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Infantry

January-February 1993

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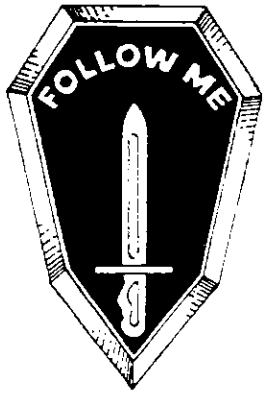

Infantry

January-February 1993 Volume 83, Number 1

DEPARTMENTS

FRONT COVER: An infantryman of the 1st Battalion, 165th Infantry scans the jungle of Buteritari Island, Makin Atoll, in November 1943 during the campaign to clear the Gilbert Islands of Japanese forces.

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Commandant's NOTE

MAJOR GENERAL JERRY A. WHITE Chief of Infantry

INFANTRY TRAINING—FROM THE BEGINNING

At the heart of the infantry team are the soldiers who must ultimately close with and destroy the enemy, and I want to use my pages in this issue to bring you up to date on the most recent improvements to the training of the infantryman.

Infantry units throughout our Army today must be able to deploy rapidly, with little notice, to anywhere in the world. At the same time, technological advances, diminishing resources, and the need for tough, skilled, combat-ready soldiers all demand a revised training strategy for infantry one-station unit training (OSUT). This training prepares soldiers to fight and survive on the battlefield as members of a mechanized infantry squad, a mortar crew, rifle squad, or a TOW crew upon their graduation.

During Operations DESERT SHIELD and DESERT STORM, we took an in-depth look at which individual skills our trainees retained at the end of the OSUT cycle and whether they could apply those skills in a field training exercise (FTX), in a totally tactical environment, or as members of a squad on a series of situational training exercises (STXs). We were surprised to find that many soldiers had great difficulty executing skills to standard when we changed the conditions. This revelation caused us to re-examine the way we did business and to develop ways of improving the soldiers' skill retention.

An earlier strategy focused on training a soldier to achieve "GO" ratings on a series of test stations in what Field Manual (FM) 25-101 refers to as the *initial* stage of training. This strategy has value where the purpose is to simply teach soldiers a standardized method of completing a task, but it falls short when training infantrymen who must apply all of these skills in a tactical environment where their very survival and unit mission accomplishment depend upon it. It became obvious to all of us during DESERT STORM that infantry OSUT graduates were joining units on the way to the theater of operations and that they might even join units already in combat, without any further opportunity for additional training. This condition still exists today—any U.S. Army unit could be committed to combat on short notice and at its present level of training.

We believe the revised strategy develops individual infantry training to an art and that the new approach to command, leadership, and development holds many lessons for trainers and commanders. Our current OSUT program links mission training plans, collective skills, leader skills, and battle drills. In other words, we now train in OSUT the way we train everywhere else in the Army—using FM 25-101.

The major points of this assessment-based strategy revolve around the soldiers' roles as members of a squad, crew, or fire team; on drill sergeants and trainers as infantry leaders; on first sergeants as master trainers; and on commanders as training managers.

Under the old training strategy, once a soldier received a "GO" on one task, he rarely referred to that task again in OSUT. By contrast, the new strategy integrates every old task with new tasks that train the soldier to higher levels of difficulty—and proficiency—in more realistic environments.

The new strategy also recognizes the high aptitude of the average soldier as he enters training. He is intelligent, relatively accomplished at what he has done so far, and well motivated to succeed. He therefore has a vested interest in behaving and performing well. He wants to be a winner!

We base our training on our vision of the final product, of this soldier upon graduation. We build the soldier by focusing on three major characteristics: skill, discipline, and motivation.

Skill. Skill includes all the components of physical training, combat critical skills, and program of instruction (POI) tasks performed to the specified standards. A soldier must execute all of the tasks in the POI for his military occupational specialty (MOS) to the *initial* stage of training. FM 25-101 defines initial stage training as the ability to complete a task in sequence. A task is trained to the *refresher* stage when a soldier can complete it to the Army standard, usually expressed in either time or accuracy. The skill is at the *sustainment* stage when the soldier can execute the task under

conditions of increased realism and intensity.

Our focus here is still to ensure that an infantry soldier can perform all the skills required of him at least to the initial stage, and that he can achieve the refresher or sustainment stage on the combat critical tasks for MOS 11B. A committee of command sergeants major, first sergeants, and drill sergeants recommended these tasks as the minimum requirements for a soldier if he is to fight and survive on today's battlefield without any additional training.

The OSUT soldier does physical fitness training six days a week, with his daily training alternating between cardiovascular conditioning and upper body strength. The goal is to have him reach far beyond the standard for passing the Army Physical Fitness Test (APFT). The objective of this training is to turn out a soldier who is physically fit and who can sustain himself for extended periods under rigorous combat conditions. His fitness is assessed through progressive road marches of up to 18 miles (while carrying up to one-third of his body weight), runs of up to five miles in 45 minutes, obstacle and confidence courses, rope climbs, chin-ups, and aerobic exercises. If a soldier is out of shape or unable to pass the APFT when he arrives in his first unit, it is probably because he met only minimum requirements while in training and did no physical training while on leave or on the way to his unit.

Discipline. The focus of discipline is on teaching a soldier to do the right things all the time by the time he graduates, with little or no supervision. We provide him with more incentives in the current program than in the past. Our objective is to shift the responsibility for individual performance from the drill sergeant at the beginning of the cycle to the soldier himself by the end of the cycle.

Motivation. The goal is to produce a winner who is a self-starter, who takes pride in himself and his unit, and who builds on his strengths to achieve the standards. (Soldiers who demonstrate a lack of self-discipline or motivation while at Fort Benning will be given an entry level separation.)

The key player in the process of developing a new soldier and easing his transition from civilian to infantryman is the drill sergeant. He is responsible for teaching the soldier about 80 percent of what he retains from training. The drill sergeant consistently tracks the soldier's progress in achieving the training standards, and he provides one-on-one remedial training for those who need it. He also gives the soldier constant feedback in terms of performance counseling. He is the one who motivates the soldier to be all he can be.

A soldier who excels in training and who clearly demonstrates leadership abilities is identified by his drill sergeant and unit commander as a "fast track" soldier. He receives additional coaching, mentoring, and counseling from his drill sergeant. In the process, he learns how to lead soldiers and to perform a limited number of additional tasks at Skill Levels 1 and 2.

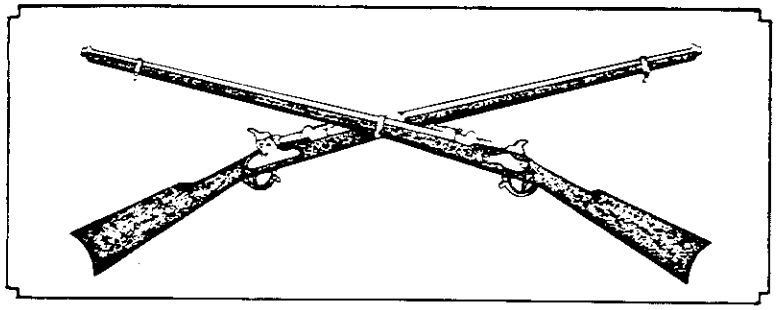
The results of all infantry OSUT soldier qualifications and training are identified in the soldier's 201 file as part of his individual training record. Gaining units should make sure this information is not disregarded during in-processing, because it provides valuable insights into the soldier's background and experience in the Army up to that point.

If you are an officer or noncommissioned officer passing through Fort Benning to attend a school or a conference, we invite you to visit the Sand Hill area and go out on an FTX with our soldiers. You will be impressed with their level of proficiency and their ability to execute training to standard in a totally tactical environment using MILES equipment.

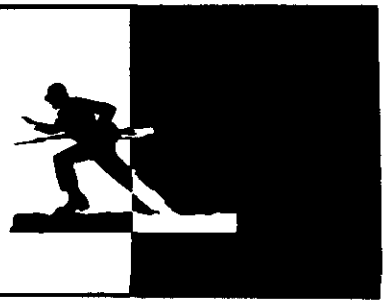
If you cannot come to Fort Benning to observe OSUT training, we encourage you to send us your comments on the quality of the graduates you are getting in your unit. Our goal is to meet unit requirements for quality in all new infantry soldiers. But we cannot do everything in the time allotted and must identify some trade-offs. We will therefore consider your thoughts in everything we do. Please help us make our new infantrymen the best they can be.

The goal of OSUT is still to produce a physically fit, technically competent, and highly motivated infantryman who can join a unit anywhere in the world and carry out the missions expected of him. Some of those units will be mechanized infantry, and this is an exciting time for the mechanized force. The quality of our training was validated in DESERT STORM, when mechanized units of the United States Army smashed the best units of the Iraqi Army. But we cannot afford to rest on our laurels.

We are therefore reviewing doctrine, tactics, gunnery, weapon systems, and crew training to make sure our fighting skills keep up with technological advances of our country, our allies, and—most important—our potential adversaries. Our ability to critically analyze our own training and equipment has been the key to victory throughout our nation's history, and this continuing analysis will ensure that the United States Army of the next century is the best fighting force on the battlefield.



INFANTRY LETTERS



MORTAR MUNITIONS

Mr. Earl W. Rubright's letter on mortars and smart munitions (INFANTRY, September-October 1992, page 3) was timely and provocative.

As a matter of professional curiosity, I did some back-of-the-envelope analysis of the effects of introducing smart mortar munitions into the force. Let me offer one old mortarman's glimpse into the future:

• Smart munitions will likely require new mortar organizations and tactics. Dispersion between gun positions must compensate for the larger, sensor-determined "footprints" of smart munitions. Range differences between smart and dumb—high explosive munitions—may also influence how future mortar-unit firing positions will be organized.

• Smart munitions could degrade the mortars' inherent high rate of fire. Volley or salvo firing of smart munitions without intermittent gunner traverse could result in multiple hits on the same vehicles inside overlapped sensor footprints. Further, if experience with the Copperhead is relevant, the firing of guided munitions would also slow the sustained rate of fire.

• Shaped-charge smart munitions may not deliver the desired effectiveness against tanks or other armored vehicles shielded by explosive reactive armor (ERA) tiling. Tandem-charge warheads may be feasible only for the 120mm mortar.

• Smart munitions are likely to be heavier and longer than the current HE rounds. Fewer projectiles could be carried in unit basic loads, unless unit transportation capabilities were increased.

• Smart munitions will probably cost more than HE rounds, complicating budget allocation and distribution planning. Scarce smart munitions may have to be consolidated within one mortar squad or section.

• The identification friend or foe (IFF) problem could be alleviated by employing direct-lay, or squad leader-observer techniques of fire, in which the mortar team makes a positive, line-of-sight identification of the armored target before engaging it.

In summary, smart and dumb (HE) munitions may turn out to be an oil-and-water combination. The infantry community may have to think about splitting the mortar unit into antipersonnel elements (firing HE, smoke, and illumination) and antiarmor elements (firing smart and guided munitions) to realize the full battlefield potential of smart munitions.

In my opinion, defending against a human-wave attack is still the infantry's worst-case scenario, especially when terrain and weather limit the effectiveness of air and artillery support.

Alternatively, the development of dual-purpose submunitions (DPSMs), designed to improve mortars' bread-and-butter antipersonnel mission across all mortar calibers, may be a smart and more cost-effective first step.

RICHARD K. FICKETT
Herndon, Virginia

SMOKE/OBSCURANTS SYMPOSIUM

The Smoke/Obscurants Symposium XVII will be held 13-15 April 1993 at the Kossiakoff Conference and Education Center, The Johns Hopkins University, Laurel, Maryland. The theme of the symposium is "Smoke: Early Entry Survivability."

Members of the Department of Defense, industry, academia, and allied nations are invited to submit papers. The abstract deadline is 15 January 1993.

The symposium is sponsored by the U.S. Army Edgewood Research, Development and Engineering Center at Aberdeen Proving Ground, Maryland.

For further information, contact me at (804) 865-7604; telefax (804) 865-8721, or Van R. Jones, Technical Coordinator, (410) 671-3668/4426, DSN 584-3668/4426, or telefax (410) 671-3617.

LISA H. McCORMICK
Symposium Coordinator

INFANTRY NEWS

THE FOLLOWING MANUALS were prepared by the Infantry School and scheduled for publication and distribution by January 1993:

FM 21-26, Map Reading and Land Navigation. Provides a standardized source document that contains guidance on both doctrine and training; discusses orienteering, training materials, and devices to assist the soldier in land navigation.

ARTEP 7-7J-Drill, Bradley Fighting Vehicle Battle Drills. Provides a set of core drills for BFV-equipped crews and platoons. Although the tasks in the drills are standardized, their tactical employment is flexible. The goal of training is to produce a combat-ready unit that responds rapidly to enemy activity and defeats the enemy.

FM 7-92, The Infantry Reconnaissance Platoon and Squad (Airborne, Air Assault, Light Infantry). Describes the doctrinal and tactical employment of the reconnaissance platoon in airborne, air assault, and light infantry battalions. It provides the reconnaissance platoon's leaders with tactics, techniques, and procedures they can use to exploit its capabilities, reduce its vulnerabilities, and enable its parent battalion to obtain the information needed to win on the battlefield.

THE ARMY LONG-RANGE Surveillance Leaders Course is offered by the 4th Ranger Training Battalion, Ranger Training Brigade, at Fort Benning, Georgia. The 35-day course is designed for leaders in the rank of sergeant and above in active or Reserve Component long-range surveillance units.

The 4th Battalion is trying to increase attendance in the course and, at the same time, to make sure the students who are enrolled meet the prerequisites. Those who do not may be turned back after arriving at Fort Benning.

Commanders and soldiers in these units should be aware of the following information on prerequisites and reporting:

- Prospective students must be either assigned to or en route to long-range surveillance units.
- Students must be airborne qualified and must have their current physical examinations and medical records in their possession when they arrive. Students who do not have these records with them will be dropped immediately from the course.
- Students must be prepared to pass the following tests on the first day of the course: a written test and a day and night practical exercise on land navigation, the Army Physical Fitness Test, and the Combat Water Survival Test.
- Each class has a maximum capacity of 36 students. Interested personnel may secure seats through the Army Training Resources Requirements System (ATRRS).
- Reporting time is 0700 on the first Monday of the course.

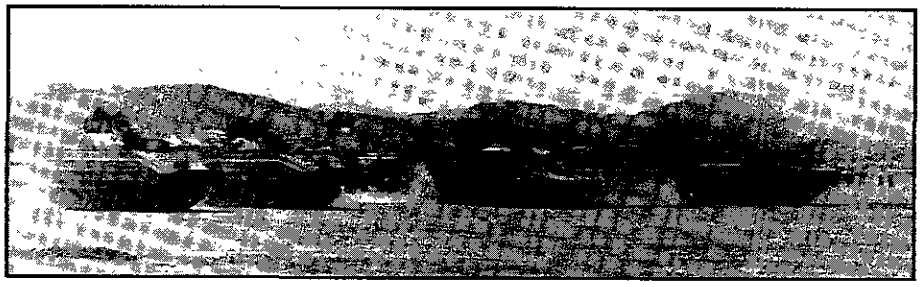
Further information, including class dates, is available from SFC Silcox, Company D, 4th Ranger Training Battalion, at DSN 784-6831/6216.

THREE PROTOTYPE M113/BMP-2 vehicles completed a field test last summer at the National Training Center (NTC), Fort Irwin, California. The M113/BMP-2 combines parts of the M113 and the Bradley fighting vehicle, along with locally fabricated components.

The prototype vehicles were designed and fabricated at the Red River Army Depot to resemble the BMP-type armored vehicles used in large numbers by the former Warsaw Pact countries and in the armed forces of many other countries throughout the world. The BMP was one of the armored vehicles frequently faced by U.S. and coalition forces during Operation DESERT STORM.

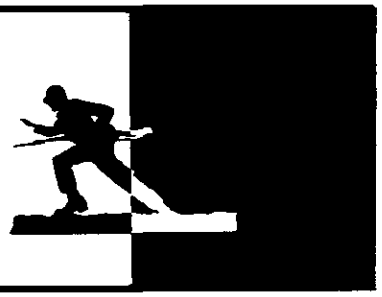
If the vehicle is approved for large-scale production, it will be used at the Army's combat training centers to replicate a generic enemy force, fighting mock battles with the U.S. Army units training there. The vehicle has no real weapons, just a simulated gun barrel and an array of laser tracking equipment that give it an air of reality.

The NTC now uses visually modified M-551 Sheridan tanks to replicate the BMP-type vehicles, but the Sheridans cannot carry infantry dismount elements as the BMP can. The M113/BMP-2 solves this problem. And because it is made from U.S. vehicles now in use, with spare parts readily available, it should be easier to maintain.



The two vehicles on the left are prototype M113/BMP-2s. Second from the right is an M551 Sheridan tank, visually modified to resemble a BMP. At right is an actual BMP.

PROFESSIONAL FORUM



Light Infantry Snipers
Let's Standardize Personnel and Equipment

LIEUTENANT KEVIN P. DRAGNETT

The November-December 1991 issue of INFANTRY included an article titled "Snipers: A Neglected Combat Multiplier," by Captain Philip K. Abbott. The author offered much useful information about the history, employment, and selection of snipers. He also discussed briefly the lack of equipment allowances for snipers under the current modified tables of organization and equipment (MTOEs). The problem, however, is much worse than he pictured it.

To say that there is a lack of personnel and equipment is a serious understatement. Only one soldier with the additional skill identifier (ASI) of B4, Sniper (awarded upon successful completion of the U.S. Army Sniper School at Fort Benning) is authorized per squad, and the sniper rifle is the only authorized piece of equipment. According to the TOE, the sniper should be assigned to a scout squad and employed as part of the squad. But the soldier who is authorized the B4 ASI is not an additional soldier but one of the five authorized in a scout squad.

In a battalion in the 7th Infantry Division, the snipers are primarily organized as a squad and employed as two-man sniper teams or as a fourth scout squad. Most commanders and scout platoon leaders have learned that organizing the snipers as a separate squad improves both sniper training and tactical employment. Since the sniper squads are being used throughout the division, however, the lack of a TOE-authorized sniper squad in each scout platoon has created a serious lack of equipment and personnel. The absence of an authorized sniper squad is an issue that requires immediate attention at the highest levels of Infantry branch.

With the sniper squad organized as part of the scout platoon, it can be—and often is—employed as a fourth scout squad, particularly for intelligence collection. Although this may not be the best use of three sniper teams, it may be necessary because of conditions of METT-T (mission, enemy, terrain, troops, and time). The sniper squad augments the light infantry battalion's ability to collect tactical information.

Many professional infantrymen may debate specific personnel and equipment requirements, but without current standards these discussions are irrelevant. As an immediate solution, we need a basic TOE change that includes one sniper squad per scout platoon. The snipers, like any other unit, will be fine-tuned with advances in technology, improved techniques, and changes in the force structure.

Since the current light infantry battalion MTOE makes no allowance for sniper positions, the soldiers who call themselves snipers are not being recognized by the Army. For example, a staff sergeant performing the duties of a sniper squad leader, who carries the MOS 11B30B4, is not filling an authorized position in the light infantry battalion. He is normally assigned to the battalion in a rifleman slot (11B10), or to the headquarters company in the "reassignable overstrength" category. The sniper squad leader is not shown as a rifle squad leader because if he were he would be taking the slot from the actual squad leader.

Thus, noncommissioned officers who hold positions of great responsibility that require intense specialized training are not being recognized by the Department of the Army for their unique qualifications and critical mission. Although their NCO evaluation reports explain their duties and responsibilities, the slotted positions shown on their Forms 2A may adversely affect their chances for promotion to sergeant first class.

All soldiers "assigned" to the sniper squad are, in fact, assigned to rifle companies as riflemen or to the headquarters company as excess. Some may argue that the sniper team, which consists of two men, is assigned to a rifle company because it *will* be employed by that company. Nevertheless, there are no authorized sniper positions within the rifle company in light units. Since we have already recognized the need for the sniper squad, collected volunteer soldiers from the companies, and "attached" these soldiers to the scout platoon as a sniper squad, we should make the sniper squad an authorized part of every light infantry scout platoon. The current process hurts both the soldiers and the sniper program and does not ensure that skilled snipers will be on hand when they are needed.

ORGANIZING

Organizing the sniper squad as part of the scout platoon would be an effective way of training the snipers and ensuring that they were employed effectively. This arrangement would allow for three sniper teams to be under the control of the battalion S-3 and S-2, respectively, for delivering long-range precision fire and for intelligence collection. With the snipers organized at battalion level, the sniper squad leader and the scout platoon leader would become sniper employment officers. The sniper teams would therefore be employed by officers more familiar with their capabilities and the missions assigned them. Sniper teams would retain the flexibility to be attached to the rifle companies on the basis of the mission task organization.

Since the MTOE does not prescribe the composition of a sniper squad, each battalion now builds its sniper squad as it sees fit. A better solution would be to standardize the composition of these squads to give light infantry commanders an asset with standardized personnel, equipment, and training. The seven-man sniper squad that Captain Abbott mentions in his article should be organized as shown in Table 1.

This organization would allow all snipers to be assigned in authorized sniper positions. The seven-man squad would allow for three sniper teams with one squad leader. Each team would be led by an NCO who is both Ranger and sniper qualified, and the sniper team leader would be the observer. This organization should be listed as a separate paragraph within the scout platoon's personnel allowance.

Sniper equipment consists entirely of the M24 sniper rifle, but a sniper team also needs a secure radio, night vision devices, observation equipment, and self-protection weapons. This equipment is now hand-receipted from the rifle companies. Since a rifle company is currently authorized eight AN/PRC-77 radios with KY-57 secure devices, the companies can hardly afford to provide radios to the snipers. And since communications equipment exemplifies the austerity of a light infantry rifle company, the sniper squad cannot expect to fill all of its equipment needs by borrowing.

Training Circular 23-14, Sniper Training and Employment, dated June 1989, discusses the equipment that each sniper team should carry: The team leader (observer) should carry an M16A2 for the protection of the team. The sniper should carry the sniper rifle—M24 or M21—and an M9 pistol. Currently, headquarters companies are not authorized enough M16s or M9 pistols to meet this requirement.

TC 23-14 also discusses observation devices. Although M22 binoculars are abundant in a light battalion, the M49 observation telescope is not authorized and therefore cannot be borrowed from the unit. (The 20-power magnification and maximum light transmission of the M49 make it the best sniper observation device.) Additionally, as presently structured, the snipers either borrow night observation devices such as the AN/PVS-7B and AN/PVS-4 or continue their mission without them.

As with personnel allowances, sniper equipment allowances are not standardized. Scout platoons equip their snipers the best they can by signing for equipment from the rifle companies. Although this equipment is usually borrowed on a long-term basis, it is still on another unit's MTOE and property book hand receipt and may have to be returned at any time. How well the snipers are equipped often depends upon the commander's needs and his views concerning the effectiveness of the snipers as opposed to the effectiveness of the rifle companies.

Sniper equipment allocations must be standardized to provide commanders with an effective well-equipped asset.

POSITION	NUMBER REQUIRED	RANK	MOS	ASI
Sniper Squad Leader	1	SSG	11B3G	B4
Sniper Team Leader	3	SGT	11B2G	B4
Sniper	3	CPL	11B10	

Table 1

LINE	DESCRIPTION	REQ
C62375	Battery Case: Z-AIJ-E1	3
N05482	Night Vision Goggles: AN/PVS-7B	3
N04732	Night Vision Sight, Ind. Weapon: AN/PVS-4	3
Q21483	Radiacmeter: IM-174/PD	3
Q38299	Radio Set: AN/PRC-77	3
S01373	Speech Security Equipment: TSEC/KY-57	3
V35477	Telescope, Straight Military: M49	3

Table 2

The sniper squad should be authorized the equipment shown in Table 2. Again, M16A2 rifles and M9 pistols are required, but they must be added to the equipment allowance of the headquarters company.

The current system for requesting changes to an MTOE is lengthy and time-consuming, and it requires approval at all levels of the Army, but the absence of snipers is an issue that requires more immediate attention. Many infantry professionals may argue with my recommended personnel and equipment lists. But professional debate concerning the composition of light infantry snipers, particularly at the highest levels of the infantry, is the first step toward revitalizing the sniper program and recognizing the very special men we call "snipers."

LIEUTENANT KEVIN P. DRAGNETT led a scout platoon, a support platoon, and a rifle platoon in the 7th Infantry Division and now commands a troop in the 2d Squadron, 12th Cavalry, at Fort Knox. He is a 1987 ROTC graduate of The Citadel.

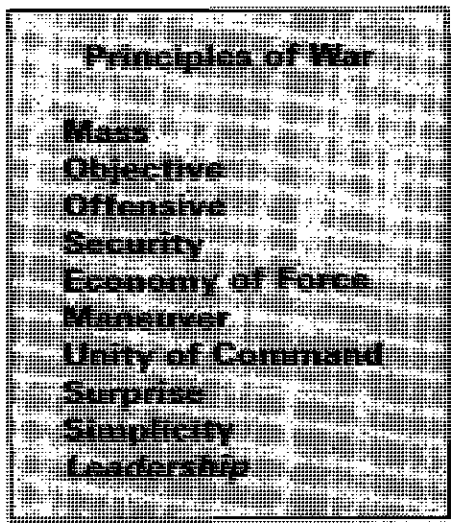
Leadership
The Tenth Principle of War

CAPTAIN RICHARD A. TURNER

FM 100-5 explains that wars are fought and won by men, not by machines, and that the fluid nature of war places a premium on sound leadership. If leadership is as important as we think it is, it needs to be included in our Principles of War.

The Principles of War, from the work of J.F.C. Fuller, are guidelines for our Army to use in conducting warfare. According to Field Manual 100-5, Operations, we adopted these nine Principles of War in 1921 and have revised them only slightly since that time. Given the great importance of leadership in today's Army, and the effectiveness of U.S. leaders throughout history, it is now time for another revision: I propose that *Leadership* be added as the tenth, and most important, principle. I offer evidence, based on two key manuals and two historical examples, to support this proposal:

FM 100-5 identifies leadership as an element of combat power. The leader decides the degree to which maneuver, security, and economy of force are to be emphasized. Leaders also decide the degree to which the other six Principles of War are to be emphasized. It certainly takes a leader to decide what *Objective* must be taken or how to seize, retain, and exploit the initiative (*Offensive* principle). *Unity of Command* dictates that for



every objective there should be one commander or leader. In fact, all of the principles rely on timely and accurate leadership decisions.

FM 22-100, Military Leadership, says that our success as an army depends greatly on outstanding leadership. It explains that quality leadership is essential if a nation is to have an army that is ready to fight. This is especially important today, given the wide variety of contingencies for which the Army must be prepared. This manual is devoted to training and developing leaders so our army will be as successful in the future as it has been in the past. This devotion to training leaders is another reason *Leadership* should be included in our Principles of War.

One example of the kind of leadership that can pull victory from the jaws of defeat is from the Battle of Gettysburg. The 20th Maine, commanded by Colonel Joshua L. Chamberlain, was ordered to hold Little Round Top at all costs. Colonel Chamberlain had 15 minutes in which to place his regiment in position and did so in an outstanding fashion.

Two Confederate regiments attacked the 20th Maine's position at least six times, inflicting heavy casualties, but were repeatedly repulsed. During a lull

in the battle, Colonel Chamberlain realized his regiment was in dire straits. Out of ammunition and outnumbered following the last assault, he ordered his men to fix bayonets and led a bold assault against the Confederates that took them completely by surprise. The stunned enemy soldiers were defeated and fell back in disarray. The men of the 20th Maine swept their brigade's whole front and wanted to go farther, but Colonel Chamberlain's outstanding skill as a leader allowed him to maintain control of his soldiers and move them back into position.

The outcome of the Battle of Gettysburg and the fate of the United States were determined by many factors in that time but none so telling as the bayonet charge of the 20th Maine. Colonel Chamberlain's leadership allowed his regiment to hold the line and the Union Army to win the battle.

Another example of the importance of leadership to success in battle is our 1991 victory in the Persian Gulf War. Although we faced a numerically superior force that had had months to prepare, we were able to deploy our forces, seize the initiative, and decisively defeat the Iraqi Army. Outstanding leadership at all levels was responsible for that victory.

As one specific example of this success, a young cavalry scout with the 3d Armored Division evacuated the crew and organized a hasty defense after his Bradley was hit by enemy fire. Although he was severely wounded himself, he was able to direct his platoon to his position and still place effective fire on an Iraqi squad.

To include *Leadership* as a Principle of War, we must first understand the term. FM 100-5 states that leadership provides purpose, direction, and motivation in combat; it also describes leadership as the process of influencing others to accomplish a mission. We can combine these two ideas somewhat to come up with an acceptable definition: *For every military operation, the leader must provide the task, purpose, and motivation.* In order to do this the leader must apply all of the Principles of War, including his ability to influence others to accomplish the mission.

In past wars, our success has always depended on the outstanding leadership displayed by U.S. soldiers at all levels and in all branches. Our future success, given the wide variety of contingencies we must prepare for, will continue to depend on competent leadership. This is why I believe *Leadership* should be our tenth Principle of War.

Captain Richard A. Turner commanded an antiarmor company in the 3d Armored Division, a Bradley company in the division during Operation DESERT STORM, and now commands headquarters company, 2d Battalion, 11th Infantry. He is a 1983 graduate of the United States Military Academy.

Evaluation Reports
Whom Do We Really Reward?

MAJOR JOSE M. MARRERO

As military professionals, we all want to be treated fairly at rating time, and our subordinates expect the same. But whom do we really reward in our evaluations and our daily activities? Do we reward the soldiers who most deserve it? What specific traits do we reward? And are we aware that when we reward one subordinate, we send a message to all the others? That message is, "This is how it's done. These are the traits we want to see in this unit."

Let's look at an example:

A captain receives a less than outstanding officer evaluation report (OER) and has trouble understanding why. After all, during the rating period, he made sure the battalion commander saw him in action and saw his company in the best light. He chatted with the colonel, impressed him with astute observations, and joked around with him, all to foster a closer relationship. He took pains to show he was in control of everything. He always had his uniform pressed and his boots shined. Who deserved a better rating than he did?

He complained to the colonel, "This is the first time in my military career that I received anything less than outstanding on an OER. You've seen how good my company is. And no one can question my loyalty to you. Every time you asked me to do something, I was there. I came through, whatever it was. You could always count on me."

He was surprised at the colonel's

response: "Yes, you've always been there for me! *Not for your soldiers. I rate an officer "outstanding" only if he is loyal in every respect. A loyal leader doesn't just serve his superiors; he serves his subordinates as well.*

"Are you making sure your soldiers get what they need? Food? Medical care? Good equipment? The best training possible so they won't needlessly become casualties in combat? That's what your superiors want. Take care of your soldiers, not just when the boss is around but all the time. Do you think the boss has to be there to know how you're doing? Take care of your men, captain. Look at what they do, and look at what they get for it.

"And that's not your only problem. You're not a team player; you always have to try to be the star! Now don't get me wrong. We need stars. But don't glorify yourself at the expense of the others on your team. Let them take the credit due them. After all, they're your buddies—leaders, just like you."

We should ask ourselves whether we reward the right people or the right traits. Do we reward long work hours instead of efficiency? Do we appreciate it when our leaders insist on modest, economical products, or do we prefer to see our budgets wasted on window dressing that makes their products look more attractive? Are we more impressed by people who talk about their accomplishments, or by those who let their work speak for itself? Do we reward quantity or quality? Effusiveness or efficiency? Exhibition or industry?

Every human being, regardless of his intellectual capacity, is motivated by the possible consequences of his actions. He does his work best when he expects to be rewarded for it in some fashion. If every leader, no matter what his rank, can find a way to motivate each of his subordinates, he can significantly increase productivity.

Motivating through rewards is a part of leadership, and rewards need not be written. Rewarding people while a project is under way often produces better results than waiting until the project is completed. Similarly, giving a soldier free time is often a better or fairer reward than a medal. Simply giving a subordinate a "Well done!" may also be appropriate.

What a leader does or does not do also communicates something to his subordinates. If he ignores the apparent laziness of a few soldiers while making his way through a training area, he is rewarding negative behavior as much as if he overlooks deficiencies during a formal inspection.Similarly, if he fails to reward a subordinate's good behavior, he diminishes the value of that behavior in the eyes of the subordinate, and also diminishes the likelihood that the behavior will continue.

The next time we are tempted to reward someone, let's stop and think: Are we about to reward appearance or substance? We might even ask whether we may have shared in creating officers such as the captain in the example. Could it be that this captain started out on the right track, only to notice that those who sought their own reward were the ones who got it?

Many officers—guided by the professional, societal, or moral definitions of loyalty—live their brand of loyalty to the letter, whether they are properly rewarded or not. They focus on their respective unit missions. They know what *moderation* and *balance* mean. They are tactful. They *work* instead of talking about work. And no matter how successful they may be, they do not become arrogant, lest they lose the proper focus.

Let's take a good look at our units and soldiers, then ask ourselves again: Whom do we really reward? The answer should reveal the traits we value most in our subordinates.

Major Jose M. Marrero has served in various Field Artillery positions including battery commander, fire support team chief, and battalion fire support officer. He recently completed an assignment as an instructor in field artillery and tactics at the U.S. Army School of the Americas, Fort Benning, and is now in a graduate program at Vanderbilt University. He is a graduate of the University of Puerto Rico.

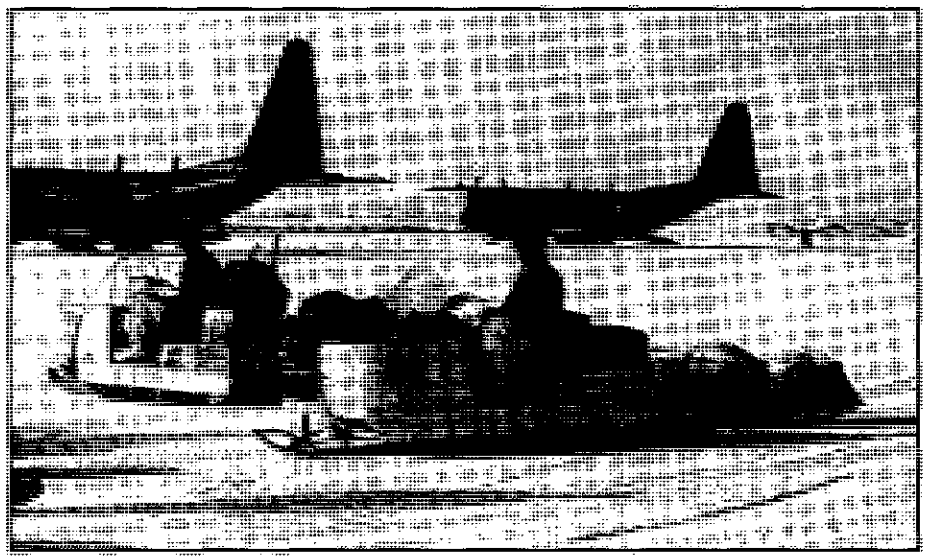
Tactical Use of "Snowmachines"

CAPTAIN KEITH W. RICHARD

When "snowmachines" were introduced in Alaska, they changed a way of living that was centuries old. (In Alaska, all "snowmobiles" are called "snowmachines," because the former term does not translate as easily from the native languages.) In remote villages throughout the state, these vehicles have assumed roles formerly filled by dog teams. While dog teams are still a routine method of transportation from village to village, snowmachines offer definite advantages, allowing movement that is free of the logistics required to operate a team of dogs.

Some U.S. Army elements in northern regions have adapted snowmachines to military uses. These machines are versatile and easy to maintain, and they offer commanders great flexibility in conducting reconnaissance and counter-reconnaissance.

My initial exposure to the tactical use of snowmachines was in my first assignment to the now-deactivated 172d Infantry Brigade. Under the modified tables of organization and equipment (MTOEs), each platoon in the battalion had at least two of them. After I left active duty and joined the Alaska Army National Guard, I found that all the scout battalions of the 297th Infantry were equipped with them.



Scouts of the Alaska Army National Guard wait at airfield for an air-land reconnaissance mission. The single-ski snowmachine can pull several ahkio sleds loaded with weapons, ammunition, or essential mission equipment.

Two basic models of snowmachines are used in military operations. The larger of the two is a wide-track, single-ski workhorse that can pull heavy loads. Its top speed is only about 35 miles per hour. It weighs 750 pounds and is usually fitted with a steel brush guard to protect the engine cowling. The smaller model is a twin-ski machine that can also pull a fair-sized load but is designed mainly for high speeds. It handles well at speeds of up to 75 miles per hour and weighs only 550 pounds.

These snowmachines can carry their own support packages, because each has an attached sled called an ahkio (AH-kee-yo). An ahkio is a six-foot long, three-runner fiberglass sled that has a canvas skirt to lash over the load. It will carry a tent, a Yukon stove, a camouflage net, several five-gallon cans of fuel, several cases of MREs (meals, ready to eat), ammunition, and mission-specific equipment.

A snowmachine team pulling an ahkio can be completely self-sufficient for up to 10 days. Depending on the mission, the sled can be loaded with an 81mm mortar and ammunition, Stinger air defense missiles, chemical and radiation survey equipment, ground surveillance radar, demolitions, or communications equipment.

The smaller snowmachine can pull two or three loaded ahkios, and I have seen the larger model pull 13, daisy-chained together. I have also used an ahkio, loaded or empty, for troop transport. The troops simply straddle the load as they would a horse. This allows a platoon leader to move a full infantry squad and its equipment to new positions miles away in a matter of minutes.

There are several ways to transport snowmachines to an area of operations. Both models can be packaged for container delivery system (CDS) aerial delivery by C-130 aircraft. With this method, the user must fuel the machine once it hits the drop zone. A preferred method is to air-land the machines by C-130. This allows a unit to deliver up to six machines that are already fueled and ready to drive off the ramp.

A UH-1 helicopter can carry the larger model as a sling load. This method requires standard sling materials and is better-suited to short-range trips. The lighter machine fits inside the UH-1, provided the skis are removed. This allows the helicopter to fly with its doors closed (which is highly recommended, especially for long-range flights). The ski removal takes about 10 minutes.

The northern area of operations involves tremendous distances, and aerial reconnaissance over distances of 250 miles or more may not provide all of the information commanders need. The aerial transport of a snowmachine and its scout team to a named area of interest gives a commander many advantages. He can have observers on the ground far forward to provide him with accurate intelligence. The team is totally self-sufficient for long periods and is not a resupply concern.

Some Alaska Army National Guard units are equipped with M113A1s, which are also useful in transporting snowmachines. An M113 can carry two machines on top, along with their teams' equipment. Once the teams have been deployed, the M113 can be used as a base of operations or communication between the teams and their higher headquarters.

These teams are highly mobile and extremely difficult to detect. They can conduct their missions from widely separated vantage points. The white-painted snowmachines are easy to conceal, and they are reliable under the most extreme conditions.

When a machine is not to be used for several hours, the driver removes the spark plugs and the drive belt (a five-minute operation) and keeps them warm. He puts the spark plugs in his pockets and the drive belt in his sleeping bag when he sleeps. He is then assured of having a machine that will start later and run at temperatures as low as 55 degrees below zero.

Communications are especially

important, of course, for teams that have been inserted hundreds of miles away. For short-range missions, a driver can carry a standard FM radio on his back. Our scout teams also train with AM radios, which give them increased range. The teams need a basic understanding of building field expedient antennas and tuning AM radios. These radios allow our battalion headquarters in Anchorage to speak to a company 350 miles away in Fairbanks.

One technique for maintaining contact with the teams is to have scheduled report times several times a day and to require continuous radio communication only when enemy contact is expected. Satellite communication is another option. We have conducted reconnaissance and counterreconnaissance operations for eight continuous days with teams as far away as Nome speaking to our main command post in Anchorage. *(For detailed discussions of the challenges of operating in cold environments, see the two-part "Cold Regions: Environmental Influences on Military Operations," by Brigadier General Peter W. Clegg and Colonel Robert H. Clegg, INFANTRY, July-August and September-October 1992.)*

The tactical use of snowmachines in northern operations allows a commander great flexibility. He can insert any number of teams on a wide variety of combat or combat support missions. He can keep reconnaissance elements on the ground and communicate with them over hundreds of miles. The reconnaissance and security they provide can be invaluable.

Captain Keith W. Richard commands a company in the 5th Battalion, 197th Infantry (Scout), Alaska Army National Guard, at Fort Richardson. He previously served on active duty in the 4th Battalion, 9th Infantry in Alaska. He is a 1982 ROTC graduate of the University of Alabama.

Ultralight Aircraft
A New Tool for Airmobility

MAJOR JAMES P. STANTON

In 1784, Benjamin Franklin, then U.S. Ambassador to France, witnessed the fascinating aerial spectacle of men riding in air balloons. Thrilled and farsighted, he asked: *Where is the prince who can afford so to cover his country with troops for its defense. . .that 10,000 men, descending from the clouds, might not. . . do an infinite amount of mischief before a force could be brought to repel them?* Thus, Franklin astutely envisioned the potential for airmobility.

This concept was developed in the waning days of World War I, exercised with gliders and paratroops in World War II, and refined during modern wars of insurgency with the effective employment of the helicopter. In our highly technological world of today, we now have the deceptively simple, seemingly anachronistic, and ultimately appropriate aircraft for airmobility—ultralight air machines made of aluminum and Dacron.

I believe that the U.S. Army's continuing requirement for airmobile troop insertion on the battlefield is the most significant role for properly configured ultralight aircraft.

Although the helicopter has proved effective in battle, its use for infantry mobility is not without limitations. In Vietnam, for example, the relative vulnerability of the helicopter's airframe required complete air superiority in an operating area. Few landing zones were available, and suppressing enemy activity near those zones seriously drained a unit's resources. As current doctrine emphasizes, the use of helicopters for airmobile insertions is never routine—conditions must be right and commanders must be responsible for "meticulous planning" to hit "exposed or assailable flanks" by using "concealed routes." In addition, helicopters are extremely costly to purchase, operate, and maintain; their crews require extensive training; and their cargos of men and equipment are priceless.

Ultralight aircraft could effectively transport infantrymen to the modern battlefield while avoiding some of these limitations. They could perform admirably at an extremely low cost while providing for combat survivability. The ultralight certainly has a place above the modern battlefield, and its capabilities fit the requirements of infantry movement.

The development of lightweight, flexible airfoils in the 1950s gave rise to the popular sport of hang-gliding in the 1970s. The airframes that were developed were safe and efficient. Then, innovative hang-glider enthusiasts—tired of waiting for the perfect wind—began to experiment with propulsion

using chain-saw motors, and soon hundreds of ultralight designs were on the international market.

These aircraft have the required performance specifications, could be deployed and employed effectively, and could be designed with the specific military role in mind, including provisions for battlefield survivability and defense. (Both Israel and Saudi Arabia have purchased ultralights for military use, as have some Central American nations.)

Numerous designs are available around the world; the United States alone has about 100 individual designs. Off-the-shelf models have the following typical performance characteristics:

- Speed of 30 to 63 miles per hour.
- Climb rate of 600 to 1,200 feet per minute.
- Takeoff distance of 100 feet.
- Landing speed of 25 miles per hour.
- Ceiling of 10,000 to 21,000 feet.
- Range of 100 to 300 miles.
- Service weight of 250 pounds.
- Payload of 250 pounds.

One successful design offers two engines with excellent performance, and it can be assembled in half an hour.

Ultralight aircraft weigh very little; they are compact and wonderfully air-transportable. They can be unpacked and prepared for flight in minutes, need little space for takeoff, and carry their payload for impressive distances. In addition, they have the benefit of structural strength, which allows for gust encounters, rough handling, and defensive maneuvering against surface-to-air threats.

To add to this system's potential, a battalion equipped with ultralights should have all the capability and support of a normal airmobile battalion, including the full complement of airmobile companies. But when conditions show that the insertion task could be done effectively with ultralights, the unit's helicopter resources could then be reserved for heavier logistic support (transporting light artillery and combat engineers, for example), threat suppression, resupply, and air evacuation if the need arose.

Ultralight-trained soldiers could unpack, service, and employ their own aircraft; there would be no need for a cadre of pilots with expensive training. In fact, experience in sport ultralight flight training shows that airmobile infantry troops could become expert ultralight combat pilots after training measured in days and weeks instead of months and years.

Other characteristics are also encouraging: Because of the short takeoff distances required, large numbers of ultralights could get into the air quickly. They could be flown extremely low—skimming the tree tops, free from enemy observation—and they would be nearly invisible on a radar screen. (If their tubing could be made of carbon or boron fiber, they would hardly show up on radar at all.)

NIGHT OPERATIONS

Night employment would be possible with night vision goggles, and the infantry pilots could maintain formation, even with minimal moonlight. With on-board helmet-mounted radios, the commander could avoid threats and select new landing zones if the tactical situation changed.

The design and weight of the ultralight offer a potential benefit that even a vertical-takeoff-and-landing helicopter could not match. For night operations, or when landing on inhospitable terrain, the ultralight has another fascinating feature: It incorporates an airframe-mounted ballistic parachute recovery system, which is used extensively by sport ultralight enthusiasts today. If an ultralight cannot land in the conventional manner, the pilot stops his engines, deploys his ballistic parachute, and descends safely from altitudes as low as 150 feet above the ground. Infantrymen could arrive on the ground with both their combat gear and their air-machine intact.

The survivability and effectiveness of a military ultralight on the modern battlefield could be further improved. Crew members could be fitted with Kevlar body protection, such as the Army's current personal armor system, ground troops (PASGT), which includes protective vests and helmets. Ballistic fabric shields could protect the pilot's seat and the aircraft's power plant. Simple chaff and flare dispensers could offer further protection. Exhaust noise and infrared mufflers are also plausible. Finally, simple avionics could help with weather penetration and night assault while theater-specific camouflage could be sprayed on during the pre-strike assembly stage.

All told, these modifications could aid in the employment and survivability of ultralights in modern threat environments. Ultralight aircraft have the performance, ease of employment, and survivability to merit serious consideration by Army tacticians for airmobile insertions. This concept offers considerable promise for mission accomplishment and great cost savings.

Off-the-shelf sport ultralights are inexpensive, compared to other aircraft. For $10,000, a buyer could obtain a top-of-the-line ultralight machine. Military modifications would drive this price up, of course; it might even double or triple. But this price would still be low, compared to that of a military helicopter.

A commander might even be able to consider an ultralight disposable. If the threat or the terrain dictated a one-way mission, he could make this decision without a great deal of anxiety, provided the tactical situation allowed the resupply, reinforcement, or evacuation of the inserted troops by the helicopters reserved for these tasks. The commander, by not exposing valuable helicopters and crews to the threats of the initial battlefield assault, would thus preserve these resources while effectively inserting a light, mobile ground force.

In addition, airmobile infantrymen could be trained quickly and inexpensively to fly and use ultralights. The small gasoline engines use little fuel; the airframes are sturdy enough to withstand the punishment of training flights; and few flight hours are required for pilots to attain and retain proficiency. Ultralight flight training for soldiers would require little airspace or runway surface. Planners therefore would not

need to worry about providing range space or shutting down conventional airfield traffic during ultralight training periods.

Finally, combat-configured ultralight machines could be pre-packaged for air transport and stored for long periods. Hundreds of ultralights would weigh little and could fit in the cargo hold of any transport aircraft. Considering their effectiveness in performing the air insertion role, ultralights have immense potential for cost saving. Even if deployed in theater, this packaged asset would not actually be used unless the tactical situation called for it.

An Army study of this potential should be conducted with the assistance of logistic planners, ultralight manufacturers, and the producers of associated military hardware and support equipment. Only then could we measure the true cost-saving potential of using ultralights in a tactical scenario.

That the infantry requires mobility is a vital truth of combat today, just as it was in the past. Army doctrine fully embraces this idea and incorporates the technology of the helicopter to do it well. Ultralight aircraft could also meet the need for infantry mobility and could do the job at a much lower cost.

It is time for Army tacticians and analysts to examine these cost savings and to decide on the best employment plans. It is plain to see, however, that these savings could be substantial and that ultralights could be used successfully for the insertion task.

Now is our opportunity to examine and adopt airmobile insertion by ultralight. Ben Franklin would expect no less.

Major James P. Stanton, U.S. Air Force, has served in numerous Air Force assignment, which included flying combat missions during Operation DESERT STORM in 1991. He completed airborne training at Fort Benning and, more recently, the Air Command and Staff College at Maxwell Air Force Base, Alabama. He is a 1977 ROTC graduate of Manhattan College in New York.

Direct Effective Fire Line

MAJOR THOMAS J. MANGAN III

As a result of the 1991 Gulf War, the role of air power has gained new followers and has expanded rapidly in operational planning. As the Air Force champions the causes of air interdiction, counter-air operations, and new technology, however, the role of close air support (CAS) is seldom mentioned.

CAS is important to the success of ground campaigns and battles, and it may take on even greater importance after the Army's planned force reductions. In future contingency operations, we may have more Air Force assets than ground forces in place when hostilities begin, because the early-deploying ground forces will need more battlefield air interdiction (BAI) and close air support to hold off the enemy until additional ground combat power can be brought to bear.

With our new technological advances, more accurate and lethal weapons, and better means of target acquisition, the way we see and fight the battle is changing. Support for the maneuver force may no longer only take the form of low and slow CAS aircraft flying overhead. Instead, it may take the form of a combination of battlefield effects close to our own troops. It is in this light that the ground forces need to re-examine the application of CAS. While the principles and techniques of the past are still valid, we can improve the way CAS is planned and executed. One recommendation for integrating CAS into the direct-fire battle is to use what I call the direct effective fire line (DEFL).

The DEFL is a conceptual planning line on the near side of which effective direct and indirect fires are employed against enemy forces. The DEFL is defined by the limit—forward of the forward line of own troops (FLOT)—to which direct fires can effectively destroy the enemy with a high percentage of first engagement kills. Additionally, observed and controlled indirect fires (directed fires) can be rapidly and effectively adjusted between the DEFL and the FLOT where they will contribute significantly to the successful direct-fire battle.

The DEFL concept grew out of my experience at the National Training Center (NTC) and developed further after I discussed the use of CAS with veteran DESERT STORM A-10 pilots, air support operations center officers, air liaison officers, ground liaison officers, and ground battle participants. The DEFL reflects one aspect of the way air power was successfully used in DESERT STORM and the way its employment can be improved in future conflicts.

Too often at the NTC, the appearance

of CAS aircraft either closed down essential direct and indirect fires or shifted them from the battle in progress. As a result, the force in training had fewer fire and maneuver opportunities and therefore incurred friendly losses, while the enemy enjoyed a respite from both direct and indirect fire.

Since direct and directed fires between the FLOT and the DEFL are effective against the enemy, it is counterproductive to stop ground force fires for the insertion of CAS aircraft. Whether in a single pass or multiple attacks, CAS aircraft (most likely the F-16 in the future) cannot usually deliver greater destructive power than the engaged ground force.

In principle then, fixed-wing aircraft are best employed beyond the DEFL where they can concentrate their power against enemy formations that are not yet decisively engaged by ground forces. This will have the double advantage of allowing the Air Force greater flexibility in tactics while concentrating air power on the enemy's second echelons or reserves. Concentrated attacks against second-echelon forces will help maintain favorable force ratios at the FLOT for the direct-fire, or directed-fire, battle and will reduce the likelihood of air-to-ground fratricide.

The DEFL delineates an area forward of the FLOT—that is, between the FLOT and the DEFL—within which fixed-wing aircraft are not normally used in the CAS role. CAS is used within this area only when the situation is critical, when its use can be decisive, *or to engage targets in dead space that* cannot be engaged by direct and indirect fires.

The distance between the FLOT and the DEFL is determined either by terrain restrictions or by the maximum effective ranges of the killing weapons, whichever is shorter (Figures 1 and 2). For light units, the distance between FLOT and DEFL will be much shorter—approximately 1,000 meters. Inherent in this concept is the understanding that direct and indirect fires can normally destroy targets inside the DEFL area more quickly and effectively than CAS aircraft can. When fixed-wing aircraft are allowed inside the DEFL, both direct and directed fires may have to be shifted or canceled to permit execution of the air strike.

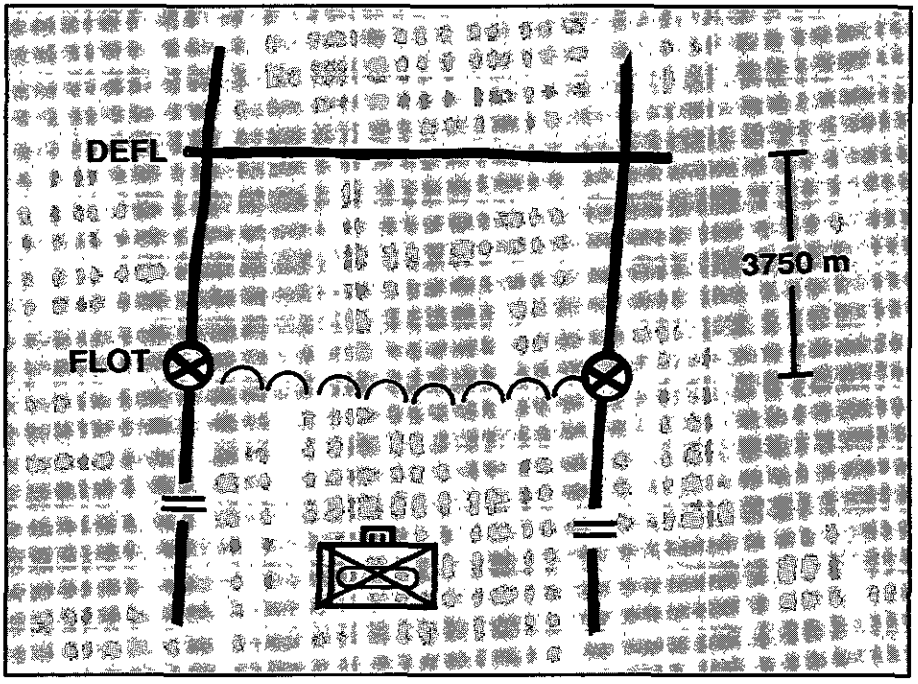


Figure 1.

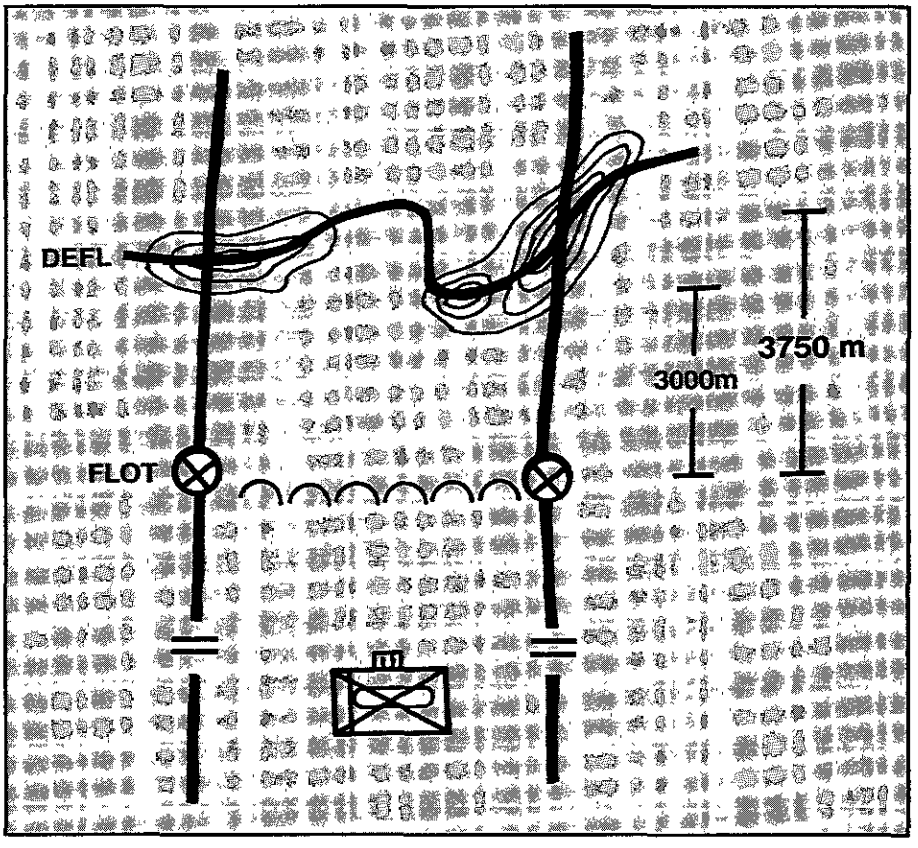


Figure 2.

The DEFL is a conceptual planning line, not a new control measure or a phase line; it does not adversely affect existing control measures or such planning tools as engagement areas. The

DEFL serves to delineate the area in which fixed-wing aircraft can be used to best advantage without the loss of massed direct or directed fires on the enemy. It is permissive in that it does not restrict commanders from using ground or air power in any manner. Its function is to help the planner prepare his battle as it pertains to the use of air forces.

The DEFL concept also supports AirLand Battle as a technique for applying the tenets of depth and synchronization. It supports depth by allowing battalion and brigade planners to look deeper into the enemy's formation for the use of—and the effects of—close air support. It supports synchronization by dividing the battlefield into workable and complementary areas for the air and ground forces. Fixed-wing aircraft and ground forces can then operate simultaneously rather than sequentially against a larger force and destroy the enemy in depth before he can mass or pose a critical threat.

Depth is defined as the extension of operations in space, time, and resources; momentum in the attack and elasticity in the defense derive from depth. Momentum in the attack is achieved and maintained when the enemy's committed forces are adequately fixed, and his uncommitted forces are interdicted or otherwise prevented from interfering. Elasticity in the defense is achieved and maintained when uncommitted enemy forces are delayed or prevented from interfering with the defense of forward deployed or counterattack forces.

Enemy forces beyond the DEFL are not likely to be decisively engaged while those within the DEFL are. Hence, forces beyond the DEFL constitute a *de facto* depth or second-echelon force with immediate availability to the enemy commander. Applying CAS beyond the DEFL, whether in the attack or the defense, adds depth to the engagement by preventing uncommitted enemy forces from interfering with the friendly unit's scheme of maneuver. Since the enemy's immediately available "depth" forces (those just outside the DEFL) are being destroyed at the same time as those in the decisive engagement (inside the DEFL), the synchronization of the weapons' effects is achieved.

Synchronization is defined as the arrangement of battlefield activities in time, space, and purpose to produce maximum relative combat power at the decisive point. Synchronization is both a process and a result. Activities are considered synchronized if their combined effects are felt at the decisive time and place.

By using the DEFL as a planning tool, leaders achieve the synchronization of both the process and the result of an engagement. The enemy force straddling the DEFL finds its units in the first and second echelons being engaged simultaneously (Figure 3). While the enemy's first-echelon forces are destroyed in the direct-fire battle, the elements of the second echelon are destroyed by close air support. The surviving elements of the second-echelon force then cross the DEFL and pass directly into the decisive direct-fire battle. In effect, the second-echelon force is attacked sequentially and in depth, while the entire enemy force is attacked simultaneously throughout its depth.

The following scenario will serve as an example:

As part of a larger attacking force, a friendly battalion encounters a well dug-in enemy defense. During the ensuing battle, the enemy is steadily and systematically destroyed by our weapon stand-off capabilities. While the battalion engages targets within the DEFL, an enemy counterattack force, a tank battalion plus, is assembling beyond direct-fire range. Although CAS aircraft are available, their overflight of the direct-fire battle area would reduce the rate of target destruction and give the enemy an opportunity to maneuver within his own effective fire range.

Planning for CAS beyond the DEFL, the commander requests attack helicopters and organizes a division-level

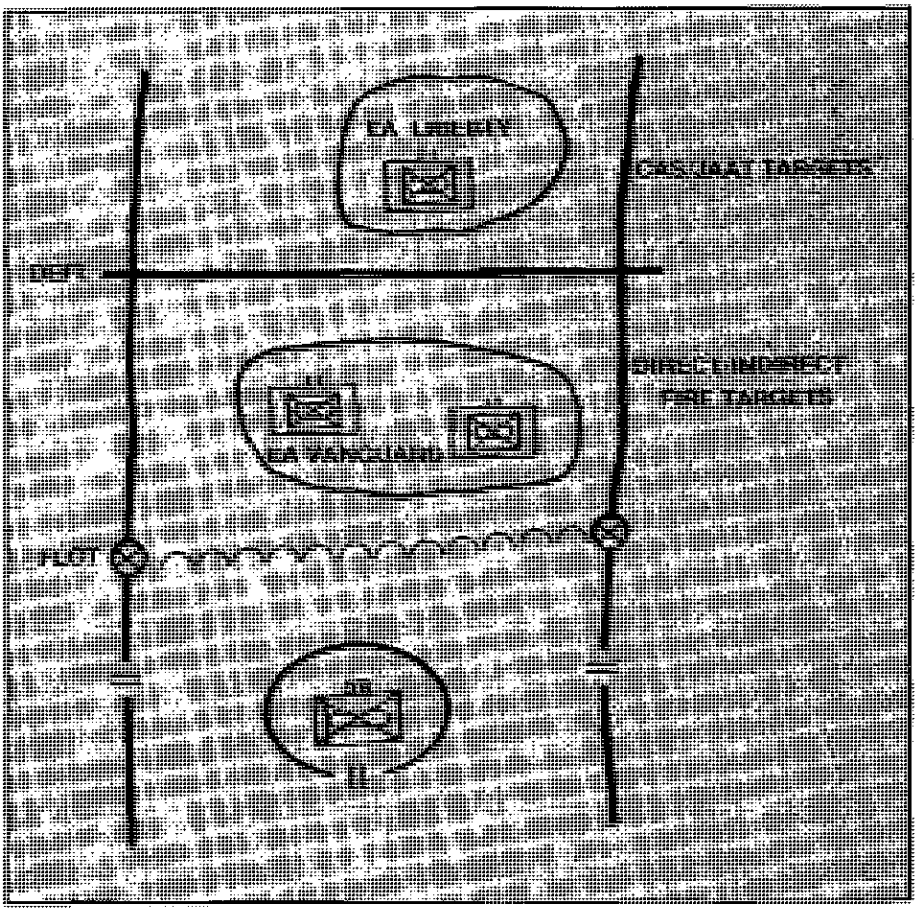


Figure 3.

deep joint air-attack team (JAAT). The attack helicopters maneuver under the suppression of enemy air defense (SEAD) provided by the artillery and destroy the air defenses of the counter-attack force. While the helicopters are re-positioning for a renewed attack, the CAS aircraft begin to destroy the armor unit. Working together, the deep JAAT operation destroys more than 34 armored vehicles in a matter of minutes.

During the entire deep JAAT operation, the ground maneuver battalion was able to maintain direct and indirect fires on the dug-in enemy short of the DEFL, except for one company that briefly shifted fires during aircraft ingress and egress. If the available CAS had been used inside the DEFL, the enemy counterattack force may have had a chance to influence the battle adversely, while the CAS may have achieved limited results against the dug-in enemy. By projecting their support beyond the DEFL, CAS aircraft had more freedom of maneuver were not under pressure to leave the area so the ground units could resume fire, and played a key role in defeating the enemy force as a whole.

In applying the DEFL concept, CAS is used to destroy targets that cannot readily be engaged by direct or indirect fires, and to help maintain a favorable force ratio at the FLOT for the direct-fire battle.

CAS within the DEFL is still possible, however, if one of the three criteria for its use can be identified—the situation is critical, the use of CAS inside the DEFL will be decisive, or stand-off weapons can still be used from behind the FLOT. Instead of automatically requesting CAS, the commander of the engaged ground force must first decide whether the use of CAS inside the DEFL will contribute to his battle, or if he can accomplish the same purpose with direct and indirect fires.

In the first case, recognizing that favorable force ratios at the FLOT may not always be attainable, CAS within the DEFL may be required to remedy a critical situation for the ground forces. For example, an impending armor breakthrough in a defended sector may require CAS as a remedy for the loss of

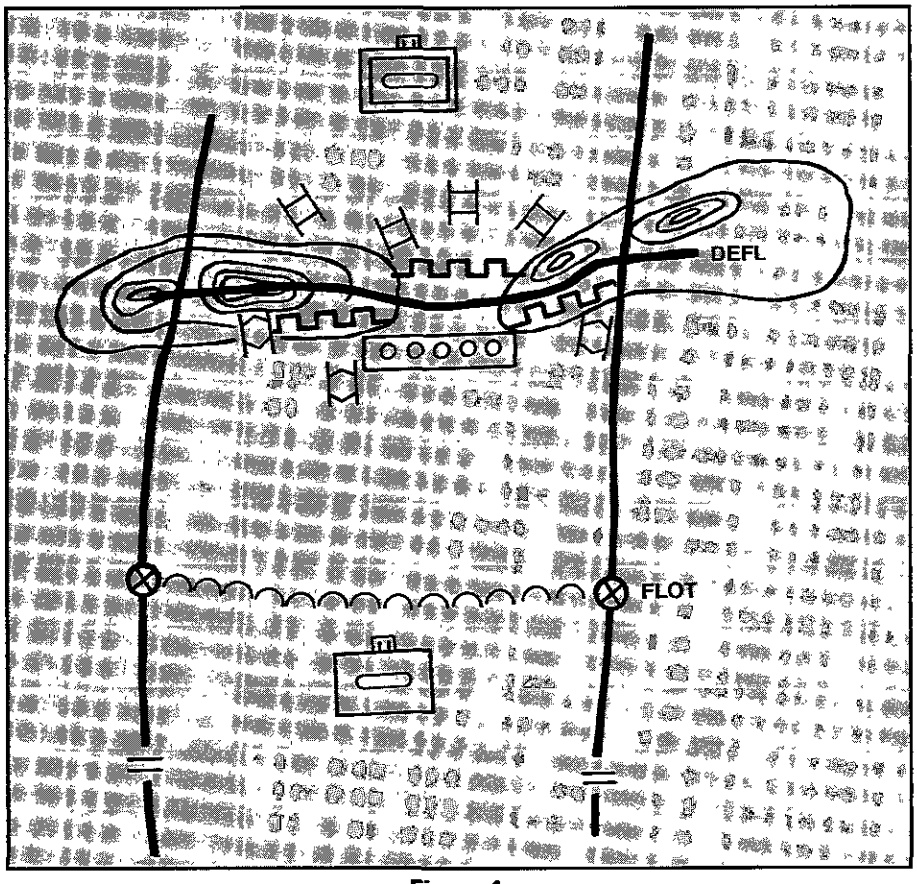


Figure 4.

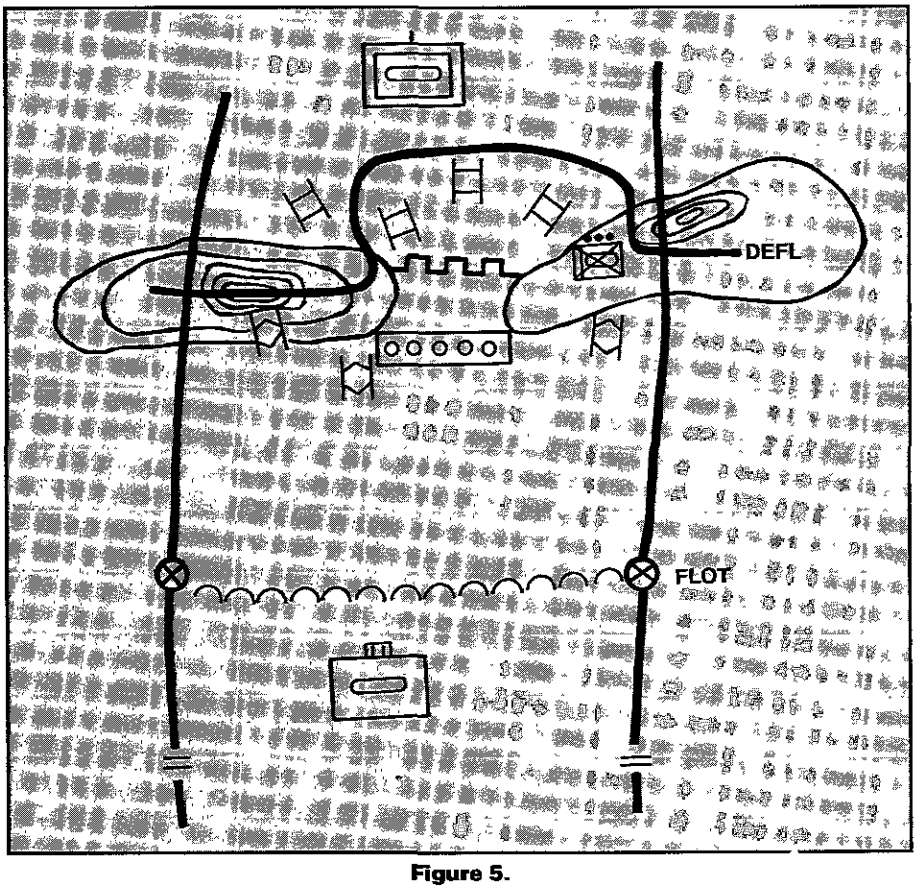


Figure 5.

massed antitank fires, or for an insufficient number of these fires. In this case, the application of air power contributes to the direct-fire battle instead of detracting from it.

In the second case, the direct-fire or indirect-fire battle may be going well, and the opportunity to defeat the enemy decisively is at hand, but the ground forces lack the firepower or mobility to do so. CAS may then be used within the DEFL. As an example, an attacking enemy may have suffered attrition within an engagement area but has not yet been defeated. In order to counter the enemy's maneuver, the friendly force may need to re-position for a counterattack. During the period of re-positioning, CAS can be concentrated in the area of reduced direct fires to cover the move and contribute to the decisive defeat of the enemy. CAS can also be used inside the DEFL to attack targets in dead space that cannot be attacked effectively by the available direct or indirect fires. In both instances, the use of CAS aircraft within the DEFL contributes to the decisive defeat of the enemy in the direct-fire battle by affording ground forces the opportunity to employ direct and directed fires more effectively.

In the third case—with ever-increasing stand-off capabilities of such weapons as the Maverick missile, low-level laser guided bombs, and automated target hand-off systems—it is increasingly possible for CAS aircraft to launch ordnance from behind the FLOT. Such attacks will require greater coordination from ground forces in identifying the target. But the benefits could be greater survivability for the aircraft and sustained direct fires during the decisive engagement.

CAS from behind the FLOT would probably result in a partial or total shift of indirect fires, but it would not require that all direct fires stop at the same time. In all cases of CAS within the DEFL, such factors as target identity, target obscuration, and masking fires must be considered. These factors are less important when CAS is employed beyond the DEFL.

The DEFL itself is flexible, depending on the weapon characteristics and the terrain. An example of the way it aids in CAS planning is demonstrated in the following attack scenario:

The attacking battalion DEFL extends to the limits imposed by the terrain and includes the forward enemy positions (Figure 4). Enemy forces on the reverse slope cannot yet be engaged, but they offer excellent CAS opportunities without limiting the attacking unit's use of artillery inside the DEFL and in support of its first assault.

Dismounted infantry and the accompanying forward observers establish far-side security for the breach teams and can now place observed fires on the enemy platoons in the second echelon (Figure 5). The enemy vehicles directly behind the obstacle are within the DEFL and would not normally be a CAS target. If the target can be destroyed by Dragon fires or artillery directed from the security forces, CAS should focus on the second echelon tank platoon; if the targets are in defilade and cannot be engaged by direct or directed fires, CAS may be used to destroy them. In the latter case, the use of CAS inside the DEFL is decisive to the outcome of the battle. Once the targets are destroyed, CAS is refocused on the targets beyond the DEFL.

In pushing air support outside the direct-fire battle area—that is, beyond the DEFL—CAS aircraft find their most favorable operating area beginning anywhere from four to six kilometers from the FLOT. It may be no coincidence that air power, whether fixed-wing or rotary, finds this depth a place in which to begin the final and decisive destruction of the enemy. The use of the DEFL lends itself to planning deep JAAT as a norm. Consequently, deep CAS and deep JAAT will require better and more frequent joint SEAD to improve the survivability and effectiveness of the aircraft.

The direct effective fire line concept is a convenient tool for planning CAS. It does not limit the options for CAS but improves the effects by helping produce depth and synchronization at battalion and brigade level.

The products and the process of AirLand Battle begin in the planning stage. The DEFL concept helps divide target group responsibility in time and space between the air and ground forces, establishes criteria for CAS within the direct-fire battle area, and gives air forces a wider range of options in flying close air support.

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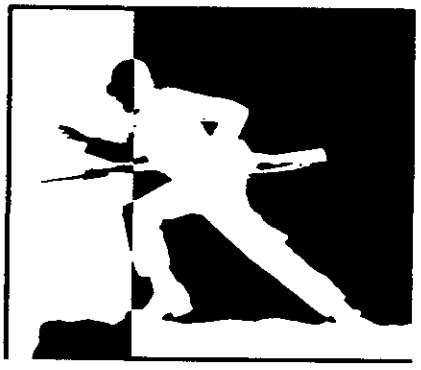
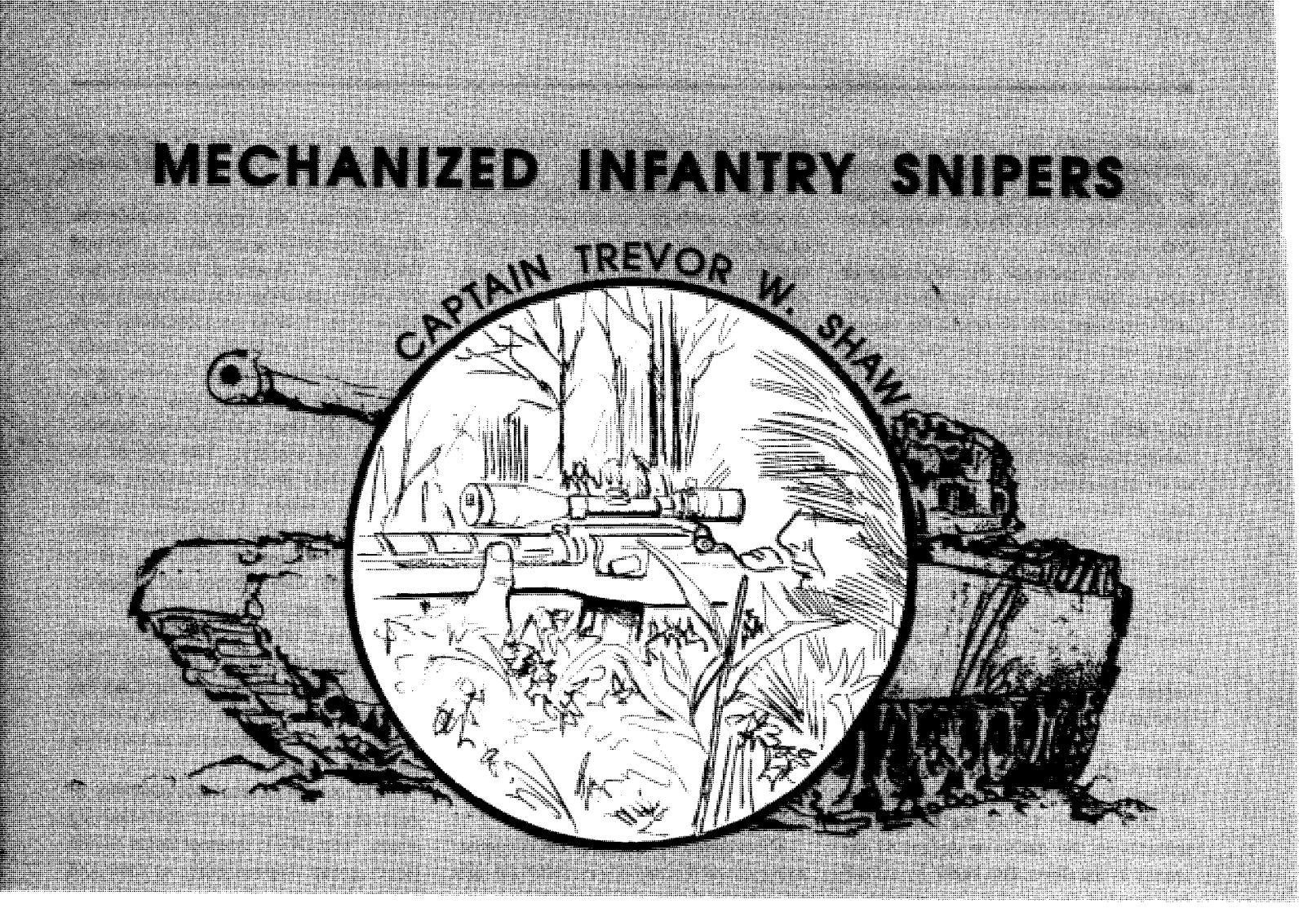


MECHANIZED INFANTRY SNIPERS

CAPTAIN TREVOR W. SHAW



The use of snipers in mechanized infantry units has been inhibited by several factors—unstructured, incomplete training; a lack of specific methods of employment; and a misconception that snipers are not useful enough.

Unfortunately, there is little useful information on the organization of mechanized snipers; their requirements for centralized training; and Training Circular (TC) 23-14, Sniper Training and Employment, does not deal in depth with the employment of mechanized snipers.

As a sniper-qualified officer with a good deal of experience in mechanized operations at platoon and company levels, I believe I can shed some light on the need for snipers in a mechanized battalion and, more important, the way a battalion should organize, train, and employ its snipers. These measures, competently carried out, will improve upon the rifle company's capabilities and also increase its ability to support its dismounted infantrymen.

The primary mission of any sniper team—including a mechanized sniper team—is to deliver long-range precision fire on key personnel and targets. But the battleground on which a mechanized sniper team operates—a battleground with armor protection, heavy and rapid firepower, a fast operational tempo, and long distances—is indeed different. In such conditions as these, the effectiveness of a dismounted, antipersonnel weapon with a slow rate of fire may seem to be of little use.

Add a lack of clear doctrine for selecting, training, and employing mechanized snipers, and the sniper rifle is apt to become a permanent fixture inside the company arms room.

Although these problems appear to be substantial, they must not deter a mechanized battalion from training its snipers. A sniper team offers a company commander capabilities that are not available with any other weapon system:

- The sniper team can support dismounted infantry in situations where the Bradley infantry fighting vehicle (BIFV) is either ineffective or inappropriate. This is done with accurate rifle fire at ranges beyond the capabilities of the soldiers' standard issue weapon.
- The sniper team is patient and stealthy and can strike without being compromised.
- The team can selectively destroy key targets with no collateral damage.
- Snipers are a hip-pocket intelligence source and a dedicated counterreconnaissance force.
- The sniper team remains the only truly effective countermeasure against trained enemy snipers.
- The mere presence of snipers has an immeasurable psychological effect upon the enemy.

The organization of the sniper teams in a mechanized infantry battalion differs significantly from the light battalion organizations. In its present form, this organization has been a doctrinal hindrance from the beginning.

A light battalion has a sniper squad in the scout platoon, with a staff sergeant—a school-trained sniper—as squad leader, who is in charge of all sniper training. Due to their organization, light snipers are primarily a centralized battalion asset that has a close working relationship with the S-2. The battalion has enough training experience and intelligence information to decide where a sniper team is best used.

For example, snipers can be attached to a company, on a screen line with the scouts, or on a specialized mission such as an infiltration to reduce a high-priority target. In turn, when the snipers are not being used in a sniping role, they are fully trained scouts and act in this capacity as additional eyes for the S-2. The U.S. Marine Corps feels so strongly about this dual capability that its snipers are officially labeled *scout/snipers*. This organization of centralized training and employment has been popular for the snipers of most nations for the past 80 years. Its superiority almost guarantees that it will remain the organization of choice for years to come.

As opposed to the light infantry battalion, the mechanized battalion has one sniper team assigned to each of its four rifle companies. Although this organization is designed to give each company its own sniper team—something that even light battalions do not enjoy—there are no dedicated slots in the tables of organization and equipment (TOEs) to accommodate the existing rifles, and the companies rarely have the knowledge or the assets to ensure that these snipers receive competent training.

The challenge, then, is to ensure that the snipers in mechanized infantry battalions are as well trained as those in light battalions. This challenge cannot be met unless more emphasis is placed on centralized training, and centralized training cannot be done without competent, trained leaders who understand snipers and their employment.

In a situation that is not well-defined by doctrine, snipers use the phrase "common sense and imagination" to govern their training and employment. Common sense dictates that dedicated snipers be trained by knowledgeable leaders to become competent in the art of sniping; and imagination is required to accomplish this task within the modified TOE of the mechanized infantry battalion.

If a training plan is to work, a mechanized battalion must adhere to these four imperatives:

- The battalion must be committed to training competent snipers and also to providing funds for the snipers' supplies and equipment.
- Each company must select qualified and retainable personnel (see requirements in TC 23-14) to fill the two sniper-team positions for no less than one year. These two soldiers must then be assigned to the same team in the same platoon.
- At least one student billet per battalion must be guaranteed at the U.S. Army Sniper School at Fort Benning.
- Army Marksmanship Unit (AMU) instructors must be scheduled to teach these soldiers basic and advanced marksmanship with the M24 sniper weapon system. If all four of these imperatives are met, the training plan can proceed with ease.

Where do these snipers come from?

Under the current mechanized infantry organization, in each rifle company, two enlisted soldiers are "dual-hatted" as snipers within a rifle squad. This has superseded the former organization, which placed the sniper team in the company headquarters platoon. It is a logical step forward, as the mechanized company headquarters platoon was not capable of sustaining sniper training. More often than not, a dedicated sniper team in a headquarters platoon assumed additional, and eventually permanent, duties as wheeled vehicle drivers or assistant training and supply NCOs. Unfortunately, these additional jobs always seemed to assume more importance than sniper training.

Although "dual-hatting" within a platoon solves the former problems, it often produces a soldier who is "jack of all trades, master of none." If the company is to have competent snipers, therefore, these soldiers must be dedicated snipers who are trained in all aspects of platoon and company operations.

The two soldiers to form the sniper team must be chosen for their competence and maturity rather than on the basis of their availability or the position they presently occupy. No matter how the team is arranged, it should be organic to a platoon. In this way, the sniper team sustains its basic infantry skills during platoon training and is not assigned duties that detract from that training. Additionally, the platoon becomes familiar with sniper operations and incorporates the team into its tactical SOP.

To become proficient at their art, however, the snipers must have capable, knowledgeable, and motivated leaders. The leadership for the sniper training program is based on the concept of a *master sniper* and a *sniper employment officer*. These two leaders form the heart of the battalion sniper training program, but they are strictly trainers. They are not necessarily required to participate as snipers during any type of field exercise other than training events that specifically involve snipers.

This system provides centralized training by knowledgeable leaders within the framework of normal battalion operations. The training of snipers concurrently with field operations will complement—not detract from—scheduled training.

Leaders responsible for sniper training should be selected from the S-3 and S-2 sections. Involving the S-3 section helps remind the battalion to integrate the snipers into company operations, and the S-2 section provides expert instruction on the snipers' secondary mission of collecting battlefield information.

The master sniper is in charge of both field training and marksmanship training for all the snipers in the battalion. He trains the snipers to advise their leaders on their proper employment. He must attend the U.S. Army Sniper School and observe the AMU training of his battalion's snipers.

Marksmanship training provides a good basis for the soldiers selected as snipers.

The ideal choice for the master sniper position is the assistant operations sergeant, in the rank of staff sergeant or sergeant first class. If the assistant operations sergeant is not available, any mature and capable operations sergeant can be chosen. *(One word of warning: The Army Sniper School is tough, and soldiers who do not have previous sniper experience often fail. To succeed, the prospective master sniper must have a strong desire to complete the course and be physically fit and proficient in all the basic soldier skills.)*

The sniper employment officer is primarily responsible for training and advising the company commanders and platoon leaders in the proper employment of their sniper teams. He is responsible for training snipers in enemy recognition, enemy and friendly tactics, and intelligence gathering. Finally, he is responsible for coordinating the use of all range facilities and training areas as well as any logistical requirements to support this training.

The ideal choice for this job is the tactical intelligence officer in the S-2 section, who is already an expert on threat forces and intelligence gathering. The liaison officer in the S-3 section is another good candidate for this job.

If possible, both the sniper employment officer and the master sniper should attend the sniper school. Although the school does not make a habit of including officers as students, it is possible when a billet is open.

How the Plan Works

Once he has completed the sniper school, the master sniper has the necessary knowledge to conduct sniper field exercises and fieldcraft training.

Next, the AMU associated with the division or brigade should be scheduled to train the snipers in advanced marksmanship skills. The G-3 usually schedules the marksmanship training teams and the team can usually conduct this training so long as they are not scheduled elsewhere. The AMU instruction takes about two weeks and teaches the snipers excellent skills.

The battalion snipers who have successfully completed this training are intimately familiar with the M-24 sniper weapon and confident in their ability to hit man-size targets out to 800 meters. Additionally, they learn observer skills and can make accurate wind estimations and adjust the sniper's aim.

After this instruction, the master sniper and the sniper employment officer conduct a week-long block of training on sniper fieldcraft, followed by a field training exercise such as the one outlined in TC 23-14 and ARTEP 7-92-MTP.

Once the sniper employment officer has supervised the initial battalion training, he prepares a block of instruction on the employment of snipers in a mechanized company and

platoon and presents it to all the company commanders and platoon leaders.

When the initial battalion sniper training is completed, more advanced training is conducted quarterly, as well as during weekly team training. Most brigade or division size units have weekly training time reserved for the NCOs to train soldiers at team or squad level. Once or twice a month, the master sniper and the sniper employment officer conduct classes during this time on more advanced subjects and on such skills as enemy identification, call for fire, and secure communication procedures.

Quarterly, the master sniper and the sniper employment officer conduct a sniper range and sniper sustainment exercises. This requires a five-day block of instruction that strengthens the skills they learned in their initial sniper training.

An extremely useful method for this quarterly training is the multi-purpose range complex (MPRC) found on most mechanized infantry posts. Its array of both stationary and moving personnel targets makes it the best live fire training a sniper team can receive. Once the first year of training has been completed, snipers can be rotated within the companies, and the process can begin again.

Employment

In the defense, there are certain missions that naturally lend themselves to effective sniper employment:

- Support of the company defensive position.
- The economy-of-force mission.
- Counterreconnaissance.
- Cover for obstacles and restricted areas.

In a defensive battle position where there is a dismounted enemy avenue of approach, it is common to separate the dismounted element from the vehicles. In this situation, the snipers can be used within the dismounted positions against such key targets as enemy leaders and heavy weapons crews. It is best to place the sniper team on the flank of the dismounted position where they can cover the unit's entire front. It also relieves the sniper position from the brunt of the attack, which then allows the team to select and rank key targets more deliberately, and thus more effectively.

Another technique is to place the sniper team forward when the company is in a reverse-slope defense. This gives the commander an observation element forward of his position that can make precision kills and also adjust mortar or artillery fire.

In cases where a dismounted enemy avenue of approach is available but unlikely to be used, a sniper team is a useful option. The team can cover the secondary avenue to disorient, detain, and possibly stop an enemy attack force, thereby allowing most of the company's combat power to orient on the more likely avenue of approach.

In addition, snipers positioned to the rear or on the flanks of the company can give the commander early warning of enemy flanking movements. Such economy-of-force missions are commonly needed, but rarely are personnel available in the mechanized infantry company who can perform these missions with the same deadly efficiency as the snipers can. A sniper is a natural choice for such roles; the accurate fire from the sniper rifle will enable the team to kill, not just suppress, relatively large numbers of exposed personnel. Such marksmanship historically stalls or halts attacks, especially when the attacker's leaders are eliminated quickly.

The sniper team may be the best counterreconnaissance force organic to the infantry company. These soldiers are trained in sustained observation, concealment, threat recognition, and indirect fire procedures.

A company should place its sniper teams forward of the company position at a distance to be determined by an analysis of METT-T (mission, enemy, terrain, troops, and time). The snipers can construct a hide position from which to observe enemy movement that has infiltrated the scouts' screen line. When there is little chance of compromise, the sniper team can choose to engage enemy reconnaissance teams with their weapons. To avoid detection, they can call for mortar fire or direct a counterreconnaissance platoon to the enemy position.

By selecting a position along a probable mounted avenue of approach, the counterreconnaissance sniper team can contribute to the main battle by engaging enemy echelons on the way to their objective.

A sniper team is ideal for covering obstacles with direct fire, especially those that are difficult or impossible to cover from the main battle position. Obstacles that block or channel will either stop a mechanized formation or slow it down enough that it will change direction. Either way, the sniper benefits because targets are presented in both scenarios. If the enemy must dismount to breach an obstacle, then the sniper can engage the breach force personnel. If mechanical means are used to breach the obstacle, or if the formation is merely slowed, the sniper can choose vehicle commanders as his targets. The engine and track noise of massed armored vehicles is usually enough to mask the sniper's fire. During a normal attack, the identification of a team's position by an armored unit is extremely difficult.

Although a sniper is at his best during defensive or static operations, he is also effective in the offense. The following are primary offensive missions for a sniper:

- Overwatch for the dismounted movement of infantry.
- Elimination of enemy snipers, key personnel, machineguns, and antitank weapons.
- The economy-of-force mission.
- Concentration of fires on fortified positions.

During mounted movement, the sniper team is of little use; it becomes an asset only when it dismounts. Unfortunately—due to the noise of cannons, engines, and tracks in a mechanized attack—the mechanized infantry sniper often loses stealth, his best ally. Additionally, the sniper team's placement on the battlefield is determined by the Bradley commander rather than by the team itself. The sniper team must act quickly and boldly to overcome these two disadvantages.

To support dismounted movement, the sniper team imme-

Mechanized infantry snipers use camouflage and concealment to help them regain the advantages they lost when they dismounted.

diately searches for dominant terrain with good fields of fire oriented toward the objective or the enemy threat. Once this is done, the snipers use camouflage and concealment to help them regain the advantages they lost when they dismounted.

At this point in the attack, communications between the sniper team and the platoon leader or company commander become critical. The snipers must tell the dismounted element when they can no longer support its dismounted movement. The platoon must then allow the sniper team to displace and find a new firing position.

The sniper team excels at supporting infantry on the objective. The team's precision fire enables the snipers to continue engaging the enemy long after the BIFVs and M113s have shifted or lifted their fires.

The question of who controls the sniper team is a matter of METT-T. On a movement to contact, the lead platoon should always be the one that contains the organic sniper team. This enables the sniper team and the platoon to become the support element upon initial enemy contact.

If the mission is more specific, as in a screening mission or a mission against a pre-planned objective, the sniper team may be detached in support of the company. This means the snipers may ride either with the company commander or in the executive officer's track to get to specific locations. Additionally, the scout platoon can transport the snipers forward so that they can be in position before the attack begins.

The sniper team's objective throughout an attack is to surgically remove the greatest threat to the company. Usually this threat consists of enemy machineguns and antitank weapons, which the snipers, aided by their optics, can quickly identify and engage.

A threat that is often overlooked (until it is encountered) is enemy snipers. Considering that a Soviet-style motorized company has one sniper organic to each platoon, it is easy to see that there are plenty of sniper rifles in unfriendly hands throughout the world. Add to this the abundance of hunting rifles with scopes, and encountering an enemy sniper is almost inevitable.

Since mechanized infantry troops are not always protected by armor, enemy snipers will take their toll. A countersniper system is needed to eliminate this threat. A thermal sight and a 25mm cannon constitute an extremely effective countersniper system; but Bradleys are easy for snipers to detect and can be easily avoided.

The best medicine for enemy snipers is a company's organic snipers. The M24 is perfectly suited for countersniper operations due to its accurate bolt action design and large 10-power scope. Since World War I it is the skilled and patient sniper who has won countersniper battles. It is therefore essential that snipers be competently trained so they can survive and ultimately win in such an engagement.

Protecting the flank of a dismounted unit is a good economy-of-force mission for the sniper team, just as in the defense, because the sniper team has the capabilities to

detain a flanking aggressor. The same is true for the sniper team engaging small, bypassed pockets of resistance. A sniper team can be detached from its platoon and used to eliminate the remaining defenders without slowing the progress of an aggressive infantry attack.

When maneuver stops, sniper activity starts. Sniper employment against fortified positions has three major objectives:

- To demoralize the enemy between actual assaults by killing exposed enemy personnel and eliminating freedom of movement.
- To gain useful intelligence on the locations and strengths of enemy fortified positions.
- To place precision fire on fortifications in support of the assault, particularly to destroy the ability of positions to support each other.

We know from our experience in Southwest Asia that in the time it takes a mechanized force to reach the theater of operations, the enemy can construct substantial defensive positions. Thus, this type of offensive operation is extremely probable for the mechanized sniper.

Military Operations on Urban Terrain

The experiences in Panama and Southwest Asia have demonstrated that light forces need to be augmented by heavy forces that increase both combat power and their survivability.

During Operation JUST CAUSE, armored vehicles, in addition to their actual contribution to the physical damage, had a tremendous psychological effect on the Panamanian Defense Force. This indicates that a light-heavy force mix is a favorable and probable option for future conflicts of this nature. Panama serves as a model for such a conflict—a mid- to low-intensity action in a populated area where there is a limited armored threat. But, this type of war, now a reality for a mechanized force, demands finesse as well as firepower.

A 25mm cannon, although capable and useful, will usually cause collateral damage. Sniper rifles, on the other hand, provide an accurate fire capability with little chance of wounding innocent bystanders. Additionally, hostage situations are likely in populated areas. A sniper can bring such criminal activity to an abrupt halt with head shots at less than 300 meters.

In a MOUT operation, a sniper team enables a mechanized unit to become three-dimensional. With all of the heavy weapons confined on the ground with the Bradley, the sniper has the only 7.62mm precision firepower in the company that is capable of firing from such places as rooftops and windows.

By centralizing its sniper training, the battalion increases its ability to assume missions where all battalion snipers are centrally controlled. Although this method of employment is not the norm, it is valuable in special situations. *(Major Robert G. Boyko describes the demoralizing effect that centrally controlled sniper teams had on the Panamanian Defense Force in his article "JUST CAUSE: MOUT Lessons Learned," INFANTRY, May-June 1991, pages 28-32.)*

Initiating and maintaining a sniper program in the mechanized infantry is an uphill battle. These difficulties are justified, however, because snipers provide unique and necessary capabilities, and their training produces proud, effective, and competent soldiers. And if the Army wants effective sniper teams for all of its mechanized battalions, changes need to be made.

The most important change should be to adjust the TOE to give a company dedicated snipers and their equipment. This tells the mechanized infantry commander that sniping is important and that he does not have to invent an ad hoc team to support his company.

A successful sniper program is also contingent upon trained instructors. It would be helpful to prepare a sniper instructor course to teach the battalion's NCOs and officers how to train their snipers. (The U.S. Marine Corps uses this method.)

To further facilitate quality instruction, corps level sniper schools and mobile training teams should be adopted. The AMUs have a similar configuration; adding fieldcraft instructors would not be difficult, nor would it require too much manpower. The sniper instructor course should be integrated into these schools.

The new MILES (multiple integrated laser engagement system) transmitters for the M24 must be fielded as soon as possible. With the heavy emphasis on MILES in today's Army, a weapon that cannot mount a laser transmitter is useless to a company team in the field. Because of this shortcoming, sniper teams have not been able to prove their value to much of the Army over the past 10 years.

The M49 observation scopes are also now authorized for mechanized companies. These scopes are a crucial part of a sniper's equipment, and companies need to get them as soon as possible.

Finally, sniper operations in a mechanized platoon and company should be governed by doctrine (FM 7-7J). Without this doctrinal guidance for commanders, snipers will continue to be misused or underused.

The priorities for mechanized infantry battalions are, justifiably, their armored vehicles and heavy weapon systems, and in such an environment sniper training has a low priority. But, without such a basic, centralized, training structure and a knowledge of sniper employment, a mechanized battalion's snipers will not be prepared to go to war. If they are not prepared, these battalions can only do what many others did when they deployed to Southwest Asia—leave their sniper rifles in the arms room. Commanders must realize that snipers in mechanized infantry units are too valuable to be ignored and that their employment will enhance their units' ability to close with and destroy the enemy.

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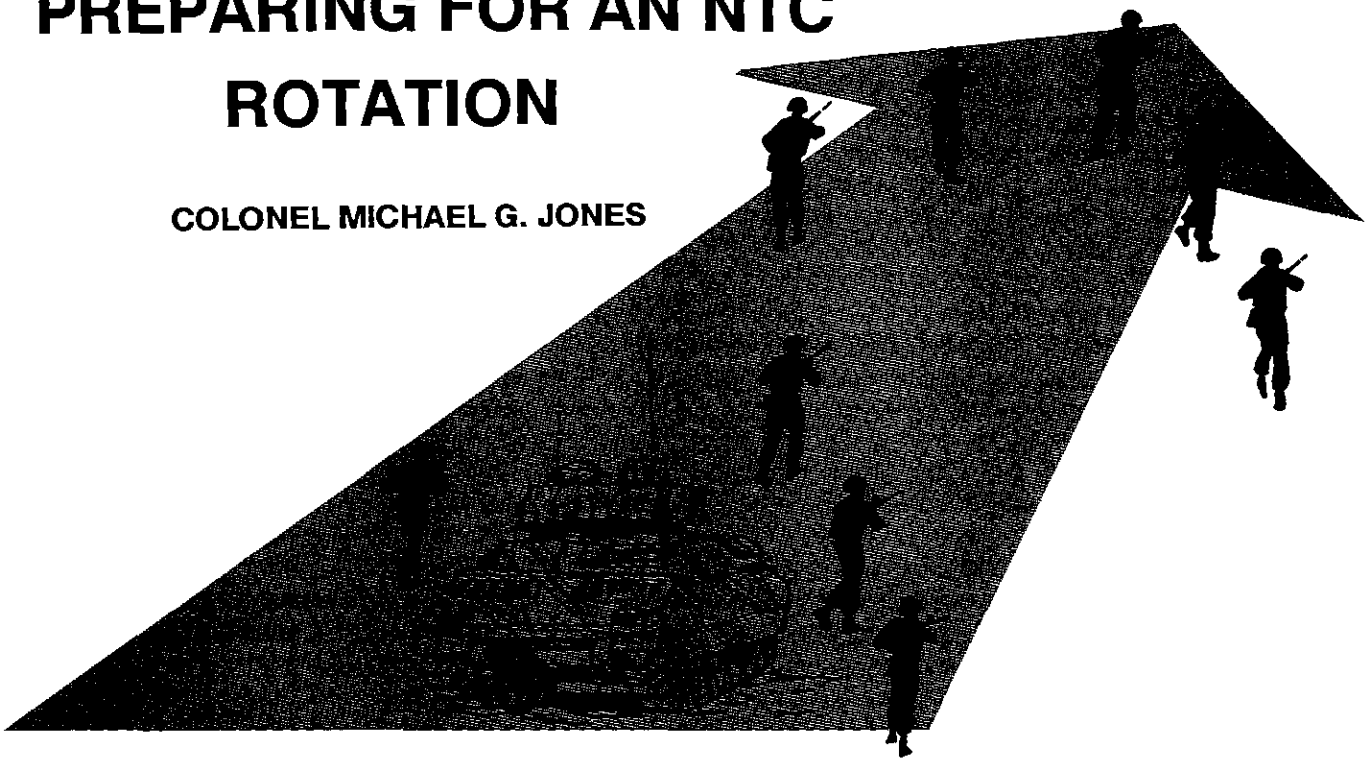
PREPARING FOR AN NTC ROTATION

COLONEL MICHAEL G. JONES



A training rotation at the National Training Center (NTC) is one of the most exciting and challenging events a battalion commander and his unit can experience. How well you prepare yourself and the members of your task force (TF) will have a lot to do with your success during the rotation. Here are some ideas on how to get started:

Begin with a brief two- or three-day assessment of where you stand. Start with your mission essential task list (METL) and the enabling tasks, and analyze your shortcomings. Since most rotations revolve around the "big four"—movement to contact, hasty attack, deliberate attack, and defense in sector—you'll want to focus on these.

As your analysis begins to take shape, ask the brigade commander and his staff to identify the tasks and skills you should emphasize.

Be sure to review the NTC take-home package and after-action report (AAR) videotapes of a recent battalion rotation. Most commanders wait until the last few weeks before a deployment; by then it's already too late.

Interview recent NTC graduates, and pay close attention to their counsel. Their experiences can help you identify your own weak areas.

Your command sergeant major (CSM) should talk with a returning CSM about activities at the Dustbowl (the initial tent city and the equipment draw and turn-in point), uniform, discipline, and the NCO observer-controllers at the NTC. Your battalion XO and staff should interview their counterparts as well. Then, formalize their research effort, and make sure they give you their notes. The interview shouldn't be one of those "How'd it go?" efforts; you and your staff need to develop specific questions in order to get the maximum benefit from the returning unit's experience.

Begin developing an NTC library. The Center for Army Lessons Learned (CALL) series and the handouts from the FORSCOM Leaders Training Program are some of the best source documents with which to start a library.

Review other battalions' NTC-tested tactical SOPs (TACSOPs), blank operations orders (OPORDs), Dustbowl game plans, letters and memorandums of instruction (LOIs/MOIs), and checklists. Publish your own LOIs or MOIs early, if only in draft, so you can use them, discuss them, and add or delete as necessary.

Begin selling your personal NTC philosophy. The NTC is World War III. It is the best training in the world. The OPFOR wants to win and knows how to do it. Morale and the desire to fight are everything. Commanders can get soldiers and weapons to the right place on the battlefield, but only tough, self-starting troops can make the plan succeed. Here are some ideas:

A successful rotation is measured in terms of three factors: Did we train safely? Did we learn? And did we maintain a positive attitude?

There are many ways to communicate your personal philosophy, but here is an approach that worked for me:

• Personally brief each company on the terrain, the enemy, and what you expect of them. Insist that they master the basics. Soldiers should know the difference between the opposing force's (OPFOR's) combat reconnaissance patrol

(CRP) and its forward security element (FSE), the maximum range of the T-72 tanks and BMP fighting vehicles, how to construct fighting positions, how to prepare range cards, and other fundamental skills.

• Put up OPFOR vehicle posters in the battalion area to keep everyone focused. The Brigade S-2 can get you what you need.

• Publish a monthly NTC newsletter that concentrates on the OPFOR, tactics, and training tips. Ensure that the newsletter gets down to platoon level.

• Develop a deployment handbook on safety, soldier-craft, and desert survival.

• Have your unit chaplain put together daily devotionals keyed to your rotation dates.

• Make sure each soldier gets a pocket-sized map of the NTC.

Get your combat support and combat service support (CS/CSS) slice elements in tow. If you concentrate all of your effort on getting your battalion up to speed, you're doomed. Sometimes, the performance of your slice elements will be decisive. The first step is to get the names of their key personnel and the vehicles and equipment they intend to deploy. Get your brigade commander's help if you have problems.

• Have your slice elements brief you on their capabilities, equipment, weapons, personnel status, and doctrinal employment.

• Ask that they attend all battalion command and staff meetings, OPDs, and NCOPDs. Don't take no for an answer!

• Insure that they help plan all training and participate in it.

• Invite them to all social events, both officer and NCO.

Go to work on MILES gear. The OPFOR has the best MILES (multiple integrated laser engagement system) equipment in the world. It is permanently assigned and always set to kill at the maximum range of their weapons. You and your company commanders must know how to boresight all weapons. (We checked tanks almost daily at distances of 3.5, 3, 2.5, and 2 kilometers.) To master MILES, consider:

• Identifying a trained and certified MILES expert in each platoon.

• Spending some time each week on long-range MILES gunnery. (Can your M16s kill at 300 meters?)

• Running MILES jousts, with awards and special recognition for the winners.

• Establishing a MILES certification range in the Dustbowl. Frequently, one battalion runs the infantry weapons portion while another handles the tanks.

Make the best use of NTC reconnaissances. Most battalions participate in two reconnaissances of the NTC before their rotations begin. The four-day FORSCOM Leader Training Program is for commanders and staffs. It focuses on the orders development process, small unit tactics, and the OPFOR. You will have an opportunity to analyze both rotational units and OPFOR plans, and then watch force-on-force battles. In addition to this program, the battalion will be able to send its XO, S-4, and perhaps others on a logistics reconnaissance to work out the details of the deployment, equipment draw, occupation of the Dustbowl, and other critical issues.

If you're lucky, you may be able to get some of your staff to the NTC as augmentees during another unit's deployment, or as students at the NTC's OPFOR Academy. If not, consider inviting some observer-controllers or members of the OPFOR to your home station.

Get your paperwork squared away as soon as possible.

• Formalize and standardize your vehicle load plans, and insist that all units comply with them.

• Ensure that everyone, including your slice elements, understands your uniform and appearance standards. Tell troops what to wear and what and how to pack. Discuss the uniforms for travel, the Dustbowl, and battle, if they are different. (In general, if it's not OD, I wouldn't take it.)

• Make sure your dependents' handbook for the rotation is prepared and issued well ahead of time. Schedule briefings for dependents, and make sure they are conducted by subject matter experts.

• Publish your NTC MOI quickly, leaving some annexes to be provided later if you don't yet have all the information. You don't want the staff churning out paper at the last moment. Don't hold up the MOI waiting for a single piece of information when you already have a lot that will be useful to the unit's soldiers and their dependents.

• Plan on completing all officer and NCO evaluation reports and a draft unit status report before leaving home station. During the rotation, there won't be time for anything but fighting.

• Get started early on such pre-deployment checks as records, powers of attorney, dental screenings, and the like to avoid last-minute problems.

Develop a comprehensive plan for Officer and NCO Professional Development (OPD/NCOPD). Don't waste a minute. Some good subjects, for starters, are counterreconnaissance, actions on the objective, development of engagement areas, and casualty evacuation.

• Study the NTC rules of engagement handbook. It will be an eye opener on how battles are fought, and it will give you insight into areas that will require work.

• Conduct orders drills until the staff has them down to a science, and get yourself straight as well. Make sure you can present a decent commander's intent. Have your brigade evaluate both your process and your product. You should be able to develop and reproduce a task force order within four or five hours. Fort Leavenworth's Reference Book 100-3 is an excellent guide, as is the NTC's Orders and Plans Handbook.

• Consider a one- or two-day logistics exercise (LOGEX) with the entire CSS team, including first sergeants, supply sergeants, and maintenance team chiefs.

• You may also find it useful to run an Army training battle simulation system (ARTBASS) simulation of the live-fire battle, and perhaps one battle in each corridor.

Develop your training plan. Regardless of your METL assessment, you'll probably want to conduct a battalion live-fire mortar exercise, a scout proficiency course, an obstacle breaching lane, and some sort of NBC certification. Some prerequisites to an NTC rotation are a combined arms live-fire exercise (CALFEX) and a gunnery within the six months before deployment.

If I were you, I would do the following:

- Focus on soldier basics and platoon and company operations.
- Do a lot of task force level work through command post exercises (CPXs), tactical exercises without troops (TEWTs), and simulations. Don't forget, however, that while these are good, nothing beats putting the task force together in a battalion level external evaluation.
- Practice at least one basic task force movement formation until you can run through it as a team at 15 miles per hour.
- Train to develop a fully integrated set of engagement areas, each of which synchronizes direct fires, indirect fires, and obstacles. This is key in the defense. Specialize your companies, and once they've developed some confidence, let them cross-train each other. To do this, you will need:

  - A breaching expert (mech heavy) who knows how to conduct in-stride and deliberate breaches.

  - A specialist in airmobile/dismounted operations (mech heavy). This requires practice, special communications, and guts.

  - An advance guard company (tank heavy). The commander leads the task force and has to be a great map reader and an independent thinker. In the defense, this may be your flex (reserve) company. He prepares two positions and practices the fast dash.

  - A counterreconnaissance expert (tank heavy). He specializes in killing divisional and regimental reconnaissance elements. In the counterreconnaissance role, he has a mix of tanks and infantry, plus Stingers and a section of mortars. (I am convinced that an ad hoc organization or the antiarmor company won't cut it on counterreconnaissance.)

Finally, remember that strength and the will to win at platoon and company level are more important than any of the above.

Recognize that most classic NTC battles can be reduced to the elements of movement to contact, deliberate attack, and defense. In a movement to contact (Figure 1), scouts precede the task force and locate the enemy. Your advance guard company kills the CRPs on the move and fixes the FSE with direct fire and mortars. The rest of the task force rapidly transitions to a hasty attack or defense and destroys the enemy's main body.

The scenario is much like the game of Musical Chairs: The chairs are terrain that affords you a significant advantage. When the music stops (contact is made), you get to the nearest chair.

In the deliberate attack (Figure 2), mass against the enemy's weakness. Dismounted infantry conducts a stealth breach and knocks out key enemy positions short of the LD.

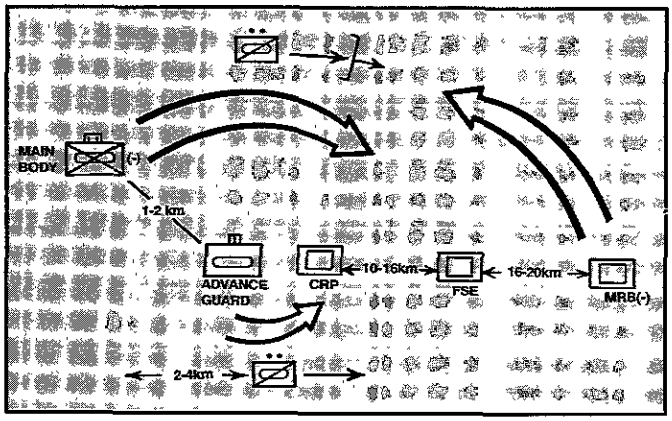


Figure 1. Movement to contact.

The task force holds the enemy in the kill sack and attempts to turn his flank. The task force focuses all its combat power against a single platoon, while smoke and artillery suppress the rest of the force. FASCAM and CAS are targeted against the OPFOR's reserve.

In the defense (Figure 3), the guiding principle should be, "He who defends all, defends nothing." Therefore, take a risk on one enemy axis (your defense sector will always be too wide). A company team secures your risk axis. Give him most of your Class IV supplies. The balance of the task force defends the other axis. The task force reserve is one tank team (minus) in depth. Scatterable mines (FASCAM) are used to shape the battle. Ask brigade for 50 laborers to help with obstacle construction.

Listen to what members of the OPFOR say. Here's what the OPFOR people have told us:

- Our TOCs are too big, too undefended, and too easy for the enemy to locate. (Move mostly at night, and keep a Stinger and some Vipers with the headquarters.)
- Local security is a common weakness. (If we were good at it, we wouldn't be working so hard on counterreconnaissance.)
- Tanks become decisively engaged at 2,500 to 3,000 meters. M1A1 tank drivers think sweeping the objective and closing with the OPFOR's ATGMs is an effective technique, but it isn't. (Our tanks should kill at ranges between 2,500 and 3,000 meters; OPFOR T-72s kill at 2,000 meters. As the OPFOR gets more T-80 tanks, look out!)
- The OPFOR is vulnerable to dismounted infantry at night. Nothing is so disconcerting to the OPFOR regiment as "crunchies" in the darkness.
- Target acquisition, an old skill, is essential. All OPFOR track commanders and loaders use binoculars. Gun-tube orientation for two-thirds of the formation is to the flank and rear.
- When OPFOR vehicles stop, they get into a good hull-down defense. When rotational units stop, they just stop. Learn from their mistake.

Some final thoughts on training skills: Most of us discount the complexities of conducting NBC decontamination, casualty evacuation, vehicle recovery, and regeneration. Many units have more problems with these than with the standard actions of attack and defense.

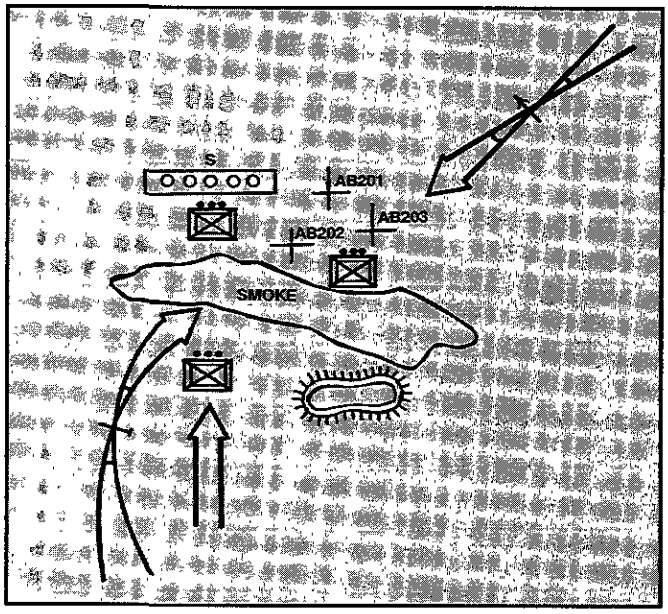


Figure 2. Deliberate attack.

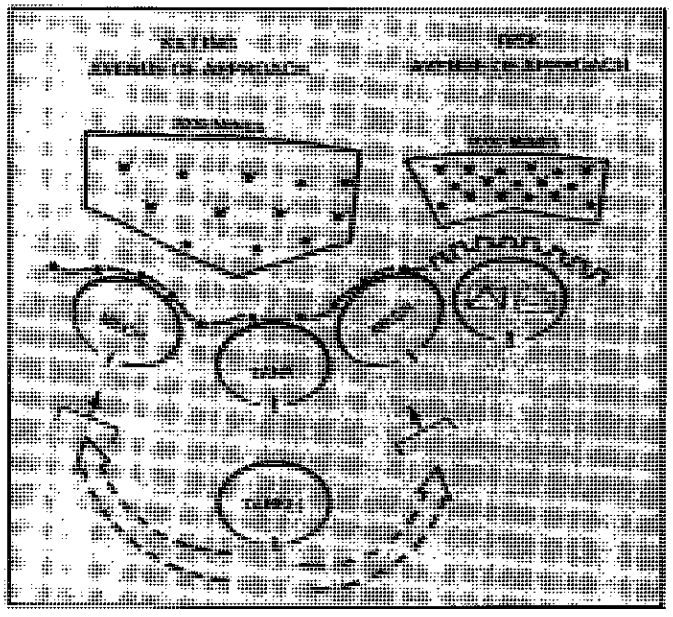


Figure 3. Defense.

Recognize that the NTC campaign consists of a set of smaller battles. Here are the ten key ones:

Deployment. Planning the move is your first real headache. This effort will require meticulous planning and an experienced eye, and it includes:

- Predeployment checks.
- Dependent briefings.
- Rear detachment planning.
- Red Cross message procedures.
- Courier flight scheduling.
- Equipment loan.
- Vehicle and equipment rail planning.
- Bus and aircraft flow.
- Preparation of manifests.

The Dustbowl. The term "Dustbowl" refers both to a place (the initial tent city) and to an activity (equipment draw and turn-in). It is normally run by the XO and the CSM. The initial emphasis is usually on getting set up, housekeeping, uniforms, and discipline. It then shifts to offloading trains at Yermo, California (some 40 miles away) and moving by convoy to Fort Irwin. You then concentrate on drawing equipment, a frustratingly complex task that the battalion must rock drill. Then your focus turns to MILES verification and the specifics of the first operation. The initial Dustbowl lasts five days (Monday through Friday). On Day 1, your unit will draw light equipment; on Days 2 through 5, the battalion draws vehicles and weapons. On Day 3, the brigade receives the first OPORD. Finally, on Days 4 and 5, key personnel will attend a whole host of observer-controller meetings.

The Moveout (frequently called the "Death March"). The convoy movement to your initial assembly area takes plenty of forethought and cannot be overplanned. The basic sequence works like this:

- Task forces move to initial staging areas, upload training ammunition, refuel, and conduct final pre-combat checks.
- At midday, scout platoons with chemical reconnaissance teams and aerial scouts move out along assigned routes.
- During the afternoon, quartering parties, TCPs, and some command and control facilities leave.
- At nightfall the task force's main body moves. (One task force moves to the live-fire training area and the other to the force-on-force area.)
- Trail parties normally close during the early morning hours of Training Day 1.

Live Fire (LF). The live-fire sequence normally lasts four to five days. The first day is Safety Day: You upload ammunition, receive your first OPORD, and test-fire all your weapons. During LF you'll do a daylight attack, a daylight defense, and a night defense. Planning time is short, and soldier skills are carefully examined. When you get out, you'll feel like you've been through the wringer.

Force on Force (FOF). Task force FOF normally runs five days. You will conduct either a movement to contact or an attack the morning you arrive in the zone. Although the schedule usually alternates fight days with preparation days, you may have to fight on consecutive days, depending upon the scenario. AARs are conducted at company level and below immediately after the mission. Task force AARs are televised, high-tech operations conducted near the battle site about five hours after you receive a change of mission. Expect something bad to happen every preparation day (an air strike, a chemical attack, or a probe). Since some of your planning time will be interrupted by enemy action and AARs, make sure you've really wargamed your troop-leading procedures.

The Transition. After the first week, task forces can expect to trade between LF and FOF. Sometimes the trade will include an intermediate phase in which both task forces engage in brigade level operations. In other scenarios, the exchange simply involves a passage of lines between the two task forces. In either case, both task forces must download ammunition, recover all Class IV supplies, and fill in vehicle

S	M	T	W	T	F	S
		RAILS ARR YERMO				(OFF-LOAD)
1	2	3	4	5	6	7
(CONVOY)	DRAW EQUIP/MILES CERT					(MOVE OUT)
8	9	10	11	12	13	14
TF 1: LF/TF 2: FOF					BDE OPS	
15	16	17	18	19	20	21
TF 1: FOF/TF 2: LF					BDE OPS (MOVE IN)	
22	23	24	25	26	27	28
(CLEAN)	TURN-IN/REDEPLOY					
29	30	1	2	3	4	5

Figure 4. Schedule for a typical rotation.

holes before leaving for the new site.

Brigade Operations. In most rotations, the brigade headquarters remains in FOF throughout the training period. The brigade commander's focus is on the FOF task force. During the transition, or at the end of the second task force's FOF, you can expect to participate in a two task force brigade operation. These operations are relatively complex, require close cooperation between the task forces, and frequently involve a task force reorganization.

Actions in the Dustbowl and Redeployment. The close-out Dustbowl represents the most dangerous phase of your rotation in terms of safety. Here, packs and other major components are being replaced day and night, the troops are tired, and most of your battalion will be scurrying around trying to get all the equipment turned in at the same time.

If you've stayed on top of maintenance, ordered parts during training, and conducted your oil analysis tests, your turn-in will only be painful. If your haven't done these things, the turn-in will be pure hell! The drawdown takes at least a week, and runs something like this:

Day 1 (Saturday): Completion of your last tactical mission. You will move to a staging area, download ammunition and equipment, return to the Dustbowl, and begin to wash vehicles.

Day 2 (Sunday): The task force receives its final observer-controller AARs and continues to wash vehicles, perform preventive maintenance checks and services, and take care of job order maintenance requirements.

Day 3 (Monday): Contractor technical inspections begin and run through Day 5. Battalions begin range police; the brigade tasking for this will run 400 to 600 soldiers a day.

Day 4 (Tuesday): Units begin turning in light equipment, communications, weapons, PLL, Class IV. The battalion can expect to get about 10 percent of its vehicles turned in.

Day 5 (Wednesday): You should have almost half of your vehicle fleet turned in. Tanks and ITVs will take the most time.

Day 6 (Thursday): The goal is to have 80 to 90 percent of your vehicles turned in at this point. This should be your last day of range police.

Days 7 and 8: By the end of the week, you should be working to get your worst vehicles up to speed. Of course, if you are slow or simply disorganized, the turn-in will take still longer. (Commanders depart when the contractor has accepted 90 percent of their units' vehicles.)

To further complicate matters, you will be managing your battalion's drawdown and redeployment at the same time. A good rule is "first to clear, first to leave."

Return and Post Operations Maintenance. Vehicles usually come off the train as they were readied for loading; that is, with limited unit integrity. Therefore, you need a good plan for offloading on relatively short notice. After a short day off, most battalions begin a cycle of internal AARs and recovery maintenance. The schedule for a typical rotation is shown in the accompanying table (Figure 4).

Some final thoughts: Training at the NTC is the greatest training experience in the world. You'll walk away from it proud of your troops, the battalion, and yourself. If you're lucky enough to get a rotation early in your command, you'll gain enough good, solid experience to improve the battalion steadily during the rest of your tour. You should recognize, however, that preparation is everything. If you've just been alerted for a rotation, you're already behind. Get excited, worried, and motivated as soon as possible, but don't get discouraged. Many have gone before you, and they understand what it takes to succeed at the National Training Center.

Colonel Michael G. Jones previously commanded the 1st Brigade of the 4th Infantry Division and has had three rotations to the National Training Center. He is currently serving as the Chief of Staff, 4th Infantry Division.

TRAINING NOTES

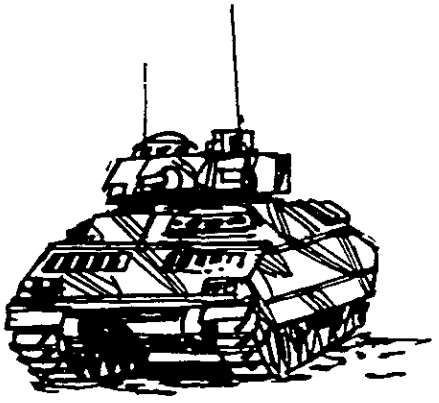
The Bradley Master Gunner

CAPTAIN JONATHAN D. THOMPSON

A Bradley master gunner plays a key role in the training management, training execution, and maintenance of a Bradley-equipped unit. The tables of organization and equipment (TOEs) for a Bradley infantry battalion call for a master gunner in the rank of sergeant first class at battalion level, and one in the rank of staff sergeant in each rifle company and infantry platoon.

Despite the criticality of master gunners to unit training, many soldiers who have this qualification find that it is detrimental to their career development. One reason is that relatively few of these slots are filled; rarely does a company have a master gunner in all three of its rifle platoons. Because of this scarcity, a unit tends to hang onto its master gunners, particularly the good ones. A graduate of the Army's Bradley Master Gunner Course (conducted at Fort Benning, Georgia) is likely to be kept in master gunner assignments instead of being given opportunities to work in other positions, such as dismounted leader positions. This is especially critical, since more than half of the soldiers in a Bradley platoon are in the dismount elements. This hurts both the professional development and the career opportunities of soldiers who are master gunners.

As a result, a master gunner NCO may lack the balanced experience and training expected of his MOS and grade, and may not be considered competitive for promotion to sergeant first class or higher. Thus, the Army ends up hurting some of its best and brightest sergeants, despite the fact that a master gunner is trained to do the same jobs a



platoon sergeant has traditionally accomplished.

One reason for the shortage of master gunners is the academic difficulty of the nine-week Master Gunner Course. The course has averaged dropout rates as high as 40 percent. Slots in this course are as important to a Bradley unit as Ranger school slots are to light infantry units, so commanders should ensure that they select their best and brightest to attend the course.

Many sergeants do not want to attend the school. They think that if they attend and fail, they may be viewed as substandard, and if they attend and pass, they risk remaining in master gunner positions with restricted opportunities to develop further. On the other hand, if they do not attend at all, they can probably expect to progress from position to position and remain competitive for promotion and other assignments such as drill sergeant.

To keep from losing these valuable NCOs, the Army should modify the TOE to code the Bradley platoon sergeant position with the master gunner additional skill identifier (ASI) of J3. Like the Ranger positions in a light infantry TOE, not all of the master gunner positions will be filled by personnel with the required MOSs, but changing the TOE will allow dedicated NCOs to progress in infantry assignments. Additionally, promotion boards for sergeant first class and higher should more carefully consider the special qualifications and duties of master gunners during their deliberations.

The skills a master gunner learns in the course are the same ones we have habitually associated with the infantry platoon sergeant—training and management. A master gunner is an expert on

training management. Bradley gunnery, which is among the most complex company-level training in the Army, is divided into four phases—preliminary, basic, intermediate, and advanced.

Preliminary gunnery includes the training that takes place at home station, whether in the motor pool or in a local training area. It includes the Bradley gunnery skills test and training in the unit conduct of fire trainer (UCOFT) simulator.

Basic gunnery, which consists of four subcaliber tables, trains the crews on target engagement. In intermediate gunnery, a crew fires 25mm rounds for the first time, and the gunnery culminates in crew qualification on Bradley Table VIII. Table VIII consists of ten firing tasks that are conducted under various conditions, such as NBC, night, and use of the auxiliary sight.

Advanced gunnery concludes with Bradley Table XII, a platoon qualification. In this final stage, the platoon leader must demonstrate the proficiency of both his Bradley crews and his dismounted squads in hitting targets. This training also consists of a tactical evaluation based on the infantry platoon mission training plan (MTP), which counts as 50 percent of the overall score. As Bradley crews' experience becomes broader, the emphasis on advanced gunnery and Bradley Table XII continues to increase as well.

Throughout the Bradley gunnery cycle, an infantry platoon still needs to conduct qualification on its small arms—six M249 squad automatic weapons, six M203 grenade launchers, and three Dragons. Additionally, the dismount squads must become proficient in their battle tasks. When vehicles and dismount elements are incorporated, gunnery training is a complex subject to manage.

The master gunner learns how to do his job, from training soldiers on individual skills up through teaching platoon fire distribution and control, and also learns how to use the various training aids available. One key example is with UCOFT training.

UCOFT training must be supervised by a trained instructor operator (IO). To become an IO, a soldier must successfully complete a 40-hour class. When certified, he can train crews as they progress through the levels of difficulty. Instructor operator certification is also a prerequisite for the Master Gunner Course. Furthermore, upon graduation, the master gunner becomes senior IO and can train other soldiers to become IOs as well. On the other hand, if a platoon sergeant is not certified as a senior IO, he cannot train his soldiers on the UCOFT, a key training aid for Bradley crews.

Another key area of the Master Gunner Course is Bradley turret functions and maintenance. The master gunner learns how the turret and its weapon systems operate and how to troubleshoot problems. He is qualified to conduct organizational level maintenance on the 25mm cannon, the Bradley's primary weapon system. If he cannot fix a problem himself, he can at least help the turret mechanics.

Once again, maintenance and technical expertise are also a platoon sergeant's areas of responsibility. Thus, a master gunner is an excellent choice to fill a platoon sergeant slot, because their roles and duties are so similar. By requiring that platoon sergeants be master gunners, we can help ensure that master gunners receive the professional development opportunities they deserve and need.

At the same time, junior NCOs will be more likely to attend the school because they know it will improve their careers. This, in turn, will cause them to prepare for the school and become more proficient in their MOSs.

A sergeant's master gunner qualifications should not be the only reason he is selected for assignments or promotions, however. I have seen excellent platoon sergeants who were not master gunners, and I have seen master gunners who would have had a difficult time serving as platoon sergeants. In the former case, the Master Gunner Course would have made these platoon sergeants even better. Commanders still have a responsibility, however, to evaluate every soldier on the basis of his performance and potential.

I believe the Army is beginning to move in this direction. As more and more leaders gain Bradley experience, more soldiers will attend and complete the Master Gunner Course. The Army, by setting a goal of requiring that Bradley platoon sergeants be master gunners, will protect its investment in time and training. At the same time, it will provide its soldiers with the most competent leaders available.

Captain Jonathan D. Thompson commanded a company in the 1st Battalion, 15th Infantry, 3d Infantry Division, and is now a division gunnery officer. He previously served in several assignments in the 7th Infantry Division. He is a 1985 ROTC graduate of Wheaton College in Illinois.

JRTC
Live Fire Operations

CAPTAIN CHARLES W. DURR

Realistic live-fire training often eludes the most stalwart of Army leaders. As a rifle company commander in a light division, I attempted to develop realistic live-fire exercises that focused on freedom of maneuver, allowing bold flanking movements. I found myself restricted by range fans, left and right limits, and my interpretation of the safety regulations; I assumed that I had to compromise realism for safety, and the exercises fell short of what they should have been.

With those less-than-perfect exercises under my belt, however, I gained further insight during Operation JUST CAUSE in Panama. I saw first-hand the correlation between training for combat and combat itself. All soldiers fight using the warfighting techniques they have learned in training. Only tried and true warfighting techniques succeeded on the streets of Panama City, and unfortunately most soldiers had to use on-the-job training to develop and reinforce those techniques. Initially, I saw apprehension and a lack of confidence among the soldiers. As the hours passed and experience grew, however, their apprehension quickly turned to confidence.

Senior leaders quickly recognized that better training on more realistic live-fire ranges at home station and at the combat training centers would help overcome the problems identified in Panama. The Joint Readiness Training Center (JRTC) then took on the responsibility for developing a realistic, challenging live-fire program.

The JRTC conducts live-fire exercises for light infantry and Special Forces (SF) units. Unlike the battalion level live-fire exercises conducted at the National Training Center, those at the JRTC focus on infantry rifle squads and platoons and Special Forces A detachments. The unit missions include *movement-to-contact, ambush, deliberate attack,* and *raid.*

This relatively new training event is a departure from the way most units conduct live-fire training. I have observed platoons from seven light divisions, detachments from five SF groups, and more than 90 live-fire exercises since August 1990 and found a great disparity in the units' levels of training. Most units appear unprepared to conduct the live-fire training at the JRTC.

STANDARD

The JRTC sets the standard for live-fire training, and a simple understanding of this standard will improve each rotational unit's performance and raise the level of combat readiness throughout the Army. JRTC live-fire operations differ from most routine live-fire exercises in three areas: *The basic concept for operations, the approach to safety,* and *the actual execution of each live-fire event.*

The concept is simply to provide the most realistic live-fire experience short of actual combat. The JRTC and its live-fire division do this in several ways: by producing a tactical scenario that clarifies all administrative requirements for the unit; by portraying a tough, life-like enemy who fights back; and by observing the unit's performance and providing immediate and precise feedback.

The live-fire division becomes a platoon's higher headquarters and participates as its sister units and support elements. This headquarters issues the orders and controls the tactical scenario. The platoon executes its live-fire exercise as a tactical mission in accordance with the operations order (OPORD) and to the standards found in the mission training plans.

The opposing force (OPFOR) is realistic and tough. The live-fire division has specifically designed targets to resemble uniformed, life-like enemy soldiers who fiercely stand their ground. They seek cover and concealment, stay out of the open, and engage the friendly attacker with their own weapon systems. The OPFOR weapons shoot back, using lasers from the multiple integrated laser engagement system (MILES), coupled with gunfire simulators. The attacker must seek cover and concealment as he maneuvers, or he risks becoming a MILES casualty.

The observer-controllers (OCs) perform indispensable functions in live-fire exercises. As observers, they examine the execution of the exercise from a doctrinal standpoint and provide immediate, accurate feedback to the unit with an after-action review (AAR). The live-fire AAR goes one step farther to correlate the number of rounds expend-

ed with the effects on the target. As controllers, they act as referees for the exercise rules of engagement and MILES casualties. As a live-fire controller, an experienced OC watches the live-fire battle unfold, foresees potential safety violations, and moves to intervene only when he thinks it is necessary. This most important aspect of the OC makes his role critical for realistic live-fire exercises.

Safety

An administrative range mentality permeates most live-fire training throughout the Army. This mentality stems from overcautious and unimaginative training conducted by leaders who are products of this same kind of training. Administrative safety stifles realistic execution and teaches bad habits to soldiers who may one day find themselves in hostile territory. The JRTC overcomes this mentality and the live-fire division conducts realistic training in accordance with the Army's safety regulations.

The live-fire division coordinates all administrative safety restrictions and requirements found in the safety regulations and makes them clear to the maneuver elements. The live-fire division writes the OPORDs and designs the maneuver graphics with range fans, firing limits, and reservation boundaries in mind. The player unit, which never sees the administrative considerations, fires and maneuvers in accordance with its tactical order. This perceived freedom to maneuver is vital to realism.

The live-fire division further improves freedom to maneuver by emplacing the enemy targets in areas where the rounds fall within established surface danger zones (SDZs). The live fire division constructs these zones so that they provide almost 180-degree fields of fire. This allows units the flexibility to execute bold flanking movements and to emplace their weapon systems in locations of their own choosing. For added realism, the division constructs these SDZs in rugged, wooded, and restrictive terrain.

From the outset, the unit chain of command is held responsible for safety. The leaders stress the safety principles inherent in the tactically sound execution of the missions outlined in the mission training plan. The JRTC gives soldiers and their leaders the benefit of the doubt—assuming the unit will employ its weapons responsibly. The JRTC further assumes the unit will use tactically sound procedures and techniques to engage the enemy and that it will avoid situations of potential fratricide to safeguard its soldiers.

Since August 1990, no soldier has been injured by direct fire on a live-fire

exercise at JRTC. Safety in training is paramount. When the training is handled correctly, units can fire safely without compromising tough and realistic training.

Execution

Mission Preparation. The platoons occupy tactical assembly areas within two to four kilometers of the forward line of own troops (FLOT). This allows the units to conduct detailed planning and rehearsals before crossing the line of departure. The JRTC attaches platoons to a notional company in which a role-playing company commander issues a detailed operations order or a fragmentary order for a company operation. The platoons then plan, backbrief, and move in accordance with this order.

Each platoon receives a basic load of live ammunition. Munitions for each weapon system include: ball ammunition for M9 pistols; ball and tracer for M16A2 rifles, M249 SAW, and M60 machinegun; target practice and buckshot for M203 grenade launchers; 00 buckshot for M1200 shotguns; M67 (90mm) and M3-550 (84mm) recoilless rifles; M67 fragmentation grenades; high explosive and subcaliber M136 AT4 and M72A2 LAW antitank rockets; M47 antitank missiles; M18A1 claymore and M15 antitank mines; nonelectric firing systems for demolition satchel charges and M1A1 bangalore torpedoes; smoke grenades; and signaling pyrotechnics. The platoon crossloads and issues ammunition on the basis of its understanding of the mission.

Units rehearse on terrain similar to that of the objective area, but they do not maneuver on the actual terrain until the execution of the mission. Some missions, however, require a leader's reconnaissance of the objective. The platoon conducts a reconnaissance patrol to a vantage point overlooking the objective area. During the reconnaissance, the platoon uses stealth and security, because live opposing forces in the objective area may compromise the patrol.

Movement to Contact. The platoons in training move as the lead element of a company conducting a movement to contact to locate enemy targets within the battalion sector. The company maneuvers with its platoons abreast or in trail along the axis of advance through march objectives. The platoons execute squad and platoon combat drills on contact. A platoon continues until it becomes combat ineffective with 30 percent casualties or until the commander decides to maneuver another platoon around to continue as the main effort.

The OPFOR, lightly armed and dismounted, ranges in size from two-man security elements to ten-man squads in hasty defensive positions on cache sites. Generally, the platoons make contact with the enemy six to eight times during three kilometers of movement.

The platoons must exercise great care in distinguishing friend from foe and non-combatant from combatant. They may encounter friendly units forward along unit boundaries or misoriented scouts along the axis of advance. As part of the targetry, these elements are

dressed in U.S. uniforms. Battlefield clutter may include civilian non-combatants. Care is taken to ensure realism.

Ambush. The platoons conduct a night point ambush on a vehicle convoy as part of a company area ambush to destroy OPFOR supply convoys within the battalion sector. Company or battalion mortars support the objective area with on-call illumination and high-explosive blocking fires. This adds a real training event to the indirect-fire systems.

The OPFOR convoys consist of groups of three to six vehicles moving along an existing road. The vehicles include the BRDM-2, a light armored reconnaissance vehicle, and the GAZ-69, a thin-skinned cargo vehicle. Each vehicle looks, sounds, and reacts like a real vehicle moving in convoy.

The platoons develop their own ground tactical plan and emplace their own weapon systems. The platoon leaders execute whatever tactically sound plan they devise. The platoons use subcaliber antitank munitions to supplement their machineguns, grenade launchers, and mines to disable and destroy the convoy.

Deliberate Attack. The platoons conduct a deliberate attack on a fortified position to seize and occupy an enemy platoon strongpoint as the company's main effort. The platoons, with an attached engineer section, establish a breach in a wire and mine obstacle, gain a foothold in the trenchwork, and begin to clear the trenches and bunkers. They use both night infiltration and deliberate daylight techniques.

The enemy platoon occupies a strongpoint consisting of a fortified trenchwork, crew-served fighting positions with overhead cover, and command bunkers. The enemy uses both mines and boobytraps throughout the position and may reinforce the position with armored vehicles.

As the platoons move along the axis of attack, the forward observer calls for planned artillery and mortar fires to prepare the objective. Artillery is fired over the axis of advance so the soldiers can experience overhead, low-angle fire. The forward observer shifts the high-explosive and smoke fires to blocking targets as the platoons maneuver dangerously close to the objective.

The platoons establish a breach in a location designated by the company commander. Generally, engineers establish a breach using an M1A1 bangalore torpedo. The platoons suppress the breach point with fire from their machineguns, SAWs, recoilless rifles, and AT4s or LAWs.

Upon establishing the breach, the platoons fight to secure the foothold by first firing and maneuvering forward and clearing the entry point with M67 fragmentation grenades. The soldiers systematically clear the trenchwork with M16A2s, SAWs, M203s, and shotguns. They also clear crew-served fighting positions and bunkers with fragmentation grenades.

During consolidation and reorganization, a reinforcing armor element threatens the platoons on the objective. Company mortars and available artillery suppress the armor column, and the platoons engage the approaching vehicles with their machineguns, AT4s, and Dragons. Meanwhile, the platoons must continue treating casualties and evacuating them to the company casualty collection point.

Raid. The SF detachment conducts direct action missions to destroy enemy command and control centers or cache sites. The detachment first goes into isolation at the intermediate staging base for detailed planning and rehearsals. It then conducts airborne or air assault insertion into the objective area and places the objective under observation. The detachment infiltrates with a basic load of blank or inert munitions and conducts active reconnaissance against a live enemy on the objective. This makes stealth and security the keys to success, because compromise is always possible.

Before attack time, the detachment exchanges blank munitions for live, and the OPFOR soldiers withdraw, leaving their mechanical counterparts in position. The detachment conducts the raid, withdraws to a pickup zone, and exfiltrates by helicopter. The JRTC uses this same process of replacing blank with live ammunition and live for inert OPFOR targets for the detachment executing the ambush mission.

Live-fire exercises at the JRTC are truly unique in their scope and realism. The concept, philosophy, safety, and execution of JRTC live-fire exercises use a commonsense approach to training. This approach exposes the strengths and weaknesses of squads and platoons by forcing units to rely on their chains of command to get the job done. Platoons are given the responsibility for reacting as they have been trained. Platoons are held accountable. As the observer-controllers have seen, most units respond professionally to the challenge and appreciate their newfound responsibility.

To gain the most from their rotation at the JRTC, the units must understand and prepare for the live-fire challenges they will face. Before deployment, all soldiers must understand their basic warfighting doctrine and be confident in themselves and their weapons. The leaders must demonstrate competence and then develop the same competence among their soldiers. Live-fire exercises offer both exciting training opportunities and the potential for accidental shootings. With a no-nonsense approach to firearms safety, commanders can derive the maximum training value with the confidence that their soldiers understand the responsibilities that are inherent in training with loaded weapons. On the ground, with these tasks mastered, the unit can anticipate, react to, and overcome every challenge.

JRTC live-fire exercises correctly train future soldiers and their leaders for combat. We can best prepare our soldiers and their units for the rigors of combat by implementing this commonsense approach in all live-fire exercises.

Captain Charles W. Durr served as the operations officer and platoon observer-controller for the JRTC's live-fire division for 17 months. He previously served with the 82d Airborne Division as a rifle company commander and a brigade assistant S-3 and participated in Operation JUST CAUSE. He is a 1983 graduate of the University of Florida and is now assigned to the JRTC brigade command and control division as an operations observer-controller.

Direct Fire Control

CAPTAIN RICK BURTNETT
CAPTAIN DENNIS M. WINCE

Direct fire control includes the techniques and control measures used to integrate direct fires into a maneuver plan. A direct fire control plan tells the soldiers the specifics of the targets they are to engage. Direct fire control consists of the terrain and enemy oriented techniques used to *control fire distribution* (where and what to shoot) and *engagement criteria* (who shoots when).

In an operations order, direct fire control measures are included in the operations overlay, the tasks to maneuver units paragraph, the coordinating instructions, and the synchronization matrix, if one is used. These control measures provide subordinates with the detailed instructions to ensure that direct fire is employed effectively and massed on the enemy's formation or positions. In addition, they serve as a foundation for avoiding the mistaken engagement of friendly forces.

Fire Distribution

From the maneuver plan, commanders develop the fire distribution plan, using a combination of techniques oriented on the terrain and the enemy force.

The plan must use all weapon systems efficiently, mass direct fire, avoid the engagement of destroyed vehicles and positions, and prevent fratricide. The fire distribution plan must be well understood at all levels and must take into account engagements during limited visibility. A well understood plan that uses the proper techniques to orient fires on the enemy will help prevent fratricide as well.

When developing a fire distribution plan, leaders should consider the following principles:

- Destroy the most dangerous targets first.
- Avoid target overkill.
- Attack the enemy throughout the depth of his formation.
- Control fires to achieve the best shots and to expose only the units or weapons needed for an engagement.
- Make the best possible use of each weapon's inherent capabilities.
- Overlap sectors of fire to prevent the enemy from fixing and maneuvering against any one element.

The following are the terrain fire distribution techniques commonly used to synchronize the direct fire plan with the maneuver plan:

Target Reference Point (TRP). A TRP is an easily recognizable point on the ground (either natural or manmade) that is used for identifying enemy targets or controlling fires. TRPs are designated, using the standard target symbol and target numbers assigned by standing operating procedures (SOPs). If a direct fire TRP is nominated and approved as an indirect fire TRP, it is numbered according to the target numbers assigned by the fire support element (Figure 1).

In areas where there are no distinguishable terrain features, TRPs can be constructed from VS-17 panels, battlefield debris, and the like. These expedient TRPs should be heated so they are visible through thermal sights. To prevent confusion when more than one company or platoon is oriented on the same engagement area, TRPs should be numbered and marked according to well-established SOPs.

Engagement Areas/Sectors of Fire. An engagement area is an area in which the commander intends to engage an enemy force with the massed fires of all available weapon systems. Engagement areas and sectors of fire are based on the available fields of fire and the capabilities of the weapons employed. A sector of fire is an area that must be covered by the fire of an individual weapon or unit.

TRPs and magnetic azimuths are used to designate the physical confines of an engagement area and sectors of fire as shown in Figure 1. An engagement area may be subdivided and assigned to subordinate units and weapons with sectors of fire. Inherent in assigning sectors of fire, as with unit positioning, is achieving mutual support to keep the enemy from isolating individual units and weapons.

Phase Lines. Normally, a phase line (PL) is a linear control measure used to control movement, but phase lines placed along terrain features can also be used to designate sectors of fire. Phase lines may also be used in engagement criteria.

Near-half, Far-half Technique. When the terrain is so open that there are no specific features to use as refer-

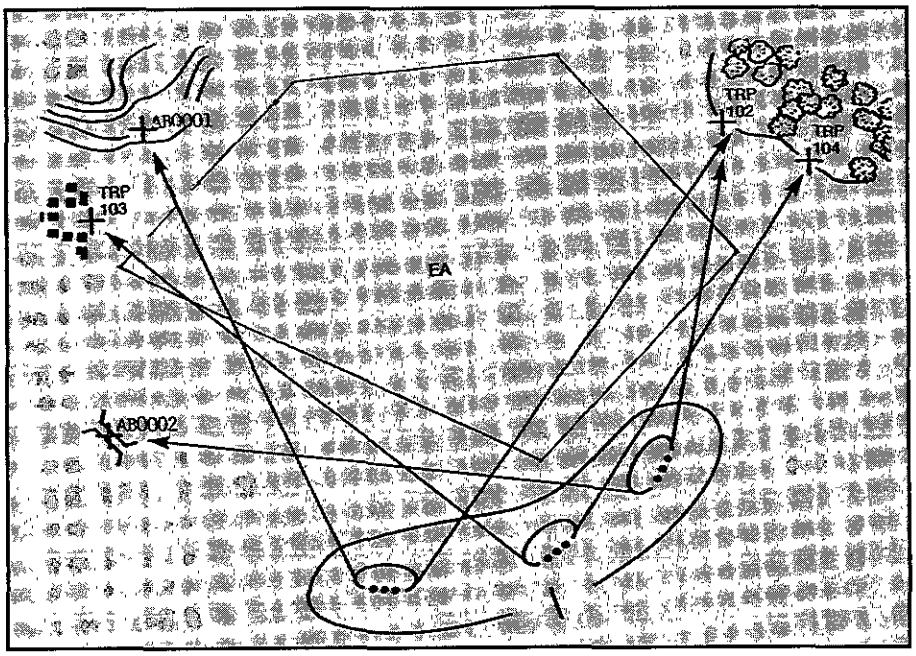


Figure 1

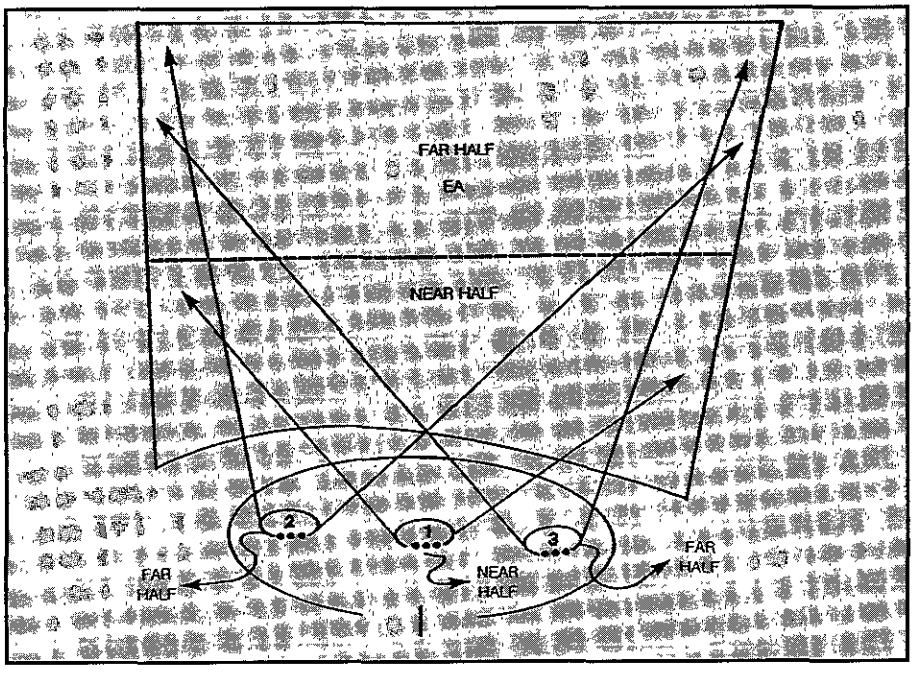


Figure 2

ence points, or when there has not been time to construct reference points as described earlier, units can be assigned specific portions of an engagement area. For instance, in Figure 2, 1st Platoon is responsible for the near half (the area closest to friendly forces), and 2d and 3d Platoons are responsible for the far half (the area farther from the friendly forces).

The common enemy oriented techniques are as follows:

Engagement Priority. Each weapon or element can be assigned a type of vehicle or target to engage first. Tanks, BMP fighting vehicles, BRDM reconnaissance vehicles, and other vehicles may appear in an enemy armor formation. These systems have different capabilities and pose different threats at different ranges. Commanders must determine which targets are the most dangerous and then assign engagement priorities to them. Engagement priorities are assigned according to the mission and the desired effects on the enemy formation. Generally, Bradley fighting vehicles should engage BMPs, ZSUs, and other light armored vehicles. Tanks should engage tanks, and TOW missiles should engage command and control, engineer, and air defense artillery vehicles. This rule should not restrict the assignment of priorities; different engagement priorities may be assigned to different platoons or companies. For example, "Company A engages BMPs, then tanks; Team B engages tanks, then BMPs."

Fire Patterns. Three basic enemy oriented fire patterns can be used to distribute fire when multiple targets appear and no other control measures have been assigned—*frontal fire, cross fire,* and *depth fire:*

Frontal fire is used when targets are in front of the unit in a lateral configuration. The left flank element engages the leftmost target; the right flank element engages the rightmost targets, or if necessary they engage targets from near to far, or from most dangerous to least dangerous. As targets are destroyed, fires are shifted toward the center of the enemy formation.

Cross fire is used when targets are positioned laterally and obstructions prevent elements from firing to the front. The leftmost element engages the rightmost target; the rightmost element engages the leftmost target. As targets are destroyed, fires are shifted toward the center of the enemy formation and from near targets to far.

Depth fire is used when targets are in a column formation. The leftmost element engages the target farthest to the rear; the rightmost element engages the closest target. As targets are destroyed, fires are shifted to the center of the enemy formation. *(See also "Platoon Fire Control," by Captains Michael H. Shields and Gerald P. Kulp, INFANTRY, March-April 1992, pages 38-42.)*

Engagement Criteria

To create the desired effect on enemy formations and positions, synchronize fire and maneuver, and prevent fratri-

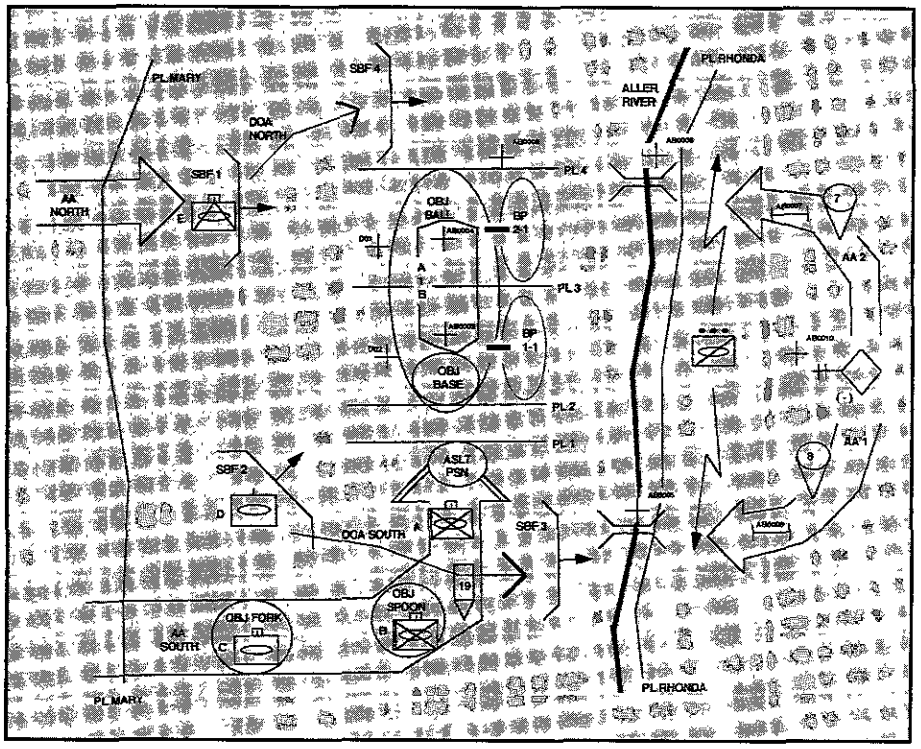


Figure 3

SYNCHRONIZATION MATRIX

EVENT / BOS	PL MARY	ASSAULT (C/O LEAD TEAM REPORTS PL 1)	PL 2	OBJ BASE SEIZED	PL 3	PL 4	CONSOLIDATION
TM A	AA SOUTH / OCC ASLT PSN	AA SOUTH / BEGIN ASLT OBJ BASE	REPORT PL 2	MARK AND CLEAR 2 VEHICLE LANES	OCCUPY BP 1 - 1 / ORIENT AB005 - 006		
TM B (M / E)	AA SOUTH / OCC OBJ SPOON	AA SOUTH / OCC OBJ SPOON	MOVE TO ASSAULT PSN	PASS THRU TM A / ASLT OBJ BALL	REPORT PL 3	REPORT PL 4	OCCUPY BP 2- 1 / AB006
TM C (RES)	AA SOUTH / OCCUPY OBJ FORK	PRIORITIES: 1) OCC SBF 3 / BLOCK CATK 2) SEIZE BALL		OCCUPY OBJ SPOON	PRIORITIES 1) B / P SEIZE BALL 2) BLOCK CATK		OCCUPY SBF 2 / ORIENT TRP D01 - CP19
D CO	OCCUPY SBF 2 / SUPPRESS PL 2 - PL 3	SUPPRESS PL 2 TO PL 3	SUPPRESS TRP 001 TO 002	DOA SOUTH OCC SBF 3 / AB005 BLOCK CATK			
TM E	OCCUPY SBF 1 / SUPPRESS PL 3 - PL 4	SUPPRESS PL 3 TO PL 4	SUPPRESS PL 3 TO PL 4		OCCUPY SBF 4 / AB006		
FIRE SUPPORT	FA - TM B 4.2 - TM B / FIRE A1B	FA - TM B 4.2 - TM B / FA - 004 4.2 - 003	FA - TM B 4.2 - TM B / FA - 004 4.2 - 004	FA - TM B 4.2 - TM B / FA - 004 4.2 - 004	LIFT FA, 4.2 / OBSV AB005, 6, 7, 8, 9		
SCOUTS	SCREEN PL RHONDA OBSERVE NAI 7 AND 8						
GSR	SCAN EN CATK AVE / APP 1 AND 2						
CSS	AA SOUTH / HOLD VIC CP 12						MOVE TO CP 19

Figure 4

cide, commanders must issue guidance to their subordinates on when to engage the enemy. As with fire distribution, this information is included in the maneuver paragraph, tasks to maneuver units paragraph, coordinating instructions, and synchronization matrix, if one is used. The various techniques for controlling and establishing engagement criteria are as follows:

Event Oriented. A commander can control engagement by specifying that a unit will not engage until a certain event occurs. For example, "Team Alpha will engage the enemy when the lead enemy company crosses Phase Line Blue."

Time Oriented. During offensive operations, a specific time may initiate engagement. For example, "Team Bravo suppresses the enemy on Objective Tiger at 120600 May (H-Hour) to prevent the enemy from concentrating fires on Team Delta, the main effort."

Sequential Engagement. To confuse the enemy as to the dispositions of defending forces, a commander may order engagements at different times for different units and weapons. For example, "A tank team may engage members of an enemy force first to cause them to orient on the tanks. Then a mechanized team and Team Echo engage the enemy's exposed flanks."

Visual and Radio Signals. To provide positive control of direct fires, a visual or radio signal may be used to initiate fire. For example, "Company A will begin its assault of Objective Stone when illumination rounds hit the objective, signaling the conclusion of the artillery preparation." Another example, "On order, Company E initiates suppression of Objective Dog; Codeword Apple via command net." A properly planned and rehearsed direct fire control plan, synchronized with the maneuver plan and indirect fires, will ensure that combat power is concentrated at the decisive point.

Using terrain and enemy oriented fire distribution techniques and engagement criteria will facilitate this synchronization of combat power.

Fire Control Plan

Figures 3 shows the operational graphics for Task Force 1-92 Infantry. Figure 4 is a synchronization matrix. This figure illustrates a direct fire control plan integrated into the maneuver plan.

Team Echo's mission is to suppress the enemy on Objective Ball to prevent the enemy from fixing the main effort to the south. To control Team Echo's

fires, the coordinating instructions and the synchronization matrix specify that Team Echo will initiate suppressive fire when the lead team (Alpha) crosses PL 1. Team Echo's sector of fire is between PL 3 and PL 4. After Objective Base is seized, Team Echo moves to and establishes support-by-fire (SBF) position 4 with its fires oriented toward TRP AB0006 (a TRP for both direct and indirect fire).

Delta Company's mission is to suppress the enemy on Objective Base to prevent him from fixing the main effort with direct fire. To control Delta Company's fires (Figure 4), the coordinating instructions and the synchronization matrix specify that Delta Company will initiate suppressive fire when the lead team (Alpha) crosses PL 1. Delta Company's sector of fire is between PL 2 and PL 3. After Team Alpha reports PL2, Delta Company shifts its fires to between TRP D01 and TRP D02 (both of which are direct fire TRPs.) Upon seizure of Objective Base, Delta Company moves along direction of attack (DOA) South to occupy SBF position 3 to block an enemy counterattack. The orientation of the company is toward TRP AB006.

A detailed direct fire control plan enables a unit to employ and mass direct fire on the enemy's formations or positions. In addition, it serves as the foundation for avoiding fratricide.

Captain Rick Burtnett has served as a platoon leader, company executive officer, and battalion S-3 Air in the 101st Airborne Division, and as a company commander in the Berlin Brigade. A former Small Group Instructor, CPT Burtnett has also served with the Combined Arms and Tactics Directorate of the U.S. Army Infantry School as a doctrine writer.

Captain Dennis M. Wince recently completed the Infantry Officer Advanced Course. He previously served as a line platoon leader, support platoon leader, and company executive officer in the 1st Battalion, 14th Infantry, 25th Infantry Division.

Team and Squad Movement

Firepower versus Speed

CAPTAIN MARK E. GREEN

There are numerous techniques for assaulting across an objective. Some units use individual movement techniques (IMTs) in crossing the objective as a fixed part of their standing operating procedures (SOPs), while others always rush across. But any time we tell leaders and soldiers to use the same technique all the time, we rob them of opportunities to exercise initiative and develop their leadership skills. We also violate the intent of mission-type orders. If junior leaders understand why different methods are used, they will learn to assess the current situation and then choose an appropriate technique.

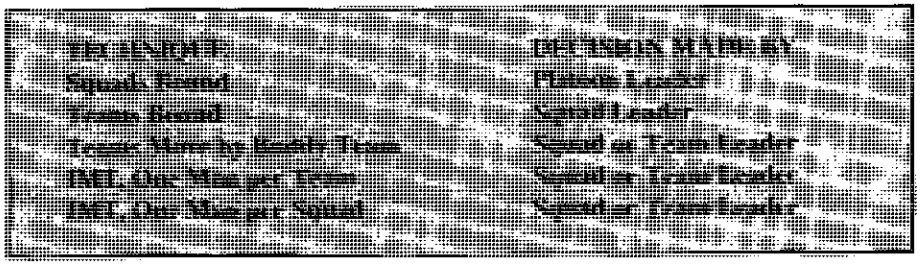
When conducting an assault, a leader must determine how much effective fire he is taking so he can determine the amount of firepower he needs to suppress the enemy fire. Once effective suppression is achieved, the maneuver elements sweep across the objective with the maximum speed the current situation allows.

In some cases, if four men are shooting, five men can maneuver: the firepower provided by the four shooters is all that is required to suppress the enemy fire, and the five-man maneuver element can move in three-to-five-second rushes. This, of course, is the *ideal* way of moving at maximum speed.

It is difficult, however, to control odd-sized units or mismatched elements in a combat situation. Breaking up teams to increase speed may cause more trouble than it is worth. One means of providing control and increasing speed is a set group of maneuver techniques.

The table below shows examples of set techniques and the leader who is responsible for assessing the situation and choosing the best technique.

The progression is from more movers



than shooters to more shooters than movers; again, the leader up front decides after assessing the effectiveness of the enemy's firepower.

Squads and Teams Bound. The leader of the entire assault element may select this technique, in which one team or squad provides the base of fire while the other maneuvers. The firing team must be able to gain and maintain fire superiority—the key decision of the leader.

Team Moves by Buddy Team. As the team leader maneuvers his element, he encounters fire that prevents him from moving all of his force at the same time. He gives the command to move by buddy team—one two-man team suppresses as the other bounds forward. In this case, the fire of half of his element is enough to suppress the enemy.

One Man Moves per Team or Squad: A numbering system for each member of the team allows the team leader to control the one man moving. The following number system might be used:

#1 Man — Team Leader
#2 Man — SAW Gunner
#3 Man — M203 Gunner
#4 Man — Rifleman

The soldiers know that the movement sequence is always 1, 3, 2, 4, or whatever their leader deems best. Once movement is initiated, the #3 man always moves after hearing that the #1 man is set and so on. No continued commands are required, and the team moves with three men shooting and one maneuvering. This works just as well with a squad—one fire team provides a base of fire while one moves a soldier at a time to a predesignated location. From the new location it provides fire for the other team while it comes on line.

Trying to get the best of all worlds—speed, firepower, and control—is difficult, but it is a worthwhile challenge for commanders who want well-trained units. Relying on only one set method or another fails to develop junior leaders and disregards the advantages of having a leader up front to make the decision. The best possible solution is to have a number of techniques that vary speed and firepower. The end result is a team or squad leader who learns to think, apply the basics, and then maneuver his unit to close with and defeat the enemy.

Captain Mark E. Green commands a company in the 1st Battalion, 505th Infantry, 82d Airborne Division. He previously led a mechanized infantry rifle platoon and scout platoon and served as a battalion S-4 and a battalion S-1. He is a 1986 graduate of the United States Military Academy.

LRSD
Adapt, Improvise, and Overcome

CAPTAIN JOHN A. SCHATZEL

During Operations DESERT SHIELD and DESERT STORM, the 1st Infantry Division's long-range surveillance detachment (LRSD) conducted 14 successful combat surveillance missions. The soldiers' training back at Fort Riley, Kansas—along with their ability to *adapt, improvise, and overcome* in the face of difficulties—led to that success. The success of those missions was a result of the following ideas, policies, and actions:

Modify the MTOE. The modified tables of organization and equipment (MTOE) for the divisional LRSD authorizes six surveillance teams, each consisting of five 11B infantrymen and one 31C communications specialist. The radio base station consists primarily of 31Cs but also incorporates eight 11Bs.

In our detachment it was obvious that the 31Cs needed to be moved out of the surveillance teams and to be replaced by the 11Bs from the base station. Since communication procedures are an essential part of every LRSD soldier's training, there was virtually no difference in communications abilities between the soldiers in the 11-series and those in the 31-series.

This reorganization produced two great benefits with no drawbacks:

First, the noncommissioned officers were now in a position to train soldiers in the same specialties as themselves. Under the old organization, it was difficult for a surveillance team leader to train his 31Cs for the portion of the skill qualification test that dealt with communications equipment his team did not use. Likewise, it was difficult for an NCO in the communications section to train a subordinate 11B soldier for an expert infantryman's badge (EIB) test.

The reorganization resulted in soldier skill test scores and EIB success rates that were significantly higher than in previous years.

Second, the soldiers were now in a position to advance from private to staff sergeant, depending on their specialties, without having to transfer from a surveillance team or communications section.

Stabilize the Teams. With the communications and infantry soldiers realigned in the teams and the communications section, stabilization increased. The first sergeant insisted that a soldier be kept in the same team, communications section, or headquarters element unless there was a very good reason to move him. Team leaders were permitted to move soldiers within a team, either permanently or on a mission-by-mission basis, in the interest of cross-training.

Stabilizing soldiers in the teams gave the team leaders every opportunity to develop the SOPs and the team cohesion that were essential to mission accomplishment. As a result, more than 75 percent of the surveillance team members who deployed during the Gulf War were in the same team they had been in during a rotation at the National Training Center (NTC) a year earlier.

Develop an Isolation Drill. The isolation phase of an operation consisted of the troop-leading procedures required to prepare a team for its mission. The teams prepared in isolation to ensure that the missions of adjacent teams would not be compromised in the event a team was captured. The detachment's operations section standardized the troop-leading procedures with an isolation drill that did not detract from the team leaders' individual leadership styles.

The experience gained during training exercises convinced the team leaders that isolation for longer than 72 hours was counterproductive because of "cabin fever." They also concluded that 18 hours was the minimum time isolation could be maintained without degrading the teams' readiness. The operations section therefore developed an ideal 72-hour isolation timeline and a worst-case 18-hour timeline.

These timelines used the one-third, two-thirds rule as a guide. They were marked with the "no-later-than" times for the completion of specific events, such as inspections, the mission brief to surveillance teams, team backbriefs to the commander, and rehearsals.

Training at the NTC soon revealed the need for one more control measure: Team leaders needed to brief the commander not later than one hour after receiving a mission. They briefed their scheme of maneuver, the isolation and mission timelines, and areas of concern.

Before the isolation drill was developed, the mission packet the team leader was given, the operations order he presented, and the detailed backbrief all followed different formats. Further complicating the process was the perception that every team member needed to know every piece of information. The isolation drill standardized all of the formats using the five-paragraph operations order format and assigned areas of responsibility on the basis of duty positions.

The only deviation from the standard operations order format was the placement of the intelligence requirements. Since the LRSD mission of observing and reporting differed from the missions of other combat units, it seemed logical to move the intelligence requirements from the Coordinating Instructions of Paragraph III to the end of the Enemy Forces portion of Paragraph I. Briefings were much easier when the senior scout briefed what the enemy had, what the enemy could do, and what the LRSD could observe to help it anticipate what the enemy would do.

The teams soon realized that they could plan faster if each soldier had an area of expertise and responsibility, similar to the radio-telephone operator (RTO) or medic on a Special Forces team. The senior scout and scout observer divided Paragraph I; the RTO and assistant RTO wrote Paragraph V; the assistant team leader coordinated Paragraph IV; and the team leader formulated Paragraphs II and III.

Although the entire team was required to memorize critical pieces of information such as intelligence requirements and the communications plan, most of it could be memorized by one or two soldiers. The other team members who listened to the three operations briefings and participated in the preparations and rehearsals also gained a general understanding of that portion of the operation.

Using a timeline and standardized briefing formats in Iraq, the surveillance teams were better prepared for a mission with 18 hours of isolation than they had been with 72 hours at the NTC.

Anticipate Operations. The ability of the leaders in the detachment headquarters to anticipate and influence future operations contributed as much to condensed planning at detachment level as the isolation drill had at team level. The detachment executive officer had established a close working relationship with the Military Intelligence battalion, the G-2 and G-3 sections, the aviation brigade, and the map agencies during simulation exercises and training missions.

We learned where to go for indications of possible missions and conducted planning on timelines parallel to, or in conjunction with, those of the other agencies. As a result, we could usually anticipate requirements, and we were never caught off guard. During the Gulf War, we continued to anticipate future missions while planning current operations with maneuver brigades and battalions, special operations units, and allied nations.

Implement a No-communication Drill. The science of AM communication is not as exact as commanders would like it to be (or as unpredictable as communications sergeants often claim). By knowing and using all available systems, developing SOPs to handle contingencies, and rehearsing the communications plan, the detachment was able to establisb reliable communications over distances of more than 1,000 miles. In anything short of a perfect plan, of course, several factors invite problems—the limitations and constraints imposed by the authorized and on-hand types and quantities of

communications equipment; expertise with expedient antennas; and the geographic area, terrain, weather, and atmospheric conditions.

The team leaders also learned not to keep a team radio turned off in a team box between missions instead of lending it to the base station, which could use it to monitor another frequency or transmit in another direction.

The company commander also never forgot the initiative of the NCOs who—through liaison with the U.S. Army Natick Research, Development, and Engineering Center—became the voluntary test bed for a dozen state-of-the-art antennas. These antennas, like the global positioning system, were to prove themselves invaluable in the desert.

It became apparent during training exercises that communication rarely worked exactly as planned. Without an alternative means of communication, it was difficult to establish radio communication. Invariably, as the element on one end was changing batteries, the other was trying to transmit. When one end was on the primary frequency, the other was on the alternate. If frequencies were changed, antenna lengths had to be adjusted. This was time-consuming in training and could be life-threatening in combat.

After months of training and more than a fair number of failures and good ideas, the communications section devised a detailed no-communication drill. This drill standardized the process of systematically and incrementally changing the various factors and components until communication had been established.

The process started with the obvious troubleshooting of batteries and connections and worked its way through various antenna types and alternate frequencies. Only the surveillance teams performed the no-communication drill; the base stations, augmented with the radios of the non-deployed teams, stood ready 24 hours a day with every available radio tuned to an alternate frequency. The antennas were cut to resonate on a specific frequency (like a tuning fork), laid on an azimuth, and inclined at a take-off angle based upon the transmitting distance to improve the chances of establishing communication.

A good communication plan and a solid SOP were ready for combat only after rehearsals in the desert had perfected them. By deploying a base radio station to the detachment's rear—a distance that roughly matched the distance the teams would eventually be deployed to its front—the detachment conducted a realistic rehearsal. Information gathered during these rehearsals led to the modification of communication windows to avoid the inevitable downtime caused by atmospheric conditions. The

dedicated logging and analysis of data to determine which frequencies and antenna configurations worked best for various distances and times of day demonstrated again that the detachment could adapt, improvise, and overcome.

Dig In. The first sergeant concluded that the communications rehearsal would provide a great opportunity to refine our methods of digging a surveillance site. Each team prepared its experimental site within the perimeter of the base camp. After much discussion and experimentation, a "Y" configuration was adopted as the standard.

Insert Teams. Once the team leaders established a standard configuration for their surveillance sites, they and their team members started putting the pieces together while establishing priorities and following the commander's intent. The LRSD complied with the commander's intent, even though our insertion was not as glamorous as we had envisioned during training. The intent of the Central Command commander was to show strength in the east and then flex units to the west. The LRSD therefore inserted its surveillance teams using Bradleys, which brought the teams within 10 kilometers of their surveillance position.

The decision to use ground insertion outweighed any consideration of airmobile insertion, since insertion by air could be observed from a greater distance. A Bradley fighting vehicle, even if it was observed, would attract less attention than a Black Hawk helicopter.

On the ground, the team leaders constantly reminded their teams of the importance of communications. The first report would inform detachment operations and then the division commander that the team had been successfully inserted and had established communications.

The division could now be confident of two things: First, if there was activity in a sector that met one of the intelligence requirements, a report from a team would be received. Second—just as important, although not as obvious—once the team's insertion was verified, if there was no report from a team, it could be assumed that there was no activity in that sector. Making communication a priority on the ground reminded the surveillance team that an ideal site was one that afforded both fields of view onto the objective area and communications with the base stations.

Know What to Observe. After analyzing the commander's intent and the G-2'S collection plan, the operations section conveyed this information to the teams by establishing intelligence requirements based upon precise quantifiable observations. For instance, the divisional primary intelligence requirement (PIR) of looking for the main effort or counterattack force at the NTC was refined in the desert and relayed to the teams as a requirement to report ten or more combat vehicles moving in formation.

The detachment's SOP identified PIR as intelligence that must be reported immediately, SIR (special intelligence requirements) as intelligence that the team would report during its next communications window, up to 12 hours later, and OIR (other intelligence requirements) as intelligence the team would report in person at the debriefing at the end of the mission. Although these terms may not have been used doctrinally or conventionally, they caused no confusion in the unit.

Every soldier's ability to identify threat vehicles and aircraft was tested as part of a rigorous program of instruction at the Long Range Surveillance Leaders Course at Fort Benning, Georgia. *(See also "Selecting and Training Long Range Surveillance Unit Commanders," by Captain David A. McBride, INFANTRY Magazine, July-August 1992, Pages 42-44.)* The soldiers kept these skills finely tuned in the desert by looking at hard-copy surveillance photographs and 35mm slides projected against a tent liner at the company base camp.

Trust. After all of these points had been made, debated, and instituted, the chain of command delegated the execution of its mission to the soldiers of the detachment. The training phase had taken months in a field and garrison environment back in the United States and 12 days of pre-combat rehearsals in Saudi Arabia. Over the next 33 days, a solid, confident trust developed between the soldiers and leaders of the detachment—forged during training and tested in combat, and which resulted in 14 successful combat surveillance missions.

At 1200 hours on Saturday, February 23, two Black Hawk helicopters linked up and performed the unscheduled extraction of Teams 1 and 2. In less than 18 hours, the detachment crossed the berm it had observed for five weeks and, along with the rest of the division, completed its DESERT STORM mission.

During the next four days, the detachment moved hundreds of miles, conducted bunker and trench clearing operations, destroyed a handful of armored vehicles, and collected dozens of enemy prisoners from the Iraqi Republican Guard.

The men of the 1st Infantry Division's LRSD—whether at the NTC, during EIB competition, on a C-130 over a drop zone at Fort Riley, or in the sands of Iraq, Kuwait, and Saudi Arabia—proved their ability to *adapt, improvise, and overcome.*

Captain John A. Schatzel commanded the 1st Infantry Division's long-range surveillance detachment during the Gulf War. Previously, he led a platoon in the 82d Airborne Division in Grenada and commanded a company in the 5th Battalion, 16th Infantry at Fort Riley. He is now serving as an Infantry branch advisor with Readiness Group, Fort Riley, Fifth Continental United States Army.

Security of the Force
A Commander's Call

CAPTAIN BRUCE H. IRWIN

When rioting broke out in Los Angeles, California, in April 1992, my unit of the California Army National Guard was mobilized to conduct civil defense operations. I had just assumed command of Company B, 2d Battalion, 159th Infantry, in March. On 30 April at 1600, I received notice of the mobilization. By Active Army standards, I had had only four days, or two drills, as the commander.

During two weeks of riot control, certain conflicts developed from incidents that my unit faced; in the process, we learned some lessons. Some of the incidents during those two weeks may also raise thought-provoking questions for other company commanders as they prepare for future operations of this kind.

At 1600 on Friday, 1 May, after a 12-hour truck road march, we arrived in the Los Angeles area. Our initial mission required us to protect critical terrain (malls, stores, checkpoints) so the police could conduct arresting patrols. In our initial staging area, we received our second issue of the Rules of Engagement (ROEs); the rules shown here (Table 1) were passed to each soldier the next day, along with the arming order matrix (Table 2).

The authority to move to a different arming order created a problem. We were required to coordinate with numerous organizations for the order. At times, a conflict developed between our duty to follow the guidelines of these organizations and our duty to make sure our soldiers were safe and had enough time to react to a threat.

On 2 May we were given part of the responsibility for protecting a major mall. As we prepared to go to our guard positions, two shots rang out at

the end of the parking lot. The shooters escaped. Later, several suspected gang members began driving by, looking at our positions. One group stopped in front of one of our positions and gestured for the soldiers to come to their car; the soldiers ignored them.

The policemen had told us that a gun store several blocks from our positions had been looted and that weapon trading in the local area had been observed. Obviously, the local gangs were well armed. Before this activity, numerous organizations wanted our soldiers at Arming Order 1; now we faced a difficult decision on whether to go to a higher arming order.

Around noon, a car began moving around the perimeter, stopping at many different places—the classic mode of a drive-by shooting, or a reconnaissance for one. At one point, several soldiers aimed their weapons at it. When the police chased the vehicle and pulled it over, the driver turned out to be a man driving around with his family trying to thank the National Guardsmen for being there. He admitted that he was not wise to be driving around our perimeter.

At the same time, my second platoon stood guard at a police checkpoint and conducted roving patrols. During this operation, one squad made four arrests. Apparently, the squad had come across two looters taking two cases of beer. The soldiers detained the two individuals and followed the same procedures as they would in taking enemy prisoners of war. Later, they detained two more people who were trying to take the same two cases of beer. For this operation, Arming Order 1 deserved serious reconsideration.

Saturday evening, the battalion deployed its reserve to guard two fire stations. The reserve consisted of two sections that came under Company B—cooks, mechanics, medics, and staff members. When I was notified, I went to the first station, which had plenty of police and plenty of light. As I went to check the other station, however, I saw all the burned-out buildings and, within a few blocks, no power. (All other vehicles to this point had police escorts.) As I looked at the map and tried to read street signs without lights, a suspected gang vehicle began following us. (One feature of typical gang vehicles was darkened windows.) The vehicle followed mine for about four blocks until both had to stop. The other vehicle pulled alongside us on our driver's side, and a window came down—a pretty good indication that this might be a drive-by shooting. My driver made a quick right turn, and as we drove away the other vehicle remained parked for several minutes. To say that things got a little tense is an understatement.

On Sunday morning, a problem arose with the firemen, who, along with the paramedics, had received gunfire and threats over the previous days. I spoke with the fire captain and agreed to put National Guardsmen on the fire engine and in the paramedics' ambulance. This improved the firemen's morale considerably, and there were no further incidents.

On Monday, my company assembled to protect a mall south of the sports

SPECIAL ORDERS
FOR CIVIL DISTURBANCE OPERATIONS

A. Every serviceman has the right under law to use reasonable and necessary force to defend himself against violent and dangerous personal attack. The limitations described below are not intended to infringe this right, but to prevent the indiscriminate use of force.

B. Force will never be used unless necessary, and then only the minimum force necessary will be used.
1. **Use non-deadly force to:**
   a. **Control the disturbance.**
   b. **Prevent crimes.**
   c. **Apprehend or detain persons who have committed crimes.**
2. **Use deadly force only when:**
   a. **Lesser means of force are exhausted or unavailable,** ***and***
   b. **Risk of death or serious bodily harm to innocent persons is not significantly increased by the use,** ***and***
   c. **The purpose of use is one of the following:**
      (1) **Self defense to avoid death or serious bodily harm.**
      (2) **Prevention of crime involving death or serious bodily harm.**
      (3) **Prevention of destruction of public utilities that have been determined vital by the task force commander.**
      (4) **Detention or prevention of escape of persons who present a clear threat of loss of life.**
3. **When possible, the use of deadly force should be preceded by a clear warning that such force is contemplated or imminent.**
4. **Warning shots are not to be used.**
5. **When firing, shots will be aimed to wound, if possible, rather than to kill.**
6. **Weapons will not be fired on automatic.**
7. **When possible, let civilian police arrest lawbreakers.**
8. **Allow properly identified news reporters freedom of movement as long as they do not interfere with your mission.**
9. **Do not talk about this operation or pass information about it to unauthorized persons; refer them to your commander or public affairs officer.**
10. **Joint task force commander withholds authority for use of riot control agents and sniper teams.**

Table 1

Arming Order	Rifle	Bayonet Scabbard	Bayonet	Pistol	Baton	Ammunition Magazine/Chamber	Control
1	Sling	on belt	Scabbard	holstered	belt	in pouch/empty	OIC/NCOIC
2	Port	on belt	Scabbard	holstered	belt	in pouch/empty	OIC/NCOIC
3	Sling	on belt	Fixed	holstered	hand	in pouch/empty	OIC/NCOIC
4	Port	on belt	Fixed	holstered	hand	in pouch/empty	OIC/NCOIC
5	Port	on belt	Fixed	holstered	hand	in weapon/empty	OIC/NCOIC
6	Port	on belt	Fixed	in hand	bolt	in weapon/locked & loaded	OIC

Table 2

arena. The mall had been looted to some extent, but remained intact for the most part. Around midnight—while I was walking the perimeter with my XO and operations NCO—a car went by and stopped out front. The driver's window was opened, and an arm came out with a pistol and fired four rounds in our direction. (Fortunately, the rounds did not land near us.) We let the police know about it, and they caught four youths with a .25 caliber automatic pistol and a starter pistol. The operations NCO identified them and would later testify against them. None of my soldiers returned fire.

Then, while I was talking to a squad leader on the opposite side of the mall, another car with tinted windows went by slowly. As the driver turned around and slowed to a stop about 25 feet from my position, I ordered everyone to take cover. At this point, the driver stopped and began rolling his window down. I ordered everyone to lock and load. The driver must have heard 40 M16 bolts sliding forward with the weapons aiming at him: He yelled, "Camera, I've got a camera!" and quickly drove off. Either he was conducting a reconnaissance mission for a future drive-by shooting, or he was just plain foolish. Obviously, we did not stay at Arming Order 1 in that case.

The only other incident that evening involved soldiers performing observation operations. As part of our protection plan, my platoon leaders had placed snipers on the mall roof. Two of the soldiers were observing a "crack house" where cars were coming and going. Every time one car left, we would hear shots. The soldiers told the police, who then raided the house and confiscated an Uzi machinegun. Staying alert, reporting, and communicating played a major part in this operation.

The next day, the company received a mission to protect another mall. That night, we posted guards in front of the mall with roving patrols to the rear. During one of these patrols, one of my squads saw a truck outside a door and heard the sounds of a possible break-in. The squad leader put one team in overwatch while he and the rest of the squad moved up from the rear of the vehicle. As the squad leader walked up behind the passenger side of the vehicle to ask the personnel their intentions, he saw a gun in the ash tray. He yelled, "Gun!" and the entire squad surrounded the vehicle. Without any command, a squad from another platoon ran to the aid of the first squad. When I arrived, I saw the squad facing outward and two individuals with slip cuffs against the truck. The platoon leader had already called the police, who then took charge. The question of which arming order was applicable here is a tough call.

The next day, we moved to our final mall position. Around midnight, one of our roving patrols turned a corner as shots rang out, and we thought the worst. Driving to the location, I loaded the reinforcing squad into my vehicle to help the platoon leader and quickly moved to the roving squad's position. When I arrived, the platoon leader deployed his second squad, and I found that the other one had suffered no casualties. No other significant events occurred that evening.

This operation really opened my eyes to the meaning of "command decisions." I had never really thought that being a commander involved issues of this kind. It is never a good situation for a commander when his soldiers either risk injury or face killing someone, especially fellow U.S. citizens.

Overall, the gratitude of families, police, firemen, and other people of Los Angeles made this a worthwhile operation. We learned many lessons:

- Bring everything. We forgot our field sanitation kits and had a serious problem with flies and garbage at one location.
- Squad leaders win conflicts. Twenty percent of my soldiers were combat veterans of Southwest Asia, Panama, or Vietnam, and their experience helped a lot.
- Conduct training using rules of engagement.
- The police and the local populace provided the best intelligence. Additionally, we used local radios to communicate with the police and security personnel.
- Use professional development classes to bolster unit proficiency. Much of my focus and training came from classes on the operations in Panama.

After our initial alert, we began civil defense training within six hours. Requiring platoon certification in the training helped the soldiers focus on the gravity of the situation. As soon as they felt they had trained to standard, I added more difficulty—fixing bayonets, employing snipers, and operating with protective masks. I also had the soldiers perform battle drills.

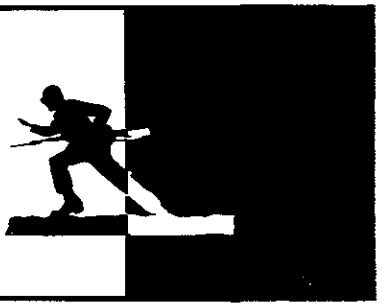
Upon our arrival at any assigned location during this operation, the platoons used the same procedures dismounting their trucks that they would use dismounting an armored personnel carrier. The soldiers also began squad combat patrols as soon as they arrived at any site. This not only put them in a tactical frame of mind, it also sent a message to any gang members who might be watching. As in other operations the enemy (in whatever form) can be expected to exploit any apparent weakness.

During this operation, I found it important to stay near the troops and to walk the perimeter. Additionally, staying in uniform and using field discipline were just as important here as anywhere else. Under the circumstances, I believe a commander absolutely must know the capabilities of all his soldiers. By the end of this operation, I had a good idea of which soldiers I could count on, although these were not the ideal circumstances in which to test some of them.

Finally, I feel confident that my soldiers and leaders will rise to the call in case of another mobilization.

Captain Bruce H. Irwin commands Company B, 2d Battalion, 150th Infantry, California Army National Guard. He previously served on active duty with the 7th Infantry Division. He is a 1984 graduate of the United States Military Academy.

ENLISTED CAREER NOTES



PROFESSIONAL DEVELOPMENT AND CAREER MANAGEMENT

The professional development of Infantry noncommissioned officers (NCOs) is an Infantry career advisor's primary responsibility. But he is also responsible for managing each NCO's career, as well as performing other duties that affect the total force.

For instance, a career advisor nominates NCOs for duty as recruiters, drill sergeants, observer-controllers, and other special management assignments. In addition, he acts as a consultant to the civilian assignment manager and is instrumental in making the final preparations for NCO assignments.

A career advisor ensures the professional development of his NCOs by seeing that they receive varied assignments and increased responsibility. He also identifies NCOs who require special training for their next assignments and ensures that they receive that training, usually on a temporary duty basis en route to those assignments. Two of the more common sources of this training are the Observer-Controller Course and the First Sergeant Course.

A career advisor has two ways of establishing an accurate picture of an NCO's qualifications and career progression. One is from the personnel data base, the other from the career management information file (CMIF). If an NCO's CMIF contains DA Forms 2A and 2-1, Personnel Qualification Record (PQR), an updated official photograph, and correct copies of his most current DA Form 2166-7, NCO Evaluation Report, the advisor can get a true assessment of the NCO's career. As a result, the NCO will be more competitive for nominative assignments or school selections.

Although career management is the responsibility of the career advisors at PERSCOM, career development begins with the individual soldier. The soldier is responsible for making sure the information on his PQR is correct during the annual records update conducted by his local personnel service center.

OBSERVER-CONTROLLER ASSIGNMENTS

Infantry Branch at the Total Army Personnel Command (PERSCOM) is continually seeking top NCOs in CMF 11 to fill assignments as observer-controllers (OCs) at the Joint Readiness Training Center (JRTC) and the National Training Center (NTC).

To qualify for these assignments, NCOs must have outstanding performance records and competitive schooling records. Sergeants first class must have served at least two years as platoon sergeants in TOE units; staff sergeants must have served at least two years as squad leaders in TOE units. All NCOs must have GT scores of 100 or more with no physical profiles (except for glasses).

The JRTC is now authorized 11M J3s (Bradley infantry fighting vehicle crewman, with master gunner qualifications). Only the top 10 percent of NCOs are assigned to these tough but rewarding positions.

If you are interested in one of these assignments and meet these standards, submit DA Form 4187, your NCO-ER form, DA Forms 2A and 2-1, and your most recent DA photo through your chain of command.

TRANSFERRING ARTICLE 15s FROM PERFORMANCE RECORD

One of the most serious setbacks for an NCO in relation to promotions is the presence of an Article 15 in the performance portion of his official file. Before a soldier enters the zone of consideration for promotion, he should make every effort to have the Article 15 removed and transferred to his restricted file.

This action will not guarantee that a soldier will be selected for promotion, nor will it cause a reconsideration of his previous nonselection. But failing to take action to move the Article 15 will send a negative message to the promotion board.

NCOs in the rank of staff sergeant and above may request the transfer by petitioning the Department of the Army Suitability Evaluation Board. These NCOs should refer to AR 27-10 for detailed information on how to file such a petition. NCOs in the ranks of sergeant and below may request the transfer under the provisions of AR 15-185. A board considers each petition and then makes a decision.

Soldiers who have Article 15s in their records should seek help from their personnel staff NCOs and legal clerks in preparing and submitting petitions.

EXCEPTIONAL FAMILY MEMBER PROGRAM

Some Infantry soldiers who have family members with special medical or educational needs run into problems when they are reassigned. Specifically, these problems arise when soldiers who are not enrolled in the Exceptional Family Member Program (EFMP) receive assignment instructions for overseas duty and apply for family travel. Some of these requests are being disapproved because the gaining unit does not have the proper facilities to care for an exceptional family member.

Faced with the prospect of a two-year family separation, these soldiers call PERSCOM and request either a change of assignment to a short tour or deletion from overseas assignment. Deletions and deferments from assignment instructions will not be granted solely for the purpose of enrollment in the EFMP.

Since 1 August 1986, Infantry soldiers with assignment instructions for duty outside the continental United States (OCONUS) have been required to have family members medically and educationally screened and, if there is a special need, enrolled in the program.

It is to the advantage of the soldier and his family to enroll in the program before he receives assignment instructions. Then, when he is nominated for assignment, PERSCOM will coordinate with the gaining command to determine whether the needed services are available.

Soldiers who indicate on DA Form 4187, Reassignment Processing, that their family members require special services, should know that decisions on OCONUS family travel will not be made final unless they are enrolled in the program or complete and forward information on their special needs to the gaining OCONUS command.

Infantry soldiers may enroll through their local Army medical treatment facilities. Questionnaires (DA Form 5291-R series) or a Functional Medical Summary Sheet are completed by the sponsor and verified by the attending medical or educational specialist. The questionnaires or summary sheets are forwarded to the regional EFMP coding team, which converts the information to coded booklets. This process is mandatory and must be revalidated every three years.

EFMP information is not maintained in local or DA-level files that are viewed by promotion or school selection boards.

CMIF UPDATE

A soldier's career management information file (CMIF) is a tool his assignment manager and professional development NCO use in considering his assignments and career development.

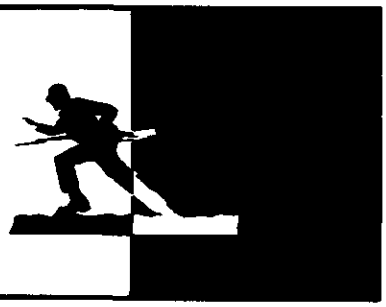
The soldier's CMIF is not to be confused with his official military personnel file (OMPF), although it often includes a microfiche copy of his OMPF. It also contains hard copies of the soldier's DA Form 2A (Personnel Qualification Record Part I) and 2-1 (Personnel Qualification Record Part II), academic evaluation reports, enlisted evaluation reports, and correspondence to and from the soldier. The CMIF does not represent the soldier before any boards, such as DA decentralized promotion boards; hardcopy enlisted evaluation reports are sometimes requested by Fort Benjamin Harrison when there is a need to complete or reconstruct an OMPF.

A soldier's CMIF is created when he is promoted to staff sergeant and his assignment manager requests copies of his DA Forms 2A and 2-1. The file steadily grows, accumulating assignment and career development transactions, correspondence to and from the soldier, and documents that detail the soldier's abilities and performance during periods of service.

A soldier can make sure the most accurate data represents him by forwarding copies of his DA Forms 2A and 2-1 at least every two years. This information also helps his assignment officer match his desires with the needs of the Army.

The mailing address for sending updated DA Forms 2-1 is Commander, PERSCOM, ATTN: TAPC-EPK-I, 2461 Eisenhower Avenue, Alexandria, VA 22331-0452.

OFFICERS CAREER NOTES



INFANTRY OFFICER ADVANCED COURSE, RESERVE COMPONENT

The three-phase Infantry Officer Advanced Course-Reserve Component (IOAC-RC) is no longer offered. Effective 1 October 1992, students enrolling in IOAC-RC now come under the new two-phase program.

Students already enrolled in the old three-phase program are provided the following guidance:

- Students who complete Phase I resident, Phase II CAS^3, and Phase II-B (Branch Specific) will be declared graduates upon verification of all requirements.
- Students who complete Phase I and some of the correspondence phases must complete the correspondence portion by 30 September 1993 to be declared graduates.
- Students who complete Phase III and some or all of the correspondence portion must attend one resident phase and complete the correspondence portion by 30 September 1993.
- Students who have not completed any resident or correspondence portion must complete Phase I of CAS^3, Phase II-B, and one resident phase by 30 September 1993.
- Students who do not complete these requirements by 30 September 1993 will be dropped from the program.
- Portions of the old three-phase program that a student has completed will not be transferred to the new program.

The new two-phase program consists of 120 hours of correspondence and one two-week resident phase. Completion of the correspondence phase is a prerequisite for the resident phase. The two-phase program must be completed within two years of initial enrollment. A one-year extension may be granted by the proponent.

JOINT DUTY CREDIT FOR DESERT SHIELD/STORM

Officers who served in the Persian Gulf combat zone may be granted credit for full or partial joint-duty tours. They must have served in the Persian Gulf combat zone in positions that provided significant experience in joint matters during the period beginning 2 August 1990 and ending 28 February 1991.

The new provision of the National Defense Act, which went into effect on 23 October 1992, is not designed to set aside the previous joint officer requirements; it is intended to provide credit only for cases in which an officer truly gained significant experience involving the integrated employment of land, sea, and air forces during Operations DESERT SHIELD or DESERT STORM.

Once the criteria have been established and published to the officer community, officers will probably be given 30 days to submit their requests. The request format will require the following information: Officer's name, rank, Social Security number, branch or occupational specialty, dates of service in the combat zone, position duty title during the service, type of credit requested (full or partial), and narrative justification indicating the position served in, supported by factual evidence such as letters of recommendation, awards, officer evaluation reports, and the like.

ADVANCED CIVIL SCHOOLING (ACS)

Each year, Infantry Branch identifies about 50 branch-qualified captains to attend advanced civil schooling (ACS) during their senior company-grade years. Officers selected to pursue master's degrees as full-time students are typically linked to gaining qualification in a technical functional area, or to an instructor assignment at the United States Military Academy.

Selection for ACS has become increasingly competitive in recent years. Understandably, manner of performance is the crucial discriminator in the selection process. Undergraduate academic records are also important in predicting an officer's acceptance and success in graduate school.

The assignment officers at Infantry Branch are looking for applicants with above-average files and undergraduate grade-point averages above 2.5 on a 4-point scale. Career timelines must also support and protect the opportunity to get each officer back to a troop assignment in time to stay competitive for future promotion and command.

The time for an officer to begin examining an ACS option is when he assumes command. Infantry Branch normally begins filling ACS quotas (by functional area) eight to ten months before the start of the upcoming academic term (normally August of each year), so applications should be submitted by October of the preceding year.

A branch-qualified captain who wants to apply should submit a complete packet that includes DA Form 1618-R, Application for Detail as Student Officer at a Civilian Educational Institution; a copy of his undergraduate transcripts; and the results of his recent Graduate Record Examination (GRE) or Graduate Management Admissions Test (GMAT) scores.

Most applicants have to study before taking one of these tests. During the officer advanced course is probably a good time to prepare for and take the test. The cutoff score for applicants is 500 in each area.

Most important, an officer who is

interested in ACS or who has additional questions should call his branch representative early and often to make sure he is not missing anything. Officers in Functional Area 39 have excellent opportunities for ACS slots and need to call as soon as possible to pursue this opportunity.

ACADEMIC TRANSCRIPTS, YEAR GROUP 1988

Officers in Year Group 1988 should send a copy of their civilian institution academic transcripts to Infantry Branch to be placed in their career management information files (CMIFs). These transcripts are used to assess potential for advanced civil schooling, functional area designation, Army Acquisition Corps accession, and numerous nominative assignments.

Additionally, officers interested in attending fully funded graduate school should maintain a current copy of their GRE scores in their CMIFs. These scores remain valid for five years.

NONRESIDENT COMMAND AND GENERAL STAFF COLLEGE

An officer who is not selected to attend the resident Command and General Staff College after first eligibility should sign up for the nonresident course immediately.

An officer has several good reasons for finishing a command and staff course on his own:

To be eligible for an assignment to a troop location as a major. In the past, the assignment of officers who are not qualified in Military Educational Level (MEL) 4 to troop duty increased the frequency of second-string jobs and poor OERs.

To increase his competitiveness for a sister service resident CSC.

To qualify for a wide variety of high-speed assignments that require MEL 4.

To improve his promotion potential. All of the majors in the primary zone last year who were not MEL-4 qualified were passed over for promotion.

An officer can take nonresident CGSC by correspondence, by classroom instruction given by the U.S. Army Reserve (USAR) schools, or by participating in a combination of USAR school and correspondence. (AR 351-1 contains the details on how to sign up.)

The CGSC nonresident course is structured into six sequential phases with each phase consisting of a number of sub-courses. An officer must complete all course requirements in sequence, and within 48 months of the enrollment date.

ARMY ACQUISITION CORPS ACCESSION BOARD

Infantry Branch is looking for 22 outstanding officers from Year Group 1986 to become members of the Army Acquisition Corps. The accession board to select these officers will convene in October 1993.

The Army Acquisition Corps is a dedicated pool of highly qualified military and civilian acquisition specialists. These specialists are trained and developed to fill designated critical acquisition management positions throughout the Army and the Department of Defense.

To be eligible, an officer must be branch qualified, have the academic background and potential to excel in all required military and civil schooling, and have a demonstrated manner of performance that indicates a higher-than-average potential for advancement.

Infantry Branch is looking for officers who have the following qualifications:

- A solid manner of performance as an infantryman with center-of-mass command reports or better; someone who has done well in various jobs; a team player.
- An academic background suitable for advanced civil schooling; a cumulative grade-point average (GPA) of 2.7 or better, 3.0+ preferred; a good record in "hard science" courses.
- The academic potential to get into graduate school; Graduate Record Exam (GRE) score of 500+ in each area.

To make an informed decision, an officer should learn as much as he can about the program and seek the advice of his battalion commander. Captain Larese, AAC accession officer, at DSN 221-6354, can answer specific questions.

Applications and test dates for the GRE are available at local education centers. No officer should take the GRE "cold"; he should first take the practice tests found in study guides.

The application packet should contain the following:

- A memorandum or DA Form 4187 requesting accession into the Army Acquisition Corps.
- Copies of all undergraduate and graduate transcripts.
- A copy of GRE or GMAT scores.

The request packet must reach Infantry Branch by 30 September 1993. At that time, an updated copy of the applicant's officer record brief and microfiche will be ordered for the board in October.

In summary, we are not looking for officers who cannot make it as infantrymen. Rather, we are looking for a few good men who excel as infantrymen and have a special interest in making their future contribution to the Army in the acquisition field. We are sending only high-quality officers into the AAC, because we owe high quality to the infantrymen of the next century.

SENIOR OFFICER LOGISTICS MANAGEMENT COURSE

The Senior Officer Logistics Management Course is a one-week, multifunctional course specifically designed to provide an update for battalion and brigade commanders, primary staff officers, and Department of the Army civilians working in the logistics field.

The course encompasses maintenance, supply, and transportation, as well as hands-on experience with vehicles, weapons, and ammunition, as well

as medical, communications, NBC, missile, and quartermaster equipment. It is open to officers of all branches in the rank of major or higher from active Army, Reserve component, U.S. Marine Corps, and allied nations. DA civilians in the grade of GS-9 or higher are also eligible to enroll.

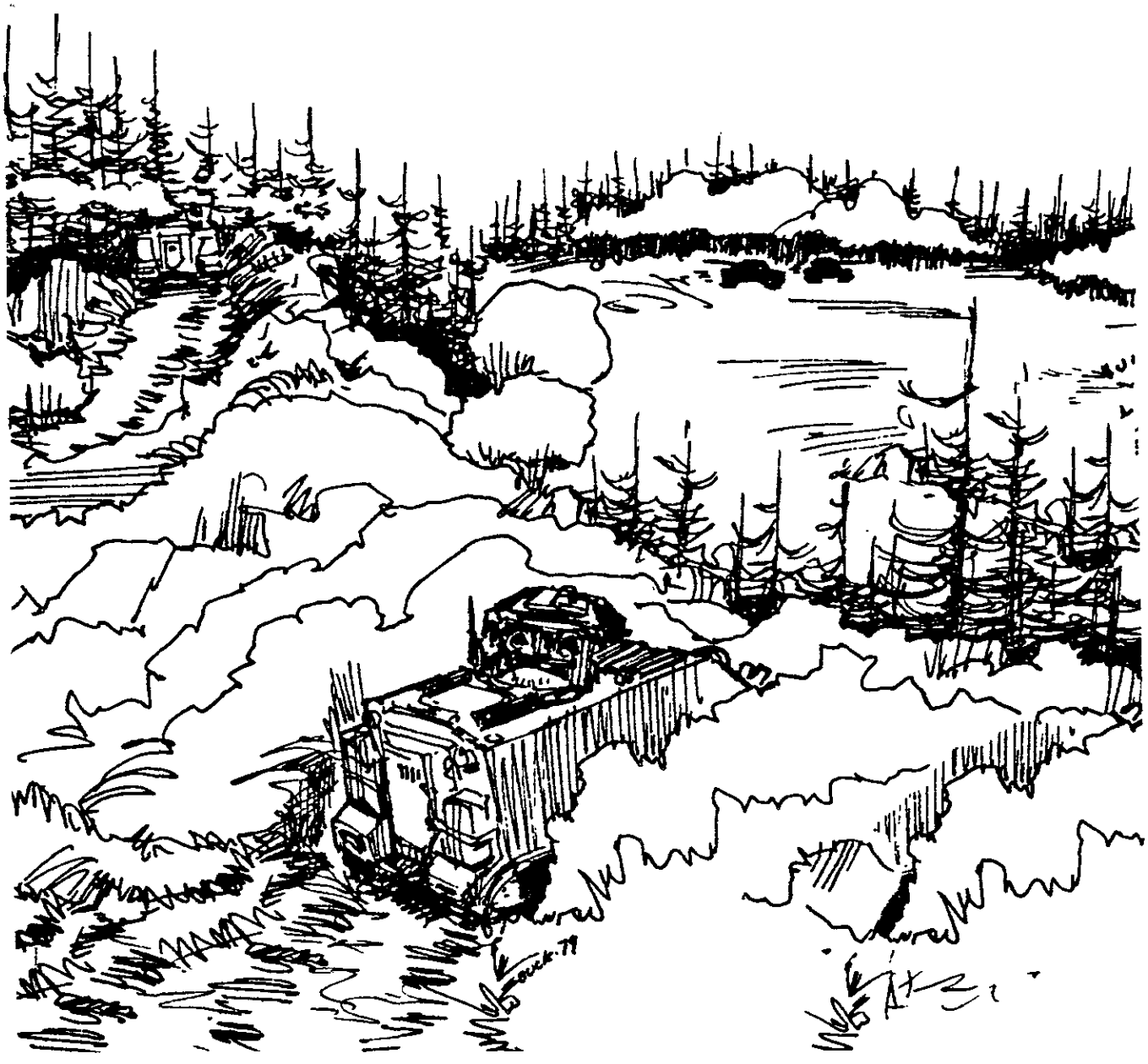
The one-week course is conducted 12 times each fiscal year at the U.S. Army Armor School, Fort Knox, Kentucky. Class quotas can be obtained through normal Training and Doctrine Command channels. Potential students must enroll through their G-3 or civilian training offices.

More information is available from the course staff, DSN 464-3411/8152 or commercial (502) 624-3411.

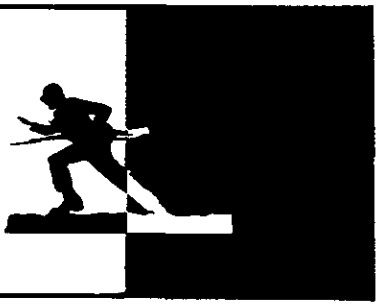
USMA TEACHING ASSIGNMENTS

The United States Military Academy's Department of Social Sciences is looking for company grade ROTC or OCS officers who are interested in teaching political science or economics. The Academy is now considering the applications of officers who may be available to start graduate study in the summer of 1994 or later.

Officers from basic year groups 1986-1990 who are interested in civilian graduate study followed by a teaching assignment at West Point should write to Department of Social Sciences, United States Military Academy, ATTN: Personnel Officer, West Point, NY 10996.



BOOK REVIEWS



WE WERE SOLDIERS ONCE. . .AND YOUNG, by Lieutenant General Harold G. Moore, USA (Retired) and Joseph L. Galloway. Random House, 1992. 464 Pages. $25.00. Reviewed by Lieutenant General Barry R. McCaffrey, Assistant to the Chairman, Joint Chiefs of Staff, Washington, D.C.

Retired Lieutenant General Hal Moore and correspondent Joe Galloway have written a gripping history of the savage Battle of the Ia Drang, which took place in November 1965. In my judgment, it is one of the most powerful and accurate accounts of U.S. infantry small-unit combat ever written. It is clearly the best piece of writing to come out of our tragic experience in Vietnam.

The authors bring to their moving tale the perspective they gained from being among the survivors of one of the bloodiest actions ever fought by the U.S. Army. Lieutenant Colonel Moore led the 1st Battalion, 7th Cavalry into the killing ground of landing zone (LZ) X-ray. Joe Galloway accompanied the assault forces as a young reporter for *United Press International*.

Moore and Galloway chronicle the ferocious combat involved in the air assault by a brigade of the newly arrived 1st Cavalry Division into the Ia Drang Valley along the Cambodian border. The battalion was first into the meat grinder with 450 troops landing at LZ X-ray. Only 250 survivors would come out. The subsequent piecemeal commitment of the 2d Battalion, 7th Cavalry into a tactical disaster at LZ Albany and the ground move of the 2d Battalion into LZ Columbus resulted in the death of more U.S. soldiers than were lost in any Union or Confederate regiment at the Battle of Gettysburg. The disciplined North Vietnamese troops of the PAVN (People's Army of North Vietnam) 320th, 33d, and 66th Regiments lost an estimated 2,000 killed as they aggressively pressed home their attacks from the looming high ground of the Chu Pong Massif.

There are a lot of reasons for a U.S. soldier to read this analysis of battle in the mire of the Ia Drang jungles. First, it brings home the central importance of leadership. The principal factor in the survival of the 1st Battalion, 7th Cavalry was the ability of its sergeants and lieutenants, its company commanders, and most important Lieutenant Colonel Moore and Sergeant Major Basil L. Plumley, to sort out the enormous confusion of small-unit combat and act decisively—even while wrapped in the crushing fatigue and brutality of the battle.

Second, the book demonstrates that the tactical axiom of infantry victory in combat is the effective employment of the combined arms team. U.S. artillery, attack helicopters, and close air support were the hammers that allowed the desperately outnumbered infantrymen to stay in the fight.

Finally, and most clearly, the book is a tribute to the heroism of the U.S. soldier. The reader sees combat through the eyes of Second Lieutenant Joe Marm, platoon leader and Medal of Honor winner; of company commanders Tony Nadal and Skip Fesmire; and of the countless brave sergeants and riflemen of the cavalry battalions. The lesson is one of raw courage that dominates fear and of the powerful love and sacrifice that glues together the U.S. Army in combat. These are men to be remembered. These are men to be used as examples when we have to face battle again.

In the final section of the book, entitled "Aftermath," the authors detail the slow process of sorting out the reasons for the bloody tactical draw between the most modern U.S. light infantry force in the world and a tenacious, well-led North Vietnamese division. Both the Americans and the North Vietnamese were shocked by the carnage. The subsequent course of the war was profoundly altered as both sides realized that a long, bloody road lay ahead. Many will argue that the North Vietnamese generals and revolutionary leaders had a clearer vision. They crafted a skillful political, psychological, and military strategy that handed the United States a long battlefield stalemate and an ultimate domestic defeat.

The book closes with an accounting of the human dimension of the battle as the authors talk of the children, wives, parents, and friends of the soldiers killed in the Ia Drang Valley. It's a good lesson for all of us who have responsibility for the lives of American soldiers. The worst effects of combat are not found in the casualty rolls of young lives lost and bodies maimed. Those at home suffer bitterly and with a sorrow that is equally lasting. Their memories of young faces frozen in time and lying forever in soldiers' graves never fade.

If we are to ask the young men and women of the armed forces to fight, we owe them clear political and military objectives and the latitude to close with their task and achieve decisive results. The costs in blood will be unbearable if we fail to understand this lesson of Vietnam. This admirable book brings the lesson home with vivid intensity.

We owe Hal Moore and Joe Galloway a debt for telling us this tale. Read this book of war. Learn of American infantry heroism in the firestorm that poured over outnumbered cavalry soldiers in the Valley of the Ia Drang. The young infantry soldiers who now stand guard for America can take strength from their powerful example.

CARL VON CLAUSEWITZ: HISTORICAL AND POLITICAL WRITINGS. Edited and Translated by Peter Paret and Daniel Moran. Princeton University Press, 1992. 397 Pages. $29.95. Reviewed by Dr. Charles E. White, Chief of Military History, United States Army Infantry School.

This is a splendid collection of Clausewitz's historical and political writings, superbly translated and brilliantly edited by Professors Peter Paret and Daniel Moran. It is intended to be a companion volume to Clausewitz's classic treatise *On War*, and it is a valuable source for understanding the genesis of Clausewitz's ideas on history, politics, and war, as well as his penetrating insights into the social, political, and cultural fabric of Napoleonic and Restoration Europe (1796-1832).

The texts are grouped into two categories: "Historical Writings" and "Political Writings." Introductions, followed by brief analyses, precede each category and individual essay. Footnotes supplement and clarify ambiguities in the texts. All of the transla-

War will be more interesting to social historians than to those primarily interested in military history. Still, the first English translation of this eyewitness account fills a tremendous void in our study of the Revolutionary War period.

THE U.S. MARINE CORPS IN CRISIS: RIBBON CREEK AND RECRUIT TRAINING, by Keith Fleming. University of South Carolina Press, 1990. 150 Pages. $24.95. Reviewed by Dr. Mike Fisher, Kansas State University.

On Sunday night, 8 April 1956, an angry Marine Corps drill instructor, Matthew C. McKeon, led 74 Marines into a tidal swamp called Ribbon Creek near the Parris Island Recruit Depot. Intended as group punishment for individual discipline, the incident resulted in the drowning of six young Marines in the tidewater currents.

Author Keith Fleming, a former Marine and current Marine Corps historian, examines the tragedy of Ribbon Creek, which triggered a national debate over Marine training methods. The slim monograph, written originally as a doctoral dissertation, develops the thesis that the harshness of Marine training fails to promote the combat readiness the Marine Corps seeks. In fact, Fleming proposes, the time-honored traditions of the past did not include the hazing and abuse he finds prevalent during the inter-war years between Korea and Vietnam, 1953-1965.

His arguments merit close attention. First, he successfully completed the rigors of Marine boot camp during 1960 as an enlisted man, becoming in his own words "a true believer" in the Corps. Later, having earned a commission, he led Marines in Santo Domingo in 1965, and a year later in Vietnam, where he commanded a rifle platoon and subsequently a company in combat. Second, since his discharge from the Corps in 1973, Fleming has worked in the Marine Corps historical section, serving as junior author on the recent *U.S. Marines in Vietnam, 1967*. He brings a knowledgeable eye and a discerning sense to Marine boot camp, an American institution that is much discussed but little studied or understood.

Several flaws mar the work, however. Fleming argues erroneously that the brutality in Marine boot camp during the mid-1950s evolved because of the Marines' failure to perform well during the Korean War, 1950-1953. In fact, in the words of General Douglas MacArthur, the Corps had "never shone more brightly" than in that war. Marine heroics during 1950 on the Pusan Perimeter, at the Inchon landing, and in the struggle at the Chosin Reservoir matched the exploits of any military legion in history. The Marines' prisoner of war record also indicates this performance: Of the 7,000 Americans captured by communist forces during the Korean War, only 227 were Marines. As POWs, those Marines conducted themselves commendably under the harshest of conditions, receiving high praise from a Congress that was dismayed by the performance of some men from other services while in captivity.

Additionally, Fleming fails to note the demographic shift that affected Marine recruitment during the Ribbon Creek days. For the first time, the Corps accepted two-year enlistees during peacetime, indicating the shortage of young adult males as a result of the low birth rates of the depression years. The Corps found itself reaching for volunteers, enlisting youths who in other times of peace would have been rejected. Fleming himself proves an apt example. Washed out of boot camp in 1959 with a bad shoulder, he was reenlisted in 1960.

The author denies the benefit of the intense discipline inappropriately reflected in the Ribbon Creek incident. Many Marines agree with him in principle but also understand that the very privation, misery, and harshness occurring inside the recruit depots forge the bonds of brotherhood and sacrifice so necessary to the combat infantryman.

On another level, the Ribbon Creek incident demonstrated the Corps' ability to contain a politically sensitive situation, damping the flames of Congressional and public outrage. The implementation of a skillful consensus between Congress and the Marine Corps resulted in the summer of 1956 in limited and, some might say, cosmetic reform of boot camp training.

After a 15-day public trial, the drill instructor, Staff Sergeant McKeon, a decorated Korean combat veteran, was found guilty of negligent homicide and drinking on duty. But he subsequently spent only 12 additional nights in the Parris Island brig before being returned to a different Corps duty station at a reduced rank.

Despite the public outcry, veteran Marines—altbough abhorring the Ribbon Creek incident—emphasized that the conversion of civilians to combatants required special and unique measures.

RECENT AND RECOMMENDED

LAST SALUTE: CIVIL AND MILITARY FUNERALS, 1921-1969. By B.C. Mossman and M.W. Stark. Superintendent of Documents, U.S. Government Printing Office Stock number 008-029-00086-5. 428 Pages. $16.00, Softbound.

FATAL VOYAGE: THE SINKING OF THE USS INDIANAPOLIS. By Dan Kurzman. Originally printed in hardcover in 1990. Pocket Books, 1991. 336 Pages. $4.99, Softbound.

THE VIETNAM WAR AS HISTORY. Edited by Elizabeth Jane Errington and B.J.C. McKercher. Praeger, 1990. 216 Pages. $42.95.

CHEYENNES AND HORSE SOLDIERS: THE 1857 EXPEDITION AND THE BATTLE OF SOLOMON'S FORK. By William Y. Chalfant. University of Oklahoma Press, 1989. 438 Pages. $24.95.

FORTS AND FORTRESSES. By Martin Brice. Facts on File, 1990. 192 Pages. $24.95.

GOD'S SAMURAI: LEAD PILOT AT PEARL HARBOR. By Gordon W. Prange, *et.al.* Brassey's (US), 1990. 349 Pages. $21.95.

THE SPIT-SHINE SYNDROME: ORGANIZATIONAL IRRATIONALITY IN THE AMERICAN FIELD ARMY. By Christopher Bassford. Greenwood, 1988. 171 Pages. $37.95.

FATAL DECISION: ANZIO AND THE BATTLE FOR ROME. By Carlo D'Este. HarperCollins, 1991. 566 Pages. $35.00.

MUNDA TRAIL. By Eric Hammel. First published in hard cover in 1989. Avon Books, 1991. 320 Pages. $4.50, Softbound.

MY TURN TO SPEAK: IRAN, THE REVOLUTION AND SECRET DEALS WITH THE U.S. By Abol Hassan Bani-Sadr. Brassey's (US), 1991. 240 Pages. $19.95.

WAR, PEACE, AND VICTORY: STRATEGY AND STATECRAFT FOR THE NEXT CENTURY. By Colin S. Gray. Originally published in hard cover in 1990. Touchstone, 1991. 442 Pages. $12.95, Softbound.

THE GERMAN SHEPHERD DOG. By Chris Walkowicz. Denlinger's Publishers (Box 76, Fairfax, VA 22030), 1991. 160 Pages. $29.95.

THE FUTURE OF NATO: FACING AN UNRELIABLE ENEMY IN AN UNCERTAIN ENVIRONMENT. By S. Nelson Drew, et.al. Praeger, 1991. 224 Pages. $42.95.

NAVAL OFFICERS UNDER HITLER: THE STORY OF CREW 34. By Eric C. Rust. Praeger, 1991. 248 Pages. $42.95.

THE INTIFADA: ITS IMPACT ON ISRAEL, THE ARAB WORLD, AND THE SUPERPOWERS. By Robert O. Freedman. Florida International University Press, 1991. $19.95, Softbound.

FIGHTER AIRCRAFT. By Alfred Price. Sterling, 1989. 128 Pages. $19.95.

BOMBER AIRCRAFT. By Alfred Price. Sterling, 1989. 128 Pages. $19.95.

TANK WARFARE. By Bryan Perrett. Sterling, 1990. 128 Pages. $19.95.

THE BRITISH AIRMAN. By Kenneth Poolman. Sterling, 1989. 240 Pages. $19.95.

THE BRITISH SAILOR. By Kenneth Poolman. Sterling, 1989. 240 Pages. $24.95.

THE BRITISH SOLDIER. By James A. Lucas. Sterling, 1989. 192 Pages. $24.95.

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From the Editor

LOOKING BACK

Fifty years ago, the United States Army was locked in some of the toughest combat in its history, as our armed forces conducted operations aimed at driving the Japanese forces from the territories they had occupied since the early days of World War II. The Gilbert Islands were the scene of bitter fighting, and this month's cover depicts a soldier of the 165th Infantry Division on Makin Atoll in the Gilberts. Subsequent covers will focus on soldiers in Italy and Germany during World War II, and we will include articles on actions of that war which are noteworthy because of their relevance to the issues of today's doctrine, tactics, and leadership. At the same time, we will continue to feature articles on the tactics, equipment, and challenges our officers and noncommissioned officers deal with on a daily basis. That is our challenge—to present a balanced, informative branch bulletin that will both entertain and enlighten the professionals who comprise our readership. If you like this approach, tell your friends. If you don't, tell us.

RAE

BRADLEY GUNNERY: CAN WE DO IT BETTER?

One of our readers, Captain Jim Riley, is completing his graduate program in operations research of the Air Force Institute of Technology, and has chosen the timely issue of Bradley gunnery in an effort to determine if there is a single best engagement strategy. Take a few minutes to read his comments, answer the three questions he poses, and then send him your feedback. Remember, you have the subject matter expertise he's looking for, so draw upon your experience and give him the information he needs. We'll close the loop by publishing his findings in a later issue of INFANTRY.

The goal of Bradley gunnery is to engage and destroy or suppress targets as fast as possible. Our focus within the Bradley community must be: How can we do it better? FM 23-1 currently provides only the broadest guidance for the structure of the 25-mm *point target engagement*. "The gunner fires a sensing round, announces his observation and adjusts rounds by BOT. The gunner then fires a three- to five-round burst on the target. He continues firing bursts until the target is destroyed or the command CEASE FIRE is given." Consequently, every Bradley unit has developed its own 'engagement strategy': a specific combination of single shots and/or multiple round bursts totaling eight, fired at a particular rate in order to destroy an identified *target*. Is there a best engagement strategy?

Captain Riley needs input from the field so that he can include favorite strategies which have proved effective for a given unit. His questions, which could be answered on a postcard, are:

a. What is the pattern? (Example: 1-4-3)
b. What rate of fire? (High/Low/Single shot)
c. Why?

Include your name, unit, and phone number so he can contact you if he has questions. Our goal is to help improve Bradley Gunnery and I hope you'll want to help! Address your responses to:

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Huber Heights, Ohio 45424

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