pei-ho River 30 miles to Tien Tsin. We were under fire the last few miles, the Chinese taking pot shots at us. We had no one hit, but it was uncomfortable being shot at and not being able to see where the shots were coming from or to return fire.

On July 13 the Allied forces—English, Russian Japanese, Italian, and American—fought the battle of Tien Tsin. The Chinese were behind the Great Wall of Tien Tsin and we were out in the open. This was the hardest fight the Chinese put up, and we were the better part of two days capturing the

city. There were only eight companies of Americans in this fight, 428 men, and out of this force 108 were killed or wounded. Our Colonel Liscum was killed, and five other officers were wounded. My company had three men killed and 12 wounded. I got through without a scratch but had a number of close shaves that still give me chills when I think of them.

On August 4 we started the advance on Pekin, the 5th we had a battle at Pietsang, 6th Yang Stun, 9th Ho-Si-Wu, all hard fights, and on the 15th captured Pekin. On this advance we lost our ration train and were unable to get anything to eat for two days except green watermelons and nubbins of green corn. The Americans also lost five more men killed, one killed and one wounded out of my company.

We returned to Ho-Si-Wu and garrisoned this town until November. About a week after our return, Lieutenant Waldron, our second officer, was shot through the hand and sent back to Tien Tsin to a hospital, and I was detailed to return with him to take care of him. We had to go by river in a small junk—a three-day trip—and on the way down I was stricken with typhoid fever. I was unconscious on arrival and was confined to the hospital for five weeks. After being discharged, I rejoined my company, which had been returned to Tien Tsin, where we remained until June 1, 1901. We were sent to Tongku at the harbor of Tien Tsin, were we remained until the end of June, when we were returned to the Philippines.

We did guard duty in Manila for two months and then went in August to Samar. For years, Samar had been the hunting ground of piratical Moros and Sulu chiefs, and a system of smuggling had also been carried on by the Visayans, the tribe who inhabit Samar.

When the Spaniards came to Samar, they cautiously sent on ahead their priests, who soon dominated the natives by playing on their superstitions. The army of Spain, however, was never represented on Samar except by a few small garrisons under the command of a sergeant, who had been instructed to marry, if possible, the daughter of the most influential man in the town and thus secure a faction that might save him from assassination. They never attempted to penetrate the interior, being content with a few garrisons along the coast.

In Samar, the insurgents were under the command of General Vincente Lukban, Aguinaldo's most trusted lieutenant. The insurgents easily eluded our troops, and owing to the wild, impassable nature of the country, maintained a kind of brigand warfare. They divided into small detachments in the interior, avoiding our men, except where they could ambush or trap them. Towns were occasionally fired upon, and a few fanatical attacks were made upon small scouting details.

Although the people in the seaport town were inclined to be peaceful, Lukban and his forces kept everything in disorder. Many expeditions were sent out to capture him but without success, and no native dared to divulge his whereabouts.

About 30 miles from the south end of the island, on the west coast, was Balangiga, a small village of about 300 inhabitants and the usual collection of thatched huts, or nipa palm shacks, a church and convent, and a cuartel, or barracks. Here, C Company landed—consisting of Captain Thomas W. Connell, First Lieutenant Edward A. Bumpus, Major (Dr.) R.S. Griswold, and about 70 men. The village leader, the chief of police, and the priest met us out in the harbor in native barotas (hollowed out logs with bamboo poles suspended from side to side to keep the boat upright), carrying the American flag. They turned the convent over to the officers as quarters and the cuartel and four nipa shacks to the men. They showed us every courtesy possible.

To those who have never been in the tropics, it is hard to picture the difficulties our troops had to contend with in subduing the insurgents. The interior of Samar is a dense jungle of rank tropical growth, immense mountain gorges, deep and rapid streams, and widespread rice and mango swamps. The enemy had placed spring traps and pitfalls along all trails, and woe to the soldier who was unfortunate enough to spring one. The intense heat of the tropical sun, fever, and the treacherous character of the natives added to our hardships. Often, while marching along a trail, watching carefully each step in fear of springing a trap, some poor soldier would fall, stabbed to death by an insurgent who had been concealed in the dense undergrowth and who could rarely ever be reached and seldom ever seen.

Our company had been in the town a few weeks when Captain Connell, in order to check the spread of cholera, ordered the village leader and the chief of police to have each villager clear away the garbage and filth piled under his hut. The native shacks were built of bamboo, four legs being set upright in the ground and the floor being fastened to these posts about six feet above the ground. The sides and roofs were made of nipa leaves, and it was reached by means of a bamboo ladder.

The order to clean up was translated into the Visayan language and posted in various places about the town by the President. But this order was not obeyed, so a second order followed, with the same results, and also a third. Captain Connell added in the third bulletin that unless this order was obeyed, he would have the town burned.

The city staff—which consisted of the village leader, the priest, and a police force of some seven or eight men—claimed they could not force the villagers to comply with the order and asked for help. Accordingly, one day about sundown, the captain turned out the company, surrounded the town, and brought in every man over 18 years of age. He then picked out 80 of the most able-bodied and held them prisoners, placing them in two Sibley tents a few yards from the guardhouse, and placed a guard over them. The remainder of the townspeople were released with the promise that they would return for work in the morning, which they did.

Each morning about ten of these men, under guard of one of the soldiers, would clean the street. At the same time, those not under arrest were cleaning up around their shacks. The natives gathered around the guardhouse every morning under the supervision of the native chief of police. Being able to speak Spanish, he acted as interpreter between the soldiers and the natives, and through his suggestion the force

of laborers was gradually increased.

None of us had even an inkling that a murderous plot was being hatched. On September 26, the chief of police and the village leader made a suggestion to the captain: Since Balangiga was the headquarters of the various small towns surrounding it, and since it was necessary for the natives to work out their taxes, they should be brought into Balangiga and allowed to do the work there. The captain thought this plan quite reasonable and consented, not thinking what the chief's real intentions were.

The chief accordingly went out into the mountains and brought in 40 husky natives. We turned 40 of the town people loose, placed these men in the tents, and made the town people promise they would return in the morning. The next day the chief again went out and returned with 40 more men. These 80 men now under guard were some of Lukban's best troops of bolo men [*the bolo is a long, heavy, single-edged machete*], and had enough cutlery concealed on their persons to stock a small hardware store.

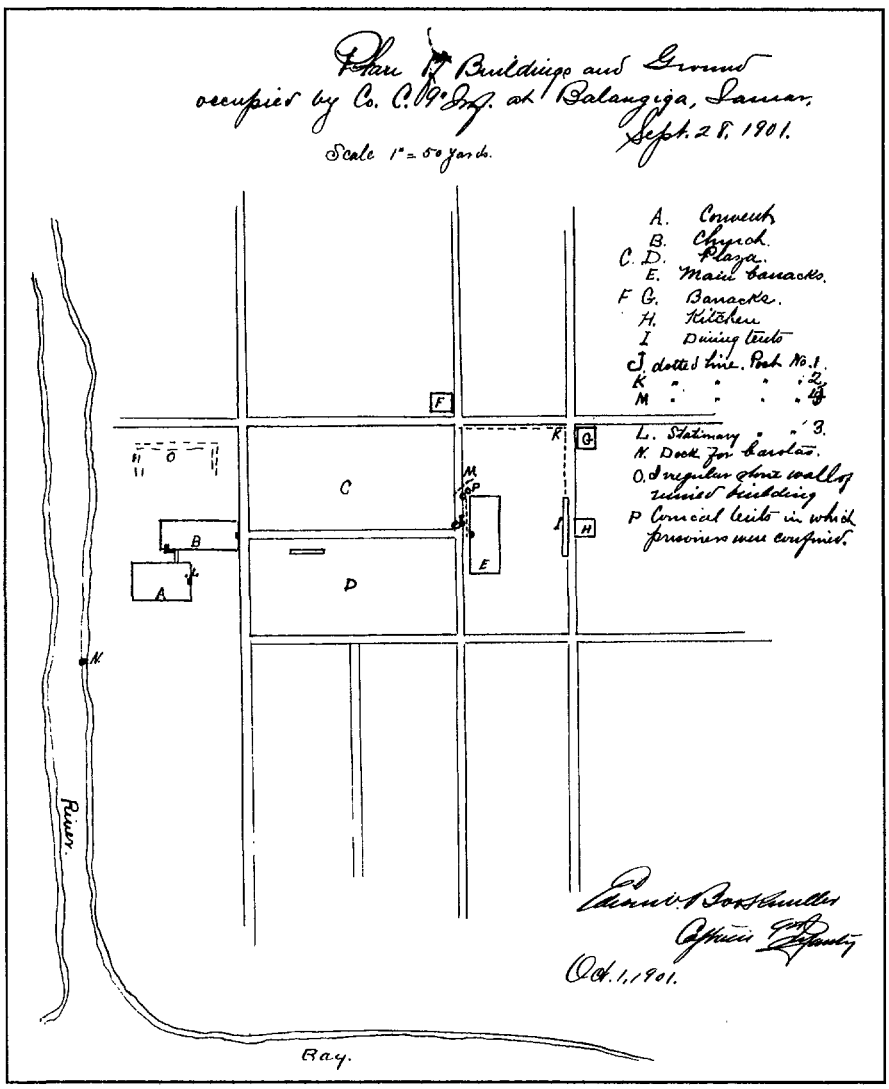
In the center of the town was a plaza, or square, on opposite sides of which were the church and convent, connected by a covered passageway, and the quarters of the men. The cuartel sheltered about 50 men, and the rest were in small shacks.

The company kitchen and mess tent were behind the cuartel, and the small shacks were adjacent to it. I was assigned to duty as officers' cook, their Chinese cook having refused to leave Manila with us. (He evidently knew the character of the natives better than we did.) I was therefore quartered in the convent with the officers. They occupied a front room and I a rear room, my kitchen being on the opposite side of a hall between the two rooms.

The company was divided into four groups—the officers on one side of the square, the main quarters under Acting First Sergeant Randles, shack No. 1 under Sergeant Markley, and shack No. 2 under Sergeant Betron. The guardhouse was in the basement of the large quarters and the two Sibley tents with the native prisoners were only a few yards away.

On the 24th, Lieutenant Bumpus, with six men, made a trip by barota to Basey for the mail and supplies. He returned about 10:00 p.m. of the 27th and delivered the mail upon arrival.

This was the last mail most of my comrades were ever to receive, and most of it remained unread; because we were issued only half a candle a month, most of the men had saved their mail for the next morning. I was a little better situated than the rest, as I had an oil lamp and was able to read all of my letters.



Map of the the town of Balangiga, drawn by Captain Edwin Bookmiller, Commander of G Company, 9th Infantry, who commanded the relief force on the return to Balangiga.

In a battle such as the one that followed, one has not much chance to look around and see what others are doing but is always on the alert to find the enemy. For that reason, I state here only what I did, but I also include reports made by three others.

That night was still and dark, and we could hear soft chanting in the church but thought it was some kind of religious service. About midnight, one of the guards reported that the women and children were leaving town; why the Sergeant of the Guard did not notify the company commander of this, I cannot understand.

About 60 natives remained in the church all night, ready to rush upon us in the convent, they being separated from us only by two folding doors. At 6:30 in the morning of the 28th, the natives were gathering for the day's work, and many were lounging around the plaza, bolos in hand. The prisoners were grouped near the tents within a few feet of a pile of bolos.

We always carried our rifles loaded, except to mess. When we bathed, only ten men at a time were allowed to go, and five of these had to remain on shore and guard. The mess call for breakfast was sounded at 6:30, the men assembling in the mess tent without their rifles. One man was always left in each of the quarters as a guard. We

never doubted that, however strong an attack, we would be able to reach our rifles.

I rose about six and proceeded to cook breakfast for the officers. My servant was a Filipino boy whom we had brought from Manila, and to whom I owe the fact that I am here now, as he gave me the first warning. I had my fire kindled and fresh water in. I had noticed nothing unusual except that the native who brought me eggs every morning had failed to put in an appearance, but I thought very little of that.

About 5:30 I heard the church bell suddenly peal out and about the same time heard a strange noise in the passageway between the church and the convent. The building shook, but I did not think seriously about this either, because we had experienced several earthquakes. My servant shouted, "Run, cook, run!" I ran to the door and was confronted by a husky native, bolo in hand. I dodged to get by him, he at the same time making a slash at my head. He hit the door casing, which warded off the worst of the blow, but he still cut a two-inch gash in the back of my head.

I had to run 60 or 70 feet to get to my rifle, and had to dodge several natives to do so. I managed to get by them without a single wound, the big native who had first attacked me following me and hacking at, but not reaching, me. I reached my rifle, which was loaded, and turned around. The man had raised his bolo to give me a finishing blow, but sticking the muzzle of my rifle right in his face—well, enough said. He did not hit me or anyone else again.

Private Walter Bertholf, with the Krag-Jorgensen that saved his life.

The rest of the natives, except the three or four who were after me, were in the front room attacking the officers. When my shot rang out, several more joined those who were attacking me. I shot the nearest one, leaped from the window onto the roof of a small building adjoining the convent, and then dropped to the ground. I still had four shots left in my rifle but—not having had time to hook my cartridge belt

Statement from Musician Meyer

I sounded mess call at 6:30 and then went unarmed to the mess tent. Nearly all of our men were in the mess tent eating. I, with Corporal Burke and about 12 mess mates, had just sat down to eat. Looking around, I noticed the chief of police, accompanied by some of his followers, walk from the vicinity of the main quarters toward a sentinel who was on guard over the mess tent. As he passed, he snatched the rifle from the sentinel and fired into the mess tent, wounding one man. The natives who were in the church rushed in, killing the officers and guard. The prisoners rushed out, grabbing their working bolos, and guarded the door of the main barracks, slashing down every man who came along. There was a succession of shouts, the tower bells rang out, and the crowd of natives, headed by the chief of police, ran toward us with the evident intention of cutting us off from our weapons in the barracks.

For a moment we were too dazed to move. Someone shouted, "They are in on us—get your rifles, boys." Instinctively, we all dashed for the front of our shack, the natives close behind, slashing and stabbing. We bounded up the ladder into the main room, the natives right after us. A fearful hand-to-hand struggle ensued, with soldiers and natives in death grips for the possession of rifles and bolos, and blood flowing in streams from the floor of the hut.

I reached the place where my revolver was and raised my right hand to grasp it when I received a terrible blow on the arm from a club in the hand of a large native, which numbed my forearm. I raised the other arm and was stabbed in the hand. Right after this, I received a stab in the ribs and a cut on the head. Unable to reach my revolver, and believing my last hour had come, I grasped the big native around the middle, pinioning his arms to his sides, and together we rolled about on the floor.

Near me were Corporal Burke and the chief of police, both giants in stature and pretty evenly matched, and both fighting as only giants can. I was losing strength from loss of blood and had about given up all hope when a shot rang out close beside me. I turned my head and saw the chief of police lying dead on the floor and Burke standing over him with a smoking revolver. In rolling about on the floor, they had turned over the cot belonging to the hospital corpsman, and his revolver had fallen out in reach of Burke. He had grasped the revolver and killed the policeman and then my opponent. I jumped up, got possession of my revolver and commenced pumping lead into our attackers. Just then, a few more men succeeded in getting rifles, and the natives ran out on the plaza. In a few minutes, seven of us were firing on the enemy.

The scene was awful, the dead and dying everywhere. We heard shots from Sergeant Markley's shack, and he soon joined us. I saw Private DeGraffenried, a great big fellow, standing on a pile of rocks and holding back several natives by hurling rocks at them. Markley gave him a rifle and all three joined our party. Hearing a cry for help, we ran in the direction of the convent. All of the officers were dead, but we found Corporal Hickman, Private Bertholf, and the native boy servant fighting off a horde of natives with but one rifle between them.

on—had left the building without it. As I struck the ground, four natives, all armed with bolos, made a dash at me. I fired, hitting the nearest one, but only wounding him. He gave an awful yelp and fell to the ground. I think his yelling put more fear into the others than my shot, for they stopped, looked at him, and turned and fled.

Just at this time, Captain Connell had leaped from the front window and came running past the corner of the building, followed by several natives. I fired at them, killing one, but could not save the captain, as they were upon him and had given him his death wound before I could fire another shot. I heard a noise behind me and turned, about to fire my last shot, when to my great relief I saw my servant running toward me with my cartridge belt and bayonet. I reloaded my rifle and commenced firing at natives wherever I saw them.

I saw Private Kleinhampl running across the plaza, closely pursued by a native. I fired and dropped the native but Kleinhampl had already been so badly wounded that he soon died.

I have often been asked whether I was ever frightened during this time, and I answer by relating the following incident:

To those of you who have never handled a Krag, the magazine holds five cartridges and one in the chamber, making six shots. By means of a small lever on the side of the magazine, the magazine may be cut out and the rifle loaded through the chamber only, in this manner keeping the magazine in reserve. It occasionally happens that after firing a shot, one forgets about his magazine being cut in, slips a shell from his belt into the chamber, and shoves the bolt home—the result being that a shell works up from the magazine and jams. The only way to overcome this is to remove all the shells from the magazine, and to a man in the state of mind we were in, it is a frenzied moment.

I saw two natives running toward me. I had just fired and loaded my rifle from the belt, and I shoved my bolt home and caused a jam. I pointed my rifle at them, and they ran behind a building. Little did they know that my rifle was temporarily useless.

Up until this time, I had heard no shots fired around the main quarters and supposed that all the fighting was on our side of the plaza. I saw some of the men and shouted for them to come over and help. Little did I realize the awful fight they were having until Corporal Hickman joined me. He had no rifle, only belt and bayonet, but had escaped. (I learned later that he had gone up to my room and was looking at a newspaper I had received in the mail when he heard them and escaped by leaping from a window.)

I kept firing at every native I saw and not long afterward was joined by Sergeant Markley and two others. We went up into the officers' quarters where we found all the guard dead. Lieutenant Bumpus was sitting up against the wall, dead. Dr. Griswold had fallen just as he leaped from his bed. Captain Connell lay dead on the ground below.

When the bells rang, every man made a rush for his quarters, but the attacks had been well planned and a force of natives guarded every entrance. At the rear of and adjoining the main barracks was a small annex, access to which was by means of a bamboo ladder. Some ten or twelve of the men drove the natives away from the ladder and made a rush for it, but their combined weight broke the ladder, and they dropped in a confused mass on the ground below. The natives were upon them and killed every man before they could put up any defense.

Those who attempted to get in the main entrance were also boloed. Three of the men ran down and jumped in the bay and attempted to swim away, but two of them met the same fate as the rest. After we had cleared the plaza and officers' quarters of natives, we went over to the main quarters. There

Statement of Sergeant Markley

I was on duty and not yet relieved at breakfast, so I stayed in the shack. I stood in the doorway looking around and called to Private Cain to hurry and get back so I could get some breakfast. As he started to come toward my shack, I went to meet him, not waiting until he was all the way there.

I noticed a lot of natives around the guard tents and in front of the main quarters and a great many on the streets. As I passed Cain I told him the natives were back early that day and went in to breakfast. I was just holding my plate to get my breakfast from Cook Walls when I heard a yell and the church bells ring.

I was rather suspicious of the natives there anyway and seemed to know at once that this meant an attack. I yelled, "Get your rifles, boys!" I ran to my shack, and when I got past the mess tent, the whole place seemed to swarm with natives. Near my shack was a big native armed with a club. He started to hit me with it, but I threw my tin cup in his face and went by. As I got to the steps, I saw a native with a bolo on our porch. I gave a leap, landing on the porch beside him and at the same time hitting him in the stomach with my fist, knocking him off the porch.

My cot was very near the door, and I grabbed my rifle, which was loaded. There were four natives in my shack, killing Private Vobayda. When they saw me they tried to jump out through a hole in the back of the shack. I shot one, and he fell through this hole and over Private Swanson, who had followed me to the shack and gone around to the rear.

The native whom I had knocked off the porch was still standing near the shack and not more than ten or 15 feet away, so I shot him first. As I reloaded, Corporal Irish fell at the steps exhausted. I helped him up the stairs and told him to get his rifle and joi me, which he did.

I then saw a native standing near th flagpole with a cartridge belt in his hand and shot him also. Swanson, Irish, and I then crossed the plaza to the main barracks, firing at natives i front of us. I saw Private DeGraffenried defending himself with rocks and fired in to the crowd attacking him, killing one, and the rest ran. We continued firing and got all but one. We were then joined by Sergeant Betron, Corporal Burke, and one or two others and made our way toward the officers' quarters.

lay the majority of my comrades, some cold in death, some slowly bleeding to death, and others crying for help.

I went around the north end of the quarters and heard a cry, "For God's sake, help me, Walt, I am dying." I found Shoemaker, a former schoolmate. We had enlisted together and were close friends. He lay there stabbed through the lungs and abdomen. I found a first aid package and bound up his wounds the best I could. Those who were able were to bring all the wounded to the front of the main quarters. I carried Shoemaker there also, then went in search of more. I found Wood, my bunkie and most particular friend, in the road at the south end of the quarters. He still lived, and I started to pick him up, but he threw his head back in my arms and said, "That's all," and died.

Leaving him there, I went back to where the wounded had been assembled. The survivors were holding a council as to what steps we had better take. We decided that, owing to the small force and the serious condition of most of our wounded, it would be best to abandon the town. The natives had neglected to make away with several barotas tied to a small dock. Perhaps they thought that after the first rush there would be no Americans left to use the boats.

We had decided to leave the town by means of these barotas, and we started to carry the wounded down to the dock. The natives, seeing what our intentions were, made a rush at us and, for a while it appeared that our time had come. However, by having those of the wounded who were able load our rifles, and by firing a magazine fire into the onrushing foe, we finally put them to flight, but not until we had killed a great number. About 180 dead natives were counted there the next day when the relief expedition arrived. Before leaving, we had made a careful search to find anyone who might be wounded. Musician Meyer and I upset a five-gallon can of coal oil and set fire to it in the convent, but the natives put the fire out after we got away. We also rendered useless all the rifles we were unable to take with us.

Of our 74 men, all well and hearty at 6:30 a.m., only 36 were now alive, and 30 of these were wounded, some seriously. We loaded most of the wounded men into the largest barota. Considine and I took Private Marak, wounded through the right arm; Private Shoemaker, wounded in lungs and abdomen; Private Buhrer, wounded in seven different places, all serious; and Private Armani, wounded in the abdomen and hand. We also took my native servant, who had put up as gallant a fight as he could.

I protested before leaving that my boat was overloaded, but was ordered to go ahead. In one of two small barotas were Markley and Swanson and in the other Wingo, Driscoll, and Powers. We had to maintain a steady fire upon the natives, for those who had obtained rifles were firing at us.

We at last shoved off, thanking God we were leaving, and thinking the worst of our troubles were over. But our troubles had hardly started. In leaving the bay, we had to round Capais Point, some four or five miles from Balangiga. Inside this point we had a calm sea, but on rounding the point the sea was choppy, wave after wave washing into the boats. By constant bailing, we managed to keep afloat. At five minutes to 12:00 (at least that is the time my watch stopped), a breaker hit the boat and swamped us. The outriggers of bamboo poles had given the boat enough buoyancy to keep

Statement of Sergeant Closson

I was seated at the south end of the mess table when the ringing of the bells and the yelling seemed to come together. I looked out and saw the natives coming toward us. I jumped up and ran to the back stairs to the large barracks, reaching them at the same time as the natives. I ran upstairs and into the annex, pushing my way through the natives, who did not try to bolo me, as they were crowding to get our guns. I seized a rifle, but someone grabbed me from behind. They were crowding so I could do nothing, and they pulled me down to the floor. Then all but three or four let go of me and went in search of rifles. I wrenched away and tried to get up, hitting at them with my fists and they at me with bolos. I thus received several wounds, the worst of which was a severe cut in the head over the left temple.

I was also stabbed with a stiletto. It entered behind my ear and came out in my throat, severing a nerve and depriving me of all control of one side of my face. I also had wounds on the top of my head, just above the left elbow and across the fingers of my left hand. I wrenched loose at last and got up. I found a stick that one of the natives had dropped and began fighting with that. A native came into the annex from the main quarters with a rifle and belt, and I knocked him down, grabbed the rifle and belt, and jumped from the window to the ground. As I struck the ground, two bolo men made for me. I struck one on the head with the rifle, which broke off at the small part of the stock. I did not know it was loaded when I hit him, but as I glanced at the broken stock I noticed it was cocked, so I took a chance on the other native, pointed it at him and fired, killing him. I reloaded the piece from the belt and started for the corner of the barracks. Some of the natives came running around the corner, and I turned down the magazine cut-off and pumped a magazine fire into them; those who were not hit ran away.

I then went around to the main door of the quarters, where I met Considine and Manire. One had a ball bat, the other a spade, and they were hitting at natives and trying to get into the quarters, the door being closed and held by natives inside. I fired once or twice through the door and the natives retreated upstairs. We forced the door open and followed them.

At the top of the stairs, I found another rifle, which I gave to Manire. I then found another, giving Considine the one I had been using, and we fired on all of the natives we saw. They were jumping from all the windows but few reached the ground alive, as some more of the boys had found rifles and were on the ground shooting them as they jumped. About fourteen or fifteen, seeing how things were going below, attempted to hide themselves in the orderly room, but we could see them through the cracks and kille every one of them. We then went downstairs and began firing on the natives on the plaza.

our heads out of the water. Those in the larger boat paddled to us and took Shoemaker and Considine out, thus lightening our load so that we floated better, but most of our bodies were still under water.

The men in the large boat told us they would land and unload and return for us, but they did not. (They later said they tried but the breakers near shore were too dangerous and they dared not land.) Thus, I was left about three miles from shore, with three badly wounded men and my servant, to the mercy of the waves. Every once in a while a wave would wash over, completely submerging us, and we had no means of propelling the boat, being under water as it was.

Words cannot express our state of mind with that tropical sun burning down on our heads, no water to drink, and the salt water causing excruciating pain as it soaked into our wounds. But God favored us with delirium, and I don't think any of us can tell all that happened that afternoon. About sundown I noticed that we were nearer shore than we had been at noon. I called the other boys' attention to this, thinking to encourage them by telling them the tide was slowly drifting us toward shore and we had a fighting chance yet.

About midnight we landed on some rocks, so weak we could hardly get out of the boat. The native boy and I pulled the boat up on the rocks as far as we could in our feeble condition. We then helped Armani and Buhrer to land. We were nearly dead from thirst, the two wounded men crying continuously for water. I had the boy climb a coconut tree and get us some coconuts, the milk from which gave us great relief. I then had the men lie down and try to get a little sleep, while I stood guard.

I know not how long I sat there awake, thinking over the events of the day and the prospects for the morrow, but there is a limit to human endurance and I had reached mine. I fought it off by walking and soaking my face in the sea, but finally gave in to fatigue.

When I awoke it was daylight. Imagine my distress when I looked out to sea about a mile and saw our boat floating. The tide which had saved our lives by landing us had gone out and taken from us our means of escape from a hostile shore. I woke my comrades and called their attention to our deplorable condition. When Armani and Buhrer saw the boat and realized our condition, they both gave up and begged me to kill them. But I finally got them calmed down.

We decided that we would walk up the beach, thinking no doubt that we would sooner or later run across a barota. Armani was able to walk, but it was necessary for me to carry Buhrer. We wandered along like this for a mile or more, finally coming to some huge boulders. We had to climb over these, which we did after a great deal of effort. Buhrer being now unable to help himself at all, and Armani but little better, both refused to go farther after getting over those rocks. We offered to carry them, but they both gave up and we could not induce them to go farther. So I hid them back among the rocks where they could be seen only from the waterfront and told them we would proceed to find a boat and return for them.

We followed the beach by walking and swimming and got about half a mile up the beach when I heard an awful yell. I turned around and to my horror saw a band of bolo men attacking my comrades. They must have been watching us and waiting for a chance to ambush us. I raised my sight and emptied my magazine into them, but they took cover.

Fearing they would head us off before we could reach a boat, and knowing our comrades were past all help, the three of us who were left hurried on up the beach. We hiked about four miles before we discovered a boat. A big husky native stood near it and saw us coming, but evidently did not see my rifle at first, because he reached into the boat and pulled out a big bolo. I did not stand on ceremony, but let drive and, taking possession of the boat, we shoved off.

This boat was in very unseaworthy condition, a large hole in one end being plugged up with a coconut husk. For paddles we had two sticks, which the native boy and I used to the best of our ability. We had gone about 200 yards from shore when the band of bolo men reached the dead native on shore. They leaped into the water and started swimming toward us, but I made this very discouraging by firing at several heads and had the satisfaction of seeing each disappear.

We proceeded along in this way for several hours, making little headway. Marak, whose arm by this time was swollen to twice its normal size, was in agony and begged me to shoot him. I had about given up hope myself when I saw a column of smoke and called his attention to it. I don't think we took our eyes off it from that time on. It came from a steamer of some kind—but was it coming our way? Would it come close enough for someone to see us? Or would it pass us by thinking we were natives? As we watched, the boat got larger. It *was* coming our way, and, thank God, they had sighted us. In about 30 minutes, which seemed as many hours, they reached us. It proved to be the launch *Pittsburg* with all of the survivors who were able to return, together with G Company, 9th Infantry.

While we were slowly drifting toward shore the day before, the large boat had proceeded toward Basey, 30 miles north of Balangiga, and had arrived just before dawn. The suffering of these men was awful. The two most badly wounded had died en route and one of the small boats had disappeared not long after my boat was swamped. Nothing has ever been heard of the men aboard it. We arrived at Balangiga that afternoon, and after firing several volleys from the deck of the boat, we landed.

We found that the natives had mutilated our dead, stripped all the bodies of their clothing, and had even killed our dog and poked his eyes out.

We picked up 36 of our dead comrades and buried them side by side in one long trench. Three volleys were fired and taps blown. I have never since that day heard taps sounded that my mind did not recall that trench and have an indescribable feeling come over me.

Out of our garrison of 74 men, we buried 36 at Balangiga, two disappeared at Balangiga whose bodies were never recovered, two died enroute, three were killed and two missing en route to Basey, and three died later at Basey, leaving 26 survivors. Thus closes the bloodiest chapter of our war in the Philippines.

The 164th Infantry Regiment
On Guadalcanal, 1942

COLONEL EUGENE H. GRAYSON, JR., U.S. Army, Retired

Fifty-six years ago, an untested and untried National Guard Infantry regiment from North Dakota played a major role during the most decisive battle involving American ground troops in the early stages of World War II. That battle—the second battle for Henderson Field—ended Japanese offensive action on Guadalcanal. Yet the role of that regiment—the 164th Infantry—during the darkest days of the Guadalcanal Campaign has been largely overlooked by military historians. Some of the soldiers in the regiment—in diaries at the time and in memoirs later—help tell the story.

In cooperation with military forces of the United Nations, hold New Caledonia against attack. These orders from the task force commander heading into the newly designated South Pacific Theater of Operations would ultimately set the stage for the first commitment of an Army regiment into combat during the early days of World War II. (Prior to that, only in the Philippines had U.S. Army units met and engaged the enemy, during the disastrous withdrawal in the face of the Japanese onslaught.)

It was clear that the understrength 1st Marine Division, which had gone ashore on Guadalcanal (code named Cactus) in August 1942, was in serious danger of losing this vital

outpost and could not have held it without the timely arrival and commitment into combat of this superb Army regiment. If one examines "combat at its best," then the role of the 164th Infantry Regiment and the results it achieved during the Guadalcanal campaign offer a classic example. Three elements made it stand out: its previous extensive training program in the United States and on New Caledonia, its outstanding leadership at all levels, and the M1 Garand rifle, which it carried into combat for the first time.

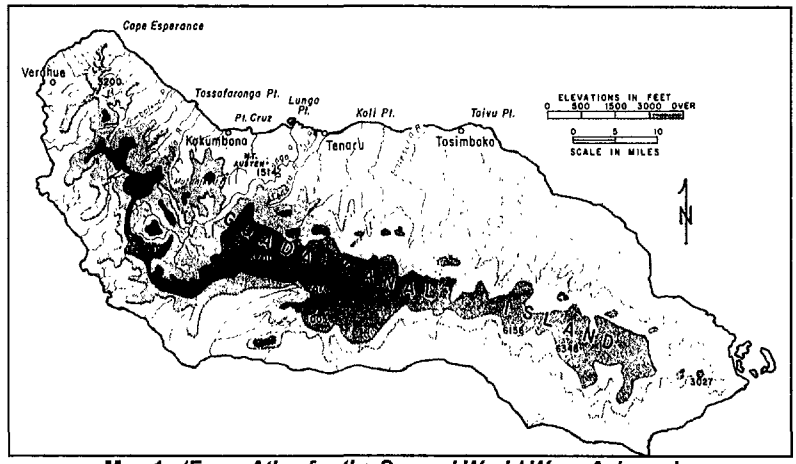
Major General Millard Harmon, Commanding General, Army Forces in the South Pacific, recognized very early the importance of Guadalcanal and its airfield in controlling the air and sea routes into Australia and New Zealand, and in supporting follow-on offensive operations up through New Guinea. After butting heads with Rear Admiral Kelly Turner, who was vigorously promoting the dispersal of forces throughout the area of operations, General Harmon made a decision. His communique to Admiral Robert Ghormley, Commander of South Pacific Area, on 6 October 1942, clearly illustrates his strategic perspective of the Southern Theater:

If we do not succeed in holding Cactus-Ringbolt [the code name for the Guadalcanal area], *our effort in the Santa Cruz will be a total waste—and loss. The Solomons has to be our main effort. The loss of Cactus-Ringbolt would be a four way victory for the* [Japanese]*—provide a vanguard for his strong Bismarck position,...give* [them] *a jumping off place against the New Hebrides,* [and] *effectively cover* [their] *operations against New Guinea.*

It is my personal conviction that the [Japanese are] *capable of retaking Cactus-Ringbolt and will do so in the near future unless it is materially strengthened. I further believe that appropriate increase in garrison, rapid improvement of conditions for air operations, and increased surface action, if accomplished in time, will make the operation so costly that* [they] *will not attempt it.*

Two specific areas in Harmon's letter indicate his theater perspective: First, the inclusion of a suitable all-weather B-17 staging field on Cactus, in order to extend reconnaissance and provide a heavy strike force, and second, the immediate reinforcement of Cactus by not less than the equivalent of one infantry regiment. The message was also a clear example of his understanding of the actions necessary at the operational level to gain and maintain the initiative until additional forces of all services could be deployed to the Pacific.

A platoon guide sergeant in Company E, 2d Battalion, 14th Regiment, later wrote: *It was important that the best regiment available be selected to reinforce the Marines. The situation on Guadalcanal was critical and only a limited number of men could be logistically supported on the Island. It was necessary that the Americans get the greatest fight per pound of logistics support delivered. The reinforcing regiment represented the U.S. Army in its first land combat since the fall of the Philippines. The eyes of the world, of countrymen, of friends, and of foes were on the island of Guadalcanal. It was important to the Americans to win. They needed to send their very best.* (From *The Battle of Coffin Corner*, by Brigadier General John Stannard. Gallatin, Tennessee, 1992.)

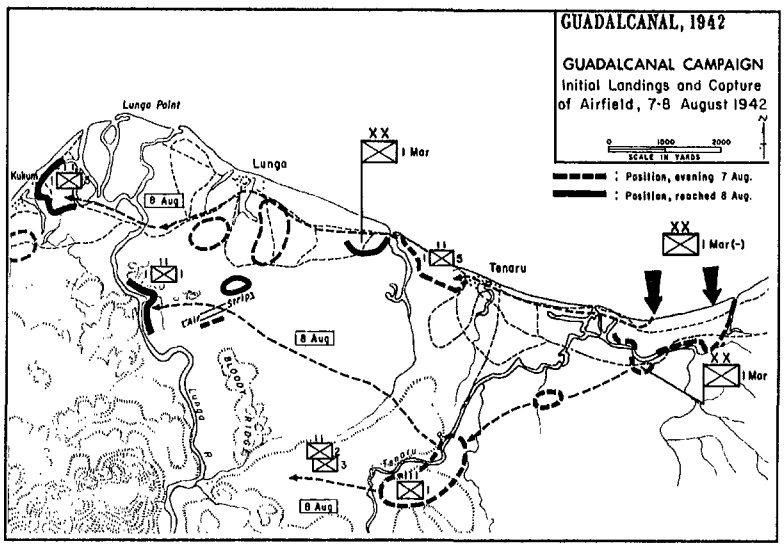


Map 1. (From *Atlas for the Second World War: Asia and the Pacific*, West Point Military History Series, 1985.)

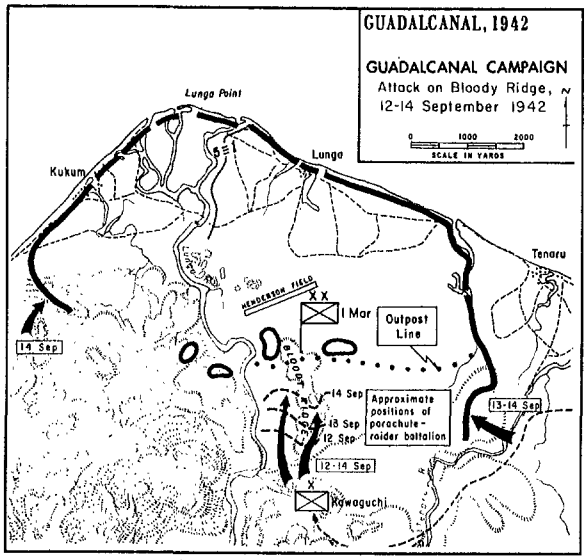
Setting the Stage

On 25 June 1942 Admiral Ernest J. King directed Admiral Chester W. Nimitz to prepare for offensive operations in the Lower Solomons. Once the Army-Navy command squabble was resolved by a boundary shift to include the area of operations in the South Pacific Theater, the 1st Marine Division (minus), enroute to New Zealand, was selected as the primary ground combat force. The area selected for the first offensive of the war included Guadalcanal, Tulagi, and the Gavutu-Tanambogo Islands, with Guadalcanal being the main effort (Map 1).

Not much was known about Guadalcanal at the time. The island was 90 miles long, 25 miles wide, with extremely heavy rainfall, numerous rivers and streams, and a nearly impassable jungle. Malaria and dengue fever, along with many other tropical diseases, were rampant throughout the area. No updated maps of any of the three islands were available. The operation would be conducted on a shoestring by an understrength division deep in "enemy country," with insufficient tactical air and with naval support far inferior to what the Japanese could bring to the fight. For Tulagi, Gavutu, and Tanambogo, the Raider and parachute battalions, supported by the 2d Battalion, 5th Marines, would conduct the operation. The main effort would be directed on Guadalcanal with the 1st and 5th Regiments (minus) and major support units including the 11th Artillery Regiment. Securing the Tulagi-Gavutu islands proved to be a much tougher job than expected, with more than 20 percent casualties before the islands were cleared. On 7 August the Marines went ashore in the vicinity of Lunga point (Map 2). The landings were unopposed, and this was fortunate since the off-loading from ship to shore did not go well. Because of a major shortage in amphibious shipping, much of the equipment required for the operation had been left behind, including prime movers. (The decision to leave the 155mm howitzers, especially, would come back to haunt the division during subsequent operations.)



Map 2. (From *Atlas....*)



Map 3. (From *Atlas....*)

Major General (later General) Alexander A. Vandegrift, commander of the first Marine Division, was faced with a nearly impossible situation—and mission. He did not have enough troops to begin with and had to hold a line around the airfield. His only course of action was to establish a defensive line along the Lunga River—about 9,600 yards, which included the village of Kukum, to Lunga Point and to the Lunga River (Map 3). Early, tough fights along the Tenaru and superb fighting by the Marines from well-dug-in positions took a high toll on the attacking Japanese. Air support, which at times was extremely limited as a result of the daily damage to Henderson Field, was provided by the few F4Fs and SDBs, augmented by old Army P-39s, P-40s, and P-400s, which—although incapable of high-altitude dogfights—were magnificent in a close-support role for the frontline Marines. The bitter fight on Bloody Ridge that turned back the first major Japanese attack also came close to being a disaster; the force between the ridge and the airfield would not have been enough if the Japanese had broken through. Other fights later took place along the Matanikau River and in the Point Cruz area, and even with the arrival of the 7th Marine Regiment, the combat strength available could do little more than hold a narrow line with too many gaps in it.

Combat

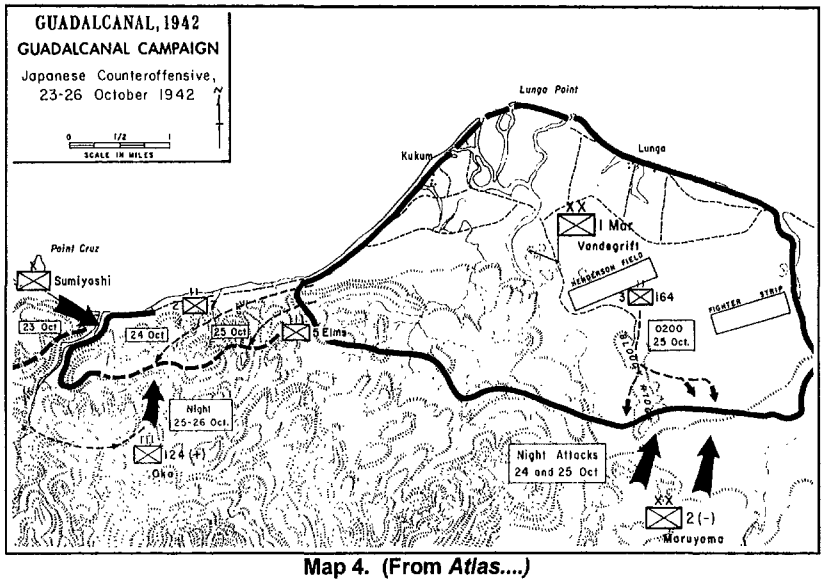
Without immediate reinforcement, the struggle to hold the perimeter around Henderson Field was in jeopardy. In early October, the 164th Infantry Regiment was alerted for deployment to Guadalcanal.

On 9 October the USS *Zeilin* and USS *McCauley* were loaded and, by late afternoon, pulled out of Nomuea Harbor bound for Guadalcanal. Lieutenant Colonel Samuel Baglien, the regimental executive officer, wrote that the trip was uneventful, with the soldiers pulling routine duties, including fire and embarkation drills. As dawn broke on the 13th, the two troop transports arrived at Kukum Beach and immediately began unloading troops and equipment. Within hours, while the regiment was still moving equipment from the beach, came the first of what seemed to be daily Japanese air attacks. By mid-afternoon, the second air attack hit, and around 1800, Japanese artillery struck the beach area. Japanese bombers, escorted by Zeros, were a constant problem for the undermanned and underequipped Cactus Air Force; and it was difficult to mount a coordinated counter-air campaign because of the daily damage to the airfield's runway.

The artillery shelling by Japanese 150mm guns posed a particular problem: Since the Marine 105mm and 75mm guns were outranged, no effective counterbattery fire was possible. As bad as the bombing was, however, nothing compared to the nightly shelling by battleships, cruisers, and destroyers, which owned the hours of darkness in the southern Solomons. The regiment's baptism by fire on the receiving end of a devastating naval gunfire attack came shortly after midnight on the 14th, when the beach area was pounded for more than three hours. Suitable cover was hard to find, and there was no time to dig in. The infantrymen and marines took whatever cover they could find. Colonel Baglien later wrote, "A new Zealand colonel who was attached to the 1st Division commented that the naval shelling on the 14th was much worse than anything he had experienced on Crete from German naval gunfire." (From *An Account of the 164th Infantry Regiment on Gudalcanal from 7 October 1942 through February 23, 1943.)*

On 15 October the 164th, under the command of Colonel Bryant E. Moore, was officially attached to the 1st Marine Division and moved into defensive positions, replacing the 1st Marine Regiment.

Once the 164th Infantry moved into the lines, General Vandegrift totally reorganized the perimeter and established five separate regimental sectors, with the 164th assigned the longest, which was some 6,000 yards. The Kukum area was assigned to the 3d Defense Battalion with the reinforced 1st Special Weapons Battalion. The Army regiment tied into this line along the beach and the Ilu River, to a position near Bloody Ridge. The 7th (-), 1st (-), and 5th (-) Marine Regiments completed the defensive perimeter. The 164th began active patrolling immediately after tying in positions with



Map 4. (From *Atlas....*)

Marine units on both flanks and, for the next several days, at extended distances, although the terrain made any sightings impossible. After one week on the line, Colonel Baglien recorded in his diary:

This is a peculiar war. We have an airfield on our regimental reserve line—the [Japanese] *navy hits us in the rear, we fight them to our front, they bomb the Hell out from the air, and we are holding a little piece of ground roughly six miles wide and three miles deep.... It looks like we are in for a rough time.*

Baglien's monograph, which provides a particularly vivid account of the regiment's early days on Guadalcanal, also listed the following activity:

15 Oct	*Bombed and strafed*	*1130 to 1430*
	Bombed and strafed	*1930 to 2030*
16 Oct	*Terrific naval shelling*	*1201 to 1230*
17 Oct	*20 bombers hit*	*1315*
18 Oct	*Enemy bombers hit*	*1414*
	Enemy bombers back	*1800*

Pistol Pete [Japanese artillery] *was working overtime between the bombers and naval gunfire on a daily basis.*

Japanese Plans to Secure Henderson Field

The critical importance of regaining complete control of Guadalcanal was not lost on senior Japanese planners. During mid-October, thousands of replacement infantrymen and additional artillery and support troops were funneled onto the island. Lieutenant General Harukichi Hyakutake, commanding general of the 17th Japanese Army, had developed an attack plan that he was convinced would result in the destruction of the American forces on the island. The plan included a comprehensive deception, using forces along the Matanikau to pin U.S. Marine infantry battalions in place, while nine infantry battalions under command of the 2d Japanese Infantry Division (supported by an ample amount of artillery and engineer support) would conduct the main attack against the Allied flank and drive through Henderson Field. By capturing the airfield, the Japanese would drive any remaining Allied forces toward the Matanikau, where they would be trapped between two major Japanese units.

Movement began on 16 October, and nine Japanese battalions headed through the deep jungle for the Allied flank, while five battalions, supported by a tank platoon and artillery, moved toward the Matanikau. From General Hyakutake's perspective, his plan should have ensured a complete victory. The Japanese 150s outranged Marine 105s and 75s. Every night, warships sailed into Sealark Channel and shelled U.S. Marine and Army positions, including the air-field. With 20,000 fresh troops, and banking on the element of surprise, Hyakutake's plan was logical and had an excellent chance of succeeding.

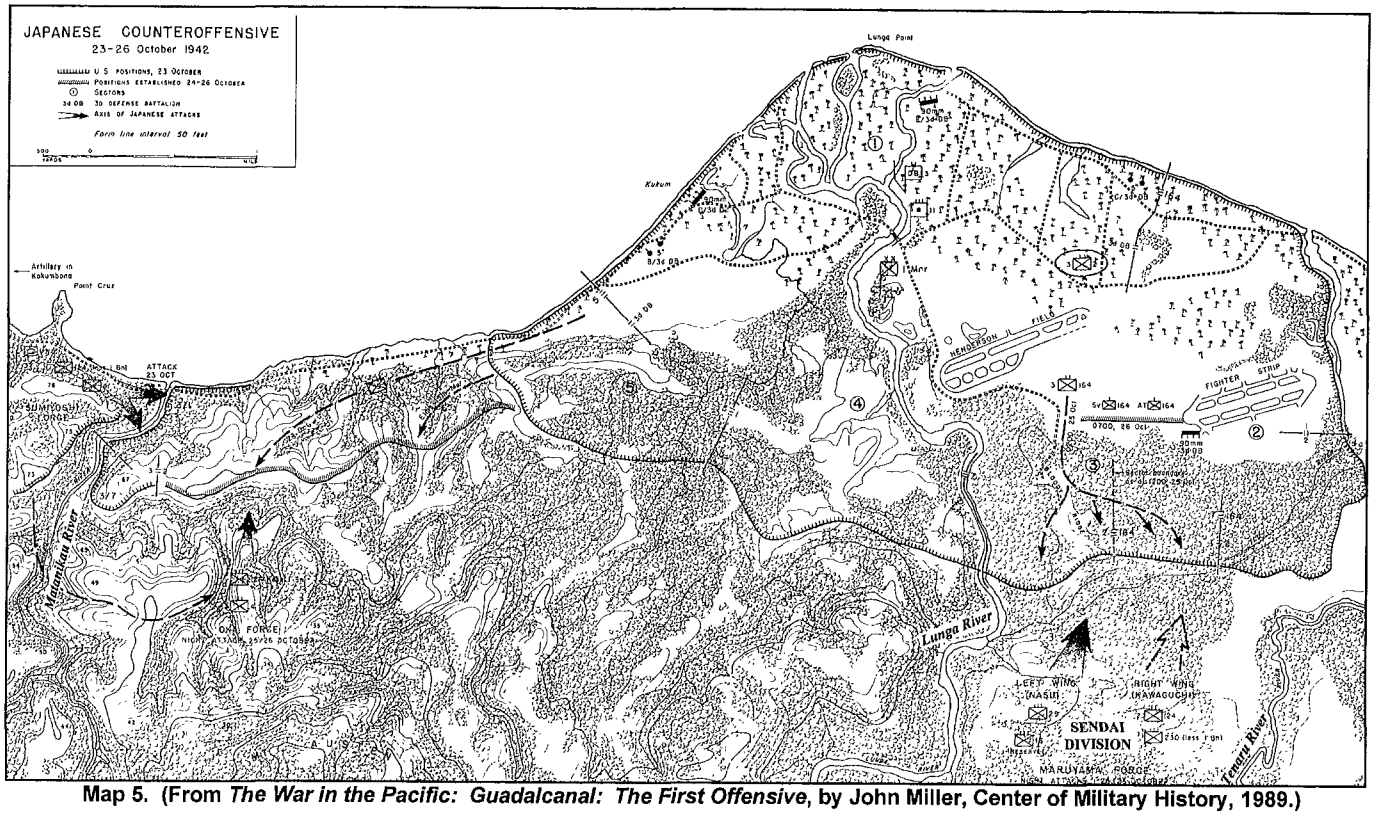
On 20 October the first clash occurred along the Matanikau when patrols from both sides began running into each other in front of the main Marine defensive positions. The first Japanese attack supported by two tanks was quickly broken up by Marine artillery and 37mm guns. Three days later, a more serious attack struck the Marines, this time supported by nine tanks and a massive artillery preparation. Once again, the Marine positions held, and the 37s destroyed eight of the tanks, while the ninth one was hit by a halftrack 75mm.

At the division command post, this appeared to be the anticipated main attack for several reasons, one of which was that the Matanikau was the only suitable terrain for an attack. The decision was therefore made on 24 October to pull the 2d Battalion, 7th Regiment, off line where it tied into the 164th Infantry's 2d Battalion, and move it toward the west and to occupy another sector in the perimeter (Map 4). This resulted in a 2,800-yard line, which was filled by Lieutenant Colonel Lewis Puller's 1st Battalion. Meanwhile, stragglers returning through friendly lines were reporting major Japanese forces moving through the jungle toward the Bloody Ridge area, and this created major concern in the command post (CP). Since it was too late to respond, however, the 1st and 2d Battalions in the 164th, along with Marines 1st Battalion, 7th Regiment, remained vigilant and prepared to receive the expected attack.

Stannard wrote:

American intelligence had failed to develop even a suspicion that a large enemy force was positioned near the southwest portion of the perimeter. Even though Japanese radio messages were intercepted, daily aerial reconnaissance flights were conducted, numerous foot patrols by native scouts, Marine snipers, and Marine and Army squads were out daily, none of these intelligence resources had discovered any sign of the Sendai Division moving to the east, around the perimeter, into attack positions.

Both General Vandegrift and Brigadier General Roy S. Geiger, who was in temporary command for a time, were convinced that the main Japanese attack would come from the west and not against the south or east sides of the perimeter. The 2d Battalion, 7th Regiment, was moved to the Matanikau salient, and Puller's battalion tied into Company E, 2d Battalion, 164th Infantry.



Map 5. (From *The War in the Pacific: Guadalcanal: The First Offensive*, by John Miller, Center of Military History, 1989.)

Harry Wiens, a soldier in the 164th, recorded the start of the fateful night as follows:

The evening of the 24th would have started routinely except that it was raining. We placed a shelter half over the entrance trench to our dugout and were sleeping when firing broke out to the southeasterly side of the perimeter. We listened for a while, and then the alert came. (From *My Own Little Corner of the War: A Look Back After 50 Years to Guadalcanal*, Scotts Valley, California, 1992.)

Wiens further recorded that Lieutenant Colonel Robert Hall, commanding the 3d Battalion (which was in reserve), while getting the battalion on the road, sent two lieutenants (accompanied by Wiens) to the division (CP) for instructions:

We entered the CP and the lieutenants reported. There was an older, somewhat broad shouldered gray-haired officer in the right side of the tent. The first question he asked was "where are they?" One lieutenant answered, "The troops are just leaving the coconut grove." General Geiger turned and just above a whisper, in what seemed like a low intense prayer, murmured "why don't they hurry?" The General then stopped in front of the lieutenants and most calmly instructed them, pointing to a map, to take the troops onto "that ridge."

At dusk on the 23d the attack against Marine positions along the Matanikau began with a massive artillery preparation (Map 5). Two Japanese battalions hit the 3d Battalion, 1st Regiment, and 3d Battalion, 7th Regiment, supported by a tank company while three more battalions struck from the south against the 2d Battalion, 7th Regiment, lines. This was the long-expected main attack, thus diverting attention from the eastern positions and achieving exactly the reaction General Hyakutake had counted on. Stannard writes that the decision to move the 2d Battalion, 7th Regiment, off-line because of the expected enemy attack in the west might well have turned out to be the worst and most costly decision the Americans made concerning Guadalcanal. Again, Puller's 1st Battalion now occupied a thin 2,800-yard line that tied into the 2d Battalion, 164th Infantry, line with Company E on the right flank.

On the 24th the Sendai Division—with three infantry battalions in each wing, followed by three more in reserve—slowly made its way through the dense jungle into attack positions. Around 2200 hours, the Japanese struck. The major attack hit the "Corner" where Company E, 2d Battalion, 164th Infantry, defended, and west into the Marines' 1st Battalion lines occupied by Company A. Marine artillery dropped rounds only 40 yards in front of the wire, while the 164th's mortar platoon from Company H fired some 1,600 rounds in front of the Army and Marine infantry companies. As the offensive grew in intensity, even the final protective fires could not halt the furious attack.

Around midnight, breakthroughs were beginning to occur along the thin front lines of the 1st Battalion, 7th Marines. The 3d platoon from the 164th's Company E, 2d Battalion, was attached to the Marine battalion to reinforce the line, soon to be followed by the reserve company. Army and Marine units were intermingled to a large extent, because Army platoons were inserted in the line wherever gaps occurred. Even with six Army platoons mixed in with the Marine units, by 0300 hours the line began to falter before the Sendai Division's brutal attack. The night would soon turn favorable for the American defenders, however, as the 164th Infantry threw the weight of its fresh 3d Battalion into the fight. As these soldiers arrived, Puller and Hall made no attempt to rearrange the lines but led the Army troops into position as

they arrived; they were totally interspersed with Marines.

Colonel Baglien writes that "upon arrival, desperate hand to hand fighting was in progress—and in some cases, hand to hand combat for the possession of foxholes and emplacements." Lieutenant Colonel Frank O. Hough writes:

...with characteristic resolution, the Japanese struck at the Marines again and again throughout the night. The Bushido spirit was unswerving, but the flesh could not endure the concentrated fire from the combined U.S. infantry battalions, the artillery, and 37mm's from the neighboring 2d Battalion, 164th Infantry. By dawn, [the commander of the 2d Japanese Division] *called back his men to regroup for later attacks, and Puller and Hall began to reorganize their intermingled battalions.* (From *Pearl Harbor to Guadalcanal, Volume 1, History of the U.S. Marine Operations in WW II,* Center of Military History, 1989.)

Once the reorganization was complete, the entire 164th Regiment was on line, with its 3d Battalion tied in with 1st Battalion, 7th Marines, on the southern slopes of Bloody Ridge, supported by four 37mm guns at the juncture, and connected with 2d Battalion on the left flank and tied into 1st Battalion. It was obvious another attack was coming. This time it would be better planned, and the main attack would hit the 164th lines. (Wiens writes that *one excited Marine guide returned to the CP with a firm pronouncement that he was going to get himself an M-1, even if he had to steal it* [Many marines had been armed with the 1903 Springfield.] *He had been guiding one of our sergeants, with his men following, to a line position, when they met five* [Japanese]. *The Marine said he'd shot one, and the sergeant, armed with an M-1, dispatched the other four before he could retract his bolt and chamber another round.*)

During the daylight hours on the 25th, hasty preparations were being made all along the 164th line. In the Army's official history, *The War in the Pacific: Guadalcanal: The First Offensive,* John Miller writes that *the 60mm mortars were emplaced behind the lines to put fire directly on the barbed wire; 81mm mortars behind the light mortars to hit the edge of the jungle; and four 37mm guns covered the juncture of the 2d and 3d Battalions.* The regimental reserve was constituted from the service and antitank companies, which moved into positions previously occupied by the 3d Battalion, while the 3d Battalion, 2d Marines, constituted the division reserve.

Adding to the already intense pressure from the previous night, Japanese destroyers sailed into the channel and shelled the airfield and beach area, while enemy aircraft bombed and strafed U.S. positions in seven separate attacks. Even Pistol Pete was active, firing artillery rounds into the Marine and Army sectors from 0800 to 1100. Because of the heavy mud—added to damage caused by enemy fires—planes were unable to take off. By mid-afternoon, however, they took to the air and destroyed 22 Japanese planes.

Shortly after 2000 hours, Japanese artillery began hitting the lines, and as darkness arrived, the major attack hit with full fury. This time, the main effort was straight at the 2d and 3d Battalions of the 164th, with the fight spilling over into the 1st Battalion, 7th Marine Regiment lines. From midnight until sunrise, the Japanese hit hard with elements of two reinforced regiments, but never made a major penetration, even though hand-to-hand combat was occurring up and down the lines. Company E, 2d Battalion, 164th Infantry, located at the "Corner," took the brunt of the attack by groups of 30 to 200 enemy assaulting the perimeter. Colonel Baglien's account published in the May 1944 *Infantry Journal* ("The Second Battle for Henderson Field," page 23) indicates that the Japanese 29th and 16th Regiments—both experienced and well-seasoned from China, the Philippines, Burma, and Java—spearheaded the strong attack.

Stannard writes that *Japanese tactics were the same as they had been on the previous night. Assaults were made by groups supported by machinegun and mortar fires, and were met by heavy fires from all available American weapons. The* [Japanese] *could not penetrate or force back the line of the 164th Infantry.*

During the bitter fight, Marine artillery played a critical role and was brought in extremely close to the lines. (One FO telephoned back to the FDC with the message, *Bring the rounds in another ten yards and we'll scratch our names on them as they go by.*) The attack by the Sendai Division at dark on 25 October was the final Japanese offensive action on Guadalcanal. It was much stronger and better planned than the attack the previous night and held within it the promise of victory. But American defensive positions were also stronger and the perimeter much better organized. By morning the bodies of more than 1,700 enemy soldiers were counted in front of the Regiment's positions, probably many more back in the dense jungle.

The performance of this former National Guard regiment was superlative in every respect. Stannard writes:

The fighting spirit and dedication to duty of both the Americans and the Japanese, who fought at Coffin Corner, were proven on that battlefield. Both sides were brave and disciplined enough to win. The Japanese were determined to win or die. The Americans were determined to win and survive. In the end, superior tactics and firepower gave victory to the Americans.

General Vandegrift wrote: "The 1st Division is proud to have serving with it another unit which has stood the test of battle and demonstrated an overwhelming superiority over the enemy."

The 164th Infantry Regiment would fight subsequent battles on Guadalcanal as an integral part of offensive actions, and by early February the island would be secured by Major General Alexander Patch's XIV Corps, consisting of the 25th Infantry Division, the 2d Marine Division, and the 164th Regiment's parent Americal Division. Other campaigns would see the 164th committed on Bougainville, Leyte, Cebu, Southeast Negros, and ultimately to Tokyo, where the regiment remained until sent home in November 1945.

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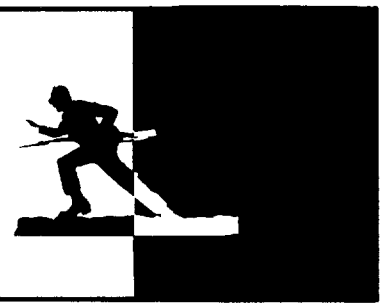
TRAINING NOTES



Antitank/Heavy Weapons Platoon

Fire Support to Rifle Company Deliberate Attacks

LIEUTENANT JOHN E. BRENNAN

The support-by-fire mission is one that air assault antitank/heavy weapons (AT/HW) platoons train for in South Korea on a quarterly basis. The mission is listed on the Delta Company's mission essential task list. And whenever the battalion training schedule allows, which is almost quarterly, these platoons execute the SBF mission as part of a rifle company combined arms live-fire exercise.

Unfortunately, Field Manual 7-91, *Employment of Antiarmor Platoons, Companies, and Battalions*, is outdated and does not even discuss the M2 .50-caliber machinegun or the Mk 19 automatic grenade launcher, both of which have been added to the AT/HW modified table of organization and equipment. This means there is no antiarmor doctrine to use as a guideline for training and employment. Fortunately, the field manuals and mission training plans used by rifle platoons and companies do provide ample information for transferring the tactics, techniques, and procedures (TTPs) of the support-by-fire to the AT/HW community. Having led an AT/HW platoon in the 1st Battalion, 506th Infantry, in Korea, I want to share lessons we learned about the employment of this platoon in the SBF role.

The platoon has four M60 machineguns and two M2 .50-caliber machineguns. The M2, a belt-fed, air-cooled heavy machinegun is a devastating weapon that is effective in the SBF role. It can be used mounted or dismounted. The primary mount for the SBF is the M3 tripod. Its maximum effective range is 1,600 meters for area targets, 1,100 meters for vehicle point targets, and 700 meters for human point targets. The M2 fires ball, tracer, armor piercing, and armor piercing incendiary rounds. The tracer burnout for the M2 is 2,200 meters. The sustained rate of fire is 40 rounds per minute and greater than this for the rapid rate.

When using this weapon in a dismounted mode, its weight is the biggest consideration (see Table 1). In fact, the weight of the M2 usually requires that it stay in its vehicle-mounted configuration. But experience and practice have shown that there is a way to break the equipment down to a manageable level for the soldiers to carry.

A full-strength AT/HW platoon is made up of one officer and 15 enlisted men. The platoon is capable of dismounting six single-channel ground and airborne radio systems (SINCGARS) and can use its organic rucksacks to transport the M2.

The first step is to break down three rucksacks. All that is required is the frame and the shoulder straps. Next the platoon secures the M2 receiver to one of the frames with bungee straps. The M2 receiver is tied down so that the triggers would be down if worn on the back. The M3 tripod is secured to a ruck frame, and then the two barrels (in their cases) are secured to the third frame. If barrel cases are not available, MRE (meals, ready to eat) wrappers can be taped to each end of a barrel as dust covers. Finally, the ammunition is divided into loads of 75 to 100 rounds. Although the ammunition cans allow for easy transportation, they are loud and add weight to the load. One method of overcoming this is to divide the rounds into 25-round belts and put each belt in a sandbag. The bags are quiet and lightweight, and they keep the rounds from getting caught on rucksack straps.

The following is a typical breakdown

COMPONENT	MACHINEGUN	TRIPOD	BARREL 1 or 2	RECEIVER	100 ROUNDS BALL	25 ROUNDS BALL
Weight	84 lbs	44 lbs	(1) 22 lbs (2) 44 lbs	62 lbs	37.5 lbs	9.4 lbs

Table 1. Weight of M2 machinegun components.

that my AT/HW platoon used:

Platoon leader—SINCGARS, 50 rounds, binoculars, AN/PVS-7B night vision goggles.

Platoon sergeant—100 rounds, AN/PVS-7B.

Platoon leader's driver—100 rounds.

Platoon sergeant's driver—100 rounds, E-tool, 8 empty sandbags.

1st Section leader—100 rounds, binoculars, AN/PVS-7B.

Gunner—Receiver, AN/PVS-7B.

Driver—Tripod.

Squad leader—Barrels.

Gunner—75 rounds, M18A1 claymore mine, asbestos gloves, traversing and elevation (T&E) mechanism, headspace and timing tool.

Driver—100 rounds.

2d Section leader—100 rounds, binoculars, AN/PVS-7B.

Gunner—75 rounds, M18A1 claymore mine, asbestos gloves, T&E mechanism, head space and timing tool.

Driver—100 rounds.

Using this configuration, the platoon can bring two M2 machineguns and 900 rounds to the fight, day or night. The platoon has local security, secure communications, enough ammunition to place accurate and sustained fires on the objective for approximately 10 minutes, increased observation, and the ability to engage two targets at the same time.

The greatest limitation of this setup is decreased security during movement. The loads are cumbersome and heavy; it takes a lot of discipline to carry them while also worrying about local security. Executing battle drills (react to contact, break contact) to standard is also more difficult when carrying the loads, and soldiers must practice these drills while carrying their actual machineguns.

Another limitation of this setup is that, although it has proved successful in conditions of limited visibility, the ranges at which the AT/HW platoon can engage the enemy are limited by the capabilities of the unit's night vision sights. Current AT/HW platoons in Korea are authorized TVS-5s but do not have them on hand. For the most part, the effective ranges decreased to 400-500 meters during periods of limited visibility. In Korea, visibility was often so poor that gunners could not differentiate the bunkers from the surrounding terrain. The final limitation is obvious: Any loss of personnel immediately decreases the number of rounds the platoon can carry.

There are some ways to reduce the effects of these limitations. The SBF AT/HW platoon should be employed along with one or more weapons squads. Using the platoon with a security element increases its survivability and allows for further distribution of ammunition. The addition of the weapons squad also gives the SBF leader greater flexibility. He can employ more weapons against the enemy, in a concerted and synchronized effort, from one or more support positions. The weapons squads also bring AN/PAQ-4 aiming lights to the picture, which greatly improves the accuracy of fires during periods of limited visibility.

Task Organization

The AT/HW SBF platoon breaks down into three elements: command and control, gun teams, and local security. The command and control element consists of the platoon leader, the platoon sergeant, and the platoon leader's driver, who also serves as a radiotelephone operator. The gun teams contain the section leaders, their gunners, and drivers/loaders/assistant gunners. The squad leaders, their gunners, and their drivers serve as the local security elements, which are equipped with M16A2s, M203s, and an M249 light machinegun.

The command and control element is led by the AT/HW platoon leader, who is responsible for directing and controlling all the fires of the SBF element. His usual task is to suppress the enemy for various purposes—such as preventing a counterattack against the breach point, or preventing the enemy from placing effective fires on a particular element. Additionally, he controls the distribution, rate, initiation, shifting, and lifting of fires. The distribution of fires, which is the assignment of targets to weapons, greatly affects the mass of the fires (the number of rounds placed on a single target). When more than one weapon is paired with a single target, the mass of fires on that target is high. Rates of fire affect the mass of fires and the time needed to suppress a given target. When the rate of fire increases, the number of rounds landing on a target in a given time period also increases, and this affects the number of weapons needed for a target. For instance, it takes two M2 machineguns firing at 50 rounds per minute to match an M60 shooting its sustained rate of 100 rounds per minute. The rate of fire is computed after the SBF leader has conducted a detailed mission analysis. The initiation, shifting, and lifting of fires are executed according to a well-thought-out, well-coordinated, and well-rehearsed plan.

In addition to helping the platoon leader perform his duties, the AT/HW platoon sergeant closely monitors the load carried by each soldier to ensure that he will still be fully mission capable when he reaches the SBF position. The platoon sergeant also concerns himself with accounting for all personnel and equipment throughout the operation and keeps the platoon leader informed of ammunition status and resupply issues. When using multiple SBF positions, the platoon sergeant can provide critical platoon level leadership at one of the other positions.

The platoon leader's driver maintains communication with the ground unit commander, normally the commander of the rifle company to which the AT/HW platoon is attached. He also maintains communication with all the SBF positions. He is an extra observer for the identification of all visual signals and ensures that the AT/HW platoon leader recognizes them.

The gun teams are led by the AT/HW section leaders and by the attached weapons squad leaders. These noncommissioned officers are responsible for the performance and accountability of their gun teams. They help the AT/HW platoon leader analyze the mission and develop the suppression plan.

Each leader keeps the platoon sergeant and platoon leader informed of ammunition status. Using code words to relay this information simplifies communications. For instance, *Red* means the M2 .50 caliber machinegun has 50 rounds left. For the M60 it means 100 rounds are left. *Black* means

all ammunition has been expended. *Slam* means the weapon does have ammunition, but it is experiencing a malfunction and cannot fire.

The gun team leaders' most important responsibility is directing and controlling the fires of their gun teams. They control the initiation, rate, shifting, and lifting of fires for their respective weapons in accordance with the suppression plan.

The local security elements act as supporting elements and are given the task and purpose of destroying dismounted enemy forces to prevent them from placing effective fires on the gun teams. The AT/HW squad leaders do a detailed analysis of the terrain surrounding the SBF position and identify likely dismounted avenues of approach. Once this is accomplished, they present recommendations to the AT/HW platoon leader and platoon sergeant on how best to defend the position from dismounted attacks.

Movements

The AT/HW platoon conducts its dismounted movements using techniques similar to those used by rifle platoons. The platoon is divided into two sections and each section into two three-man wedges. The platoon leader can position himself immediately behind the first section and the platoon sergeant right behind the second section. The squad leaders are at the point of the lead wedge, and the section leaders at the point of the second wedge. Everyone pulls 360-degree security. The leaders do not carry M249 machineguns, but these weapons are located nearby for quick employment.

Battle drills are the same for the AT/HW platoon as for the rifle platoon, except that all the .50 caliber equipment is immediately grounded after the soldiers seek cover. If M60 weapon squads are attached to the AT/HW platoon, they travel with the platoon leader or sergeant and are employed as in normal rifle platoon battle drills.

Occupation

The SBF element moves from its line of departure to the objective rally point (ORP). Once there, the platoon halts and pulls local security. From the ORP, the AT/HW platoon leader and his gun team leaders move toward the objective to confirm its location and identify the SBF position. Then the leaders move back to the ORP. An analysis of mission, enemy, terrain, troops available, and time (METT-T) determines what preparation of equipment is done in the ORP. Although the main consideration is noise discipline, the leader must also consider the platoon's ability to move an assembled M2. He must also stress the camouflage of men and equipment.

The platoon stops short of the SBF position and consolidates its M2 components. The distance between the release point and the SBF position depends on METT-T, but it must not be visible from the objective. In the release point, the local security element drops off its ammunition with the gun teams and moves to clear and secure the SBF position. (The security element must have done a visual clearing of the position earlier and then emplaced security along the position's likely dismounted avenues of approach.) The local security leader ensures that claymores are in place and that each soldier has a sector of fire and is behind cover and concealment.

Once local security has been established, the gun teams begin emplacing their weapons, keeping in mind that the release point is within hearing distance of the objective. While the platoon sergeant supervises this, the platoon leader and the gun team leaders crawl into the SBF position and begin identifying gun positions and looking at their targets. The platoon leader divides the objective into the targets he briefed during his order and orients the gun team leaders to the objective. Once he is satisfied with their backbriefs, he orders them to move their weapons into position.

First, the M60 teams crawl forward, one at a time, and put their weapons in tripod mode one at a time. Once the M60s are in position (with ample space allowed for the M2s), the M2 gun teams use a three-man carry technique to drag the weapon into position. During this time, the platoon sergeant's driver fills four sand bags for each M2 to create a firm and stable platform for it.

Once all personnel and weapons are in position, the platoon leader gives the order to load the weapons. The M2 teams load their weapons but—because of the noise—do not charge them, until the enemy is being engaged with direct fire.

The last step is to lay the guns on their respective targets, do a dry fire rehearsal of the shifts and lifts they will perform, and have the platoon leader and platoon sergeant get down behind the guns to verify their orientation. They also look for the metal-to-metal contact between gun and tripod that would prevent it from traversing into the friendly assault positions. Now the platoon leader calls the ground unit commander and notifies him that the SBF element is in position.

If the platoon occupies its position at night, the AN/PAQ-4 infrared aiming lights are invaluable in identifying targets. When the weapons squads are attached, they normally bring one PAQ-4 for each M60 and one for the weapons squad leader. The weapons squad leader paints the target and has his gunners line their lasers up on his mark.

Although the M2s do not have aiming lights, the gunners can see the leader's PAQ-4 through their AN/PVS-7Bs. The squad leader just paints their targets and lets them get close for their sight picture. The problem with the PVS-7B is that its limitations in depth perception force the gunner to focus in at his rear sight, adjust the focus to see the front sight, and then adjust the focus again on the target. One remedy is to find a scratch on the lens of the PVS-7, line it up on the rear sight and then focus forward and see if the spot stays on the front sight and the target.

In general, the M2 gunners can orient their weapons so that the initial rounds land within five to ten meters of their targets. After the initial burst (using three to five tracers at the beginning of the belt), the gun team leaders can quickly adjust the gunners onto their targets so that they can begin neutralizing the bunkers or trench lines with a high volume of fire. In training it is possible to fire a single tracer round to register the guns. Each gunner fires a round at his target and adjusts subse-

TIME (Min:Sec)	WEAPON: M2	WEAPON: M2	WEAPON: M60	WEAPON: M60	WEAPON: M60	WEAPON: M60
	Gun 1	Gun 2	Gun 3	Gun 4	Gun 5	Gun 6
	Tgt/# rounds	Tgt/# rounds	Tgt/# rounds	Tgt/# rounds	Tgt/# rounds	Tgt/# rounds
00:00	6/10	9/10	3/25	3/25	C/25	2/25
00:15	6/10	9/10	3/25	3/25	C/25	2/25
00:30	6/10	9/10	3/25	3/25	C/25	2/25
00:45	2/10*	10/10*	11/25*	12/25*	C/25*	C/25*
01:00	2/10	10/10	11/25	12/25	C/25	C/25
01:15	2/10	10/10	11/25	12/25	C/25	C/25
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14:45	CA/0	CA/0	11/10	11/10	12/10	12/10
15:00	CA/0	CA/0	11/10	11/10	12/10	12/10
*Shift of Fires						

Table 2. Sample matrix showing organization of the suppression plan.

quent rounds using feedback from his observers. Registration contributes to force protection during maneuver live fire exercises.

If the AT/HW platoon is to use multiple SBF positions, each one needs FM radio communications, with platoon level leadership at each position. The methods of occupation are similar for each position. A limitation of the weapons squads is that they have PRC-126 radios instead of SINCGARS. There are two possible solutions to this problem: Give the weapons squad one of the AT/HW platoon's radios or set the platoon leader's own radio frequency on his weapon squads' frequency. The former solution is ideal, while the latter involves a lot of switching to plain text single channel to talk.

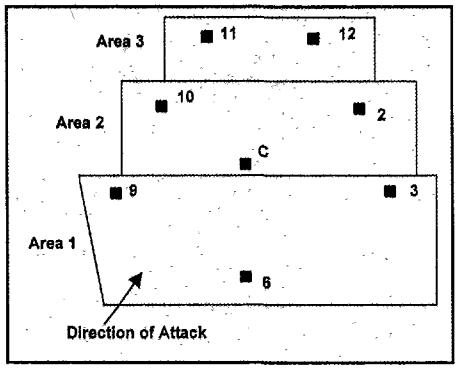
As soon as the platoon is in position, it needs to begin giving intelligence updates to the ground unit commander. Because the platoon has binoculars and night vision capabilities, its soldiers can identify enemy positions, equipment, and troop locations and numbers before the rifle company arrives. During the fight the AT/HW platoon can also tell the ground unit commander where the enemy is reinforcing his trenchlines, where his counterattack is, and which bunker an enemy soldier may have just entered. This kind of information saves friendly lives and gives the ground commander some flexibility.

Suppression Plan

The suppression plan is the method of execution for the way the AT/HW platoon will support the rifle company with direct fires. The plan begins during the troop-leading procedures when the AT/HW platoon leader conducts his detailed mission analysis and is updated throughout the execution of the mission.

The platoon leader will need to ask the commander for certain information: How much suppression does he want? How long does he want the enemy's head down? Where will the breach be? Which bunkers should be suppressed to facilitate the breach? Which way will the platoons move through the trenches? Where is the likely avenue of approach for a counterattack?

There are other questions the platoon leader will have to answer for himself, on the basis of his METT-T analysis: What weapon will be best able to destroy or suppress the bunkers? At what rate should the weapons fire to meet the time constraints? How many weapons should be hitting each target? In essence, how many bullets does the commander want in each bunker? When should the weapons shift? To what targets? When do they lift? Which weapons should engage which targets during a counterattack? Should the SBF element stay in position or consolidate on the objective? Which of these choices will make the most of the weapons' standoff capability? When all of these questions are answered, the platoon leader has his suppression plan.



To organize the plan, the SBF leader begins with target identification. One way is the clock method. The 12 o'clock position can be based on the SBF's orientation or the company's direction of attack, but a decision should be made that both elements can understand. Notice on the diagram that each bunker is given a clock number based on its position in relation to the direction of attack. Also, there are groups of bunkers that are divided into areas. For instance, bunkers 3, 6, and 9 are Area 1 targets. This area coincides with the ground commander's scheme of maneuver. On this objective, the commander has a phase line (PL) that stretches from bunker 9 to bunker 3 and a PL from bunker 10 to bunker 2.

Once targets are assigned, the SBF leader decides where, when, and what fires need to be placed on each target. A simple matrix will help organize the plan (see sample in Table 2). This matrix tells the leader that one minute after the initiation of fire, Gun 4, an M60, is firing at target number 12 and that the gunner is to fire 25 rounds during the next 15-second period. That equals 100 rounds per minute, the M60's sustained rate of fire. The matrix also shows that 15 minutes after the initiation of fire, both M2s have stopped firing and Gun 3 is firing only one ten-round burst every 15 seconds. This means that the rifle company almost has the objective secured and the gunner is shooting only at

targets of opportunity. It also means the gun team leader must ensure that the gunner is putting a time lag between bursts.

This matrix is merely a tool that the platoon leader can use to track what ammunition he needs in order to give the commander the amount of time he needs. It also can be used to show a weapon shift, as indicated by the asterisks. Other information can be added as required, such as a symbol representing a change in rate of fire. It is important to remember that this document can be altered as weapons go down, or as the ammunition or target status changes. This means that the platoon leader must have a good grasp of how quickly certain rates of fire affect ammunition levels and how long it takes to fire a five-round burst as opposed to a 10-round burst. Such details help the leader respond quickly to any changes in the plan.

When the target identification and matrix TTPs are put together, the commander has his plan. Here is the way they work together:

- Upon initiation, the SBF positions will fire on Area 1 and 2 targets. Gun 1 fires at 6, Gun 2 fires at 9. Guns 3 and 4 fire at 3, Gun 5 fires at C, Gun 6 fires at 2.
- Once the bangalores go off, all weapons shift to Area 2 and 3 targets. Gun 1 fires at 2, Gun 2 fires at 10, Gun 3 shifts to 11, Gun 4 shifts to 12, Gun 5 continues to fire at C, and Gun 6 shifts to C.
- Once the rifle platoons reach PL 3-9, they will fire a green star cluster and send an FM signal. On the star cluster, or on order, all guns shift to Area 3 targets and beyond. Guns 1 and 2 will lift fire and orient on the likely counterattack avenues of approach. Guns 3 and 4 will fire on 11. Guns 5 and 6 will fire on 12.
- Once the rifle platoons reach PL 2-10, they will fire an M203 parachute flare and send an FM signal. On the flare, or on order, all guns will lift fire and shift to likely counterattack avenues of approach and begin consolidation.

It is critical to mission accomplishment and force protection that all elements of the operation rehearse the suppression plan. One method is to use "rock drills." Here, all the key leaders meet and talk/walk through all their actions and signals. At each phase of the operation, each gun team leader explains the actions his team will be taking. The most important aspects of this rehearsal are backbriefings from the key leaders with respect to fire, movement, and signals. They must incorporate visual, FM, alternate, and back-up signals for every event.

It is also important to rehearse the occupation phase of the SBF operation. Contingency planning should be used for reacting to chance contact that may be made by all units. What does the SBF element do if the maneuver element makes contact before its assault position? What does the SBF element do if it makes contact before, during, or after the occupation phase?

Once the objective is secure, the AT/HW platoon's main concern is destroying any enemy counterattack. The AT/HW platoon leader must identify likely avenues of approach to the objective that the enemy could use for a counterattack. Each gun is assigned responsibility for one of these avenues. At least one M60 is moved to cover the dismounted avenue of approach position that is the most likely route for an enemy attack against the SBF position. Immediately all gun team leaders give the AT/HW platoon leader a report on water, ammunition, casualties, and equipment. The platoon sergeant begins redistributing ammunition and water and treats casualties. Once the enemy counterattack is over, the platoon repeats this consolidation process.

Now the ground unit commander must decide whether he wants the SBF position to consolidate on the objective, stay in position, or move to another location for linkup and further combat operations. The commander has many options, but he and the AT/HW platoon leader must analyze the terrain and the current situation to determine what further suppression the ground unit needs. For instance, if the company is going to set up a medical evacuation pickup zone, the commander may want to move the SBF element to a position that allows it to overwatch the pickup zone operations. The main thing to remember is that the value of the AT/HW platoon lies in its ability to use its weapons' ranges to stand off from the enemy. When the order to move is given, the M2s are the first to move out of position, while the M60s overwatch. The M2 gun teams use water to cool the barrel and then move the weapon to a covered and concealed position (the ORP). (Although using water is not the preferred method because it can warp the barrel, it has proved to be the quickest. Once in the ORP, the platoon breaks down the M2s and configures them for dismounted movement. When they are ready to move, they pull security while the M60s prepare to move. On order, the M60s go to bipod mode (one gun at a time) and pull back to the ORP and prepare for movement. The AT/HW platoon sergeant inspects the SBF position for personnel or equipment and moves to the ORP for an accountability inspection. Finally, the AT/HW platoon initiates its next movement.

Although this discussion is focused on an air assault platoon using the M2 machinegun, it remains to be seen whether this concept can be applied to airborne operations or operations in which the platoon uses its Mk 19 automatic grenade launchers. The challenge is for other units to try these tactics, techniques, and procedures and get word out to the rest of the infantry community.

The AT/HW platoon plays a critical role in the rifle company deliberate attack. The platoon gives the ground unit commander devastating, timely suppressive fires, consolidated command and control for his SBF elements, and real-time intelligence before his attack. The SBF mission for the AT/HW platoon is difficult, physically and mentally, and is a mission for which the platoon must train diligently.

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Airborne Heavy Weapons Company

Peace Enforcement Operations in Bosnia

LIEUTENANT COLONEL R.D. HOOKER, JR.
CAPTAIN JOHN R. LIGHTNER

In December 1995 the 3d Battalion, 325th Infantry (Airborne Battalion Combat Team), deployed to Bosnia-Herzegovina for Operation *Joint Endeavor*. The first U.S. combat unit to arrive in the theater, the ABCT assumed the mission of securing Tuzla Air Base, headquarters of the U.S. Multinational Division (Task Force *Eagle*). Throughout its three-month stay in Bosnia, the Combat Team's Company E (Heavy Weapons) ranged across the American Sector and played a key role in the unit's success. This article describes the heavy weapons company's organization, training, and tactical employment in a stressful and challenging operational environment, and suggests lessons for its future use by the Infantry community in similar missions.

This unique organization, the 3/325 ABCT, served as the U.S. component of the Allied Command Europe Mobile Force (Land) and was based in Vicenza, Italy, as part of the Southern European Task Force. Although the team was built around a standard airborne infantry battalion, the unit modified tables of organization and equipment also included a beefed-up battle staff, an organic 105mm artillery battalion, a very large transportation platoon, combat and heavy engineer platoons, riggers, a large forward support company, an air defense platoon, and ground support radar and water purification elements. Except for the artillery battery, these elements were provisionally attached to the unit's parent headquarters, the Lion Brigade (Airborne). The most versatile unit in the ABCT, however, was the battalion's heavy weapons company. The soldiers and leaders of Company E provided much of the team's long-range firepower and mobility and played a decisive role in the battalion's outstanding success in Bosnia.

Although Company E was similar to the antiarmor companies in the airborne and air assault divisions, it differed significantly in mission and weaponry. The "heavy weapons" designation described the unit's responsibilities, based on its theater-specific missions, to provide heavy direct fires of all kinds in both mounted and dismounted modes. Like standard antiarmor companies, Company E fielded 20 TOW antitank systems, but it also had 10 Mk 19 automatic grenade launchers, 10 M2 .50-caliber heavy machineguns, 10 M60 medium machineguns, and 10 M249 light machineguns, in addition to individual weapons, which gave the unit impressive firepower and flexibility.

Organized into five platoons of four gun vehicles each, the company also traded its "soft top" platoon command vehicles for the "hard shell" variety with mounted light machineguns. This version was still a command and control vehicle, but one that offered better protection and augmented the platoon's firepower. Although the company enjoyed a high leader-to-led ratio, it suffered from a theater-wide shortage of 11H soldiers. The company struggled to maintain its three-man crews, since even a single missing soldier would render a crew combat ineffective. For operational deployments, the company was typically augmented with drivers from the brigade, not an ideal solution but probably the only viable one.

Although the company retained its primary tank-killing role, it also played other important roles as a fourth maneuver team headquarters for airfield seizure (detaching some of its organic platoons and assuming control of rifle units); as enroute security, escort, reconnaissance, and counterreconnaissance operations; and as a mobile security, reserve, and counterattack force against dismounted threats. To strengthen rifle platoons during air assault operations, Company E was also tasked to organize and train machinegun teams for dismounted operations. These requirements—along with the need to remain highly proficient in heavy drop/airborne assault operations—severely taxed the company's leaders and training program.

Unquestionably, the number of assigned missions made focusing on any one of them extremely difficult, which was a key concern for the battalion's senior leaders. Relying on the company's outstanding NCO leaders and stressing live-fire training and crew drill, the battalion commander made a conscious decision to expand the company mission essential task list.

The company's ability to execute such a demanding mission load was tested repeatedly in the months leading up to the deployment. Throughout 1995, the team trained intensively to extract UN Protection Force units from the eastern enclaves in Bosnia and for noncombatant evacuation operations in Central Africa. For these contingencies, Company E reconfigured and retrained to provide mounted security at forward operating bases and dismounted gun teams to support air assaulting rifle companies, and even to operate as a dismounted rifle company. The company's ability to execute its antiarmor mission—a real concern, given its multiple missions—was validated two

months before the deployment to Bosnia, at U.S. Army Europe's Combat Maneuver Training Center. In a grueling rotation, the company exceeded expectations, destroying 19 tanks in one defensive engagement. In the final phase of the rotation—a five-day peace enforcement scenario modeled on Bosnia—the company continued to develop its skills in mounted patrolling, route reconnaissance and security, and mobile checkpoint operations. All training included the newly attached drivers.

These intensive training experiences—along with a demanding home station training program that focused on section and platoon battle drills and crew drills—brought the company to a high state of readiness by the fall of 1995. In November the ABCT was alerted for early deployment to Bosnia and began to ramp up. As the battle staff planned, the companies progressed through a rigorous program of mine awareness training, situational exercises, and platoon lane training oriented on the rules of engagement (ROEs).

Through the personal intervention of the commander-in-chief of U.S. Army Europe, ten M1109 uparmored high-mobility multipurpose wheeled vehicles (HMMWVs) were delivered to Company E just before deployment. These vehicles would play a key role: They were light enough for air movement in C130s but protected enough to win in a small arms engagement. In the second week of December, the team moved to Aviano Air Base and began rigging for air movement. Then European Command issued the "execute" order, and the team took to the air.

Upon arrival, the soldiers of Company E expected to conduct mounted patrols inside and outside the perimeter of Tuzla Airbase and provide the mobile component of the ABCT's quick reaction force (QRF). While these missions occupied the unit throughout its time in Bosnia, it faced an unexpected challenge in the frequency and duration of taskings to conduct independent operations far from Tuzla.

Routine patrolling and escort missions in and around Tuzla began upon arrival and typically absorbed three of the company's five platoons. Initially, at least one platoon was also required each night to help with surveillance of the southern sector of the airfield using its night vision systems. With one platoon always on standby for the QRF, routine operations, in addition to mission planning and maintenance, committed the entire company seven days a week.

New missions soon pushed the heavy weapons platoons to the forefront of the action. Problems with bridging the Sava River delayed the arrival of 1st Armored Division tank and mechanized infantry units in sector. For almost a month, the ABCT served as the only combat maneuver unit in the Task Force *Eagle* area of responsibility (AOR), which encompassed hundreds of square kilometers. An additional complication was the delayed arrival of the Russian Airborne Brigade, which had been slated to occupy a large sector to the north and east of Tuzla. The ABCT mission was therefore expanded to include the temporary occupation of the Russian Sector as well as frequent escort missions as much as 150 kilometers from Tuzla. With its mobility and firepower, Company E quickly became the focus of the battalion's tactical operations.

A typical mission tasked one platoon to escort a high-value element to areas in the zone of separation (ZOS), a belt of neutral territory spelled out in the Dayton Accords and roughly defined by the former Confrontation Line running through Bosnia. In the early stages of the mission, exact locations of mined areas were incompletely recorded, while armed units of the various factions remained in place in and around the ZOS. Tensions remained high as each night brought indiscriminate firing. With a mandate to enforce the Dayton Accords, the battalion was kept busy opening routes through the ZOS, overseeing demining operations, and monitoring the removal and storage of weapons from the ZOS, as well as providing security and attending high-level meetings with faction commanders.

The heavy weapons platoons traveled fully combat loaded and, like the rest of the battalion, employed responsive ROEs, with weapons loaded and on safe. Company E elements enjoyed great credibility with members of local factions, who knew that these rugged soldiers, though highly disciplined, were prepared to use their weapons if threatened.

A platoon typically mounted one Mk 19 and one .50-caliber machinegun for long-range suppression. For rapid close-range action, the platoon mounted an M249 and an M60, respectively, on the remaining two gun vehicles, thus providing for weapons coverage of both near and far threats. The platoon command vehicle was dedicated to communication, fire support coordination, and navigation.

The attachments normally included an engineer vehicle, an Air Force enlisted tactical air controller, a mechanic, and a combat medic, augmented by a combat lifesaver in each vehicle. For long-distance missions, a communications NCO with tactical satellite (TACSAT) radio was attached. For missions outside FM radio range, the company commander or a field grade officer normally served as officer-in-charge.

In addition to the threat from mines and armed factions, adverse weather conditions, poor roads, and mountainous terrain posed serious hazards to the soldiers of Company E. These soldiers were well equipped with cold-weather gear, and aggressive small-unit leadership prevented cold-weather injuries. Apart from straying into unmarked minefields, the most serious threat to troop safety was mountain driving in poor weather (sometimes with visibility as low as five meters). In this environment, slow speeds, tire chains, careful navigation, vehicle separation, tight unit standing operating procedures, platoon risk assessments, and driver awareness all played a role in avoiding accident or injury. (As one example, one movement of 85 kilometers through very mountainous terrain took eight hours.) The key factor, however, was the strong leadership displayed by the company's highly experienced NCOs.

The experiences of Company E in Bosnia offer important lessons for nonmechanized infantry battalions in future peace enforcement missions. Whether airborne, air assault, or light infantry,

these units all have gun vehicles that can play a prominent role in determining the success or failure of the mission.

Training. Commanders should weigh the advantages of expanding the mission task list for these units against the disadvantages. Multiple missions and different weapon systems pose a severe training challenge. Because of its high priority in the theater, the ABCT had access to training areas in Europe, adequate ammunition, and the time to qualify gunners on all weapon systems. If the resources are not available, standard antiarmor companies and platoons should not be asked to assume expanded roles.

The team's 11H soldiers were asked to maintain proficiency in antiarmor warfare while mastering multiple weapon systems, both mounted and dismounted. Initially, leaders experienced resistance, because individual soldiers perceived their role as mounted tank killers. Changing the unit culture to embrace new missions while retaining mastery of the antitank mission thus became a first-order priority. Lacking mission training plans for heavy weapons missions, company leaders were forced to develop their own—a tribute to their professionalism and competence. Clearly, it is time to institutionalize detailed .50-caliber machinegun and Mk 19 training programs for antiarmor soldiers.

In a peace enforcement environment, countermine operations, vehicle identification, and vehicle recovery are key tasks. Company E frequently encountered live mines at old checkpoints and on the shoulders of roads, but several factors helped them avoid the mines—local guides, the aggressive use of current mine overlays provided by higher headquarters, and familiarization with terrain likely to be mined. Intensive countermine training before deployment, the use of combat engineers down to platoon level, and alert observation by leaders and troopers—along with liberal doses of luck—enabled the heavy weapons company to avoid any mine injuries or fatalities.

Vehicle identification proved challenging as well. Some implementation force (IFOR) units used BMPs and BTR-70s, factional units occasionally fielded NATO vehicles stolen from UNPROFOR, and Nordic units used vehicles entirely unfamiliar to U.S. soldiers. These soldiers even encountered fully operational T-34 tanks. Detailed S-2 handouts, pre-mission briefings, and experience gained through daily operations—as well as an aggressive predeployment training program—enabled the unit to cope with an initially confusing array of combat vehicles.

Vehicle recovery posed particular challenges because of the distances at which the unit operated from the battalion. The single five-ton wrecker assigned to the ABCT proved a poor option since it required separate escort and could not move well off the road in the prevailing terrain and weather. Self-recovery thus became the norm. The battalion's few tow bars were given to Company E, and helicopter sling sets and tow straps were also used. Always a dangerous operation, especially in limited visibility and bad weather, vehicle recovery is also leader intensive, and the NCOs always supervised closely. The company executive officer played a crucial role in vehicle recovery and monitored vehicle and equipment maintenance during the non-stop assignment of missions.

Equipment. The M1109 uparmored HMMWVs became the mainstay for long distance missions. Although heavy, they proved powerful and rugged in mountainous terrain, mechanically reliable, and stable on slippery mountain roads. With improved suspension systems, they easily coped with loads greater than normal. Their built-in survivability gave the crews tremendous confidence and enabled them to accept greater risks.

The M1109's enhanced crew protection provided a decisive advantage that allowed platoons to conduct their mission aggressively, a key lesson learned. Bolt-on armor kits were requested for the rest of the unit's vehicles, but none arrived in time. Given the limited protection provided in standard gun vehicles, some form of improved armor for light vehicles will undoubtedly save lives in future missions of this type.

Because of its unique mission, the 3/325 ABCT was equipped with a variety of communications systems, most of which were used by the heavy weapons company. TACSAT radios proved the most important, as they were the only means of reliable communication beyond FM range, which was often affected by the mountainous terrain. Newly fielded SINCGARS (single-channel ground and airborne radio systems) performed well and were used frequently, both mounted in the vehicles and in the manpack mode. The commander's PRC 109 HF radio was not used because it lacked a voice-secure capability. The lack of some type of vehicle intercom system was a serious handicap that should be addressed by force developers; communication between gunner and vehicle commander is crucial. (This capability is standard in all other Army combat vehicles.)

Heavy weapons leaders were liberally supplied with global positioning systems (GPS), and these proved vital because of the inexact maps issued for the mission. (One standard map was based on a 1943 Wehrmacht map product, and the 1:100,000 and even 1:250,000 map scales were commonly used.) GPS allowed for precise obstacle overlays throughout the division AOR—a key force protection measure. The system is best used with an external antenna mount, bracket, and cable, but these were not available for the Bosnia mission. As a result, constant use while mounted caused 10 of the company's 15 systems to fail.

Standard personal gear for mounted operations included impact resistant goggles, balaclava head covers, cold weather suits and gloves, and medium weight cold weather boots. This equipment was indispensable. It enabled gunners to maintain maximum security in the wet cold, which would have been impossible without the balaclava due to wind chill. Ballistic helmets and vests were worn at all times, although gunners stowed masks and load carrying equipment (LCE) inside the vehicle when mounted in the turret (protective masks and LCE were always worn outside the vehicle). Gunners carried 9mm pistols mounted on the front

of their vests for easy access.

Simple improvements that could greatly aid mission accomplishment include external mounting racks for ammunition (7.62mm, 5.56mm, .50 caliber), infrared driving lights, vehicle mounted searchlights for checkpoint or roadblock operations at night, and fire control devices such as the LPL30 laser pointer. (The LPL30 is the one item the company leaders did not have that might have proved critical if firing had broken out.) With this device, a heavy weapons platoon leader can effectively control fires at night to maximum distances, and this control is imperative, considering the non-linear boundaries often encountered in peace enforcement scenarios. The AN/PVS-6 infrared observation set, a hand-held system that provides range and direction, should also be standard issue for platoon leaders. In addition, vehicle crews should be issued M4 carbines instead of the bulkier M16s.

Operations. The heavy weapons company became a victim of its own success in Bosnia when its inherent flexibility and high standard of performance resulted in serious overcommitment. With few assets to call on in the early stages of the operation, the planners of Task Force *Eagle* increased the frequency and duration of company missions to the breaking point. As time for planning, rehearsals, maintenance, and troop rest disappeared, company and battalion leaders ultimately appealed for relief through the chain of command. No infantryman likes to say "no" when the slightest mishap can cost lives and threaten the mission, but unit leaders have a responsibility to gauge the situation and intervene when they consider it necessary.

The lack of support for platoons operating far from help was a constant concern for the ABCT commander. Any incident—a mine strike, a clash with local factions, a vehicle accident or breakdown—could have put Company E soldiers at great risk. The battalion's habitually assigned Air Force personnel provided an essential link to fire support and assistance with their expertise and state-of-the-art long range communications. In some cases, helicopters supplied elements with fuel and rations to enable them to complete their missions. Task Force *Eagle*'s attack helicopters could be summoned in the event of trouble, but poor flying weather often limited their availability. For the most part, the command relied upon the initiative and resourcefulness of leaders at the platoon level, as well as their training and previous operational experience.

Several factors played important roles in Company E's outstanding success in Bosnia—a well conceived training plan, adequate ammunition and training areas, strong leadership from junior leaders, and highly motivated, physically fit soldiers who were confident in their leaders, training, and equipment. The unit's flexible, multifunctional organization and high density of leaders gave the combat team commander a range of options that he exploited to the limit.

In later stages, the U.S. presence in Bosnia would take on a much stronger character. But in those tenuous early weeks, the U.S. flag flew far and wide in Bosnia on the gun vehicles of heavy weapons troopers.

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Captain John F. Lightner commanded Company E, 3d Battalion, 325th Infantry, in Bosnia and participated in other peacekeeping missions and exercises in Uganda and Albania. He is a 1987 graduate of the Virginia Military Institute. He recently completed an assignment to the Northern Warfare Training Center in Alaska and is now assigned to Fort Chaffee, Arkansas.

CMTC Lessons

From the Platoon Leader's Perspective

LIEUTENANT ROSS F. LIGHTSEY
SERGEANT FIRST CLASS GEORGE L. BROOKS

After returning from a peacekeeping tour in Bosnia in mid-1997, our battalion geared down from the deployment and at the same time trained for a gunnery and a rotation at the Combat Maneuver Training Center (CMTC) in Germany. Training a Bradley platoon for the CMTC was a dramatic change from the peacekeeping operations. From this experience, we learned four basic lessons:

MILES rules the battlefield. This lesson was an unavoidable issue on the high-intensity battlefield of the CMTC. With the multiple integrated laser engagement system (MILES), a weapon either kills or it doesn't, which leaves out any subjectivity in assessing *catastrophic*, *mobility*, *firepower*, or *communication* kills. The kills and near misses are also registered in one collective computer bank, used for immediate after-action reviews (AARs) and battle monitoring.

Furthermore, the new MILES II system forces Bradley fighting vehicle (BFV) gunners to practice reloading

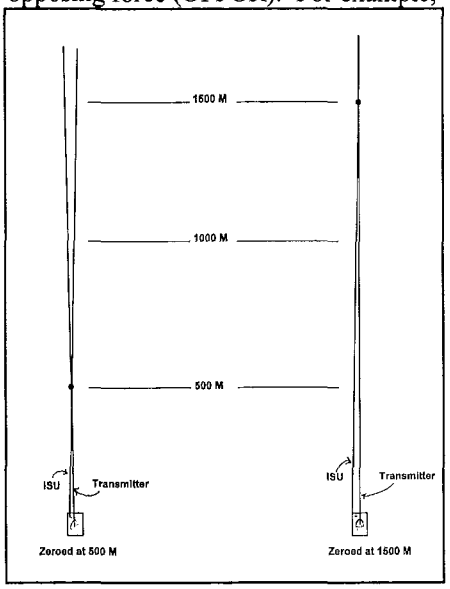
procedures and the platoon sergeants to enforce Class V resupply actions in simulated combat. First-time users of mounted MILES gear become frustrated with the system. Today, however, the MILES II is the best means of controlling a fabricated battle. Some units might consider using MILES training at home station to prepare for a CMTC rotation.

Maintenance on each system is a must. The MILES components on each BFV must be treated and cared for as if they were the weapon systems themselves. This includes the sensor belts and the hookups for the precise lightweight GPS (global positioning system) receiver (PLGR). If the sensors do not respond, the vehicle is not allowed to enter combat. As for the laser transmitter, the priorities of work must include constant zeroing and verification.

A lot of thought must go into when, where, and how to zero weapons. Whenever possible, zero should be confirmed at the greatest distance (at least 1,500 meters), that time, terrain, and security allow. When firing a TOW or the 25mm gun at a 2,500-meter target, a 400-meter zero may prove to be off. This is rarely the case in the wooded terrain at the CMTC, but it does happen at least once in every battle. The parallax effect takes away from the actual reticle sighting. In combat, a soldier can see real 25mm rounds and adjust from them, but in MILES combat, he has to rely on his zeroing talents. The transmitter and the integrated sight unit are 24 to 36 inches apart on the vehicle. Therefore, it would be safe to assume that if a BFV is zeroed at 500 meters, the offset distance at 1,000 meters would be 24 to 36 inches in the opposite direction. Furthermore, at 1,500 meters, the difference would increase proportionally to 48 to 72 inches. (Just imagine trying to fire at a BMP 2 that is 2,200 meters away, for example.)

The method of zeroing the BFVs during a high-intensity rotation is simple but effective. Basically, one platoon BFV, with the MILES key, is sent out as far as the terrain dictates. The three remaining vehicles confirm off the target BFV, then the target BFV fires back to confirm its own zero. This is done, of course, after the transmitters are boresighted, which is a platoon leader's highest priority before entering combat. Platoon sergeants are much better at implementing the actual tasks. This can be done at night, but it is not recommended. In addition to boresighting problems, the light from the flash weapon effect signature simulator (FLASHWESS) and the combat vehicle kill indicator may compromise the position. We found that zeroing after stand-to during twilight was the best opportunity. This allows for good confidence-building moments before an attack. Another consideration is that traveling across the rugged terrain at the CMTC causes the transmitter to shake erratically, thus throwing the zero off.

As for targeting, engagement, and disengagement criteria, the platoon leader must assess the strength of the opposing force (OPFOR). For example,



with the MILES II upgrade, the 25mm antipersonnel round no longer suppresses the OPFOR T-80 tank (a modified U.S. M60). T80s can now fire while being engaged. This is where the platoon leader definitely needs to study the probability-of-kill factor for frontal, flank, and rear shots on vehicles, including BMP 2s and BRDMs. With the sensor belts on the T-80, flank shots consist of the turret only. On the BMP 2 (M113), the sensor belts are on the upper part of the hull. To be effective, gunners therefore need to focus their efforts on the belts—any other shots at the vehicle may be wasted.

Tactics Must Adapt and Change. Once a new platoon leader has accepted the fact that MILES rules the battlefield, his tactics on gaining a positional advantage will also have to be adapted and changed. In addition, he must know the CMTC rules of engagement (ROEs). These ROEs allow for a better simulated battlefield—mines, obstacles, safety, markings, limits of advance, civilians on the battlefield, indirect fire. All these factors must be included in the platoon leader's estimate process during the rotation.

For example, breaching techniques and capabilities are somewhat different. When breaching, we typically use the four tenets—suppress, obscure, secure, reduce—but the direct fire MILES offers little or no actual suppression. The FLASHWESS and the lack of gunfire sound do not display firepower or intimidate, but it does reveal your position to a rocket-propelled grenade (RPG) team. The obscuration itself is very effective, but it limits the security effectiveness to the distance of the smoke at the breach site.

The actual reduction of the obstacle is also changed in the ROEs, especially when using a mine-clearing line charge. In a company breach rehearsal, we found that an armored-vehicle launched bridge (AVLB) took about two minutes to emplace over an 11x3 mine-wire-mine obstacle, thus eliminating any need for de-mining, lane marking, and reduction. The AVLB, in this case, proved to be the better choice. Taking all breach attempts into account, the bypass method is by far the most effective tactic. Nevertheless, there are various techniques that allow for a good combination of the ROEs and doctrinal techniques. These are essentially the same; the conditions have simply changed, and the tactics have had to adapt.

One doctrinal tactic commonly used is developing a support-by-fire (SBF) position. This will work, of course, with live rounds in actual combat but not with the present system. We found that there is no such thing as a true SBF. The fire and maneuver effect is altered slightly. A simultaneous fire with maneuver is preferred and more effective (attack by fire). Bounding alternately

and successfully should be used only as overwatch positions but not for establishing a stationary base of fire. Firing by sections, or even the entire platoon, should be done on the move.

Firing on the move does not mean rushing to your failure. A common armor tactic at the CMTC was to attack swiftly and use shock. From my experience, the maneuver of shock in the open was more deadly on our behalf. I prefer a more deliberate and methodical approach. Moving through Slow-Go terrain in the woodline proved beneficial to our survivability and stealth, and was also lethal to the enemy. Tempo is regarded as setting the pace and having constant and overlapping timed events. Tempo should never be confused with actual speed and maneuver.

The difference between cover and concealment is clear to any infantryman. At the CMTC, however, concealment *is* cover. I quickly found that it is futile to fire the 25mm gun at an OPFOR RPG team behind a bush. The foliage itself provided a MILES berm, giving the advantage to the well-trained OPFOR. The same may be done with the BFVs. Actually it is proper doctrine to use the concealment of the brush in masking movements; the side effect just happens to be cover as well. Inadvertently, hand-held smoke also creates a MILES berm (Figure 2). I believe this is cheating with MILES and teaching BFV crewmen bad habits. But it would be an excellent tactic in simulated laser warfare.

Traditional maneuver and formations are not applicable at the CMTC (echelon left/right, vee, action left/right). The restrictive terrain here dictates more of an event-driven type of formation and movement. This is in deep contrast to the formations used at the National Training Center. To seize a valuable piece of key terrain quickly, units should use combat column on the roads. File formations are used to bypass obstacles or travel through a prescouted woodline. It is possible to steer away from the file when going in and out of the woodline, but a new platoon leader is concerned because he loses sight of the other three vehicles and dismounts. This does pose a never-ending problem with command and control, especially with fire and maneuver. Still, if the platoon leader correctly uses his tactical sense, he can maneuver the platoon if he knows the BFVs' general locations. A platoon leader should place more emphasis on where the enemy is than on exactly where his BFVs are. Consolidation will happen at the next opening space of the woodline. This is when a basic "follow my lead" needs to occur.

Use the dismounts. Although the CMTC mechanized fight is very track-and-armor oriented because of the limited number of dismounts, a good dismounted operation can turn the tide of the battle. The mounted sections of the platoon are usually the main effort, but this tends to shift to the few dismounts on the ground. Each mission is different, and the dismounts must constantly refocus their efforts. Every infantry platoon leader wants to dismount and fight on the ground, but with seven dismounts I found it better to stay with the BFV and not be tempted to micromanage a very competent squad and squad leader. I dismounted only on rare instances of damage assessment and obstacle emplacement.

In the CMTC AARs we encountered, the emphasis and focus were on vehicle kills only, by type and quantity. OPFOR dismount kills did not register in the battle because they were too difficult to track, confirm, and register. The fact that they are not included in the AARs should not refocus the platoon leader on killing the enemy. The enemy should never be primarily regarded as a vehicle or track. For example, an enemy dismounted platoon (minus) prevented the breach of an armor company team by the proper use of massing RPGs, indirect fire, antitank mines, and overwatching obstacles, thus eliminating covert breach attempts at night. Twenty-five well-trained OPFOR soldiers killed a company team in the breach. In another example, 20 of our dismounts successfully conducted covert breaches of obstacles, stealthily scouted the enemy, and marked a secure route for an entire armor/mechanized infantry task force to pass through to the objective. This was achieved by sending the dismounts out the night before the attack, 12 kilometers to the intermediate objectives (breach sites). The 20 men were obviously the main effort throughout the night and proved invaluable to the success of the task force.

The same may be done on a smaller scale at platoon level. The BFVs and the squad will mutually support each other throughout the fight. In the defense, dismounts have the best opportunity to provide early warning of any enemy activity. Without dismounts, an enemy squad can easily take out a BFV section. The noise of a Bradley makes it impossible to listen for the OPFOR. Therefore, the squad should be sent out as far as support will allow; it will be the eyes and ears for tracks, and the BFVs will be the shooters.

It is possible to use the dismounts to reduce the enemy force in the defense and in the attack. AT4 and Dragon antiarmor weapons need to be massed, concentrated, and volley fired. The antitank team leader must train his men to fire two or more AT weapons, simultaneously, at one vehicle. A single shot alone will not kill a BMP 2. Actually, this is good training because of the inaccuracy of men firing in real combat. During our last gunnery, three out of five gunners hit a stationary target at 600 meters with an AT4.

When to dismount the men is a hard decision. There are two schools of thought: Keep them inside the BFV to protect them from indirect fire; and dismount them to prevent a complete catastrophic kill from direct fire. At the CMTC, the troops who typically live the longest are dismounted troops. At every stop, the platoon leader should dismount the men for survivability. During screening operations of the defense, they should be left at the forward line of troops to keep watch, for intelligence and to call indirect fire.

We found that teams with radios can be very lethal. Remounting and linkup will take place after the battle. Dismounts who are assessed as casualties in the back of BFVs receive no training value whatsoever, and they often spend most of their time in "dead" pools. Even when the "fog of war" has them outside the BFV with no orders or

communication from "dead" leaders, they at least receive some dismounted training.

In the mechanized fight, the dismounts must be used to help the BFVs reach the objective and effectively kill the OPFOR vehicles. They should never be used to pull security for an armor company or to protect the Bradley, for example. The BFV should be thought of as the means of getting men closer to the battle instead of as the actual main effort throughout most of the battle. Once again, if used correctly the dismounts can shift the momentum of the battle in favor of the mounted troops.

Train for Combat. These experiences are nothing new to some units that continually train at the CMTC. But with the peacekeeping operational tempo of infantry units in Europe, training for combat has been rare lately. This may also be due to the difficulty of acquiring land space at home station training areas. These precious warfighting skills and training were more subtle as our battalion began another peacekeeping train-up for a Macedonia mission in early 1998. When we were training for CMTC, though, the MILES and ROEs were sometimes looked upon as training distractions. Platoon leaders must train their soldiers for actual combat, not to win at the MILES game. If we concentrate our training on winning at CMTC by using MILES tricks, we will be in for a big surprise when tracers are flying across our deck. If used properly, the training distractions can be turned into training enhancements. We need to respect MILES and the ROEs. This is not a game but a train-up for actual combat, which is exactly what it is intended to be.

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Company Training Calendar
Tips and Strategies

CAPTAIN TYRONE T. MANNS

As soon as a new company commander takes command, he faces the task of developing a training calendar that will ensure his squads' ability to maintain a high level of proficiency in numerous combat tasks.

Here are a few things you either must do or should do, and some techniques you may want to consider before you take command:

Read and understand FMs 25-100, *Training the Force*, and 25-101, *Battle-Focused Training*. FM 25-100 will help you understand how to sustain unit proficiency and will provide information on multi-echelon training techniques, mission essential task list (METL) development, calendar planning, and, most important, assessment and evaluation. FM 25-101 will cover much of the same information but will give you a detailed outline showing how your training products should look.

Talk with the battalion's key personnel. I suggest that you have several in-depth conversations with the battalion commander, the S-3, the command sergeant major, and (if assigned to a mechanized unit) the executive officer. These talks should give you the answers to several questions: What is the commander's training philosophy and focus? What will he expect of you and your company during each training cycle? What special missions, if any, will your company be expected to execute in the event of war? A special mission might be *conduct screen, conduct or assist a passage of lines*, or *assume the mission of the battalion scouts.* Once you get a clear understanding of your role, visit the S-3 to find out what training strategy he has designed for the battalion.

The S-3 can also provide information that will help you develop or refine your company METL. He can give you data on training cycle trends, such as when selected division, brigade, and battalion mandatory training events will take place. These events are usually personnel intensive and will consume a large number of your soldiers and their training time. The S-3 should always be your first stop to solve difficult training or planning issues. Do not overlook his experience and knowledge by going directly to the commander for training related answers. You will discover that the commander is normally far too busy with his other tasks.

The command sergeant major will be a great help to you throughout your command. He will be able to provide you with information on the strengths and weaknesses of the primary training force within your company—the noncommissioned officers (NCOs). Ask for his goals, strategies, and priorities for sergeants' time, expert infantryman badge, common task training, or any other NCO-related training events.

Strive to develop an open and honest relationship with him. Don't be afraid to take his advice, and don't be concerned that he will be offended if you decide not to take it. The CSM will understand what you're trying to accomplish as a company commander and will do all he can to help you succeed.

Finally, if you're in a mechanized unit, a talk with the XO will give you a better understanding of the commander's maintenance goals, philosophies, and strategies. The XO can also provide information on specific maintenance trends, strengths, and weaknesses within your company and your assigned maintenance team.

Review the METLs and mission statements two levels up. Know what your higher headquarters will want to accomplish during a war. Look closely at the brigade and battalion METLs and mission statements. These are the road maps that show whether you will be attacking, defending, and counterattacking, or in the reserve. Compare them with your company METL. If the battle-focused tasks on the battalion METL are mostly offensive in nature and your company METL includes an abundance of defensive tasks, it may be time to make some changes. Keep this process simple so you can meet the intent of the commander's mission statement. Also, add only those tasks that will help your squads achieve any special mission they will be expected to execute during combat. You may also compare your company mission statement and METL with those of the other companies. There should be very few differences, other than one or two special missions the commander may assign each company.

By the time you take command, you understand your mission, you've developed your company METL, and it meets the intent two levels up. Now it's time to put together your first training calendar. This is what you have to do:

Review the most recent quarterly training brief (QTB) information. Remember that the commander before you may have briefed the brigade commander on the training focus and gained approval for the upcoming quarter. A radical change at this point could do more harm than good and may cause your company to miss valuable training time. But if you're at the end of the training quarter and will be briefing the new strategy, I recommend the following:

Spend some time with your first sergeant, and figure out your goals for the new training quarter. An example of this may be *train to a "T" level six squads on battle drills, breach a wire-mined obstacle, enter a trench line,* and *destroy a trench/bunker complex.* On the basis of these tasks, devise a training strategy that will make sure the related individual, collective, and leader tasks are achieved to standard. This training should culminate in a company internal or external evaluation to provide feedback and an assessment of your efforts.

Review the division's training events calendar, and pull out all of the major training events that will affect your company—ARTEPs, simulation exercises, gunnery exercises, officer professional development (OPD) sessions, terrain walks, and holidays. Confirm these events with the battalion S-3, and place them on your calendar.

Review the mandatory AR 350-1, brigade and battalion training events or calendars—the battalion quarterly training guidance, seasonal training, driver's training, safety training, alert exercises, platoon or squad training events, unit-conduct-of-fire training, red cycles, small arms qualification (range weeks), services, tactical exercises without troops (TEWTs) or professional development sessions, and training holidays. Again, confirm the dates and events with the battalion S-3 and place them on your calendar. Don't forget to add Federal and company training holidays.

Now that you've placed the external events on your calendar, look closely at the number of training days you actually have to reach your desired end state. This will be your last chance to adjust your initial plan, so don't be afraid to make changes. Too often company commanders try to do too much and end up accomplishing very little. Once you make adjustments, or decide to stay with your original concept, determine how to reach proficiency in each of the training disciplines (individual, collective, and leader tasks).

Here are a few tips that will help you make the most of your training time, land, and other resources.

Individual training: Don't let red cycles destroy you. This is the time when you and your first sergeant must come together and, if I may use a horrible term to describe it, *micro-manage* time and soldiers. This may mean daily meetings with the platoon sergeants to learn who will be available the next day once they have met detail commitments. You may find there are only ten or 15 soldiers who are not committed. Pull them together under the senior person and assign them several individual tasks that are related to your training strategy. At the end of the day, have one of your platoon leaders or platoon sergeants conduct an internal evaluation of their efforts and give you the feedback. If this process is kept simple, you will accomplish many of your individual tasks during each of the red cycles throughout the quarter. Maintain good records, and give common task training credit to those soldiers who meet the standards.

Collective training. Many will disagree with me on this tip, but you can maximize your training efforts by using sergeants' time whenever possible. If you plan, resource, and execute aggressive training, your squads will be protected from the numerous training distractions. Sergeants' time will be your only true training time, and you and your first sergeant must ensure that the training remains focused on meeting your overall training goals and strategies. Try to keep the battle drills being trained to one or two, and at the end of the day you will have time to conduct internal evaluations. Train all day and away from the company/battalion area. All too often, training will start at 0730 and end with the 1130 meal at the dining facility. I suggest, instead, an 0530 road march that ends in one of the local training areas, a lunch of MREs (meals, ready to eat), and a 1500-1700 road march back to the company area. If your strategy includes night training, this is the day to stay out late. Have

your company XO plan for a hot meal and conduct a night tactical field feeding.

Leader training. Take advantage of brigade/battalion terrain walks, OPDs, and TEWTs. Plan to keep your senior leaders on the ground, and conduct your own leader training that relates to your training strategy. By piggy-backing on the higher units, you will save yourself some training days. OMEGA training and OPDs with your platoon leaders and platoon sergeants during the first hours of sergeants' time will help keep your leadership training focused on the tasks required to achieve your strategy.

Once you've developed your training strategies and overlapped all of the external and internal events on your training calendar, it is time to match your plan to the available training days. Here is a technique that may help. Focus your level of training within each month of the quarter: first individual, then collective/leader tasks, and finally internal and external evaluations. At the QTB, the brigade commander will approve the battalion's training plan, and you will be on your way to resourcing and training.

These are only a few tips to help resolve the recurring issues, conflicts, and distractions associated with maintaining proficiency in today's unstable and resource-constrained training environment. You are responsible for the training of your company. If you can't find a method that works, your soldiers will suffer in peacetime and die in combat. Company command will be the most challenging and the best time of your career. Do all you can to make it count.

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The Three-by-One Concept

Getting More Out of National Guard Training

COLONEL MICHAEL A. HODGE
LIEUTENANT COLONEL JEFFREY C. McCANN

Over the past several years, the U.S. Army National Guard has been downsized, with ever smaller training budgets, and the decline in training resources is likely to continue. National Guard and Army Reserve leaders must find ways to improve the effectiveness of training and overcome such constraints as training time, geographical dispersion, equipment available for training, and adequate training areas. It is time to entertain new ideas, and it is with this in mind that we put forth this training concept for peer review and comment.

What we propose is the Three-by-One (3x1) concept, which consists of three one-week (five-day) phases spread throughout the training year. Intervening drills can then be used to prepare instructors and leaders for the upcoming training event. Each of the five-day training phases has a specific focus:

Phase 1—Individual soldier skills with noncommissioned officers (NCOs) conducting the training; concurrent officer and leader training; and Soldier Readiness Processing (SRP). (SRP includes such activities as physical examination, cardiovascular screening, pantographic x-rays, HIV testing, and record maintenance.)

Phase 2—Squad/crew training and qualification.

Phase 3—Collective skills training at platoon and company level with concurrent battalion staff training, using a command post exercise (CPX) and the Army Training Battle Simulation System (ARTBASS).

Given the need to make the most of training time and limited facilities, the 3x1 concept is a viable alternative to the traditional mix of multiple unit training assemblies (MUTAs). (National Guard and Army Reserve units usually connect five or six such assemblies to make the best use of training time and transportation resources.)

The following are some of the advantages of the 3x1 concept:

- Improved use of scarce, specialized facilities, such as the Fort Hunter Liggett multipurpose range complex (MPRC).
- Focused training. (Soldiers can focus and maximize training in three one-week phases rather than the traditional two-week annual training (AT) phase used by most reserve units.)
- Improved use of inactive duty training (IDT) periods (monthly drills between phases).
- Decreased transportation and maintenance costs resulting from fewer trips to the training area (approximately 20 percent).
- Decreased costs in feeding (75 meals instead of the current average of 96).
- Reduced wear and tear on organic vehicles (potentially increasing readiness).
- Increased field training time (due to reduced travel and maintenance).

The training of specialty platoons and low-density military occupational specialties (MOSs) can also benefit from this concept. During home station drills, their activities will be primarily the same as the rest of the unit, but during the three one-week increments, they can progressively focus on specialized and collective tasks. An example of the 3x1 concept for a mechanized infantry unit is shown in Table 1. This concept uses a total of 48 UTAs plus 15 days of AT. Any type of unit (combat, combat support, combat service support) can use this model. Every phase has a MUTA 5 on the first weekend, which includes a first formation on Friday night with the convoy movement to the training area. Tables 2, 3, and 4 will help explain the concept more fully and illustrate one way it can be implemented. (The accompanying list of acronyms used in the tables will help in their interpretation.)

Depending on a unit's mission essential task list and its previous evaluations, the phases can be tailored to the individual unit. Training Assessment Model (TAM) evaluation can take place in any one of the three phases but would most likely be at the end of the training year. In addition, supplemental evaluations can be made at the end of each phase along with the after-action review process.

The 3x1 concept offers many potential benefits. For example, buses can be used during any one of the three phases, or not at all. Currently, the norm for one battalion is five iterations to cover the five MUTA 5s used to accomplish IDT field training. Annual training advance and rear funding will not be required because extensive annual training preparation is not needed, and IDT advance-party travel will be reduced (three IDT periods instead of five) Another potential benefit is the inclusion of support battalions and other slice components during the third phase to enhance collective training.

For the individual soldier, there are some additional benefits. With the time between UTAs increased to 90 days, soldiers will be able to make up their lost time during preparation and clean-up for one of the follow-on unit phased

MONTH	NUMBER OF UTAS	ACTIVITIES
October	3	Rehearse instructors/administration, logistics, maintenance activities/Combat Lifesaver Program
November	Phase 1 7 UTAs + 5-day AT	Diagnostic APFT/CTT/Individual and crew-served weapons qualification/ SRP; TEWT with leaders
December	3	AMC/Muster/Family Support activities
January	3	Rehearse instructors/administration, logistics, maintenance activities
February	3	Rehearse instructors/administration and logistics/Muster
March	Phase 2 7 UTAs + 5-day AT	Squad crew training and qualification/CPX-ARTBASS specialty training (classes taking more than 2 days or MUTA 5)
April	3	Record APFT/rehearse instructors/administration, logistics, maintenance activities
May	3	Rehearse instructors/administration, logistics, maintenance activities
June	3	Rehearse instructors/administration, logistics, maintenance activities
July	Phase 3 7 UTA's + 5-day AT	Platoon evaluations/company training/CPX-ARTBASS
August	3	Rehearse instructors/administration, logistics, maintenance activities
September	3	Rehearse instructors/administration, logistics, maintenance activities

Table 1. Three by One Concept

FRIDAY	SATURDAY	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
Move to training site	PT/ CTT-A BRM-all	PT/Bayonet/ CTT-A BRM-A/C	PT CTT-C IWQ-B/D CWQ-E	PT/Bayonet CTT-D IWQ-HHC CWQ-A Mines/demo-C	PT CTT-E IWQ-HHC CWQ-B Mines/demo-D	APFT CTT-HHC CWQ-C Mines/demo-A
	←	SRP →				
		← TSFO	TSFO →	← Gunners	Skill Test	11H/11C →
				← Driver	Tng/Licensing	Course →
APFT makeup CTT-HHC CWQ-D Mines/demo-A Driver tng/licensing	Battalion run Return to home station Maintenance activites					

Table 2. Phase 1 Concept. NCO-driven week with focus on individual preparation.

FRIDAY	SATURDAY	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
Move to training site	Squad train-up MILES zero	Squad train-up	Squad evaluation A Co MOUT D Co	Squad evaluation B Co LFX-A MOUT C Co	Squad evaluation C Co LFX-B MOUT A Co	Squad evaluation D Co LFX-C MOUT B Co
			←	TOW SQD	evaluations thru	Table IV →
			←	Mortar/Scout	Specialty Plt.	Evals →
LFX-D TOW SQD Evaluations thru Table IV	Turn-in equipment Return to home station Maintenance activities					

Table 3. Phase 2 Concept, with focus on squad and crew proficiency and qualification.

FRIDAY	SATURDAY	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
Move to training site	Platoon train-up	Platoon Evaluations	Platoon evaluations	Platoon evaluations	Platoon LFX CALFEX evaluations →	Platoon LFX CALFEX
	←	ARTBASS →		← CSS		
			← TOW	thru Table	XII →	
Platoon LFX CALFEX	Turn-in equipment Return to home station Maintenance activities					

Table 4. Phase 3 Concept, with focus on platoon and company proficiency and qualifications.

training events. Another plus is that the soldiers still get a National Guard paycheck every month.

The concept does raise some issues that must be considered. Some civilian employers may not be happy with the loss of an employee for three one-week periods instead of the normal 15-days. On the other hand, some employers may like giving an employee up for only one week at a time. (Families may like the shorter absences too.)

The 3x1 concept will require that the unit process combined payrolls (IDT-AT-IDT). Its implementation would require that the National Guard Bureau grant year-round training (YRT) authority or incremental annual training (IAT) authority. (National Guard Regulation 350-1 provides for YRT and IAT when units can show that this will provide for the most effective use of training time and resources.)

All of these issues can be dealt with, provided employers, soldiers, and families are given plenty of advance notice. As always, there will be some soldiers who need to train using the traditional IDT/AT concept, and there are various options for them.

GLOSSARY OF ACRONYMS

ARTBASS—Army Training Battle Simulation System
AT—Annual Training
BRM—Basic Rifle Marksmanship
CALFEX—Combined Live Fire Exercise
CTT—Common Task Training
CWQ—Crew-served Weapons Qualification
IWQ—Individual Weapons Qualification
LFX—Live Fire Exercise
MILES—Multiple Integrated Laser Engagement System
MOUT—Military Operations on Urbanized Terrain
SRP—Soldier Readiness Processing
TEWT—Tactical Exercise Without Troops
TSFO—Tactical Simulator Forward Observer
UTA—Unit Training Assembly

A preliminary survey of one battalion indicates that 73 percent of the soldiers either favored the concept or saw no difference between the 15-day AT and the 3x1. Of the 27 percent that preferred the standard AT, only 8 percent of the total surveyed expressed legitimate employment concerns.

The real benefits of the 3x1 concept are:

- A higher quality and greater quantity of realistic training.
- Better prepared instructors.
- Focused training on individual, squad, and collective levels.
- More effective use of resources.

We believe that the time has come for innovative training techniques. Although the 3x1 concept can be seen as a variation of "the Texas Plan"—in which soldiers come in as the unit needs them—there is no documentation to show that this concept has ever been tried. The 3x1 concept gives National Guard and Army Reserve soldiers the maximum opportunity to train as they will fight.

Colonel Michael A. Hodge commands the 3d Brigade, 40th Infantry Division, California Army National Guard, and commanded a military police brigade during Operation *Desert Shield/Storm* He was commissioned through the Infantry Officer Candidate School in 1966.

Lieutenant Colonel Jeffrey C. McCann commands 2d Battalion, 160th Infantry, California National Guard, and has held various battalion and brigade staff positions. He is a 1975 graduate of the California Military Academy.

SWAP SHOP

Pickup Zone Crisis Action Team

Recently, my unit has found great success in missions by using a special element called the crisis action team (CAT) on our pickup zones (PZs). (Some units have used other terms to describe this type of contingency element, such as a *PZ response team*.) The CAT is a small element of two or three men that can be placed strategically around a PZ to expedite the mission and add a new level of safety and control to both large-scale and small-scale air assaults.

A primary mission of this team is to assist the PZ control officer in preparing the PZ, inspecting sling loads, and managing the flow of both troops and materials once the operation is under way. This can be done in several ways, such as locating one team with the sling loads, a second team with the troops to be loaded aboard the aircraft, and a final, senior team, with the PZ control officer, able to (where he can??) respond to the PZ to assist a team in the event of problems.

Types of PZs the CAT should be able to manage include sling loading, pure personnel moves, forward area rearm and refuel points, or a combination of these. The CAT should consist of at least one NCO who is familiar with air assault operations and one or two soldiers to help him execute the CAT mission.

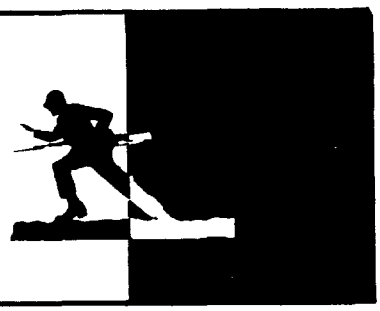
Equipping, refreshing, and training these teams is vital. The training should consist of mission requirements first. The type of PZ and procedures, sling loads to be used, emergency and communication procedures on the PZ, and contingencies must be clear to all team members. The equipment issued to the team can range from a PZ flow chart, to sling-load link counts (cheat sheets), to a small bag containing type III nylon, cotter pins, break away and 100 mile per hour tape. This type of bag has turned tragedy into triumph more than once. The management of the teams before a mission should fall on the battalion S-3 Air, the S-4, or the support platoon leader.

The CAT system has been used with great success at both the Joint Readiness Training Center and the National Training Center in the delivery of Class IV and Class V and in light infantry brigade-level air assaults.

The air movement of supplies and soldiers can be hazardous, from large-scale operations at the 101st Airborne Division to small-scale sling loads at your unit. A CAT can make all the difference in both speed and safety.

(Submitted by Staff Sergeant Eric B. Johnson, HHC, 1st Battalion, 502d Infantry, 101st Airborne Division)

INFANTRY CAREER NOTES



INFANTRYMAN'S EXPERIENTIAL ASSESSMENT

The Chief of Infantry and the Command Sergeant Major of the Infantry Center are responsible for linking professional development to leader development in the areas of institutional and operational employment.

The Infantryman's Experiential Assessment has been designed to correlate an Infantryman's institutional performance with his operational position. The completion of any course in the Noncommissioned Officer Education System is a critical progressive gateway, which requires simultaneous alignment with a solid unit leader development program and continuous self-study. The transfer of the building and mastering Infantry skills from the schoolhouse to the field takes a tremendous amount of time, and this institutional assessment for the Infantry's squad leaders, section leaders, and platoon sergeants will help reduce the time spent. The sample assessment sheet shown here is a portion of the Infantryman Critical Task List.

Institutionally, each soldier is being trained and evaluated against a number of critical tasks that will enable him to perform his duties and execute missions in an operational setting. Our Combat Training Centers give units a take-home package to facilitate an in-depth assessment, determining or exposing strategies to improve training proficiency on specific weaknesses and to plan sustainment training on demonstrated strengths. This evaluation will serve the same purpose for our Basic and Advanced NCO Course Infantrymen.

In accordance with Army Regulation

INFANTRYMAN'S EXPERIENTIAL ASSESSMENT

NAME:_____ RANK:_____ MOS:_____ SSN:_____

CLASS NUMBER:_____ INSTRUCTOR/FACILITATOR _____

CRITICAL TASK LISTS	LEADERSHIP COMPETENCIES E=EXCELLENCE S=SUCCESS N=NEEDS IMPROVEMENT									BATTLEFIELD OPERATING SYSTEM T=TRAINED P=NEEDS PRACTICE U=UNTRAINED							STRATEGY
INFANTRYMAN CRITICAL TASK LIST	COMMUNICATIONS	SUPERVISION	TEACHING/COUNSELING	SOLDIER TEAM DEVEL	TECH/TACTICAL PROF	DECISION MAKING	PLANNING	USE OF SYSTEMS	PROFESSIONAL ETHICS	INTELLIGENCE	MANEUVER	FIRE SUPPORT	MOB/COUNTER MOB/SURV	AIR DEFENSE	CMBT SERV/SUPPORT	COMMAND AND CONTROL	
REQUEST SUPP/LOG SERVICES																	
PROCESS CAPTURED MATERIAL																	
PLAN/SUPERVISE CHEM ALARM																	
CONTROL RADIATION EXPOSURE																	
PLAN DECON OPS																	
EMPLOY NBC DEFENSE TEAM																	
CONDUCT ZONE RECON BY PLT																	
CONDUCT AREA RECON BY PLT																	
CONDUCT ROUTE RECON																	
PREPARE OPS OVERLAY																	
PREPARE SITUATION MAP																	
PREPARE STRIP MAP																	
PREPARE OPERATION PLAN																	
EXTRACT INFO FROM RECON																	
CONDUCT BREACH OF MINEFLD																	
CONDUCT MOVEMENT BY PLT																	
PREPARE PLT SECTOR SKETCH																	
COORD W/ADJ PLT																	
ESTAB HELIO LANDING POINT																	
CONDUCT TACTICAL RD MARCH																	
OCCUPY ASSEMBLY AREA																	
PLAN USE SUPPORTING FIRE																	

350-41, paragraph 6-2 (Training in Units), the Unit Leader Development Program must be battle focused; be tailored to support training the leader skills demanded by units and the professional development needs of the leaders; and be linked to a common framework, such as the nine leadership competencies and the battlefield operating systems.

The Infantryman Experiential Assessment embraces these aspects of professional development. This gives a complete picture of the soldier's performance to determine his level of proficiency against his institutional MOS critical task list.

Presently, BNCOC/ANCOC critical task lists consist of Common Core Leader Tasks, Common Infantry Tasks, and MOS Tasks. The battlefield operating systems and the nine competencies of leadership may then be applied to compare the soldier's performance against the Course Critical Task List.

The Experiential Assessment format and criteria can be modified to fit unit requirements. The assessment adds a degree of exactness to the input for an Infantryman's NCO evaluation report. The rater and the senior rater can include this evaluation with unit critical tasks, efficiency report counseling report requirement, the commander's quarterly/yearly guidance for NCOs, and build a leader development action plan for developing Infantrymen.

The Infantry Center's aim is to link professional development (institutional training) to leader development (unit training/self development). The Assessment will help correlate an Infantryman's institutional training appraisal with his operational position to support his continuous development.

AIRBORNE INSTRUCTORS

The 11th Infantry Regiment is looking for motivated soldiers to serve as instructors at the U.S. Army Airborne School at Fort Benning.

Noncommissioned officers in MOSs 11B, 11C, 11M, 11H, 11Z, and 71L can make their mark in history by training future paratroopers.

All volunteers must be Active Duty, United States citizens, and Airborne qualified (Senior or Master Parachutist). Advanced parachutist rating may be waived for NCOs with at least three years experience in an airborne assignment if they are willing to attend the Jumpmaster Course. All Jumpmasters are assigned jump status and hazardous duty pay.

There is a special need for female instructors, who can be in any MOS and are not required to be 71L. Details can be worked out with their branches.

A soldier currently serving at an Army installation may submit, through his or her chain of command, a completed DA Form 4187, requesting reassignment to the 11th Infantry Regiment for duty as an instructor at the U.S. Army Airborne School. A copy of the form, along with copies of DA Forms 2A and 2-1, should be sent to U.S. Total Army Personnel Command, ATTN: TAPC-EPK-I, 2461 Eisenhower Avenue, Alexandria, VA 22331.

Anyone who needs more information may contact MSG Collins at (703) 325-7849 or DSN 221-7849; FAX: (703) 325-4880 or DSN 221-4880;E-mail: collinm1@hoffman.army.mil.

IOAC IS NOW ICCC

The Infantry Officer Advanced Course has changed its name to the Infantry Captains Career Course (ICCC). This change, effective 1 October 1998, represents the execution of Phase III of the Captains Professional Education Action Plan (CPT-PME).

For details of the overall plan, see the March-June 1997 issue of *Infantry*, pages 46-47.)

OCS PHASE III NOW OFFERED AT FORT BENNING

Senior National Guard officer candidates may now take the Total Army School System OCS Phase III in residence at Fort Benning, Georgia. Five consecutive two-week rotations were offered for the summer of 1998.

The program of instruction consists of three major events: The Leadership Reaction Course, the Tactical Leaders Course, and the Capstone Field Training Exercise.

After in-processing on the first day, candidates are assigned to squads within the company, where uniform and equipment checks are completed. Cadre and candidate orientation briefings conclude the inprocessing activities.

Day 2 begins with a 2.5-mile road march to the Leadership Reaction Course. This course consists of 15 leadership tasks, six dry and nine over water, designed to challenge the leader's ability to evaluate a situation, devise and issue a plan, and then supervise its execution. The Leadership Reaction Course also serves to build teamwork among officer candidates, helps identify tentative leaders, and aids students in acclimatization. An extended time is allowed for the full implementation of the troop-leading procedures and an in-depth feedback by evaluation TAC officers.

The day's training events include the Confidence Obstacle Course and the Combat Water Survival Test. The confidence course consists of 16 obstacles, each demonstrated and supervised by the regional TAC officers. Candidates are encouraged to help each other complete each of these non-timed events. The Combat Water Survival Test familiarizes candidates with emergency procedures to follow upon encountering a water obstacle. (Weak swimmers and non-swimmers are identified and given basic swimming instruction.) Three events include a 15-meter swim in battle dress uniform, boots, and weapon; a blindfolded drop-and-swim from the three-meter board; and an emergency equipment removal while submerged.

The Combat Water Survival Course and the Confidence Obstacle Course are team-building and acclimatization exercises that also give the candidates a sense of confidence and accomplishment. These events mirror activities included in the Infantry School OCS program of instruction.

The three-day Tactics Leadership Course is a field exercise that begins with a 2.5-mile road march. During this

event, the Tactics Leadership Branch trainer focuses on offensive squad-size operations. Each assigned squad leader trains and leads his squad through the various lanes. The evaluation criteria include the troop-leading procedures and leadership dimensions in accordance with Field Manual 7-8, *The Infantry Rifle Platoon and Squad.*

The nine squad lanes are designed to establish a common understanding of squad drill techniques. They include: *Perform a link-up, passage of lines, breach a wire obstacle, conduct a point ambush, bust a bunker, cross a danger area, react to a near ambush, clear a trench line,* and *react to indirect fire.* The multiple integrated laser system (MILES) is used to enhance realism as candidates train for the capstone exercise.

A staff ride to the Andersonville Confederate Prison is included on Day 7 of the training. The purpose of the staff ride is to instill Army values into officer candidates, based on the lessons learned in our nation's history. Three staff-led discussions focus on ethical conduct and its application to today's Army—Ethics of a Supervisor, Ethics of a Subordinate, and Ethics of a Peer. Candidates visit the National Cemetery where approximately 13,000 Union prisoner-of-war dead are interred.

The tactical exercise without troops begins on Day 8. Candidates conduct a 2.5-mile road march and then move into one of four tactical training sites. Troop-leading procedures are honed to a higher level in one of four platoon operation scenarios, which include *movement to contact, dismounted ambush, platoon raid,* and *vehicular ambush.*

The Capstone Field Training exercise concludes the second week of training with a company attack on a platoon defensive position. It is a scenario-based, force-on-force, small-unit tactical exercise using MILES equipment. The student leaders rotate throughout the exercise to maximize their opportunities for assessment in a challenging and realistic field environment.

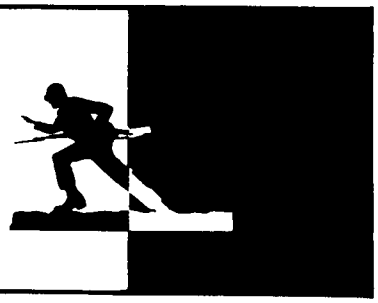
Officer candidates are out-processed on Day 14 of the rotation and are transported back to their respective states, where graduation and commissioning exercises are held.

The rotations are manned by cadre from various Total Army School System regions around the country, Active Duty for Special Work National Guard soldiers, and selected soldiers from the 3d Battalion, 11th Infantry Regiment, Officer Candidate School, at Fort Benning. Command, control, and oversight are provided by the commander and staff of the 3d Battalion.

Billeting facilities and support for the OCS Phase II course are provided by Fort Benning. Officer candidates are housed in the 3d Battalion, 11th Regiment barracks. The facility contains 68 two-to-four-person rooms with communal latrines and showers. In-house laundry facilities are available, along with office space for counseling and command and control. Rotational cadre are housed in a building that contains 30 individual rooms with communal latrines and showers. It is within walking distance of the officer candidate barracks. Dining facilities in the battalion area provide food service to candidates and battalion staff. Medical services are provided by two troop medical clinics, with additional services available from Martin Army Community Hospital when necessary.

The tactical operations center, near the battalion headquarters building, supports cadre, operations, service support, and visitor operations for the entire phase. The battalion establishes a 24-hour field operations center when candidates move into their field locations. Continuous communications through cellular phones, tactical radios, and hand-held radios ensure that the training conforms to the OCS motto—"Standards, No Compromise." *(Submitted by Major Walter N. Dyky, a member of the 70th Regiment, Maryland Army National Guard.)*

BOOK REVIEWS



***Victory at Any Cost: The Genius of Viet Nam's Gen. Vo Nguyen Giap.* By Cecil B. Currey. Brassey's, 1997. 401 Pages $25.95.** Reviewed by Dr. Joe P. Dunn, Converse College.

Cecil Currey, a retired U.S. Army Reserve chaplain who again retired last year as an academic professor of military history, has been a prolific writer. The most important of his ten works are the first two parts of the trilogy that this book completes—*Self-Destruction: The Disintegration and Decay of the United States Army During the Vietnam Era* (1981), an extremely controversial book, and *Edward Lansdale: The Unquiet American* (1988).

We have needed a good biographical study of the victorious North Vietnamese general for some time, and this volume—designated an Association of the United States Army book and a History Book Club selection—is an interesting, readable, and useful study.

Currey paints a picture of Giap as bright, adaptive, creative, a genius of organizational skills, a vain man of indomitable will who would pay any price for victory. As Currey traces Giap's military career, which is simultaneously the history of the communist revolutionary movement in Vietnam, he offers increased insight into the perspective of an adversary.

For his sources, the author employs Vietnamese and American writings, an extensive questionnaire and interviews with Giap and other Vietnamese, and a thorough grounding in the secondary literature. Throughout the study, he provides new details on various aspects of the war. Particularly valuable is an enhanced perspective on U.S. relations with Ho Chi Minh and Giap at the end of World War II and in the early years of the French-Indochina War. Also interesting are Giap's reservations about the change of strategy in Tet 1968 and his efforts at recovery after that disaster. The book brings the story of both Giap and Vietnam up through the octogenarian's retirement years after being "kicked upstairs" following the defeat of the Americans.

As the author admits, the heavy reliance upon the recollections of Giap himself entails certain limitations; but until Vietnamese historical archives are more open than they are at present, this will stand as the best work available on the illusive general. It is fascinating reading for scholar and general reader alike.

***Ernie Pyle's War: America's Eyewitness to World War II.* By James Tobin. The Free Press, 1997. 312 Pages. $25.00.** Reviewed by Ralph W. Widener, Jr., Dallas, Texas.

This is the story of a very talented writer who was better able than any other World War II correspondent to relate what was happening on the battlefield to the folks back home. He did this in such a way that they could see their men in uniform winning the war, despite the carnage it produced. And he did this despite the constraints of wartime censorship.

It is also the story of the fighting man's admiration for Ernie Pyle. For one thing, the soldiers enjoyed the attention he gave them. In one of his columns, he wrote, "Your average doughfoot will go through his normal hell a lot more willingly if he knows that he is getting some credit for it, and that the home folks know about it, too."

Pyle was not the only correspondent who traveled with the troops, but he was the only one to gain their universal approval. As Tobin points out, "As a rule, GI's distrusted correspondents as flashy cowards without the guts to stay near the front any longer than was necessary to grab a quick quote. They were outraged by headline hype about dashing columns and effortless gains which left out their agonies." Pyle, on the other hand, "was universally regarded as a 'guy who knows how it is' because he lived at the front, did many of the things they did, and sweated it out with them."

This is also the story of a man who, during the war, would take to his bed (a cot, or the ground itself when with the troops) with physical ailments and a great sense of depression. These, he told his bosses at Scripps-Howard, resulted from being so long under the strain and tension of combat. He was not alone. Audie Murphy, World War II's most-decorated soldier, felt this way to the end of his life.

It's also the story of a man whose personal life back home was anything but what it should have been. His wife, Geraldine, moved between alcoholic breakdowns and moody depressions, each time imploring him to come home and give up the war. Though he often wanted to heed her advice, he could not do this once he had spent time with the troops. Fortunately for the reader, Tobin uses many of the letters between them in his book.

The book ends with Pyle going to the Pacific because he felt he owed it to the fighting men there, men he had not yet favored with his columns home. He moved to the fighting front on Ie Shima, a small island near Okinawa and, on April 18, 1945, did what he had told the men in Europe not to do: He stuck his head up to see where the enemy was and was shot dead by a Japanese machinegunner.

This interesting book about a man who was loved by the people at home, as well as those on the battlefield, will be just as appreciated today as his columns were more than 50 years ago.

***Stalin's Lieutenants: A Study of Command Under Duress..* By William J. Spahr. Presidio, 1997. 352 Pages. $24.95.** Reviewed by Colonel George G. Eddy, U.S. Army, Retired.

As Stalin rose in power and authority, especially after Lenin's death when it had appeared that Trotsky would prevail as the legitimate successor, he became more ruthless, barbaric, and bloodthirsty than ever. As huge as the battlefield casualties were—estimated at 27 million (Stalin was personally responsible for millions of combat deaths due to his bungling and intermittent interventions)—the executions of suspected traitors based on fabricated evidence was seemingly endless. To the paranoid Stalin, everyone, even the very top military commanders who helped the Red Army prevail, was a potential suspect. No one Stalin fingered was able to escape. These purges of key military commanders not long before the German invasion put Russia in such a precarious state it was a wonder the country survived. Weather, terrain, and space

proved to be critical factors. But, for the Red Army commander: a favorite one day, a corpse the next.

"At the end of the 1920s," writes the author, "there had been a purge of officers and political workers suspected of being in sympathy with the Trotsky opposition. In the early 1930s there had been a purge of former officers of the old army. In this case more than 3,000 officers were not only dismissed, but the victims were tried on the basis of falsified evidence. According to Voroshilov a total of 47,000 officers were dismissed in these two purges, including 5,000 who were members of the Trotsky opposition. In mid-1936, arrests of Red Army commanders began again...." As Eugene Lyons noted in his 1941 book *The Red Decade*, "It was official carnage unprecedented for size and imbecilic in detail...at least 50,000 communists, officials, professors, economists were killed without the formality of trials; the country's foremost generals, admirals and marshals were executed and four-fifths of the higher officers' corps, about 30,000 Red Army, Navy, and Aviation specialists, were 'liquidated' by exile, demotions and execution; a terror more frightful than anything in a thousand years of Russia's sanguinary history swept through the country, leaving mountains of corpses in its wake."

What has to be considered miraculous is that so many officers braved this ferocious and terrifying bloodletting storm and continued to serve the army and the country, never knowing when they might be the next victims. These men successfully defeated the White Russian forces, the Poles, the Finns, the Japanese, and finally the Germans while struggling in a ravaged and devastated country, inadequate foodstuffs, shelter and clothing, an economy in shambles without a meaningful infrastructure. Roads were nonexistent in many parts of Russia, mere ruts and trails, communications in pathetic condition, and rail lines and rolling stock woefully inadequate for so vast a country.

Why did the leaders and the followers continue to fight? Mere love of country and a chance, however slight, of a better existence? Some observers might respond, "What other choice did they have?" Surely, however, this love of the land alone cannot explain how the leaders were able to develop proper units, and increasingly larger ones, and motivate desired performance. The author is silent on how these top Red Army commanders, Stalin's lieutenants, carried out this significant task. While the army at the outset was forced to depend on officers who had fought in the Tsarist army, the "specialists" as Spahr identifies them, the subsequent leaders were largely uneducated peasants. How did they learn so fast? Again, we don't get much help from the author here. The Russian experience adds new meaning to "learning on the job." Several military academies were launched to help train future commanders, but these did not exist during the fighting against the White Russians in the nascent days of the new Red Army.

The chief flaw of this book is the amount of detail the reader must plod through, trying to piece together major events, organizations, their leaders, and dispositions without maps, organizational structures, or order of battle information.

***Small Wars: Their Principles and Practices.* By Colonel C.E. Callwell. Third edition reprint. Bison Books, 1996. 559 Pages. $25.00.** Reviewed by Lieutenant Colonel Harold E. Raugh, Jr., U.S. Army.

United States military operations in the past quarter-century (with the exception of the Persian Gulf War), including those in Beirut, Grenada, Panama, Somalia, Haiti, and Bosnia, are reminiscent of Queen Victoria's "little Wars" of a century ago. Indeed, Rudyard Kipling called them "the savage wars of peace."

Originally published in 1896, *Small Wars* was written by Colonel (later Major-General Sir) C.E. Callwell. The third edition, of which this is a facsimile reprint, was published in 1906, with updated information from British operations in India, the Sudan, South Africa, and elsewhere, and the U.S. campaign in the Philippines. This new edition includes an insightful introduction by military historian Douglas Porch.

Callwell considered the term "small war" difficult to define, but said it "is simply used to denote, in default of a better [term], operations of regular armies against irregular, or comparatively speaking irregular, forces." In his study, he did not intend to cover all aspects of fighting small wars; he believed the details of logistics and administration were covered sufficiently in military publications. The purpose of his book was to give a "sketch of the principles and practices of small wars as regards strategy and tactics...."

The initial chapters of the book highlight the causes and objectives of small wars. The subsequent chapters emphasize various aspects of intelligence; the importance of "boldness and vigour," offensive, defensive, infantry, cavalry, and mounted camel tactics; hill, bush, and night warfare; and many other contemporary topics. Of significant interest is the chapter on guerrilla warfare in general. All chapters include detailed examples of British, French, and even American military operations, of the Victorian and Edwardian eras. These examples illustrate the author's encyclopedic knowledge of, and experience in, many of the campaigns he wrote about.

This book also chronicles, probably unwittingly, the evolution of warfare during the period of imperial expansion. Technology (then and now) could never substitute for tactics or strategy, countering enemy mobility, the ability to adapt to different terrain and climates, and timely and accurate intelligence. The regular forces in the small wars depicted, even though seemingly technologically superior, were not always successful in defeating their opponents. This, according to Callwell, was because commanders frequently did not foresee and prepare for differing facets of the campaigns, and occasionally did not understand the habits, customs, and tactics of their "inferior" enemy. The key to success was quick, decisive battle. These lessons should not be lost on today's military leaders.

Small Wars is not just a treatise on military history and tactics; it is also a primer for potential future military operations. In 1906 the British Chief of the Imperial General Staff recommended this third edition as "a valuable contribution on the subject of the conduct of small wars....full of useful facts and information on all the details...of those minor expeditions...." The same recommendation for this informative and analytical book is still valid today.

***The Sleeping Giant: America's Armed Forces Between the Wars.* By J.E. Kaufman and H.W. Kaufman. Praeger, 1996. 212 Pages, $55.00.** Reviewed by Lieutenant Colonel Albert N. Garland, U.S. Army, Retired.

The period between 1920 and 1940 was not a happy time for our military services, although some fared better than others. With little popular support and even less presidential and congressional backing, the services struggled to retain some aura of military credibility, despite ever-shrinking budgets and manpower allocations. As bad as 1920s were, the 1930s (at least until 1938) were even worse as the country suffered through a severe economic depression.

The authors, both teachers in the Texas educational system, have attempted in this book to tell us what the services did to maintain their sanity. To do this, they have

adopted a less-than-comprehensive approach. In their words, the book "synthesizes the history of all the armed forces as well as the development of strategy and tactics in the interwar period."

Unfortunately, they devoted most of their attention to a few specific areas of interest: naval and air maneuvers; development of naval air and the aircraft carrier; the Army Air Corps' attempts, beginning with Billy Mitchell, to gain greater recognition and increased budgets; and our coastal defense systems, both at home and abroad.

With the latter exception, the Army's story is almost totally neglected until the late chapters because, the authors say, "the bulk of the Army rarely found itself in the limelight during this period." From this, I got the distinct impression that if an Army story did not appear in *Time* magazine, it was not worth mentioning.

Much must be omitted in any synthesis, and so it is with this book. The most important omission was the authors' decision to ignore the human element, to tell us about the men who manned the guns, the planes, and the ships. Who were they? Where did they come from? How were they trained? Who made up the officer and noncommissioned officer corps? And by ignoring the service school systems, the authors made a serious mistake, for it was these systems that did more than any other single agency to hold the services together and to keep them striving, and thinking, and pushing developments despite the paucity of resources.

The authors do include a bibliography (mainly secondary works), a list of abbreviations, and a useful index. There are other syntheses available that may offer a different slant on the same era, and these should also be consulted. Overall, though, much remains to be done in writing any history of this 20-year period.

Fighting on the Brink: Defense of the Pusan Perimeter. **By Brigadier General Uzal T. Ent, U.S. Army Retired. Turner Publishing Company, 1996. 431 Pages. $49.95.** Reviewed by Lieutenant Colonel Michael F. Davino, U.S. Army.

During the summer of 1950, the U.S. Army was engaged in a desperate struggle on the Korean Peninsula. The undermanned and incompletely trained Eighth U.S. Army traded space for the time the U.S. and its allies needed to marshal forces for a counteroffensive.

General Ent's *Fighting on the Brink* is a close study of this phase of the Korean War. It covers the situation before hostilities, the invasion by the Democratic People's Republic of Korea, the defense of the Pusan Perimeter, and the eventual breakout and pursuit of the North Korean forces.

Although recent generations of Army leaders have devoted their efforts to trying to see that we never again face the need to conduct similar operations, this possibility cannot be entirely ruled out. We cannot be sure that future enemies will allow us the time to build up a huge force before the start of a war, as was the case in the Persian Gulf. Even today in Korea, where the Combined Force Command maintains two formidable field armies, many of the allied divisions are located in vulnerable garrisons within artillery range of the north Koreans. If these divisions are to survive largely intact and with time to assemble in the opening stages of a conflict, they will require a clear and unambiguous warning of an impending attack. Since this is something our intelligence apparatus has failed to provide in the past, we cannot be assured of entering such a war with complete units.

Additionally, if Korea is the second of two nearly simultaneous major theater wars, we may once again be fighting a prolonged defensive campaign. Therefore, leaders en route to an assignment in Korea would profit from reading this excellent book.

The author, a veteran of the campaign, has researched this critical period of the war in great detail. He makes extensive use of the official records and previous literature, but also includes the first-hand recollections of hundreds of participants. The narrative is full of lessons on the use of fire support, especially close air support, defensive warfare, and the conduct of counterattacks.

General Ent's accounts of the delaying actions and the fight to establish and maintain the so-called Pusan Perimeter are the most comprehensive published to date. He describes and analyzes the actions of units as well as the decisions made by leaders at all levels and is candid in his assessments.

This work could have been improved in the areas of editing and documentation. There are typographical errors throughout the text, and documentation consists of a list of sources, by chapter, at the end of the book. A more conventional documentation (sequentially numbered end-notes or footnotes) would have been more helpful to readers who want to do further research.

The author has succeeded in his objective of writing a definitive account of this crucial campaign. The book documents and explains the efforts of U.S. and allied forces to give General of the Army Douglas MacArthur the time he needed to launch the amphibious assault at Inchon.

Serious students of the Korean War will want this book for their libraries. The detailed accounts of small-unit actions also make it especially valuable for small-unit leaders.

Agent of Destiny: The Life and Times of General Winfield Scott. **By John S.D. Eisenhower. The Free Press, 1997. 464 Pages. $27.50.** Reviewed by Colonel Cole C. Kingseed, U.S. Army.

No military officer more indelibly imprinted his personality on his age than did Winfield Scott. A hero of the War of 1812, the conqueror of Mexico City in the Mexican War, Scott was general-in-chief of the United States Army at the outbreak of the American Civil War. His military career spanned more than half a century, from 1808 to his forced retirement in 1861, during which time the fledging American republic expanded from the Atlantic seaboard westward to the Pacific. In the process, Scott emerged as the nation's first truly professional soldier and one of its most vocal advocates of Manifest Destiny. In this, his latest book on the Mexican-American War, John Eisenhower has produced the definitive biography of this magnificent soldier.

For those unfamiliar with the U.S. Army of the first half of the 19th century, this biography will make compelling reading. Eisenhower's Scott emerges as an officer driven by personal thirst for prominence and prosperity. Introduced to the national scene as a spectator at Aaron Burr's treason trial in 1807, Scott joined the Army and won rapid promotion in the aftermath of military debacles in the War of 1812. He ended the war as a national hero, having contributed significantly to U.S. victories at Chippewa and Lundy's Lane. Between that war and the Mexican War, Scott played an integral role in revising Army doctrine and creating a sound military establishment. Appointed general-in-chief of the U.S. Army in 1841, Scott reached his zenith as a military commander in his conquest of Mexico in a brilliantly conducted campaign from Vera Cruz to Mexico City in 1847.

Still, his career was not without mishap. Three times, he found himself before a court martial, and once, he was convicted of "unofficer-like conduct," incurring a year's suspension from the Army. As the author says, it was a "shaky" beginning for an ambitious officer. On numerous occasions, his rivalry with Generals Alexander Macomb, Andrew Jackson, and Edmund Gaines earned censure from numerous presidents and secretaries of

war. Not surprisingly, Scott's military influence waned in the aftermath of the war with Mexico, due in no small part to his private and public flirtations with politics, an arena in which he was not particularly adept. His retirement in 1861 was as much a result of Lincoln's lack of confidence as of General George McClellan's own ambition.

In the final analysis, Eisenhower's greatest contribution is not in relating Scott's military exploits but in analyzing his relationship with civil authority. Scott served 14 presidents, 13 as a general officer. With his headquarters alternating between New York and Washington, Scott established cordial relationships with most of the country's leading politicians. Perhaps his greatest achievement lay in his efforts to avert a third war with Great Britain over a boundary dispute in the Maine wilderness. Scott was also the Whig Party's last candidate for president in 1852. In the aftermath of the election, Presidents Franklin Pierce and his successor, James Buchanan, relegated Scott to the sidelines as the Union drifted to dissolution.

In the pantheon of American military heroes, Eisenhower rates Scott "a military giant," who was his country's most prominent general for the four decades preceding the Civil War. Although he was not the architect of Manifest Destiny, Scott was the principal agent for the consolidation of the nation as a single unity and for its expansion. Herein lies Scott's greatest achievement.

Chancellorsville. **By Stephen W. Sears. Houghton Mifflin, 1996. 593 Pages. $35.00.** Reviewed by Major Don Rightmyer, U.S. Air Force, Retired.

Stephen Sears, the author of previous Civil War histories on the battles of Antietam (*Landscape Turned Red)*, the Peninsula Campaign of 1862 *(To the Gates of Richmond*), and a biography of General George B. McClellan (*George B. McClellan: The Young Napoleon*), has provided another excellent Civil War history, this time examining the campaign and battle of Chancellorsville in the spring of 1863. This book may be the best history of its type that Sears has produced.

The Army of the Potomac was in real trouble in early 1863. Its beloved commander, George McClellan, had been relieved of command the previous fall, after the battle of Antietam. The army had suffered an ignominious defeat at Fredericksburg under the command of General Ambrose Burnside. Senior officers of the Potomac army were disloyal toward their commander, one of the key people among them being General Joseph Hooker.

Despite that, President Lincoln placed General Hooker in command of the army and gave him responsibility for its spring offensive against the army of General Robert E. Lee. The battle of Chancellorsville was another serious defeat for the eastern Union army, and for Hooker's removal from army command as well. Sears provides a very fair, even-handed coverage of Hooker's efforts to reorganize the army and carry out a strategy that he hoped would result in the defeat of the Army of Northern Virginia once and for all. Despite Lee's audacious division of his forces in the face of the Union army and the loss of his able subordinate, General T.J. "Stonewall" Jackson, at dusk on the first day of the battle, the Southern commander was able to deal a solid defeat to the Army of the Potomac and send them back to where they had started their campaign.

This is the best history and analysis of the Chancellorsville campaign ever written. It goes into considerable detail for all aspects of planning, logistics, cavalry operations, and combat actions during the two days of the battle. It will certainly stand for some time as the best work done on Chancellorsville in several decades. Others have been published but, in comparison with this work, they are only surveys of the battle.

For students of the Civil War, we can only wait with anticipation for the next Civil War campaign that will attract the attention of Stephen Sears. It always seems well worth the wait and the time necessary to read one of his excellent volumes. *Chancellorsville* is highly recommended.

RECENT AND RECOMMENDED

Drawing Fire: A Combat Artist at War: Pacific, Europe, Korea, Indochina, Vietnam. **By Howard Brodie. Portola Press (P.O. Box 911, Los Altos, CA 94023), 1996. 159 Pages. $16.95, Softbound.**

Twilight Warriors: Inside the World's Special Forces. **By Martin C. Arostegui. St. Martin's, 1998. 346 Pages. $6.99.**

Inside Hitler's Headquarters. **By General Walter Warlimont. Originally published by Bernard & Graefe Verlag, 1962. Presidio, 1997. 672 Pages. $19.95.**

The Battle for Hunger Hill: The 1st Battalion, 327th Infantry Regiment at the Joint Readiness Training Center. **By Daniel P. Bolger. Presidio, 1997. 384 Pages. $24.95.**

The Company They Keep: Life Inside the U.S. Army Special Forces. **By Anna Simons. The Free Press, 1997. 240 Pages. $25.00, Hardcover.**

Drop Zone Sicily: Allied Airborne Strike, July 1943. **By William B. Breuer. Originally published in 1983. Presidio, 1997. 240 Pages. $14.95, Softbound.**

A Piece of My Heart: The Stories of 26 American Women Who Served in Vietnam. **By Keith Walker. Presidio, 1997. 352 Pages. $15.95, Softbound.**

Sabres in the Shenandoah: The 21st New York Cavalry, 1863-1866. **By John C. Bonnell, Jr. White Mane Publishing Company (P.O. Box 152, Shippensburg, PA 17257), 1997. 377 Pages. $34.95.**

Rebel Watchdog: The Confederate States Army Provost Guard. **By Kenneth Radley. Originally published in 1989. Louisiana State University Press, 1997. 340 Pages. $16.95, Softbound.**

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From the Editor

WHERE'S YOUR WEAPON, SOLDIER?

This issue's account of the bloody engagement of Company C, 9th U.S. Infantry Regiment against a numerically superior force of insurgents points out a lesson that's as true today as it was a century ago: Don't let your guard down! Fighting men have had to relearn this bitter lesson in most wars before and since, and—amazingly—many of them have lived to tell the story. Many have not. Those friendly folks who live outside the wire, who haul your trash, clean your compound, and wave as you pass them in your HMMWV can turn on you in a minute, and you may never see it coming.

Once a few of the Manchu's at Balangiga got hold of their .30 caliber Krag-Jorgensens, the tide turned and 26 Americans escaped what would have been certain death. It was not a relief force that saved the day, nor was it machineguns or danger-close artillery fires. It was the fighting spirit and the individual weapons of those embattled young Americans. Had other members of the company not been separated from their rifles, still more would probably have survived. Every soldier needs to be able to get to his weapon in a hurry, shoot fast, and put a bullet where he wants it. In today's high-tech world, there is a temptation to regard our personal rifle or sidearm as a when-all-else-fails option instead of as our primary weapon. Pardner, when they're in the wire—or through the wire—all else *has* failed, and the close, personal Infantry fight is at hand.

Our forces in the Balkans realize—and train for—the danger; they live with it every day. They know that the region's indigenous forces are the children and grandchildren of the men and women—in regular army units and partisan organizations—who tied up 26 German divisions during World War II. Our leaders and their units in the former Yugoslavia are not likely to be caught off guard, but volatility is not limited to the Balkans.

Wherever our forces are deployed on stability and support operations around the world, the locals' loyalties to faith and family, home and neighbors go a lot deeper than any ties they have to us. Our commitment to global peace and stability means that we'll have troops on duty in potential hot spots for years to come, and we owe it to them to make sure they return safely when they have completed their mission. Training soldiers to maintain possession of their weapons is as important a force protection issue as we have ever addressed, and is one that needs to be hammered home in combat, combat support, and combat service support units alike. We should have learned by now that the secure rear area of the past—if it ever existed—is a fantasy, and that the enemy is where you find him. Stay alert, watch your lane, and keep your guard up.

RAE

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