

Infantry

May-August 2000



General “Vinegar Joe” Stilwell in Burma (Page 21)
Observations on the IBCT and the FBCB2 (Page 27)

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Infantry

May-August 2000

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FRONT COVER: In the first week of June 1951, two infantrymen of the U.S. 3d Infantry Division are seen laying in their Browning Cal. .50 M2 machinegun during the drive on Chorwon-Kimhwa to consolidate positions along Phase Line Wyoming. This and other similar actions facilitated stabilization of a line of demarcation along the 38th Parallel at the conclusion of the Korean War.

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Commandant's Note

MAJOR GENERAL JOHN M. Le MOYNE Chief of Infantry

CLOSING RANKS FOR A STRONGER INFANTRY

The spearhead for the Army's transformation to the Objective Force will be the two Infantry brigades at Fort Lewis. The great soldiers in these brigades, and in the brigades to follow, will blaze a trail that takes us to the limits of our imagination with regard to maneuver and the application of combat power. Every possible capability of these organizations is being scrutinized and retooled—equipment, training management, organization, etc. Infantry noncommissioned officers (NCOs) will be at the marrow of these brigades, today and in the year 2030.

Today's Infantrymen in MOSs 11B, 11C, 11M, and 11H bring to the transformation the very best that our distinct light, mechanized, antiarmor, and indirect fire cultures—all Infantry subcultures—have to offer. Slowly, they will shape an Infantry bound by common values, skills, and a shared sense of identity. They will share a common understanding and application of firepower. They will live, train, and fight as combined arms warriors and leaders. The two brigades at Fort Lewis have already set this in motion, with great success.

Consistent with that vision, the Infantry Center is pursuing an initiative to transform our great infantry noncommissioned officer corps to be ready for the future force. Today our legacy force displays two sets of distinguishing attitudes and be-

liefs—those of our light forces and those of our heavy forces. As our transformation continues, those distinctions will blend with the birth of a force that combines the absolute best of both of these ethical systems.

We have requested that the Department of the Army approve our proposal to consolidate our infantry military occupational specialties. Tentatively targeted for 31 July 2001, the Infantry will consolidate MOSs 11H and 11M into 11B at Skill Levels 1 through 4. At Skill Level 5, MOSs 11B, 11C, 11H, and 11M will be recoded 11Z. As a result, we will initiate the most important component of the Army's Transformation and prepare for our Army an Infantry NCO corps that understands and applies all the great capabilities our Infantry brings to the battlefield.

The Infantry Center has reviewed our entire training strategy and will be prepared to execute it this summer. One-Station Unit Training will continue to present 14 weeks of training oriented on basic infantry skills, just as we have done so well for over 25 years. A new program of instruction (POI), the Bradley Transition Course, will train all sergeants (SGTs) and staff sergeants (SSGs) who are en route to mechanized units (from the light Infantry) in three weeks of turret-related skills and safety concerns. Another new course, the Antiar-

mor Leaders Course, will train soldiers in the ranks of sergeant through sergeant first class (SFC) who are new to antiarmor assignments. SFCs and master sergeants new to the mechanized Infantry will attend the proven six-week Bradley Leader's Course. Finally, Basic Noncommissioned Officer Course (BNCOC) and Advanced Noncommissioned Officer Course (ANCOC) POIs in our Noncommissioned Officer Academy will cross-train NCOs on a variety of tasks across the Infantry spectrum.

Cross assignments (light to mech, mech to light) for SGTs will be based on the Army's needs. At the SSG and SFC levels, we will seek volunteers initially. Training seats in the service schools will be synchronized with the assignment process so that our noncommissioned officers, after attending training, will arrive in the units prepared to lead and train. Our commitment to the field is that the institution will prepare NCOs to lead successfully in every way possible. Each year we will conduct a detailed after-action review on this initiative.

We do not see all NCOs switching from one type of Infantry to another. Nor do we desire this. Experience has shown us that 200 to 300 NCOs each year request to move to another form of Infantry. This should meet our needs as the new Interim Brigade Combat Team (IBCT) brigades continue to come on line. We do see young soldiers moving through the ranks with past experience in more than just one form of our Infantry. They will be our future senior NCOs and leaders. They will understand the strengths and weaknesses of multiple aspects of our Branch.

That's the type of leaders we are going to build with this program. More articles will follow in future issues that highlight the specific details of our efforts.

This consolidation will be the first step toward capturing and synergizing the best qualities of all our Infantry forces in the field and molding one great capability. This step is necessary to prepare for the Objective Force and to show us the best path to take during the IBCT phase of Transformation.

Our NCOs are ready for this challenge. We have many examples of proven leaders in the ranks of our command sergeants major who have experienced multiple aspects of our Infantry. When I ask our ANCOC students how many have served in infantry positions outside of their primary skill, only between 25 and 30 percent raise their hands! Why not remove the administrative barriers and let our young soldiers re-enlist for a wider range of infantry duty stations? Today, 42 percent of our first-term infantry soldiers re-enlist for a different MOS. Often they do this because they can't get to their station of choice. We have an opportunity to make changes for the better for our soldiers and at the same time prepare for the future Army ahead of time, without having to play catch-up later.

The brigades at Fort Lewis have shown us the way with more than 400 11Ms and 11Hs in their ranks. What a shame it would be to ignore the positive signs on the way ahead. Let's get on with it! For our soldiers, our NCOs, our Army, and our nation.



INFANTRY LETTERS



NEW LEADER MEETS THE MEN: SERGEANT HOUSTON WILSON, PLATOON MEDIC—KOREA 1952

Sergeant Volkmar met me just outside the entrance to the command bunker of the first platoon, B Company, 14th Infantry Regiment, when I arrived to replace First Lieutenant Alwin Oar, a highly regarded former platoon leader recently promoted to company executive officer. He had already left the platoon in Mundung-ni Valley and moved up to the company command post with Captain Jim Martin on Heartbreak Ridge. Sergeant Volkmar was the platoon sergeant, but he would soon be returning home to Ohio under the Army's rotation system.

Inside the bunker I was introduced to the other four inhabitants of the log-and-sandbag architectural masterpiece that was to be my new home away from home. Structurally, the bunker was sound. Aesthetically, it lacked a lot. The interior was dark and dank, but that was not surprising since the only source of natural light was from the narrow entrance. Sergeant Thomas was from California. Sergeant Richard, the assistant platoon sergeant, was from Illinois, and Private Orr, the radioman, was from Missouri. And from The Great Commonwealth of Virginia, there was Sergeant Wilson—Houston Wilson—the platoon medic. When God finished creating "Doc" Wilson he shredded the pattern. Wilson was one of a kind. Native to the beautiful rolling slopes of southwest Virginia, he was an irrepressible rebel and model of nonconformity.

I have no idea how much the Army spent in money and man-hours trying to forge each soldier into a controlled discipline of dress, behavior, and mind-set. But there were always a few who failed to get the word. In a pejorative sense,

the old regular Army NCOs called them "individuals." "Doc" Wilson was a classic example of what they were talking about, and he was an individual *par excellence*.

Physically he wasn't very imposing, slim and lanky. His most distinctive feature was a receding chin which gave him an appearance of weakness. As time went by, however, I would learn that his looks belied his courage when the chips were down. Individuals can be amazingly adroit when it comes to straddling the fragile line that separates conformity from nonconformity. Wilson had an uncanny knack for obliterating it altogether.

My arrival kindled one of the most awkward situations known to mankind—the change of command in a small combat unit. The severity of the circumstance is exponentially sensitized by its proximity to hostile forces along forward battle lines. In other words, the closer you are to the enemy the worse it gets. This sudden relationship between a new leader and the men he is to lead bears heavily upon all concerned. Serious consequences ride on it. Survival comes to mind. Both sides look for signals. It isn't a democratic process; it's more like a game of chance. Each player assesses his draw quickly. The gold bar of a second lieutenant and the crossed sabers of cavalry on my collar did not emit a very comforting message to the men—a silver bar and crossed rifles of infantry would have been far more reassuring. From my own perspective, they had been on the line long enough to take on a rather haggard look that gave them an appearance of something less than elite troops. But you play the cards you are dealt, and these men were my best—and only—hand.

The matchmaking itself was an impersonal affair made far from heaven. Somewhere deep in the hollows of a

rear echelon headquarters, seated in a pyramidal tent pitched high on a God-forsaken Korean mountaintop, a unit clerk wearily types a name in a blank space on an organization chart. Nothing emotional about it. Nothing scientific (out of Infantry officers?...Substitute an Armor officer).

So, as I put away my few possessions (known as "personal effects" when you are killed) in an old K-ration crate wedged into the sandbag wall, an understandable pall descended. When I turned to face the men I would soon depend upon so heavily, bits of small talk began to emerge, but it was too much like having a wisdom tooth pulled without novocaine. A very slow and very painful extraction.

It wasn't long, however, until we were interrupted by the depressing whine and crump of incoming artillery fire. Enemy artillery has a way of grabbing everybody's attention, and it was coming in pretty close to our bunker. Without hesitation, Doc Wilson began to take remedial action. He launched into a loud and soulful prayer that seemed to me to be bordering on sacrilege. Maybe God could tell, but I couldn't. "Dear Lord," he intoned, "you are letting that stuff get awfully close-in on us. Would you mind moving it over a little bit? We're not asking much." The shelling miraculously shifted several yards away, and Wilson quickly expressed his gratitude for the adjustment. I assumed communication at this celestial level was not unusual since the other occupants seemed unconcerned about it and gave me only an occasional glance. Even so, I couldn't help cringing as I secretly hoped the Lord would consider that I had only been there about 30 minutes and really hadn't had time to take over yet. After all, I was an infantryman by sudden decree, not by experience or training, so I certainly had no

desire to take on the North Koreans, the Red Chinese, and the wrath of God, all at the same time.

Following further ethereal exchanges, negotiating an acceptable impact zone, the artillery finally subsided—but not Sergeant Wilson. He merely shifted the course of his dialogue and continued: “Dear Lord, you have seen fit to send us a brand new second lieutenant today and we thank you for that. But please, Lord, let us keep this one awhile. You know you haven’t let us keep second lieutenants very long and this one seems like a nice man and we think we would like to keep him.” Wilson now had the full attention of everybody else within the narrow confines of our quarters. Then, after several more minutes of expostulation on the unreasonable brevity of front-line infantry second-lieutenant longevity, he abruptly ended his supplication: “And Dear Lord...Rotate me!” In GI terminology that meant send me home.

Suddenly the bunker was quiet. Sergeant Thomas was looking at me. His expression, I’m sure, reflected that of the others, which I could feel but couldn’t see. His eyebrows were twisted in anxious concern. I don’t think he was breathing. But when I grinned and slowly shook my head from side to side, laughter erupted in the bunker and the anxiety of our initial meeting, which had consumed us all, evaporated. The ice was broken. I hope God smiled too...and I think he did, because not so much as one round of enemy artillery ever fell directly on our bunker for as long as we remained in the Valley.

Was Sergeant Wilson testing me? Was he saying, “Here’s your chance, Buster; you can take the ball and run with it, or you can drop it—the choice is yours”?

I didn’t ask.

He didn’t say.

RICHARD E. ROBINSON
Infantry Platoon Leader
Company B, 14th Infantry Regiment
Korea, 1952

THINKING ABOUT FUTURE URBAN COMBAT

Working in the Infantry School’s Doctrine Division, I have been the subject matter expert on military operations on urban terrain (MOUT) for about ten years. During that time, I have studied what has been written about urban combat and noncombat military operations in cities. I have listened to many officers talk and write about MOUT, both at the Infantry School and in other forums. What I have heard and seen sometimes disturbs me.

As an Army and as a branch, we must avoid the temptation to view future urban combat as solely small-scale, SWAT-type operations. While some such operations can be concluded quickly, neatly, and cleanly, with few or no friendly casualties, and with little damage to the surrounding area, wars of the past 60 years have shown the reality of the MOUT fight to be anything but a surgical strike.

Underestimating the extent of MOUT commitment is dangerous, because it blinds us to the possibility that higher levels of combat may be called for. History shows us that we seldom have been able to dictate the course of events in urban combat, and that the enemy too often gets his vote as to how large or small a combat operation will become.

The most striking thing about urban combat is that it has not changed much over the years. We may want it to change. We may wish that it *would* change. We may think that it *will* change. But somehow, in spite of all our efforts, urban combat always comes down to the same thing—a series of relatively small, somewhat connected but separate, vicious, deadly, destructive gunfights.

At times, these fights will coalesce, grow, and swirl wildly out of control. At other times, they will sputter to an inconclusive finish, leaving both sides exhausted and uncertain of the next step. Sometimes, they will blend into a coherent theme that one side or the other can take advantage of and thereby win a decisive victory.

In many ways, tank engagements, sea battles, aerial dogfights, and even In-

fantry combat on most other terrain, is much different today from the way it was 50 years ago. This is not true of battles in the city. The Infantry and Armor veterans of Aachen, Manila, Seoul, Hue, and Mogadishu all share a surprisingly common experience.

Another striking thing I have observed is how little influence modern technology has on the course and outcome of urban battles at the tactical level. That is not to say it has no influence, just that no matter what technology gap exists between the two sides initially, they are much more closely matched in an urban area. This is not true anywhere else, except perhaps dense jungle, a setting that shares many of the aspects of urban combat, lacking only the third dimension afforded by multi-story buildings.

In the urban battle, small-unit training, cohesion, endurance, leadership, imagination, and dedication compensate to a great degree for lack of sophistication and technological advances.

Who, in the post-war drawdown of 1947, would have predicted a division-sized assault to retake Seoul just three years later? Who, in the guerrilla war focus of 1965, would have been able to predict the vicious street-to-street fighting for the Citadel of Hue in just three years? These were as implausible as someone predicting that, in 1987, a half million American soldiers would be sweeping across the desert toward the Euphrates only three years later.

Small urban battles can flare out of control quickly. We must always count their economic, cultural, societal, psychological, and political implications, often above purely military considerations. This is especially true if we are engaged in a struggle with non-sovereign entities, which are predicted to be more common in the future.

We must be very careful not to give our combat arms soldiers the idea that all future urban combat at the tactical level will more closely resemble police SWAT team operations than the combat our fathers saw in Germany and the Philippines. We cannot predict that with any certainty, and we may well be wrong.

Unfortunately, I think many leaders

and most young soldiers in the Army today think that high-intensity combat in cities is a thing of the past. If we couple that belief with unreasonable assumptions that U.S. forces cannot or will not accept high casualty rates, and that battles can be fought in densely populated areas without damaging much of the city or hurting many noncombatants, I think we have a prescription for disaster.

I am certainly not predicting tactical defeat, but what I fear is the tremendous surprise and intense psychological shock to both leaders and soldiers as the realities of the urban battle unfold. This shock may be so profound that it could render all pre-battle staff analysis worthless and cast senior leaders mentally adrift, without a vision of how to impose their will on the situation and regain the initiative.

In World War I, the killing power of the machinegun and modern artillery had a profound psychological effect on senior leaders. It generated a mental retrenchment and determination to make the attack succeed by sheer force of will. Such rigidity of thought and lack of vision made intelligent men with solid military backgrounds do incredibly stupid things that result in horrific casualties without any successful results.

I think we are negligent if we do not teach our young infantry officers several truths about urban combat:

Urban combat in the future may be small scale, but it just as well could be large scale. We cannot predict very well. An operation may start out small and then, for reasons beyond the control of soldiers or leaders at the tactical level, turn into a large-scale battle. We have to be ready for whatever could happen, not for what we *hope* will happen.

Urban combat will involve casualties—theirs, ours, and others. We must neither shrink from it nor glory in it. We must plan for it. To do otherwise will be disastrous. Giving our potential enemies the impression we have no stomach for U.S. casualties will only increase the probability of suffering them.

Because we want to reduce unnecessary collateral damage, we train hard for battle at very close quarters. I think,

however, that by day three of a real battle our soldiers simply won't be going into rooms that they know are filled with enemy troops without doing everything they can to kill those troops first. They will use all the grenades, demolitions, tank fire, artillery, and bombs they can get—and call for more.

We must come to accept the fact that if the Nation sends its Infantry into a city to fight, horrible photographs and video footage will come out. As soldiers, we can only trust in our leaders, remain true to our oath to support and defend the Constitution of the United States, obey all legal orders, and pray that in the final reckoning, the ends justify the means.

Limiting collateral damage is a relative thing and, in and of itself, should not be the objective of a military operation. Urban combat equals damage and destruction. There is no way to get around that. You cannot have a neat and tidy fight in an urban area.

In fact, even the term *collateral damage* is vague. There is a significant difference between damage done to a building the enemy is using as a defended position and that done to all the unoccupied buildings in the general vicinity.

Generally, under the Geneva Accords, combatants are allowed to concentrate as much firepower and destructive force as is required to eliminate a defended position. At the same time, we hold commanders responsible for limiting, to the best of their ability, unnecessary damage to surrounding areas that are not defended. For political or military reasons, higher commanders may impose further limits on the firepower they authorize their subordinates to use against enemy positions, in order to limit damage to surrounding areas.

Although we can only do so much to limit damage during an urban battle, one of the amazing things about modern cities is the resiliency of their infrastructure. Today, Beirut is once again a beautiful place, even though it was subjected to days and days of concentrated tank, artillery, and aerial bombardment by the Israelis and, before

that, was rocked by powerful car bombs and mortar fire almost every day.

If we allow our soldiers and leaders to harbor the expectation that they can fight in a city and contain damage to just a few places, when that is shown to be false, what concept do we have to give them to replace it? Do they fall back on total destruction, the Russian solution in Grozny? I hope not.

Rules of engagement (ROEs) can change in the blink of an eye. We must not place too much emphasis on detailed, formal, written ROEs. We must teach leaders to think, to consider the on-scene situation, and to make decisions based on general guidelines we have established. We must avoid having leaders who always consult a written checklist of ROEs before they act and would never think to modify that list as the situation changes.

We must get leaders to understand that U.S. troops are always operating under some set of ROEs, even if we have not written them down. We derive these ROEs from the Law of Land Warfare, U.S. civil and military code, U.S. national objectives, and the senior commander's evaluation of the specific political and military aspects of the situation. These rules may become more or less restrictive as the situation changes, but they are always there. It is more important that we provide young leaders with an understanding of how to decide whether a specific act is appropriate than it is to provide them with a written set of rules.

Urban combat is not an Infantry-only mission. Just as the combined arms team is the right answer to tactical problems on all other terrain, so it is in urban areas. The precise composition of the team might change, with varying proportions of armored vehicles, engineers, aviation, and artillery, but tactical success demands the same type of teamwork. We must teach soldiers and leaders at all levels that a combined arms team wins in the city, and that single-branch operations either lose or win, only at a much greater cost in lives and time.

We forgot that truth in Somalia, and had to re-create the Infantry-Armor combined arms team at night, under fire,

without a plan, and with allies who spoke little English. It is a credit to the soldiering skills and fighting spirit of the Infantry, Aviation, and Special Operations forces involved that they were able to hold out until that ad hoc combined arms team could come together. When it did, the issue was decided.

I hope that we can do something about problems of this kind, through both doctrine and instruction.

ARTHUR A. DURANTE, JR.
Deputy Chief of Doctrine
Combined Arms and Tactics
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ON-VEHICLE LADDER NEEDED FOR LAV III

I have studied the capabilities of the new light armored vehicle (LAV) III infantry carrier, and it appears to me that it is lacking a beneficial piece of on-vehicle equipment. Various Army studies and reports have identified the need for infantry forces to fight more effectively on urban terrain, an environment that is expected to become the most common battlefield. Since the LAV-equipped brigade combat teams will no doubt operate in this environment, it would be beneficial to provide the infantry carrier with a simple and

low-cost piece of equipment that would greatly improve the infantryman's capabilities during military operations on urban terrain, and on other terrain as well.

A standard commercial 20-foot aluminum extension ladder (approximately 10 feet long when retracted) can be strapped to the side of the LAV III to give infantrymen an invaluable aid to mounting obstacle and crossing gaps. The LAV III hull is 6.51 feet high, and if it were pulled up hard against the side of a building, an infantryman might be able to stand on it to gain entry through a second floor window. But a vehicle cannot always get that close to a building and in many parts of the world, building floors are 10 feet or higher. A 20-foot extension ladder on the ground would allow access to some second-floor windows. Set atop a LAV III and braced against a hatch, the ladder would allow entry through third-floor windows, even if the vehicle were a couple of meters from the building.

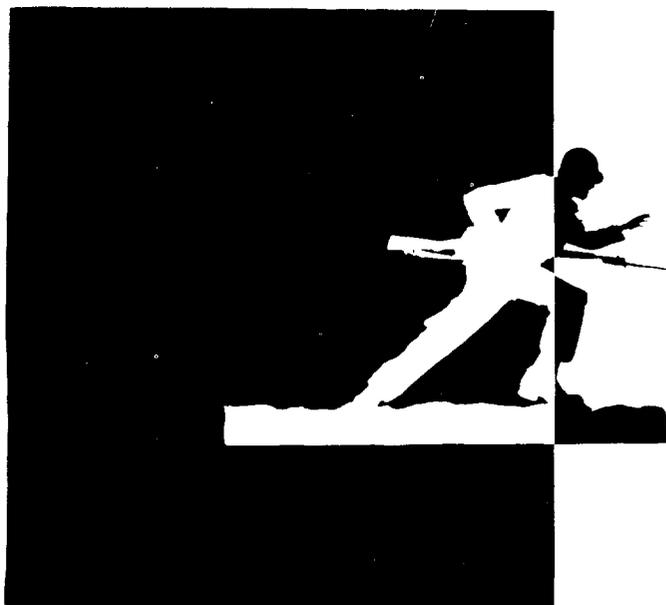
Some might suggest that the tactical caving ladder, a single telescoping pole with rungs attached, might be used, but a two-sidebar extension ladder would be more versatile. The extension ladder is strong, low-cost, and extremely light. It can easily be carried and emplaced by one man. A ladder with two sidebars can be used for crossing gaps of 16 to 18 feet, between buildings or across gullies and steep-banked streams. This

is important since the LAV III can cross only a 6.5-foot gap.

The ladder can also be used to scale high walls, fences, and barbed wire obstacles and as an aid in clearing telephone and non-charged power lines. It is extremely difficult to use the caving-type ladder to climb chain-link fences topped with angle barbed wire on outriggers. A two-sidebar ladder can surmount such an obstacle easily and can be pushed under concertina coils, lifted up, and propped in place with stakes or short barbed wire pickets to provide a tunnel under the obstacle. This ladder also makes hauling heavy items such as crew-served weapons and ammunition through windows easier than the single-pole, caving-type ladder hanging free from a window sill. It is also a more effective way to evacuate casualties than a caving-type ladder.

The simple addition of a lightweight, already proven, and readily available 20-foot extension ladder to LAV III infantry carriers, reconnaissance, and engineer variants will provide a low-cost, low-tech means of significantly enhancing the mobility and capabilities of the dismounted infantryman.

GORDON L. ROTTMAN
MSG, Retired
Special Operations Branch
Fort Polk, Louisiana



INFANTRY NEWS



THE FOLLOWING INFANTRY SCHOOL publications have been approved for distribution, contingent upon available funds and priority. All publications will be available online in the Army Doctrine and Training Digital Library at <http://www.adtdl.army.mil/atdl.html>.

STP 7-11BCHM1-SM, *Soldier's Manual, MOS 11BCHM Infantry, Skill Level 1*. This manual is for soldiers in Skill Level 1 who hold MOSs 11B, 11C, 11H, and 11M. It contains standardized training objectives in the form of task summaries to train on critical tasks that support unit missions during wartime. This manual applies to soldiers in both the Active Army and the Reserve Components.

STP 7-11H14-SM-TG, *Soldier's Manual and Trainer's Guide MOS 11H, Heavy Antiarmor Weapons, Infantry, Skill Levels 1/2/3/4* and **STP 7-11M14-SM-TG**, *Soldier's Manual and Trainer's Guide, MOS 11M Fighting Vehicle Infantryman, Skill Levels 1/2/3/4*. These manuals are for soldiers in Skill Levels 1 through 4 soldiers who hold MOSs 11H and 11M, as well as for trainers and first-line supervisors. They contain standardized training objectives in the form of task summaries, which support unit missions during wartime.

All three of these manuals should be made available in the soldier's work area, unit learning center, and unit libraries.

DOCTRINE WRITERS AND TRAINING developers in the Infantry School's Combined Arms and Tactics Directorate (CATD) are refining and updating doctrine and training materials. These new and revised manuals will support current operations as well as future Army transformation into the Infantry Brigade Combat Teams (IBCTs).

The Infantry School is the proponent

for the IBCT, and CATD's Doctrine and Collective Training Division developed warfighting doctrine and collective training manuals to support their fielding.

The following is a list of the new field manuals (FMs) created to support that transformation effort:

FM 7-4, *The Interim Brigade Reconnaissance Platoon (Coordinating Draft)*.

FM 7-5, *The Interim Brigade Rifle Squad and Platoon (Coordinating Draft)*.

FM 7-12, *The Interim Brigade Rifle Company (Preliminary Draft)*.

FM 7-22, *The Interim Brigade Infantry Battalion (Preliminary Draft)*.

FM 7-32, *The Interim Brigade Combat Team (Preliminary Draft)*.

Digital versions of these drafts are available for review and comment at web site: <http://doctrine.army.mil>. (You will need to request a password from the webmaster before you can access these drafts.)

The following mission training plans (MTPs) for the IBCT are also in draft, and will soon be available for download from the Reimer Digital Library.

ARTEP 7-4 MTP, *The Interim Brigade Combat Team Reconnaissance Platoon Mission Training Plan (Preliminary Draft)*.

ARTEP 7-5 MTP, *The Interim Brigade Combat Team Rifle Squad and Platoon Mission Training Plan (Preliminary Draft)*.

ARTEP 7-12 MTP, *The Interim Brigade Combat Team Rifle Company Mission Training Plan (Preliminary Draft)*.

ARTEP 7-22 MTP, *The Interim Brigade Combat Team Infantry Battalion Mission Training Plan (Preliminary Draft)*.

ARTEP 7-32 MTP, *The Interim Brigade Combat Team Mission Training Plan (Preliminary Draft)*.

ARTEP 7-90X MTP, *The Interim Brigade Combat Team Mortar Platoon Mission Training Plan (Preliminary Draft)*.

ARTEP 7-91 MTP, *The Interim Brigade Combat Team Antiarmor Company Mission Training Plan (Preliminary Draft)*.

ARTEP 7-94 MTP, *The Interim Brigade Combat Team Battalion Headquarters and Headquarters Company Mission Training Plan (Preliminary Draft)*.

Since military operations in urban terrain—both combat and non-combat—are the most likely contingency, the doctrinal discussions of urban operations have been amplified in all CATD field manuals and mission training plans.

The urban operations sections of the following manuals have been published and uploaded to the Reimer Digital Library:

FM 7-10, *The Infantry Rifle Company, Change 1, Appendix L, Urban Operations*.

FM 7-20, *The Infantry Battalion, Change 1, Appendix G, Urban Operations*.

FM 7-30, *The Infantry Brigade, Change 1, Appendix J, Urban Operations*.

In addition to these already-approved appendices to the infantry company, battalion, and brigade manuals, discussions of urban operations are being added to **FM 7-8**, *The Infantry Rifle Squad and Platoon*. This change is expected to be approved by the Commandant of the Infantry School soon and uploaded to the Reimer Digital Library.

FM 90-10-1, *An Infantryman's Guide to Combat in Built-up Areas*, is now under revision. A coordinating draft was published in June 2000 and made available for review on the Infantry

INFANTRY LETTERS

School draft doctrine web page. (You will have to request a password from the webmaster to gain access to this staffing site.)

A new field manual on urban operations, **FM 90-10-XX**, is now under development. It will augment **FM 90-10-1**, while focusing on brigade-level operations and their place in campaigns at the division and joint task force levels.

Urban operations bring with them a multitude of collective tasks, and sometimes cause significant changes in the conditions or standards for the completion of other tasks. Urban operations tasks are being added to all infantry unit MTPs.

FM 7-7J, *The Mechanized Infantry Rifle Squad and Platoon (BFV)*, and **FM 71-2**, *The Tank and Mechanized Infantry Battalion Task Force*, are both under revision. Drafts of these manuals are available on the Infantry School staffing web page. These drafts will address changes in the tables of operation and equipment associated with the Limited Conversion Heavy Division, the 3x9 rifle platoon, and the new BFV-equipped engineer battalion within the division.

In addition to the discussions of urban operations in other manuals, Change 2 to **FM 7-10**, *The Infantry Rifle Company*, will consist of two new appendices and a replacement chapter. This change will provide doctrinal guidance on the employment of the Javelin-equipped antiarmor section, on direct fire control, and on troop-leading procedures (TLPs). **FMs 7-8 and 7-7J** will also incorporate the changes in the TLP introduced in the change to **FM 7-10**.

FM 7-91, *Tactical Employment of Antiarmor Units*, is also being revised to incorporate additional missions such as convoy security and target engagement with the .50 caliber machinegun and Mk 19 automatic grenade launcher.

The initial draft should be available in early 2001.

All eleven of the Infantry mission training plans (MTPs) for the rifle squad through the infantry battalion, and including specialty platoons such as reconnaissance and mortar, have been revised. Electronic versions of them are now available for download on the Reimer Digital Library. These electronic versions are in effect now, and should be used instead of the older, paper-based ARTEP mission training plans published before March 2000.

Members of the Doctrine and Collective Training Division of CATD are aided greatly in this effort by members of the Combined Arms Leadership Division, who are subject-matter experts from most of the other Army branches; Tactics Division, which includes all the small-group instructors, and the Combined Arms MOUT Task Force.

THE 75TH RANGER REGIMENT is looking for top quality, highly motivated Ranger-qualified infantry officers to serve in the regiment. Openings are routinely available for lieutenants, branch-qualified captains, and majors.

Duty positions are located with the 1st Ranger Battalion at Hunter Army Airfield, Georgia; 2d Ranger Battalion at Fort Lewis, Washington; and 3d Ranger Battalion and 75th Regiment headquarters at Fort Benning, Georgia.

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Interested infantry officers should send the following:

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- DA photo.
- DA Form 4187 requesting assignment.
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- Letter of intent.

Points of contact are as follows:

Regimental Assistant S1, CPT Jeff Hudson: (706) 545-5124, DSN 835-5124; FAX (706) 545-5830, DSN 835-5830, e-mail HUDSONJ@SOC.MIL.

Mailing address:

Commander, 75th Ranger Regiment

ATTN: RAS1 (CPT Hudson)

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Fort Benning, GA 31905

THE ARMY NATIONAL GUARD needs Observer/Controller (O/C) Augmentees to cover Joint Readiness Training Center (JRTC) Rotation 01-09 (27th Enhanced Separate Infantry Brigade, New York ARNG), at Fort Polk, Louisiana, 01-15 August 2001. Specific needs include:

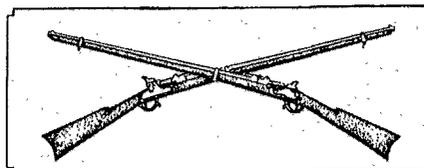
ARNG Captains (11A/12C) with Infantry Mortar Leader Course, rifle company, antiarmor, or light cavalry command experience.

ARNG First Lieutenants (11A) with antiarmor platoon experience.

ARNG Staff Sergeants and Sergeants First Class (11B/11C) with sniper, mortar, or rifle squad/platoon leadership experience.

The National Guard Bureau funds these tours as *additional* Annual Training. Travel and per diem is included. The tour consists of a five-day O/C train-up, followed immediately by a 10-day rotation.

For more details, contact Captain Wilson, (703) 607-9154, DSN 327-9154, john.wilson@ngb.army.mil or Captain Porter, (703) 607-7317, DSN 327-7317, garry.porter@ngb.army.mil.



PROFESSIONAL FORUM



Lethality and Flexibility Fighting the 4+3x9 Bradley Platoon

CAPTAIN KEVIN P. WOLFLA
LIEUTENANT DAVID KIRKLAND

The Army Transformation and its attendant force restructuring will have a significant effect on the way today's mechanized forces train for and fight in combat. The changes forced by the inactivation of one company in each mechanized infantry battalion is likely to receive much attention over the next few years. Unfortunately, when it comes to the changes made in the Bradley platoon, the Army and the infantry community cannot afford to wait that long to adapt our warfighting techniques. The Bradley platoon is the building block of mechanized maneuver. The career management field (CMF) 11 consolidation will likewise be closely related to the training and operations of the Bradley force.

The reorganized platoons will have four Bradley's and three rifle squads with nine soldiers each, a net gain of one squad. Although this change appears to be simple, it leads to vastly greater changes in command and control, maneuver, and training.

Currently, each platoon leader is responsible for two Bradley sections and two rifle squads. This keeps his span of control at a manageable four maneuver elements. Looking at the new design, it appears that the platoon leader would now be in charge of five elements—two Bradley sections and three rifle squads. With a leader normally able to effectively command and control a maxi-

mum of five elements, this seems to be a lot for a new lieutenant to handle. After all, a battalion commander's span of control is only five, and he has a battle staff.

Combining the three rifle squads into one section, and selecting the most competent staff sergeant in the platoon to control the section, limits that platoon leader's span of control to only three maneuver elements. The platoon leader would control only the two Bradley sections and the rifle section leader. Assigning a rifle section leader need not require any additions to the current modified tables of organization and equipment (MTOE). With the removal of the platoon leader's radiotelephone

operator (RTO) and making one of the squad leaders a sergeant with one of his fire team leaders a corporal, current authorizations remain the same (Figures 1 and 2). (The SINCGARS ASIP model's small size and handset controls eliminate any real need for a dedicated RTO.)

The addition of a third squad affects not only command and control but also platoon maneuver. Under the old design with two squads, leaders could simply fight one rifle squad with each Bradley section. Now with three squads, but not an extra Bradley section, the third squad must be split between the two mounted sections. In short, each Bradley section will be car-

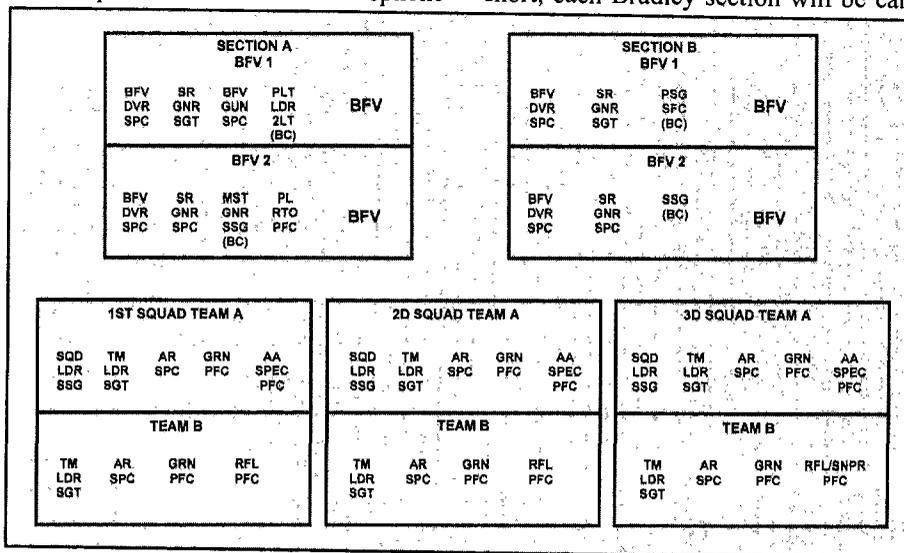


Figure 1. Current Force XXI Platoon Organization.

rying three fire teams. For the platoon to fight effectively as a team, the platoon leader must plan a linkup point for the rifle section, as well as for the contingency that the section cannot conduct the linkup.

If there is going to be a linkup, a leader must be positioned on each Bradley. This is accomplished with the platoon leader's mounted section carrying the first squad and the Bravo team from third squad, while the rifle section leader, second squad, and Alpha team from third squad travel with the platoon sergeant's mounted section. With the squad leader from third squad traveling with the platoon sergeant's mounted section, this places adequate leadership with each three fire team sections until a linkup can be completed. Once linked up, the rifle section can then continue to maneuver toward the objective.

The addition of the third squad enables the platoon to maintain combat effectiveness longer, in spite of anticipated casualties, and continue to maneuver on the objective. With only two squads, they could sustain fewer casualties before becoming combat ineffective. Now, with an extra nine soldiers, the platoon not only has more firepower with which to engage and suppress or destroy the enemy, but also has the manpower to sustain extended combat operations.

In the attack, a third squad now enables the platoon to breach and seize a significant foothold using one squad to breach, one or two squads to assault, and the four BFVs and/or one squad to support by fire. The platoon can better synchronize the maneuver of the rifle section and BFV sections in either assault or support-by-fire roles. With more riflemen now firing and engaging enemy personnel or bunkers, the BFVs can destroy additional vehicles or look deep for enemy counterattacking forces.

In a defensive role, the platoon can now secure all BFVs while also creating a small arms engagement area and increasing the obstacle effort. With more small arms, the BFVs are able to look deeper while they have increased flank security through more observation posts (OPs) and patrols. One of the biggest advantages with the third squad in the

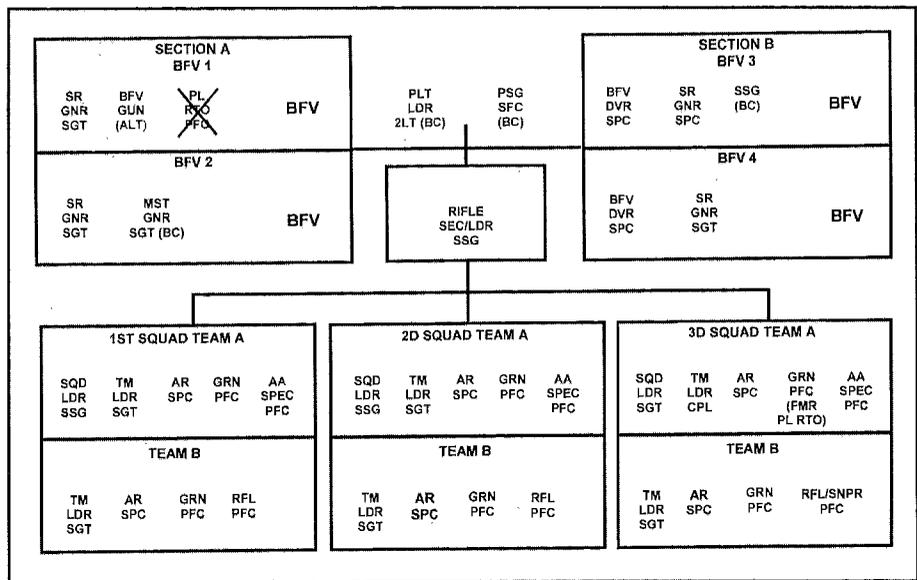


Figure 2. Proposed Force XXI Platoon Organization

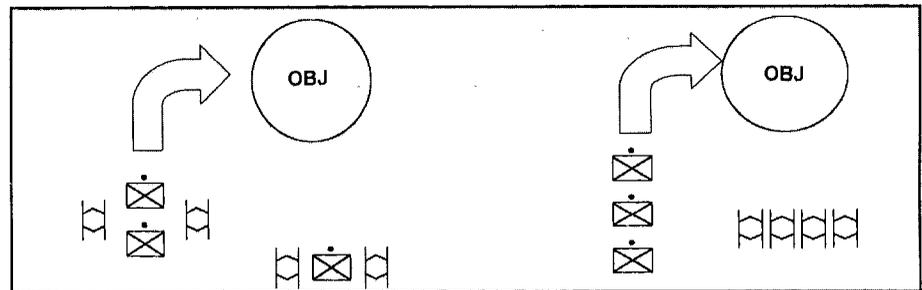


Figure 3. Effects of the third squad in the offense.

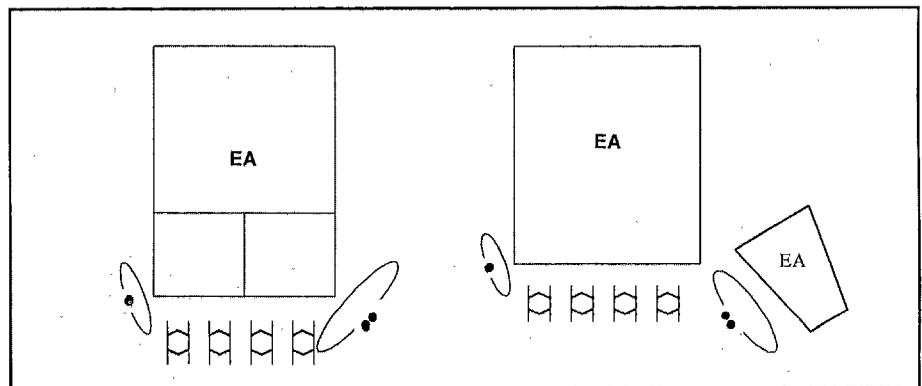


Figure 4. Effects of the third squad in the defense.

defense is that it may now allow a platoon to organize and conduct an internal counterattack.

After a rifle section is created, led by the platoon's senior staff sergeant, training must sharpen the unit's skills and techniques to command and control as well as its ability to maneuver all three squads in any combat scenario. The mechanized rifle section leader, unlike his light infantry counterparts, must not only know how to command three squads but also have a strong

background in mechanized infantry battle drills. The platoon and company must make sure their enlisted soldiers and NCOs are not allowed to single-track in either rifleman or Bradley crewman roles. Proper personnel management and a clear career progression will ensure that NCOs become technically and tactically proficient in both mounted and dismounted roles (Figure 5).

With the addition of a rifle section leader, commanders must develop

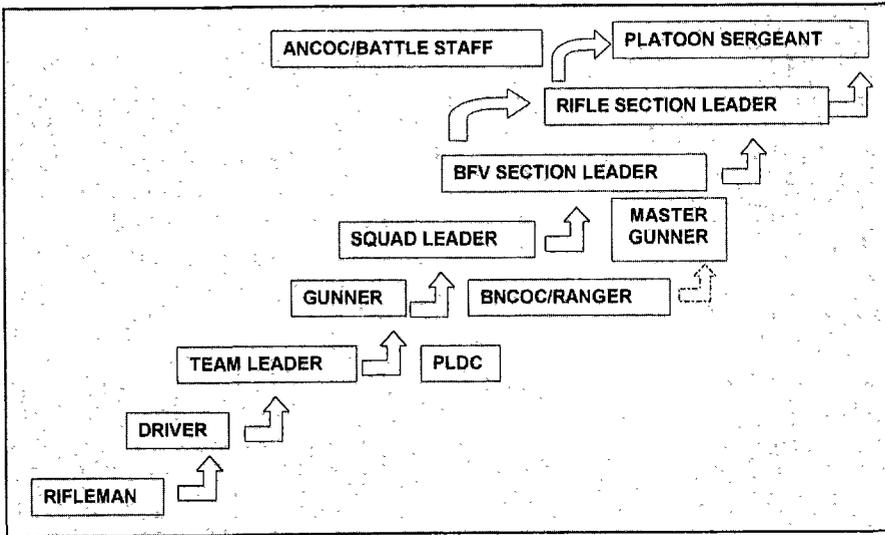


Figure 5. Mechanized Infantry NCO Career Progression.

training that allows the rifle squad leaders and the section leader to work with the riflemen to ensure that they can perform their basic battle drills both independently and as a cohesive team. For individual training, the squad leaders still perform as the primary trainers, while the section leader focuses on resources and supervision. For collective task training, the rifle section leader takes his place as the primary dismounted trainer, with the platoon leader and platoon sergeant supervising. In order to maximize the potential of the third squad, rifle section training must focus on dismounted drills and actions taken in the last 300 meters of the assault, something relevant to all soldiers involved in the CMF 11 consolidation.

Only after the section has become proficient in dismounted tactics should commanders incorporate the Bradleys into the training to complete the development of a lethal mechanized platoon.

From a training management perspective, commanders can best accomplish this by integrating the two during a period between Bradley crew gunnery and platoon gunnery. Ideally, the rifle sections will have trained on their squad drills while the crews were shooting gunnery through Table VIII. During the integration phase before Table XII, the platoon leader and platoon sergeant become the primary trainers to ensure that all three sections understand their internal drills and the way they relate to the platoon drills.

The arithmetic of fighting with three rifle squads and two Bradley sections will also require us to examine how we evaluate our sections and squads. It is also possible to envision scenarios in which the Bradley section and the three fire teams it transports might maneuver together. But given the current training constraints on time and other resources, it makes little sense to blindly follow a

rigid training doctrine in an era when flexibility has become paramount. Instead, company and battalion commanders must focus on developing training exercises that constantly emphasize coordinated mounted and dismounted maneuver in all of the combinations and permutations the new MTOE affords. After all, on the mechanized battlefield, neither rifle squads nor armored vehicles can win the fight alone; since the Bradley platoon is the smallest unit to incorporate both assets, it must remain the building block of the training doctrine.

Although Force XXI reduces each mechanized battalion by one company, it puts the *infantry* back into the mechanized infantry platoon. While one can argue the costs and benefits of this change, one cannot argue that, since the change has occurred, the task now becomes making this MTOE lethal on the battlefield. The key to this lethality lies in maximizing the rifle section in each platoon. In order to do so, leaders must embrace the change and overcome the challenges in command and control, effective maneuver, and integrated training.

Captain Kevin P. Wolfla commanded a company and served as S-3 in the 1st Battalion, 12th Infantry, 4th Infantry Division. He also served as S-3 Air and antitank platoon leader in the 1st Battalion, 187th Infantry; and as a rifle platoon leader in 1st Battalion, 503d Infantry, in Korea. He is a 1991 graduate of the University of Miami, Florida.

Lieutenant David Kirkland served as a company executive officer and S-1 in the 1st Battalion, 12th Infantry, and as antitank platoon leader, 1st Battalion, 503d Infantry, in Korea. He is a 1996 graduate of the University of Georgia.

Light Infantry Weapons Squads

CAPTAIN ROBERT THORNTON

A light infantry company's medium machineguns, 60mm mortars, and antiarmor weapons are key to its ability to succeed in combat. The machineguns and mortars allow it to achieve fire su-

periority and provide a base of suppressive fire for maneuver elements to close with the enemy by reaching positions in defilade with high explosive, obscuring enemy fires with white phosphorus, or

desynchronizing the enemy's ability to fight by well-placed indirect fire. The Dragon or Javelin will provide the company's only organic antiarmor capability. When positioned properly,

these weapons can initiate a well-placed antiarmor ambush or defense of an obstacle. To reach their full potential, however, these squads must have training that goes beyond qualification and sustainment.

Weapons squads are a part of the task organization of the rifle platoon. Generally, this translates into a weapons squad leader (staff sergeant) and two gun teams, each consisting of a gunner (corporal), an assistant gunner (private first class), and an ammunition bearer. These are the same soldiers who often wind up as the antiarmor teams, because dedicated personnel for the teams are not available.

The training of the weapons squad is the primary responsibility of the weapons squad leader, the platoon sergeant, and the platoon leader. They provide the platoon with its base of fire and constitute a sizable amount of its firepower. But they do not reach their potential because operating tempo and lack of experience at the junior officer level make it difficult just to maintain qualifications and support maneuver exercises.

The second lieutenant usually takes a rifle platoon as his first assignment. In the best cases, he has three rifle squads, a weapons squad, and a headquarters, consisting of the platoon sergeant, a medic, a radiotelephone operator, and himself. He probably gets about 12 months in this job, but not always.

In a garrison environment, he and the platoon sergeant manage all the administrative aspects of the platoon, from awards, physical training, equipment accountability and serviceability, weapons qualification, and a host of other things to get ready for a readiness cycle or a training deployment. He is also involved in planning training for his squads during upcoming tactical environments if the training exercise permits.

In a tactical or field environment, he supervises squad training (both force-on-force and maneuver live-fire exercises) and executes platoon training as part of a company or battalion directed event. Most of what the platoon does consists of battle drills at the squad and platoon level. The average second

lieutenant is leaving his first job about the time he really begins to understand what needs to be done. The thinking is that he can rely on the real constants in a company—the NCOs—to help him ensure that things are done to standard. But what about time to take that training to a level beyond qualification, to a higher standard?

On the other hand, the rifle company executive officer (XO) probably has had a specialty platoon that gave him an appreciation of mobility and counter-mobility, integration of an assortment of direct and indirect fire weapons into the fight, and most of all, experience. The average XO has about two years of experience in the battalion. He understands the commander's intent better, can formulate a solid training plan within the commander's guidance, and can conceptualize nonstandard training events. He understands relationships between time available for training due to battalion driven events, how to obtain training areas and ammunition, and how the battalion functions. He is one step away from a company command. What better officer to put in charge of training the soldiers who constitute the company's organic firepower?

The platoons will still be task organized with two machinegun teams if the mission requires it. I am not advocating removing the platoon's base of fire, but not every mission requires two machinegun teams, or an antiarmor capability at platoon level. Often the mission is better served with the company's firepower concentrated and directed to best support the momentum of the attack.

As many times as we practice a platoon mission, it does not require many casualties to make a platoon ineffective. A company stands a much greater chance of succeeding than a platoon, no matter what the odds might be. Platoons seize parts of an objective or allow another portion of the platoon or company to move forward. A habitual relationship should be formed between platoons and weapons squads, but they should be consolidated at the company level for training and tasked out as directed in the commander's order.

Consolidating the weapons squads

under the XO has other benefits as well. The company mortars and machineguns can be synchronized by the XO from a consolidated support-by-fire (SBF) position. An appropriate weapons mix within the SBF has a better chance of suppressing or destroying key aspects of the enemy's defenses. Four M240 machineguns and two Javelins initiating the direct-fire portion of an attack—while 60mm fires harass enemy positions, or screen the maneuver element attempting to gain a foothold—stand a better chance if they are well coordinated.

With technical innovations—such as the soldier intercom system, night vision devices (NVDs), better optics, and laser aiming devices—fires can be redirected quickly as maneuver elements become bogged down or other elements are passed through. This level of synchronization reduces the risk of fratricide because the less independent elements are firing into the objective. It reduces the loss of soldiers to enemy fire, because a heavy volume of well-placed fire is moved onto the enemy as necessary.

This level of synchronization does not automatically come from three weapons squads from three platoons task organized into a company SBF for a specific mission. Instead, it requires that the company base of fire train its individual parts as a whole all of the time. Every maneuver live-fire range I have seen suffered from several problems. The surface danger zones (range fans) require that only certain positions be occupied as an SBF. These positions are too close to the objective because the closer the SBF, the narrower the fan. If it were farther away, the left and right limits would inhibit maneuver onto the objective. This is a part of maximizing safety while being able to integrate all of the company's organic direct-fire weapons.

This method of training does not train all aspects of providing a base of fire for a maneuver element. Like indirect fires, which are governed by a similar set of guidelines, it does exercise some of the coordination pieces, but not as many of the required skills—such as concentration of direct and indirect fires

or shifting all weapons in the SBF to sustain momentum. It's not easy to achieve overlapping beaten zones in front of the element moving across the objective while simultaneously neutralizing bunkers and destroying vehicles with missiles or providing indirect fires that screen, mark targets, or isolate the objective. Units must train for this, and train hard. You can't just show up at the fight and hope to pull that off.

Since most maneuver ranges will not let you fire dud-producing munitions into a range that will be reoccupied the following day or week by another unit, or that do not have targets at longer ranges from which you can actually shift fires, you are forced to run a non-standard training program. This program should consist of individual training such as separate ranges, coordinated rehearsals such as rock drills, and integrated live-fire exercises.

The leaders within the consolidated weapons section should attend individual training on qualification ranges, as a minimum. For example, the mortar squad leaders and section sergeant should have an understanding of things like the fire control and distribution required of an M240 gunner. Conversely, the weapons squad leader should be thinking about such things as how a short round of white phosphorus could affect his part of the mission.

This kind of appreciation can go a long way in preventing or quickly solving problems that are bound to occur when things are most critical. It will also make the most of training resources.

The capstone training event is an integrated live-fire exercise that would replicate in both intensity and duration the fire support of a maneuver element's movement onto and across the objective. Most impact areas have ranges or sections dedicated to indirect fire weapons and attack aviation, and these areas are usually target rich with old combat engineer vehicles, tanks, personnel carriers, and assorted other objects. The area selected should provide targets that require shifts laterally and in depth, and should also support range fans for all the weapons to be fired.

Since there is no actual maneuver element to force the shifts in fire, these should be designated by the fire plan, with the XO providing the cue. An audible signal that causes a change in the fire plan due to engagement criteria for the Dragon or Javelin gunners, such as a vehicle moving onto the objective, is an example of intentionally disrupting the fire plan to train the SBF to react, engage the target, then pick up where it left off, while continuing to maintain the momentum of the maneuver element.

What I noticed as a lieutenant in the light infantry was that it was difficult to make any real headway in training the weapons squad. As a second lieutenant rifle platoon leader, I had a full plate and did not understand the full value of my weapons squad. The only time I saw them receive the kind of attention and training that made them lethal was the train-up provided by the live-fire branch at the Joint Readiness Training Center.

With training time divided among a number of tasks, I believe that consolidating the company's organic firepower for training and then cross-attaching those assets to meet specific mission requirements can raise the level of proficiency within a weapons squad. It can turn a marginally effective base of fire into an element that supports the scheme of maneuver and maintains momentum. Once you tie the weapons squad in with the company mortars and the company's second in command, you have a capable, flexible element controlled by an experienced leader who understands what the maneuver element needs to succeed in combat.

Captain Robert Thornton led rifle and anti-armor platoons in the 187th Infantry, 101st Airborne Division, and is now assistant S-3, 1st Battalion, 24th Infantry. He is a 1996 ROTC graduate of Austin Peay State University.

Marshal Petain Understood It All

Firepower Kills

BURTON WRIGHT, III

In 1870 the French Army was decisively defeated by the Prussian Army. The reasons for the defeat were many—technology, in that the Prussians had better rifles than the French; staff work, in that Helmuth Karl von Moltke’s development of a new type of staff officer helped to coordinate the movement of the now vast armies Europe could field;

and superior leadership among the Prussian field commanders.

After the Treaty of Paris, France burned for revenge, and the French Army felt the heat but could not initially make the changes required to overcome the fundamental weaknesses inherent in its training and doctrine. Internal bickering was one major problem; religious

attitudes and many officers’ hatred of the Third Republic; the Dreyfus Affair that divided not only the Army but also France; and the rise to power of Colonel Louis Loizeau de Grandmaison.

As head of the Staff College, Grandmaison believed that the only way to win was to develop the idea of the “perpetual offensive”—French infantry

closing with the enemy and routing them. Philippe Petain was then a relatively junior major. Instead of focusing on the overwhelming offensive, Petain spent his time studying two conflicts more recent than the Franco-Prussian War—the Boer War and the Russo-Japanese War.

Unlike many soldiers of his time, he understood the significant lessons of both wars, which were similar. In the Boer War, the Boers were crack shots with rifles. They were armed universally with the German Mauser magazine rifle, while the British Army was armed with a lesser weapon. In battle after battle, the magnificent marksmanship of the Boers stifled British tactics and piled up a significant number of casualties.

At Colenso and Spion Kop, the Boers used steady and accurate rifle fire to win the day. The British plan was thwarted when fog prevented the British troops from occupying the top part of Spion Kop, which, once the fog cleared, was instead occupied by the Boers.

From their superior perch, the Boers delivered such accurate rifle fire that British soldiers could not rise above the shallow trenches they had dug without fear of a bullet in the head. Hundreds of British bodies littered the top of Spion Kop at the end of the battle. At Magersfontein, the Highland Brigade attempt to use a massed infantry attack against Boers dug in with rifle pits and spent the entire day under the blazing sun because they were too exposed to accurate rifle fire.

The British drew some of the correct lessons. After the end of the Boer War, they began rigorously training their infantry in accurate and sustained rifle fire. This was so successful that when the Germans collided with the British Army near Le Cateau, they believed the British had hundreds of machineguns in their line. They didn't. It was the British infantry firing just as the Boers had done before the turn of the century.

The Russo-Japanese war was an even more important one because it was the first modern war that used a significant number of machineguns. In terms of numbers, the two sides were about evenly matched, but the Russians had

almost inexhaustible manpower reserves. The Japanese did not, but the Russians used the machinegun to inflict severe casualties on the Japanese infantry. At several battles before Port Arthur, the Russians used machineguns combined with fortifications and barbed wire to mow down hundreds of Japanese infantry.

Petaun saw the fatal flaw in Grandmaison's theories of offense. Courage and the offensive spirit would be rendered useless by firepower long before the attacking force came to grips with the enemy. He also saw that these two conflicts validated the idea that a good defense is not all that bad. Where Grandmaison decided any defense was silly and a waste of time, Petaun saw it as a means of wearing down the enemy before going over to the offense. In the French Army of his time, Petaun was one of the few who understood the concept of the active defense.

Petaun would have retired an obscure colonel with a less than spectacular record if World War I had not given him his chance. Within a span of only 18 months, he was promoted from command of a regiment to Supreme Army Command. With his personal rise, so rose his tactical proficiency.

As a corps commander, Petaun used artillery instead of massed infantry. He was not a commander to keep throwing fresh infantry into the maelstrom that was the Western Front. Glory at the cost of high casualties was not his plan; victory was.

In fact, according to Alistair Horne in his epic *The Price of Glory: Verdun 1916*, Petaun made popular some interesting phrases: "The offensive is the fire that advanced; the defensive the fire which stops," and "Cannon conquers, infantry occupies."

His German counterparts appeared ignorant of this theory. In fact, the battle at Verdun, which made Petaun's name a household word in France, illustrated the German disregard for the effectiveness of massed French artillery.

Today's United States Army is far closer to Petaun than to Grandmaison. The average infantry platoon of today has nearly as much firepower as a company of 1918 infantry. The ability of

the infantry—both individually and in small units—to marshal its own firepower and meld it with artillery and air support has proved the validity of Petaun's views—except that today it will not be only artillery but a combined arms team that is decisive.

Compared with World War I, the Infantry now has the ability to use many types of weapons to dominate either offensive or defensive operations. As time passes, technological improvements will continue and refine our means of bringing firepower to bear.

Petaun did not intend to imply rigidity or inflexibility in the employment of firepower. The U.S. Army is moving to make its firepower agile, powerful, and flexible. Military history clearly shows that flexibility in war—the ability to change tactics to fit the weather, the terrain, and the enemy—is a key to victory.

In a discussion I once had with Lieutenant General Harry W.O. Kinnard, former commander of the 1st Cavalry Division in Vietnam, I asked him about the abilities of the enemy—the North Vietnamese Army and the Viet Cong. He praised them as worthy opponents, and he pointed out that they changed after the battle in the Ia Drang Valley to be better able to react to the 1st Cavalry Division's extraordinary ability to move. He also added that he changed the division's way of fighting, and said that he hoped he was always one step ahead of the NVA and the VC.

This superb leader of troops understood the value of flexibility and firepower. Follow his lead. Marshal Petaun would have been proud to command those sky soldiers in South Vietnam. Their common understanding of firepower transcends more than half a century.

Dr. Burton Wright, III, served on active duty in the 7th Infantry Division; in the Weapons Department of the Infantry School; and as an assistant professor of military science, Missouri Western State College. As a civilian historian, he has served at the U.S. Army Center of Military History and the U.S. Army Aviation Center. He is now Command Historian of the U.S. Army Chemical School at Fort Leonard Wood. He is a 1966 ROTC graduate of Creighton University, and also holds a master's degree and a doctorate from Florida State University.

The BTR-T

New Use for Old Tank Hulls

ADAM GEIBEL

Russia's recent combat experience, particularly in local conflicts such as Chechnya, has dramatically revealed the need for increased protection of mecha-

nized infantry from modern weapon systems. Federal units suffered horrendous armored fighting vehicle losses in the first battle of Grozny (December

1994 to March 1995), although these can be attributed more to leadership and logistics than to materiel shortcomings. While a better carrier will never substi-

tute for good training and tactics, the current Russian armored personnel carriers (BTR-80, BRDM, BMD, BMP-2, and MMT-LB) have long been considered underarmored.

Applique armor for the BMP-2 appeared in the last years of the Afghanistan War, and the survivability upgrades built into the BMP-3 reflect those experiences of the 1980s.

More recently, while implementing a "maximum protection" concept, the Design Bureau of Transport Machine-Building (in cooperation with the Transport Machine-Building Plant, a state-run production association) developed and manufactured a prototype of the BTR-T heavy armored personnel carrier based on the T-55 main battle tank (MBT).

Since the remaining T-55s (an estimated 100,000 were manufactured) were at the end of their life span as effective MBTs, those still in Russia's armed forces inventory have been discarded. Furthermore, a substantial number were delivered to many countries as part of military aid packages. This led the plant to choose the T-55 chassis as the most likely bed for a heavy assault carrier.

According to a 1996 article by Steven Zaloga in *Jane's*, St. Petersburg's Kirov plant had already proposed a heavy infantry tank vehicle based on T-80 tank components. But such a vehicle would be more expensive than something based on an outdated hull.

The BTR-T's most distinguishing feature is its low-silhouette turret, mounting a modern gun-missile weapon system: the 30mm automatic gun (as found on the BMP-2) and Konkurs AT-5 antitank guided missile (ATGM) (NATO Spandrel). This combination can defeat lightly armored ground and air targets as well as heavily armored ground targets.

Reconfiguring the crew compartment created enough room in the hull to accommodate a commander, a driver, and five assault troops. Along with modern nuclear, biological, chemical (NBC) and environmental controls, the vehicle's survivability is dramatically increased due to the installation of an integral smoke screen generating sys-

tem, improved mine protection, and built-in explosive reactive armor (ERA) protection systems.

The modular concept of combat compartments will allow manufacturers to equip the BTR-T with various armament systems (including NATO standard) to meet the customer's requirements. Conceivably, this could also include Tula's KBP (Instrument Industry Design Bureau) one-man Kliver turret, designed for the BTR-60/70/80; a 30mm 2A72 automatic cannon with AT-13 Kornet ATGM. The Kornet can be armed with fuel-air explosive warheads, giving it an artillery-like capability against soft targets. Current factory offerings include the following:

- 30mm 2A42 automatic cannon and Konkurs AT-5 ATGM.
- 30mm 2A42 automatic gun and 30mm AGS-17 automatic grenade launcher.
- 2A38 twin-barrel gun.
- 12.7mm NSV AA HMG and Konkurs AT-5 ATGM.
- 12.7mm NSV AA HMG and 30mm AGS-17 automatic grenade launcher.

The plant claims that, by implementing the engineering concepts already incorporated into the BTR-T, it is possible to build heavy assault vehicles on the chassis of any outdated Russian or foreign-made tank. Operational precedence already exists (with the Israeli

Army) and a potential worldwide market.

Using tanks as assault squad carriers is not a new idea. The British fielded the Mk V, a troop-carrying version of the rhomboid tank they used late in World War I. This was followed by the Canadian Kangaroo concept (a turretless Sherman variant) during World War II.

Most recently, the Israelis have the Centurion-based Nagmashot and T-55-based Achzarit heavy assault carriers in service (and the Merkava MBT can theoretically carry troops as well). The Achzarit—developed after the Israeli Defense Force's experience and dissatisfaction with the U.S. M113 armored personnel carrier's performance in Lebanon—is used in the Golani infantry brigade and two reserve infantry brigades, but more units are getting them.

India's huge fleets of Vicar's Vijayanta and T-55 MBTs are approaching the end of their life span, while their T-72 fleet is being updated (India's current tracked infantry fighting vehicle is the BMP-2).

Furthermore, in a concession to a growing desire by purchasers to include transfer of technology in any arms deal, the Russian plant stated that they can convert obsolete tanks into BTR-T heavy armored personnel carriers using the customer's production facilities with

BTR-T BASIC CHARACTERISTICS

WEIGHT	38.5 metric tons
CREW	2
TROOPS	5
ARMAMENT	
Automatic gun:	
Type	30mm 2A42
Ammunition load	200 rounds
ATGM:	
Type	"Konkurs" 135mm
Ammunition load	3 rounds
902 smoke grenade launchers	12
PROTECTION:	
Built-in ERA	600mm equivalent @ 30° T-55 front glacis RHA 90mm @ 60°
MOBILITY	
Max speed	50 km/h
Road endurance	500 km
Negotiated obstacles:	
gradients and slopes	32°
side-slope	30°
vertical obstacles	.8 meters
ditch, meters	2.7 meters
fording depth, w/o preparation	1.4 meters
w/OPV snorkel tube	5 meters

components delivered from Russia.

Where do heavy assault carriers fit into the 21st Century battlefield mix? Are they practical, given all the expense and effort? At first glance, the idea appears sound—fleets of obsolete tanks inexpensively converted into hardened personnel carriers, which also happen to have better mine resistance than current APCs. Furthermore, Russian Kontakt 5 ERA is rumored to offer protection against 105mm sabot rounds, still the prevailing MBT main gun in western tank fleets.

According to Russian literature, the BTR-T is designed to transport mechanized infantry subunits into NBC-contaminated environments under heavy fire and defeat hostile targets. Although the advantages of thicker armor are obvious, it is interesting to note the emphasis that Russian designers continue to place on operating in an NBC environment. One possible tactical configuration for the heavy assault carrier is a close security platoon for MBT companies.

One drawback of this concept is that

the use of obsolete tanks requires units to maintain a stock of parts significantly different from those required for MBTs. Another is that the BTR-T squad would have to dismount “over the top” as with the old Soviet BTR-152s or -50s.

Although the lack of firing ports would seem to be another shortcoming, a squad should be dismounted during urban assaults (not hiding in their APCs, as the Russian troops did during the 1994 New Year’s Eve assault on Grozny). A stabilized turret-mounted weapon system with a fire control system is far more effective than several troops bouncing around, wasting ammunition. (The BTR-T’s limit of 200 rounds of 30mm is another shortcoming, as is the absence of a 7.62mm coaxial machinegun. If the small turret would be overloaded with a general-purpose machinegun, then an auxiliary remote-control turret, like those found on the Marder or even the LeClerc, would be useful.)

Another questionable point is whether a heavy assault carrier based on an outdated tank chassis can maintain

the same cross-country pace as a premium MBT. Beyond the horsepower to weight ratio, the older suspension systems may not give an acceptable ride at higher speeds. One option would be to fit something similar to Continental Teledyne’s hydropneumatic suspension systems in place of the torsion bars, which would increase the price and complexity of this conversion.

Whatever the costs, modifications, and capabilities of such recycled tank chassis, their availability and the degrees of interest in them highlight their potential as improved armored personnel transport. U.S. forces must continue to remain informed and alert to the appearance of such vehicles in the conflicts of the next century.

Adam Geibel is the tactical intelligence officer in the 5th Battalion, 117th Cavalry, New Jersey Army National Guard. He previously led a tank platoon in the 3d Battalion, 102d Armor. He is a graduate of Drexel University and was commissioned through the New Jersey Military Academy Officer Candidate School in 1990.

Battlefield Bumbles

Lessons from Korean War Battlefields

LIEUTENANT COLONEL FORREST KLEINMAN, U.S. Army, Retired

During World War II, General George Patton's troops often saw him jeeping to the fighting front, but they never saw him speeding to the rear. He had a light plane pick him up at the front for return trips.

Doubtless, Patton remembered a notorious World War I fiasco: A staff officer with a routine message galloped his horse from front to rear of a troop column on its way to the trenches. The rider's speedy passage sparked dire rumors, which fanned the troops into a panic. The column broke into a pell mell rush to the rear.

In hope of imparting salutary memories such as this, I offer here a few bumbles from Korean War battlefields:

IT HAPPENED DURING THE EARLY DAYS of the conflict when Major General William Dean's 24th Infantry Division was defending the key town of Taejon. At the division command post in a Korean school house, his G-3 section was in radio contact with a reconnaissance plane cruising the endless column of enemy tanks and troops headed for Taejon. The pilot reported that the tanks were peeling off and disappearing into a wooded area near the road. Obviously, the tanks were going into an assembly area preparatory to attacking the 24th's Kum River defense line.

An assistant G-3 plotted the assembly area on the situation map and measured distance. When he found that it slightly exceeded the division artillery range, he appealed to the Air Force liaison officer—a lieutenant colonel who was the division's contact with GHQ. "Call in those heavy bombers on Okinawa and knock out that assembly area tonight."

The lieutenant colonel laughed at him. "That's only a tactical target,

Major. Don't you know heavy bombers are reserved for *strategic* targets?"

General Dean and his G-3, Colonel Smee, were touring the front line and couldn't be reached in time to overrule the air officer. So the enemy tanks survived to lead the attacks on Taejon.

Although it was too late to save Taejon, the lieutenant colonel's axiom was soon disavowed by General MacArthur. He unleashed a heavy bomber attack upon an entrenched North Korean regiment opposing Colonel Oh's South Korean regiment. The bombardment enabled the South Koreans to join the 19th U.S. Infantry delaying force on the inland road south to Chinju.

At Chinju a battalion commander in the 19th Infantry refused to allow a light tank to venture 50 yards beyond the perimeter where it could destroy a large group of enemy moving in open terrain. He said, "Tanks are never committed singly."

The lesson of such incidents, of course, is etched in blood, not ink. Axioms are pointless—and indeed dangerous—if they are not tempered with the common sense often demanded by specific situations. All available force that fits the occasion must be used to destroy the enemy.

No rule should be as binding as it was to an inflexible 24th Division ordnance supply officer at Taejon. He refused to break up basic loads of artillery shells to provide enough HEAT (high-explosive antitank) rounds for our field artillery to employ in their role as antitank weapons. This at a time when it could have stopped the T-34s from overrunning the skeleton division defenses.

FROM THE OUTSET, THE 24TH Division's most formidable problem was the one

posed by the enemy's World War II Russian T-34 medium tanks. Their armor was impervious to our World War II 2.75-inch rocket launcher. A 19th Infantry lieutenant launched a dozen rockets at close range without damaging a T-34.

So the G-3 section was elated when a colonel arrived at the CP with a classified message from the States. A U.S. factory was working night and day to produce a 3.5-inch rocket launcher that could penetrate any armor then in existence. Two plane loads were on the way to our division, he said. This meant Bazooka gunners should be assembled in the rear for a quickie course on the new weapon. Then they could quickly rejoin their units at the front, armed and ready to knock out T-34s.

"I just hope they split the launchers and the ammunition when they load the planes," said a cynical assistant G-3. His sour grapes drew a frown from the messenger and a dirty look from his section chief. He was banished from the CP forthwith to conduct the 3.5 training course.

A day or two later, one of the planes arrived with a load of the new launchers. The other plane—socked in by bad weather in Kyushu, Japan—contained all the ammunition. Precious days passed while gunners trained without ammunition and front-line units were without rocket launchers.

This bumble was born stateside, but its effects were felt on the battlefield. The salutary lesson in this instance is posed by a question: "Who supervised the loading of the two planes—an experienced G-3 officer or an inexperienced airman?"

THOUGH KOREA IS NOT IDEAL TANK

terrain, all it takes for tactical success there is a few invulnerable tanks on the roads to spearhead the infantry. So the T-34 was still a problem when the 19th Infantry delaying force reached Chinju in southwest Korea. By then they were armed with the 3.5 rocket launcher, but it was effective only at close range. What was needed was an antitank weapon with at least the range of the T-34s.

There were three Pershing tanks in Japan with just such a weapon—a 90mm cannon that could penetrate armor that was immune to our light tank's 37mm or 75mm guns.

Because the 19th Infantry was blocking access to the open southern arc of the Pusan perimeter, the Pershings were sent there. Applause at Colonel Ned Moore's CP in Chinju! Then came a second message like a drench of ice water. The Pershings could not be moved off the railroad flat cars. They had no fan belts.

Quickly the GHQ was informed of the emergency. The next day the 19th Infantry received an air drop of fan belts. Wrong size!

By this time the North Koreans were threatening to envelop the delaying force. The 19th's two battalions had to retreat to the next delaying position at Haman Notch. So the Pershing tanks were left behind in Chinju's rail yards. First, of course, the tanks were rendered as unusable to the enemy as they were to us.

Like the other blunders, this one poses questions: Why wasn't the entire transit process supervised and accom-

panied by ordnance officers? Why weren't the tanks guarded night and day en route to Chinju?

Even a General MacArthur can't think of every detail. That's what staffs are for.

THE FINAL INCIDENT FROM THIS GRAB bag of battlefield bumbles occurred much later—during the Chinese invasion of North Korea. After MacArthur's reconnaissance in force revealed the magnitude of the Chinese threat, he ordered a hasty retreat below the 38th parallel. It was the classic stratagem of the mythic Greek warrior who fled his numerically superior enemies until he could turn and defeat them piecemeal.

For the stratagem to succeed, however, the Eighth Army had to withdraw so swiftly and deeply that it would have time and space to reorganize the defense. So the main roads south were filled night and day by double files of tanks, trucks, and artillery. Units were mixed into the columns wherever they could enter.

Riding between two light tanks, a cynical staff officer of the 24th Division was in the western column when it arrived at a multi-spooked road junction about 50 kilometers below Seoul. There he found two busy military policemen directing elements down the various roads. He stopped his jeep on the shoulder to watch.

Soon it became obvious that the MPs were diverting the column's elements more or less at random. "How do you know which units go where?" he asked. "We were just told to keep the column

from standing still," was the response.

In other words, the units were not being directed to planned assembly areas. They were being sent into a hodgepodge in which artillery could wind up in front of infantry and service units in front of artillery.

As it turned out, the speed of the retreat—plus the rear guard's artillery fire and air strikes—provided just enough time to untangle the units. By the time the Chinese pursuit arrived, the Eighth Army was aligned in a hasty defense. But what if the time necessary to organize the defense had run out?

Why wasn't an Eighth Army G-3 officer at that crucial road intersection with a deployment plan and with radio contact to GHQ in case of late revisions? Why was the job left to two MP privates?

If General Patton could learn from the past, and if General MacArthur could ignore axioms, perhaps today's commanders and staff officers can benefit by remembering any battlefield bumbles they may experience.

How do I know these events in Korea occurred exactly as related? Because I was there every time. I was the staff officer who watched them unfold and observed the consequences.

Lieutenant Colonel Forrest K. Kleinman entered the Army in 1934, and later received his commission as an officer in the Infantry. He has commanded a training company and a heavy weapons company, and served as the S-3 and executive officer of an infantry battalion. He saw action as a battalion landing team S-3 in North Africa, and served with the 24th Infantry Division during the Korean War. He retired in 1960, and currently resides in Salt Lake City, Utah.

The Army's Nonlethal Weapons

An Overview

CAPTAIN ALFRED E. JACKSON

Over the past ten years, nontraditional military operations (such as peacekeeping, humanitarian, and stability and support missions) have placed demanding requirements on our soldiers and leaders. The presence of noncombatants and civilians in these operations has forced our troops to use more initiative and imagination in executing their missions, and having nonlethal weapons available in potentially volatile situations will enhance their capability.

Nonlethal weapons are defined as weapons explicitly designed and primarily employed to incapacitate personnel and materiel, while minimizing

fatalities, permanent injury to personnel, and undesired collateral damage to property and the environment.

Some capability requirements were identified by warfighting commanders as the core for a joint concept for nonlethal weapons in both categories—counterpersonnel and countermateriel.

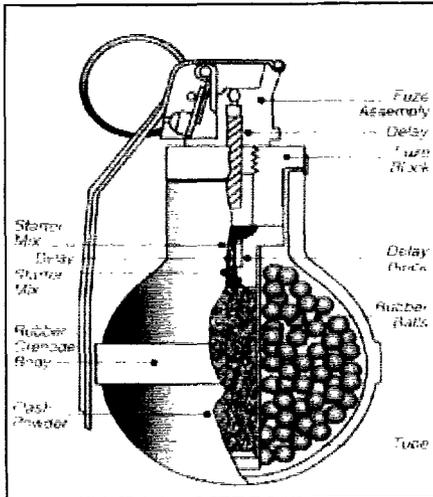
Counterpersonnel capabilities help reduce the risk of fatalities or serious casualties among noncombatants and friendly or enemy forces. Countermateriel capabilities render equipment and facilities unusable without completely destroying them.

Within these two categories, there are

six functional areas. Counterpersonnel capabilities include four functional areas: crowd control, incapacitation of personnel, area denial to personnel, and clearing facilities of personnel. The countermateriel category includes two functional areas: area denial to vehicles and disabling vehicles, vessels, and facilities.

The U.S. Army Infantry Center is the proponent for tactical applications, and the U.S. Army Military Police School is the proponent for law enforcement applications.

In the near future, when a unit is notified to deploy and execute a nontradi-



The sting ball/stun grenade can be used to break contact or enforce a buffer zone with a violent crowd.

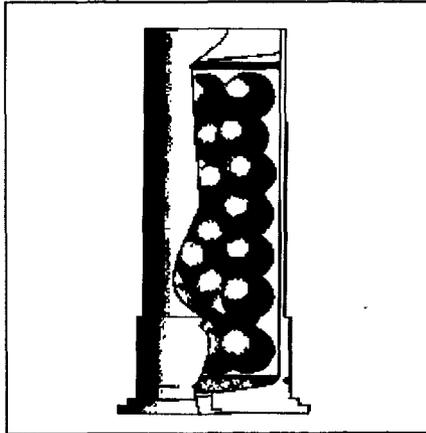
tional military operation, it will draw and use a nonlethal capability set (NLCS) to enhance its force protection and reduce noncombatant casualties. Following is a brief description of an NLCS and how the Army plans to use and train on it in the near future:

An NLCS will contain the weapon systems, munitions, and equipment required to satisfy most operational requirements for an enhanced capability to apply nonlethal force. It is designed to augment lethal forces and will be employed in a manner that will incapacitate personnel or materiel, while minimizing fatalities or permanent injury, and damage to property and the environment. The set was designed to support a battalion/task force. A 200-man company, reinforced with support personnel, was selected as a conceptual basis for employment of the components. The set can be divided into four distinct categories:

Individual Protective Equipment. These items include face and body shields (ballistic and riot control types), shin and knee guards, and other protective garments as they become available.

Weapons. These items include a shotgun, riot batons, individual oleoresin capsicum (OC) pepper spray or M36 CR dispensers, riot control agent dispensers, restraining devices, and a variety of nonlethal munitions.

Enhancement Devices. Such devices as bullhorns and voice amplifying devices (for protective masks) increase



The 40mm crowd dispersal round enables a soldier to stun an individual without penetrating the body.

command and control capabilities. They also include high intensity searchlights and devices that can be used for area denial or at local checkpoints.

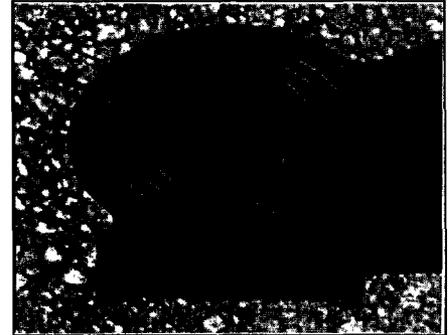
Training Devices/Allocations. Each capability set is designed to include training devices and training ammunition. The ammunition provided is the maximum necessary to conduct live-fire qualification or familiarization for each ammunition type. Since many of the operations that require nonlethal capabilities have proved to be of protracted duration, these sets are designed to provide training ammunition for three separate unit rotations before training stocks need to be resupplied or munition stocks need to be rotated.

Training Strategies

An NLCS is designed to be a pre-positioned stock of equipment that will be issued only in support of mission requirements. Due to this contingency method of allocation and the special characteristics of some nonlethal components, there will be special training requirements for soldiers:

User Training. User training will be handled through the development of a multi-media training support package and supplemented by a mobile training team (MTT) to conduct "train-the-trainer" certification. The support package will be drawn with the NLCS and will also be made available through one of the Army training websites to ensure the widest possible dissemination and rapid updating.

Train the Trainer. Train-the-trainer



The individual voice amplification system is critical while controlling a crowd while wearing a protective mask.

personnel can license or certify soldiers in the use of NLCS components and can certify unit trainers in small-unit tactics, techniques, and procedures. Personnel operating special support equipment can be licensed to do so on their automated DA Form 348 as a means of managing certification. Train-the-trainer training will be done through an approved course. Currently, the U.S. Marine Corps has the only Nonlethal Weapon Instructor Course, located at the U.S. Army Military Police School, at Fort Leonard Wood, Missouri. There are plans to make this a joint course in the future.

In addition to this course, the plan is to formalize an NLCS MTT to meet Army training requirements on an emergency basis. A unit that needs a nonlethal weapon MTT submits a requirements document to Department of the Army; if the request is approved, the tasking is forwarded to the Army's Training and Doctrine Command (TRADOC).

Institutional Training. Soldiers at all levels should be aware of NL programs in general as part of their professional development. There should be some general instruction on NLCS and their capabilities at various levels in the service schools, particularly in those branches (Infantry and Military Police) most likely to employ them. The MP School currently provides instruction on NL programs, and the Infantry School is looking at the requirements to provide it in the future.

The Army fielded five NLC sets in Fiscal Year 2000, and plans to have a total of 30 in the field by FY 2005. The distribution and training plans are cur-

rently being finalized at TRADOC and proponentry level.

Funded Acquisition Programs

Seven funded acquisition programs are under development:

Modular Crowd Control Munition (MCCM). MCCM is a nonlethal variant of the current Claymore mine. The lethal fragmentary payload is replaced with numerous rubber ball, blunt impact munitions for use in crowd control.

Portable Vehicle Immobilization System (PVIS). PVIS is a pre-replaced capture system designed to stop a 7,500-pound vehicle traveling at speeds up to 45 miles per hour without causing permanent injury to the occupants.

NL Crowd Dispersal Cartridge. This cartridge is intended to be fired from the M203 40mm grenade launcher for crowd control. It will give the warfighter a way to strike a targeted individual with a direct fire, low-hazard, and non-shrapnel-producing blunt trauma round from 15 to 30 meters.

Bounding NL Munitions (BNLM). BNLM is a nonlethal tactical area denial munition for site security and perimeter defense. The payloads being developed are expected to produce an audible alert signal to friendly forces within a minimum range of 200 meters.

Canister Launched Area Denial System. This system will provide friendly forces a rapidly dispensed nonlethal area denial capability. Its launcher will be used to deliver a variety of payloads, including BNLMs.

66mm Nonlethal Munitions. These munitions are intended to provide a short-range, indirect fire, crowd control/area denial NL capability that can be employed from the light vehicle obscurant smoke system. The two types of munitions are blunt trauma (450 .32 caliber rubber balls inside a rubber housing attached to a metal base) and distraction (flash bang) made of a polyurethane material that will produce an audible and visible distraction.

Foam Applications. Foam applications will enable units to delay access to building openings in urban operations and temporarily disable selected equip-

DOCTRINAL LITERATURE

FM 7-98, *Operations In Low-Intensity Conflict.*

FM 7-98-1, *Stability and Support Operations Training Support Package.*

FM 19-4, *Military Police Law and Order Operations.*

FM 19-15, *Civil Disturbances*

FM 100-23, *Peace Operations*

FM 90-40, *Multi-Service Procedures for the Tactical Employment of Nonlethal Weapons.*

TRADOC Pamphlet 525-5, *Force XXI Operations.*

TRADOC Pamphlet 525-66, *Military Operations Battlefield Visualization Concept.*

TRADOC Pamphlet 525-73 w/c 1, *Military Operations, Concept for Nonlethal Capabilities in Army Operations.*

Infantry Branch Concept on Nonlethal Tactical Applications.

ment, vehicles, and weapons.

These items will be included in the NLC sets, or used along with them once they are fielded.

Technology Investments Programs

Technology Investment Programs (TIPs) are short (one- to two-year) initiatives with products designed to meet identified needs relating to the core capabilities for nonlethal weapons. They are intended to stimulate governmental laboratories, industries, and academia to generate technological concepts and solutions that meet current or future NL mission needs and requirements. Seven of these programs are currently funded:

Pulsed Chemical Laser. The objective is intended to create a flash-bang effect on the target using varying amounts of energy. The effect is equivalent to delivering a massless, shrapnel-less blunt impact on the surface of the target.

Frangible Mortar Casing. The objective is to develop a nonlethal mortar round based on the existing M821 120mm high-explosive round. The flight performance of this round should match as closely as possible the rounds in the inventory in the areas of aerodynamics, ballistics, firing tables, and propellant loads.

Nonlethal 81mm Mortar. The objective is to develop and demonstrate a nonlethal mortar round capable of delivering payloads to a long range. The desired effect is to cause disorientation

and distraction among the crowd in a targeted area.

Microcapsules. The objective is to determine the effectiveness of delivering nonlethal encapsulated chemicals. It will offer significantly improved ways of delivering chemical agents similar to the ones already being used, but which are now only crudely delivered.

Airborne Tactical Laser. The objective is to conduct a feasibility study to determine the effectiveness of an airborne tactical laser to conduct nonlethal engagements against materiel targets.

Overhead Chemical Agent Dispersal System. The objective is to demonstrate the ability to disperse nonlethal chemicals rapidly over large areas. The system provides a flash-bang effect when the chemical agents are rapidly dispersed. It can be used for crowd control or to provide a remotely generated protective barrier.

NLW Guided Projectile. The objective is to conduct a feasibility study to determine possible usage, including payload tradeoff analysis and effectiveness studies. In addition, this effort will explore the feasibility of applying guided projectile technologies to the long-range delivery and deployment of nonlethal weapons.

At the conclusion of each TIP period, a decision to terminate or keep the program will be made by the proponent agency for nonlethal weapon development.

Nontraditional military operations will continue to be part of the Army's operations. The presence of non-combatants and civilians in these operations makes it very difficult to use strictly lethal weapons. The need for nonlethal weapons has become more demanding, and they will prove to be an effective force multiplier.

Reviewing the accompanying list of doctrinal literature should help unit leaders understand these new weapons.

Captain Alfred E. Jackson, when he prepared this article, was assigned to the Small Arms Division, Directorate of Combat Developments, U.S. Army Infantry School, at Fort Benning.

“We Took a Hell of a Beating”

General “Vinegar Joe” Stilwell in Burma

GORDON BROWNE

In the early days of World War II, the United States government was faced with the difficult problem of finding someone to send into the China-Burma theater, someone who could deal with the complex social and political aspects of that area and who could also put together a military command that would successfully fight the Japanese. This thankless task was given to a Chinese-speaking brigadier general named Joseph W. Stilwell. This 60-year-old general knew the difficulty that would face an American commander who was caught between the colonialist British Army of India/Burma and the nationalist (actually ineffective fascist) Chinese government forces under the inept dictatorship of Chiang Kai-shek.

There were a couple of problems in assigning Joe Stilwell to this position. He was only a one-star general and to be equal in rank with the British and Chinese officers in the area, he was quickly promoted two grades, making him a lieutenant general. Besides the promotion, however, there was the fact that Stilwell got his nickname, “Vinegar Joe”, from his rather caustic and extremely cynical personality. He had the habit of saying what he thought, which in the political world of the Far East, was not a very wise policy.

He was constitutionally incapable of remaining silent when confronted with either a political fool or a military buffoon, and it was this characteristic that probably found him only a brigadier general at the beginning of the war. It was suggested that he was a misanthrope, but his disgust with humans did not encompass all of mankind—it was generally directed at those in authority who seemed to revel in their ignorance and pomposity. Stilwell was different from most of the high-ranking American military officers, and even those close to him had to admit they never completely understood the man and considered him at times a strangely elusive character who never really showed all of himself to anyone.

Lieutenant General Stilwell, along with his small staff, flew out of Florida in early February 1942. Due to war conditions, it took two weeks to get from the United States to India. In the Indian capitol, Stilwell had lengthy conferences with the British, who expressed their extreme dislike and

distrust of the Chinese. Then he flew on to China for discussions with the Chinese, who expressed their hatred and suspicion of the British. By this time the Japanese invasion of Burma was well under way.

Chiang Kai-shek informed General Stilwell that he was now the overall commander of all the Chinese armies still fighting in Burma. This was done to assure the U.S. government that the Chinese were serious in their commitment to fight the Japanese. Historically, Stilwell was the first non-Chinese ever given command of Chinese forces. When he finally arrived in Burma on 11 March to take command, the Japanese Army had already taken the port city of Rangoon and was moving quickly northward up country toward the city of Mandalay (see map).

The man who was expected to bring a coherence to the coordination between the Chinese and the British armed forces informed the British commanders that he, Lieutenant General Joseph W. Stilwell, would henceforth be commanding the Chinese armies in Burma at the instruction of Chiang Kai-shek. He announced that his immediate intention was to attack the Japanese as soon as possible and hold the line in Burma so that the land route between India and China, known as the Burma Road, would remain open to supply the Chinese in their continuing fight against the Japanese.

Unknown to Stilwell, shortly after he had left the British headquarters, the commander of the Chinese 5th Army came in and informed the British headquarters staff that General Stilwell was not the new commander of the Chinese forces but only thought he was. The Chinese general informed the British that the Chinese wanted to keep the Americans in the war and the only way to do this was to give them a few commands on paper.

The military situation was quickly deteriorating. The numerous defeats the British had suffered at the hands of the Japanese throughout the Pacific rim had thrown their command into disarray, and the idea of defending Burma became less a question of how to save it than of why they should. Burma was the most poorly run colony of the British Empire, and the native population had become extremely hostile.

Unlike colonial India, the infrastructure that had been imposed on Burmese came in the form of high-ranking British officials backed up by Indian civil servants who took most of the administrative and the management jobs of actually running the country, shunting the Burmese population aside into a situation that was very close to slavery.

Along with this British political problem was the fact that the Chinese were exceedingly reluctant to place their army in any sort of danger. From Chiang Kai-shek down through his general officer ranks, the feeling was that they had already done enough over the past four and a half years fighting the Japanese, and it was time for the Americans and the British to take on the task. When General Stilwell gave an order to one of the Chinese generals under his command to move forward and engage the Japanese, nothing happened. Excuses were made, delay followed delay, and nothing moved.

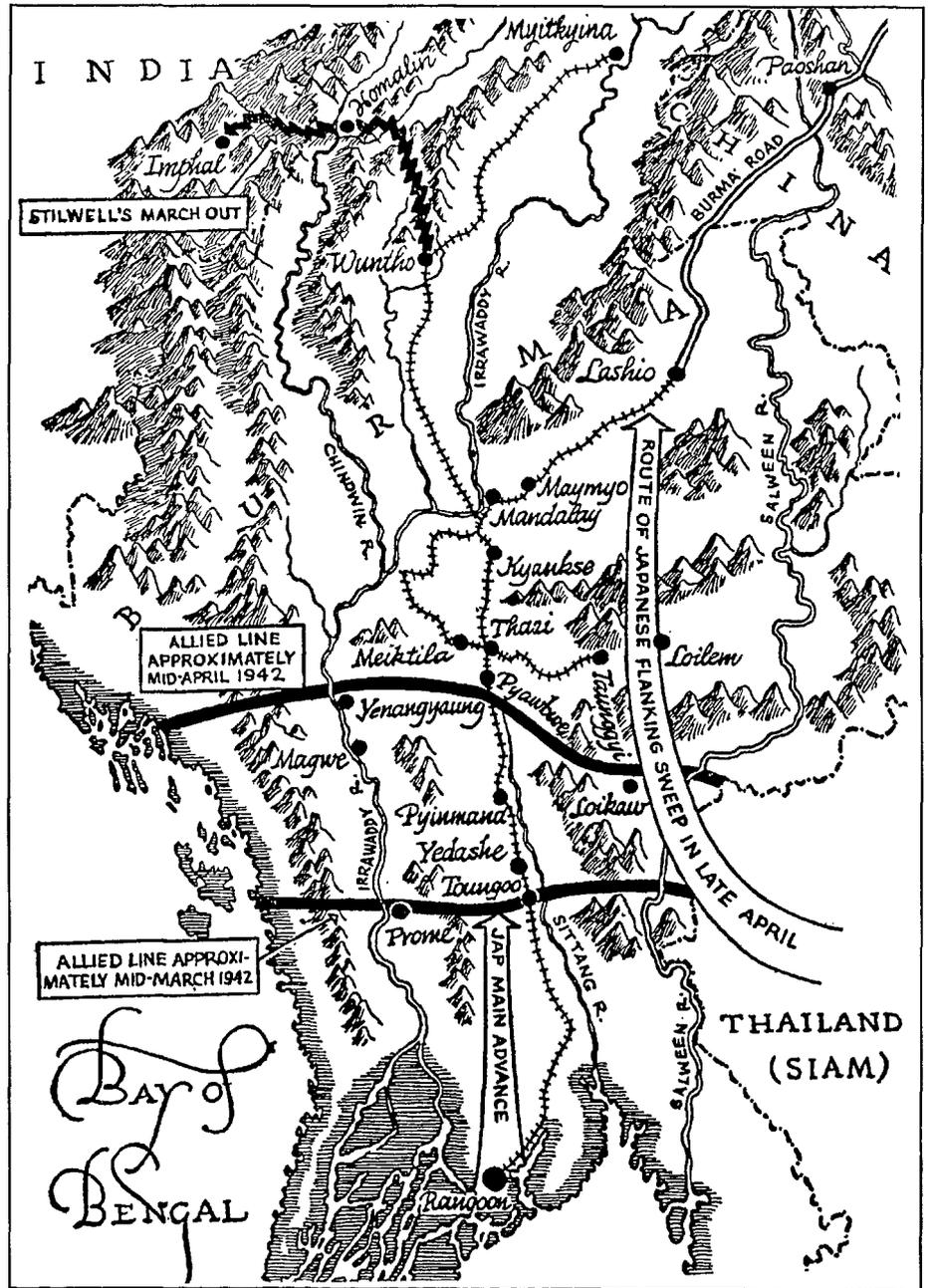
Stilwell wrote in his diary, "The Chinese commanders are up and down, highly optimistic one minute, in the depths of gloom the next. I can't shoot them. I can't relieve them. And just talking to them does no good. So the upshot is that I am the stooge who does the dirty work and takes the rap." To one newspaper reporter, he pointed out that he was supposed to be in command of all the Chinese troops in Burma, "You don't know what that means?" he asked the man, "I don't either!"

Amid this confusion, the Japanese opened a three-pronged offensive up the two river valleys and behind the mountain range that separated Burma from Thailand. The British were defending the valley closest to India on the Irrawaddy River, leaving the Central Valley that straddled the Sittang River to the Chinese army. Within the Burmese population a Fifth Column had sprung up and was assisting the Japanese in their attacks on the allied command. The Japanese had taken advantage of the anti-British, anti-colonial sentiment by propagandizing the Burmese with the motto "Asia for the Asians." Using back trails and dirt roads, the Burmese led the Japanese around and into the rear of both the British and the Chinese forces, creating havoc.

Stilwell moved back up through Burma along with the Chinese forces as the situation worsened. The British, losing their desire to fight in Burma, were showing signs of getting ready to retreat into India. The final blow came when the Japanese attacked the Chinese 55th Division guarding the eastern flank facing Thailand. One moment there was a Chinese army division and the next

moment there was none. Stilwell told Captain Fred Eldridge, his public relations officer, "That is the . . . damndest thing I ever saw. Last night I had a division and today there isn't any." Under heavy attack by the Japanese, the division simply broke up. The officers fled, and the peasant Chinese soldiers left the front in twos and threes and headed back toward China.

At the same time, the Japanese Army quickly went north, got in behind the retreating allies, and closed off the Burma Road. A cargo plane was flown in specifically to take General Stilwell, along with the members of his staff, out of Burma to India. But the idea of flying out of Burma in defeat was something that Stilwell couldn't accept. During the previous months, the British had suffered numerous defeats at the hands of the Japanese, and the Americans had taken a severe beating at Pearl Harbor, on Wake Island, and in the Philippines, but Stilwell had not yet been given a chance to



fight the Japanese, and he had no intention of turning tail and running away. It was not part of his character.

Fully aware of the fact that Chiang Kai-shek was sending secret communiqués to the Chinese commanders telling them not to follow his orders, Stilwell felt that he couldn't be blamed for something that wasn't under his control. He was a three-star general in command of an army that didn't listen to him. He gave commands that no one followed, and now it was being suggested that he jump on an airplane, abandon his command, and escape into India. Turning away from the plane, he sent a message to the world at large that Vinegar Joe Stilwell, the American commander of the China-Burma front, was still in command and was still fighting. He wasn't going to let the Japanese run him out. To the Chinese, his decision to stay with the troops was a simple gesture known as *saving face*.

Two Americans had joined the group that remained standing with General Stilwell as the last plane took off for India. One was the Burmese-born, American Baptist missionary surgeon, Dr. Gordon Seagrave. The son of missionary parents, he was a man of great energy, strong religious faith, and dedication to the practice of medicine among the Burmese people. Like Stilwell, he had a sharp, rough-edged personality that created great difficulty for him in dealing with the British colonial government officials.

Dr. Seagrave had established a hospital in the mountainous Shan State of northeastern Burma and trained the local native girls as nurses, while giving medical care to anyone who came through the doors. Much to Seagrave's surprise, Stilwell immediately accepted him into his military organization, including all of his native Shan and Chin nurses and the group of seven young British Quakers who were working with him as a volunteer ambulance unit.

The second unusual American to stay was 32-year-old Jack Belden. A Brooklyn-born Colgate University honors graduate who, facing America's great depression, had shipped out in the early 1930s and ended up jumping ship in China where he wandered about doing various jobs, such as bartending and teaching English, while he learned to read and write Chinese. Eventually, he worked his way into the newspaper business and ended up as the correspondent for the United Press International. In this capacity he covered the Japanese invasion of the Chinese mainland where he first met and became friends with Stilwell. Belden was described as something of a romantic and idealist who was moody, driven, and alternately cheerful and despondent. He was one of those strange Americans who wandered about the Far East and were considered eccentric characters.

Later, when Colonel Stilwell returned to China as a lieutenant general, Jack Belden joined him and went down into Burma with him as the newly appointed correspondent for *Time* magazine. In his book, *Retreat With Stilwell*, Belden said he woke up one morning and found that he was the only journalist left in Burma. All the others had flown out. When he was offered a seat on the last plane, he decided that he had better stay with General Stilwell and quickly wrote the last press communiqué to come out of the Burma war zone: "This is probably my last message. I'm staying with General

Stilwell and his small command. The Japanese are driving with incredible speed, swinging wide of both our east and west flanks and somehow we have to get the Chinese troops out of this closing-in trap. In writing this I hear an American transport plane circling, ready to land. Must go. Goodbye."

With a collection of humanity that looked less like a military command than an international parade, Stilwell headed north in a column of army trucks and jeeps. There were 28 Americans in the group, mostly staff officers, a few sergeants, and one Army doctor. The second American doctor was Gordon Seagrave, who had with him his 19 native nurses and the British Quaker ambulance unit. Then there were the Malayan and Burmese cooks, native mechanics and porters, and a collection of Indians and Anglo-Indians (including an American missionary), a president of a Burmese agricultural college who spoke a number of the native dialects, a collection of 13 British army officers, a squad of 16 Chinese soldiers who were General Stilwell's personal body guard, along with a mixed group of civilians and Jack Belden.

There were about 100 people in the column traveling in an array of military trucks, jeeps, and sedans loaded with ammunition, supplies, and personal effects. They started north

Those close to Stilwell, who had served under him, had great confidence in the man, but the others thought he had lost control of the situation and was going to get them killed or captured by the advancing Japanese.

with the intent of keeping ahead of the encircling Japanese and in front of the retreating Chinese army, which was followed by a mass of desperate refugees.

The attitude among the American officers in the column was decidedly mixed. Those close to Stilwell, who had served under him, had great confidence in the man, but the others thought he had lost control of the situation and was going to get them killed or captured by the advancing Japanese. This second group talked and plotted among themselves and came up with the idea of abandoning all of the civilians in the column, including Seagrave's nurses, and striking out on their own for India.

Major Frank Merrill, who would later become famous as the commander of Merrill's Marauders, approached Jack Belden, who was resting under a tree beside the sleeping General Stilwell. Merrill quietly told Belden about the plan being put together by the American officers to abandon the civilians and strike out on their own into India. It is difficult to understand just why Merrill would approach Belden, a civilian, to tell him about the plot, except for the fact that it was well known that Belden was thought to be a close friend of Stilwell from their China days. Major Merrill probably thought twice about approaching the "old man" directly and felt that Belden could act as some sort of intermediary. After the major explained the situation, Belden told him that he didn't think Stilwell would buy the idea and suggested that Merrill forget about it.



General Stilwell leads his column, followed by his two aides. He set a pace of 115 steps a minute. Unknown to most, he had been a long-distance runner and in China had participated in a number of long marches that helped keep him in top physical condition.

Merrill was right in thinking that Belden was close to the “old man” and knew exactly how he would react. During the Japanese-Chinese conflict in the 1930s, Belden had been one of the free-lance reporters working for the international news services when then-Colonel Stilwell was the American military attaché who was responsible for reporting on the Japanese military for the United States Army. Stilwell had traveled to the front a number of times with the young reporter and readily admitted that Belden’s news reports on the war were his major source of information on what was happening in the Far East.

While Stilwell slept, rumors began to spread through the camp among the native workers, the Chinese guards, the British soldiers, and Seagrave’s nurses. It was being said that the Americans were going to take all of the jeeps and the food and break away, leaving everyone else behind. There were angry discussions and confusion among the members of the column. It all dissipated when at 0300 the general awoke and ordered the column to move out.

In time, the group reached the end of the passable roads. The trucks and other vehicles had to be abandoned. Stilwell

gathered his motley command together and informed them that they were going to march out of Burma through the jungle and over the mountains into India. He explained to them that they would have to cover 14 miles a day to stay ahead of the Japanese. There were also the hordes of refugees coming up behind them, along with the defeated Chinese soldiers heading the same direction. He reminded them that the monsoon rains would start in 10 to 12 days and they had to be out of Burma by that time or they might be stranded. With that he instructed them to throw away anything that wasn’t essential.

A Chinese pack train appeared from nowhere with 20 tiny mules and two drivers; they were immediately hired along with 60 local Burmese to carry the packs and bedrolls. Then Stilwell radioed to headquarters in India that they were getting ready to walk out. The message read, “I’m with a party of one hundred, including Headquarters, Seagrave’s surgical unit and strays. We are armed, have food and a map. Last message for a while. Cheerio, Stilwell.” Then he had the 200-pound radio destroyed.

Stilwell, with a Thompson submachinegun slung over his

shoulder and his watch in hand, moved off at 115 steps a minute into the jungle. Stilwell, normally skinny with gray showing in his hair and the oldest officer in the column, set a grueling pace through the jungle heat. Unknown to most, the general had been a long-distance runner for most of his military life, and during his time in China had participated in a number of arduous long marches that helped keep him in top physical condition. The same could not be said of most of the other American officers who were following behind him into the jungle.

At noon on the first day 51-year-old Colonel William Holcombe, who had not been well for some time, collapsed. The column came to a halt while arrangements were made to have Holcombe carried at the end of the column, along with one of Seagrave's nurses who had recently had surgery. They were being carried on makeshift stretchers by the Quakers from the ambulance unit. The column started up again. An hour later, 39-year-old Major Frank Merrill passed out from heat stroke and a possible heart condition, and was added to the group at the end of the column. He was unconscious and irrational, and there was some question whether he would survive. Because the trail followed along side stream, the Quaker Friends and the nurses were able to acquire two inflatable mattresses that belonged to the Americans and used them to drag the sick through the stream.

Then two more American officers passed out from sunstroke. Captain Tommy Lee and Major Felix Nowakowski collapsed, unconscious, and were placed with the others who were being dragged and carried along at the end of the column. Stilwell couldn't believe that these strapping young Americans were in such bad shape. In his diary entry for that day he wrote, "Christ but we are a poor lot." He reduced the weight of the packs they were carrying to ten pounds for fear that more of the Americans would fall by the wayside.

Dr. Seagrave's 16 tiny nurses ministered to and helped in carrying the sick Americans while singing Christian hymns such as "Onward Christian Soldiers." Nothing was said about the fact that these were some of the same American officers who had proposed abandoning the nurses for fear they would slow down the escape into India. By the second day, Colonel Holcombe, Major Merrill, and Captain Lee were back on their feet, but Major Nowakowski was still unable to walk. Stilwell was disgusted with them. Addressing Colonel Williams, the army doctor who was in his early fifties, Stilwell demanded to know, "Dammit, Williams, you and I can stand it. We're both older than any of them. Why can't they take it?"

At one of the ten-minute rest stops, the general was shown a bedroll that had been found on the back of one of the tiny mules in the pack train. In place of the bare essentials, the pack contained a mattress, an overcoat, suits, a dinner jacket, dress shirts, a collection of personal effects and an assortment of colorful ties. Stilwell kicked the bedroll and all of the clothing into the stream. Because everyone had been carrying heavy backpacks with only essential materials, it was inconceivable that an American officer had decided to keep his dress clothing. Fuming, Stilwell turned to Jack Belden, who just happened to be sitting beside him, and in-

structed the newspaper correspondent to find out who owned the bedroll and inform him immediately. The General stalked off toward the front of the column, leaving Belden to sort out the matter.

For Belden, who wasn't even in the Army, this order to find the culprit was incomprehensible. Jack turned to the public relations officer, Captain Fred Eldridge, and said, "How in the hell am I going to find out who this belongs to?" Eldridge hesitated and then sheepishly admitted it was his, and was later severely reprimanded by Stilwell.

As if Stilwell was not having enough trouble with all that was going on around him, a British Colonel came up to him

A small advance party on one of the small rafts pushed off ahead of the others with four American officers acting as scouts. After buying food from the locals—mostly chickens, eggs, and rice—the four large rafts pushed off downstream.

as he sat with a group of the Americans, including Jack Belden, on the side of the three-foot wide path eating their meager noon meal. The colonel said in all seriousness, "I don't want to criticize you General, but in the British army things would be done differently. The higher rank officers and the other military ranks would eat in separate messes." There is no record that Stilwell responded to the British Colonel but one can easily imagine what he was thinking.

On the third day, the column reached the Uyu River, a tributary that flowed 60 miles west to join the Chindwin River at the city of Homalin east of the mountain range that separated Burma from India. The mule train was sent off downriver with a U.S. officer and the Chinese troops as the rest of the column set to work building rafts.

Seagrave's nurses went about gathering the large leaves and rattan that would be cut into twine. They built the framework to erect shelters on the rafts to shield the rafters from the intense sun. As the work was being completed, Stilwell noted in his diary that the nurses were "always willing" to work, and then added that at the same time "we have a couple of [allied] gentlemen who can't be bothered to work."

Each small raft was made of double layers of bamboo poles bound together with the rattan twine. Then three small rafts were lashed together creating one large 81-foot vessel with a sun shelter on each section. Four such rafts were built.

A small advance party on one of the small rafts pushed off ahead of the others with four American officers acting as scouts. Food was bought from the locals—mostly chickens, eggs, and rice—and the four large rafts pushed off downstream. The Americans with General Stilwell were on the first, followed by the British, then Dr. Seagrave and the nurses on the third with the few Anglo-Indian women. Taking advantage of his civilian status, Jack Belden hitched a ride on the Seagrave raft and spent his time acting the part of

a reporter, gathering stories from those nurses who could speak English. The fourth raft contained the mess with all of the food and the remaining men, mostly Anglo-Indians, Indians, and some Chinese, and Captain Fred Eldridge.

The mood immediately changed from the painful drudgery of the jungle trail to the perfect quiet relaxation of floating on a tropical jungle river. Seagrave noted that it was so hot the men took off all of their clothes with the exception of the underpants (boxer shorts), and the native women removed everything except the light skirts known as "longi," which they tied under their armpits. Those who got hot would slip into the river for a quick swim. "If we weren't swimming," Seagrave wrote, "we were sleeping."

An hour before sunset they pulled in to the shore and, for the first time since they started the retreat, had a meal in which everyone was fully satisfied. The "big chow," as Stilwell called it, included tea, cooked chicken, and rice, with green tomatoes and jungle vegetables. The nurses had gathered wild weeds from the jungle that were cooked up and tasted, as one American noted, like spinach with the vinegar already added.

Once dinner was over, Stilwell ordered his command back onto the rafts despite murmured objections. They pushed off into the current of the river in complete darkness. Around midnight the moon came up. Fred Eldridge later described in somewhat romantic terms what the trip on the river at night seemed to him: "The moon made the black jungle with its enormous trees on either side a thing of shadowy, dramatic magic with the soft, silvery river flowing through it."

During the second day on the river, a bomber roared in overhead, and for a moment they expected to be attacked as the plane banked and turned back toward them. Someone spotted the English insignia on the wings as the plane came down the river a hundred feet off the water and started dropping supplies. A cheer rose from the rafts as everyone, including Stilwell, jumped into the water and raced for the supplies. At that moment local natives rushed out of the jungle and were able to take a few bundles before anyone could get to them. The general with one of the sacks over his shoulder, wearing nothing but his boxer shorts and his campaign hat, proudly walked back to his raft with his bundle.

The plane was a clear indication that the outside world knew they were there and had some concern for their well being.

At dawn on the third day there was a heavy tropical shower. This was not a good sign. The monsoon rains were not due for a week. As the sky cleared, the mountains that separated Burma from India came into view in the distance. By late morning they floated into the city of Homalin. There was no one waiting for them. The advance party had scouted out the town, but there was neither colonial British representation nor, luckily, any sign of the Japanese. The stores were shuttered and the local population remained out of sight. It was noted that the British Commissioner had gone upriver in his launch. Stilwell wrote in his diary, "I bet he's beaten it. Telephone office shut. Suspicious."

The next day, the morning of May 13, after eight days they

faced the serious problem of crossing the Chindwin River to the safety on the other side and the mountains beyond. As the column moved out across the flat river plain leading to the river's edge, someone joked that General Stilwell reminded him a lot of Moses leading his people toward the Red Sea. No one laughed. The problem was that the Chindwin River was not the Red Sea, and it showed no sign that it could be parted.

As the column approached the river's edge, several native dugouts came paddling upstream as if summoned by some higher power, and were immediately put into service ferrying the column to the other side.

Once across, they started up the mountains. The three days of floating down the river had helped. They were rested. The climbing was difficult but not impossible. No sooner had they started up the steep mountain paths than the monsoon rains began, and climbing became extremely difficult. The trails were slippery and people repeatedly lost their footing. They were sick and tired and wanted the ordeal to be over.

In the late afternoon of the second day, exactly ten days from the start of their ordeal, they were met by a British civil servant who had with him the food supplies necessary to carry them the rest of the way into India. They had made it out, just as Stilwell said they would. Feeling safe at last, the people in the column began to change in attitude. As Jack Belden unhappily pointed out, "Before we were sort of homogeneous. A polyglot group hanging together to outwit fate. But once the outside world came in, almost everybody separated back into his or her past. That is the colonels became colonels again, the British became British, the Americans became Americans etc."

During one of the rest stops as they moved back into India, they were sitting by the side of the trail resting. General Stilwell turned to Jack Belden and in confidence told him that an American colonel had come to him with a list of names that he felt should receive medals and decorations for the retreat out of Burma. Silent for a moment, Stilwell finally stated that he just could not believe it and added, "They were just walking out trying to save their own lives and they wanted decorations."

In *Time Magazine*, Belden later wrote, "The iron-haired, grim, skeleton-thin Lieutenant General Joseph Stilwell walked into India with a tommy gun on his shoulder at the head of a polyglot party of weary, hungry, sick American, British, and Chinese army officers, some enlisted men, Burmese nurses, Nagger, Chin, and Shan tribesmen and a devil's brew of Indian and Malayan mechanics, railway men, cooks, cipher clerks and the mixed breeds of Southern Asia. Though they were ragged and weary, everyone was in comparatively good health for so arduous a trip."

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Observations On the IBCT and the FBCB2

CAPTAIN JEFFREY A. SAELI

This article is based upon a study I conducted at Fort Lewis concerning the Interim Brigade Combat Team (IBCT) and the Force XXI Battle Command, Brigade and Below (FBCB2) information system. My principal duties as a data collector included observation of and commentary on the doctrine and tactics of the IBCT, and observation and commentary on the efficacy and integration of the FBCB2.

I draw my conclusions from direct observation of the IBCT and the FBCB2, and discussions with leaders and operators from the battalion commander down to the soldier level. In addition, my military experience and civilian education, viewed as a whole, provide me with a solid background against which to evaluate the incorporation of advanced information systems into a military force at the battalion/brigade level and below.

I agree with the senior Army leadership concerning the need for a major force revision in light of emerging geopolitical realities—global American military dominance, the emergence of asymmetric threats, the absence of a regional conventional threat capable of force projection, continued democratization of the globe, an established global economy, an established global media presence, and the United States' contemporary role as an overseas political leader.

We need a significantly restructured force, tailored to meet emerging threats, and comprising the elements of deployability, lethality, restraint, and an ability—and willingness—to execute diverse and extended operations in environments ranging from “peacekeeping” and similar operations other than war (OOTW) to major theater war (MTW). The IBCT is the nascent expression of this realization, and integrating of such a force into the larger, contemporary Army is the goal of the ongoing effort at Fort Lewis.

With this goal in mind, we must realize that mission requirements of the IBCT must be carefully focused. Fielding a successful, effective force with a definitive mission essential task list (METL) requires changes to both doctrine and modified tables of organization and equipment (MTOEs). Concurrent with the development of this force is the effort to

integrate an advanced information system. Either task would be difficult alone; attempting them together requires close analysis of each competing effort, and of the synergistic effect of simultaneous development.

Capabilities, Limitations, and Emerging Concepts

The IBCT accepts risk through decreased survivability by a reduction in armor protection and firepower in its proposed principal weapons platform, the light armored vehicle (LAV) with a 105mm main gun. This risk is mitigated by doctrinal recognition of a need to augment the IBCT with more robust, conventional armored forces at the high end of the conflict spectrum mitigates. Other mitigating factors are the situational awareness provided by the FBCB2 as an integrated command and control platform for the collection and dissemination of intelligence, the rapid identification of and reaction to enemy threats, and the enhanced integration of supporting forces at all levels.

Capabilities. The IBCT and FBCB2 provide the commander with a robust force structure, well equipped to meet a variety of threats. Company commanders have significant assets under their direct control: sniper teams equipped with both .50 caliber and 7.62mm rifles, multiple-caliber mortar systems (120mm, 81mm, and 60mm), mounted infantry platoons made up of robust rifle squads and weapons squads, integrated sharpshooters and designated Javelin gunners, and a mobile gun system platoon.

This “arms room” concept allows the commander to select force levels and weapons appropriate to the mission, and also to task organize his individual platoons and provide them with enough firepower to operate independently in a diverse and extended environment. The FBCB2 provides the command and control necessary for individual platoons to conduct dissimilar missions at the same time in geographically separated areas.

Further, a high level of mobility, situational awareness, enhanced target acquisition, and improved fire control measures give unusual agility to the company commander oper-

ating independently within the higher commander's intent.

Limitations. A high level of training covering a broad spectrum of missions is necessary to ensure that this force can perform all of its intended roles effectively. A METL will be difficult to develop; the risk is an unmanageable level of assigned tasks and insufficient time to train on all of them. This is inherent in the IBCT's role as a full-spectrum force, prepared for quick insertion into any environment with little notice.

The current FBCB2 system is nearly useless once operations have begun. Conventional analog systems accomplish most communications after the line of departure (LD) is crossed. Some commanders have mitigated this by tasking the executive officer to conduct real-time battle tracking and reporting through the FBCB2 while the commander, mounted or dismounted, conducts the fight. Synchronization becomes a shared duty.

Increased agility and decision-making will be required of leaders at all levels. Current service school programs of instruction do not teach these skills in sufficient depth.

Communications are an essential component of distributed operations. For dispersed units, the disruption of communications is a significant vulnerability.

Service and support for geographically isolated forces is more difficult, particularly for mounted forces.

If it is to operate effectively, this force requires an enhanced information systems management capability. The current MTOE tasks leaders to be the principal operators of the FBCB2, which becomes problematic during dismounted operations.

Emerging Concepts. The IBCT is emerging as a multi-functional team that retains lethality as a *capability* but not as its principal purpose, except in major theater war. Commanders are proving imaginative in the use of restraint and invitations to negotiate or surrender, followed by the appli-

The IBCT is emerging as a multi-functional team that retains lethality as a capability but not as its principal purpose, except in major theater war.

cation of an appropriate level of force, and should be encouraged. This additional consideration will, of course, recognize the presence of civilians on the battlefield, and their likely effect on operations.

- Commanders also show initiative in the use of the FBCB2 to execute battle command and situational awareness, rapidly distributing intelligence and force disposition (friendly and enemy) to the lowest possible level.

- The complex nature of distributed operations has led some commanders to conclude that a company needs a robust tactical operations center in a parallel battle-tracking role.

- Some commanders have discussed the need for an as-

sistant platoon leader, perhaps a warrant officer, to provide positive control of mounted assets while the platoon leader and platoon sergeant fill traditional dismounted roles. This individual would also serve as the platoon's principle FBCB2 administrator.

- Commanders recognize the need for forward observers at the platoon level.

Technical Considerations

The FBCB2 is a fundamentally sound concept that seeks to incorporate advanced information systems into a conventional military force to enhance command and control. It is important to remember, in the discussion that follows, that the FBCB2, in its current form, is a prototype system. Flaws are to be expected. Indeed, the developmental phase of any information system involves identifying the strengths and weaknesses of the proposed system, followed by further modification and testing. User feedback and subsequent modification are a fundamental part of information system design. Early frustration with a developing system must not lead to a belief that the system cannot function as desired.

Three issues immediately present themselves when evaluating the FBCB2 independently of its role in combat and OOTW operations:

Bandwidth and Throughput. The military services are allocated a finite slice of the available electromagnetic spectrum in which to conduct information operations. Any bandwidth assigned to the FBCB2 in its role as a data transmission system limits the bandwidth available for conventional, analog (radio) communications. The same is true in reverse.

Currently, such limited access to the spectrum manifests itself as a slow throughput time for relatively small data packets (25 minutes for one page of text is one example) transmitted through the FBCB2. To achieve full efficacy of the FBCB2, the Army must remedy this shortfall, and without significantly compromising current analog capabilities.

It is possible that spread-spectrum, frequency hop technology will moderate this drawback, particularly if shared frequency use through digital timing and encoding allows simultaneous transmission of multiple data over a limited spectrum. This technical question must be resolved in such a manner as to allow the seamless integration of digital and analog communications over a limited spectrum with full transparency to the end user.

Currently, the FBCB2 functions well in combat support (CS) and combat service support (CSS) environments. Such uses are not as time-sensitive as communication in a close battle environment. Conventional analog systems accomplish most communications beyond the LD.

This fact has broader implications than may seem evident. First, an antagonist with even limited means of electronic surveillance may be able to interpret the rise in analog communications as an indication that operations are imminent. This presents a challenge to the doctrinal requirement for surprise in offensive operations. Second, if the system is developed in such a way as to permit continuous use of the

FBCB2 by a stay-behind operator while the commander and key leaders conduct the battle using conventional means, the principle of unity of command may be violated.

Interface. The current system consists of a mix of pull-down menus, text-entry boxes, and Graphical User Interface icons. Not all force components need all elements of the FBCB2 interface at all times.

CSS functions, for example, do not need an interface as intuitive as those proposed for execution in a close battle environment. Such functions, and CSS conditions, generally enable the user to spend more time preparing and editing messages than is possible under conditions involving imminent or actual enemy contact. In the latter case, such messages must require only seconds to execute if they are to successfully replace analog transmissions.

Certain transmissions of the latter type, if properly interfaced with the user, improve the responsiveness of CS assets. For example, if the fire support officer wanted to process a call for fire and he was presented a set of point-and-click icons representing mission type (troops in the open, vehicles, etc.), and had the ability to select the target grid with the click of a mouse on the digital overlay, then a call for fire could be accomplished in three mouse clicks. One click would select target type, one would select the grid, and the third would send the request. Since the location of the requestor and all associated elements is known through GPS technology, the elements of the call for fire can be instantly formatted, and fires can be cleared much faster than by conventional means.

A similar case can be made for the reporting of certain battlefield conditions. Obstacle types could be selected from a set of icons, the grid (or trace) indicated with a click of the mouse, and the information sent simultaneously to all elements, with graphics immediately updated across the brigade.

Certain other conditions apply: Text boxes do not currently allow the user to view an entire page of text without obscuring the digital map. Users must be able to select window size and location. One of the major advantages for the commander is visual situational awareness through real-time update of element (vehicle) positions. A real time "chat box" would also be useful, providing a second communications channel in the event analog communications jammed. Finally, icon size on the screen is a current concern of users. Most icons are larger than surrounding terrain features; magnification of the digital map to overcome this often results in a screen that shows no more than the commander can see by stepping outside his vehicle and taking a look around.

In summary, a more intuitive, more responsive, and more limited interface is necessary to realize the full potential of the FBCB2.

System Limitations and Transition from Digital to Analog. At some point, it becomes necessary for the commander and subordinate leaders to dismount. This takes the leaders away from the digital interface offered by the FBCB2, and they must use analog systems. Two issues are paramount: First, doctrinally, how do we determine the

time, conditions, or method of transitioning from digital to analog communications? Second, if we leave behind an FBCB2 operator, how do we avoid diluting unity of command?

The way mechanized units operate may offer a partial solution. Key leaders (executive officer, first sergeant) can remain behind with the vehicles and help the commander execute the battle by way of concurrent analog communications. When the FBCB2 is distributed to the platoon and squad level this becomes problematic. A second solution is

One of the major advantages for the commander is visual situational awareness through real-time update of element (vehicle) positions.

to offer the dismounted leader a partial interface, a portable screen that provides graphics and element locations, but does not require feedback from the operator. This maintains situational awareness for the leader; analog communications provide the means to instruct stay-behind FBCB2 operators.

Further, real-time GPS uplinks carried by key leaders that provide center-of-mass locations for their respective elements will enhance both command and control and situational awareness. This is analogous to 18th and 19th century commanders observing the disposition of forces on the battlefield by means of unit colors.

In conclusion, the principle limitation of the FBCB2 lies in the ability of the dismounted leader to provide feedback. Time constraints and interface do not allow the effective transmission of information, only its receipt. Given time, voice recognition software may provide a solution to this; in the interim, doctrine must deliberately address leaders' actions upon isolation from the FBCB2. Such doctrine may place specific constraints and requirements on any stay-behind operator of the FBCB2 and dismounted leaders.

Doctrinal Considerations

MTOE. Yet unaddressed is the issue of who will be the principle operator of the FBCB2. It is simply not possible to give this responsibility to the traditional operators of analog information systems—leaders, radiotelephone operators, drivers. First, such soldiers often lack the training and skills (such as typing) necessary to be effective operators. Second, such soldiers already have an important and demanding set of duties to accomplish, particularly in a close battle environment.

Also at issue is the question of administering the overall systems. Organizations that use information systems as an integral part of their operations normally maintain a cadre of technical professionals to maintain and administer their systems. Nominally, such cadres may include systems administrators, programmers, technicians, and operators. Such cadres ensure proper functioning of the system for end users. No such parallel structure exists within the organization of

the IBCT. This is, in my opinion, a grave oversight.

Information systems are not the same as weapon systems. Timely evacuation to a support organization for maintenance is not possible, given the complexity of most information systems. Combat leaders lack the training and the requisite time to maintain the functionality of an integrated information system under combat conditions. The deep integration of the FBCB2 into the IBCT command and control structure worsens the effects of this limitation.

To successfully integrate an information system such as the FBCB2 into any force structure and doctrine, we must come to terms with the legitimacy and inevitability of the need for a technical component of the force tasked with operating and maintaining the unit's systems. This force component will not include "combat troops" in the accepted sense. Nonetheless, such a force component must have an inherent understanding of the combat functions and requirements of trigger-pullers on the ground. Such a component may be recruited as technical professionals or warrant officers from among the combat arms force at large, or, alternatively, it may be developed independently through specialized, focused training.

A typical force component would include a systems administrator and programmers at battalion level, as well as technicians and operators distributed throughout subordinate units. The successful integration of advanced information systems into a combat force requires acceptance of this concept, no matter how unpalatable it may be to traditionalists.

Precedent for this is evident in the blurring of the lines between rear, close, and deep operations and their participants.

Tactics, Techniques, and Procedures. Current doctrine provides commanders with adequate guidance in the form of rules of engagement, operations orders, and standing operating procedures. Lacking is a definitive set of tasks, and the methods by which to accomplish them, oriented toward a force that must rapidly move between OOTW and MTW operations. The agility to make this transition rapidly from OOTW to a limited, distributed combat focus is not defined in current doctrine. Indeed, it may be necessary to define a narrower role for the IBCT.

The capabilities necessary for a force to effectively execute combat operations and those of a force to successfully execute OOTW operations may not be found in one force structure. Instead, it may be necessary to define complementary forces, each with a definitive mission, and the ability to conduct a seamless battle hand-off at the point of transition from OOTW to combat operations. Since well-established doctrine exists for traditional combat force structures, my comments here will be limited to the organization and capabilities of an OOTW oriented force.

The IBCT is a response to a changing geopolitical environment. Inherent in its conception is an awareness of the need for a force that can quickly and effectively respond to non-mature threats involving large numbers of civilians intermingled with combatants in an urban environment. Accordingly, this force should contain those elements necessary

to perform its principally OOTW-oriented focus while maintaining sufficient combat power to defeat (offensively or defensively) a conventional threat for a certain period of time.

This force must contain the elements necessary to provide police functions, basic engineering, civil affairs administration, medical services, sustainment services, and third-party combatant neutralization. At the same time, it must retain the lethality to conduct limited offensive and defensive operations in support of force protection and contingency operations, predicated upon its relief or augmentation by a more robust, strictly combat-oriented force.

This force could serve as a pre-combat or a post-combat force, able to execute civil missions in a hostile environment that does not involve unrestrained combat. In a pre-combat role, this force would serve as a presence intended to forestall combat, gather intelligence, and, possibly, serve as a security or isolating force while surgical raids are carried out by appropriate forces. Upon the initiation of broader hostilities, the force must be able to protect itself long enough to allow the theater employment of more robust combat forces.

The successful integration of advanced information systems into a combat force requires acceptance of this concept, no matter how unpalatable it may be to traditionalists.

In a post-combat role, this force would assume the previously mentioned functions following the cessation of broader hostilities.

What seems certain is that integrating all of these functions into one force poses obstacles: Combat forces are trained for combat, and are ill-suited to non-combat missions in a complex environment. The reverse is often true as well.

An example is the case of a raid conducted by an IBCT company. The objective of the raid was to capture a general officer of the opposing force (militia-style regulars) who was reported to be in town for a meeting. The OPFOR was hostile to the company, and antagonistic toward a part of the town's population (based on ethnic derivation). The company was required to raid the town under these conditions and capture the general.

In the execution, the commander initiated the raid with mortar fire, which killed the target and wounded a number of civilians (the mortar fire was intended to fall behind the town as an isolating element). Further, realizing the source of the attack, the OPFOR killed a number of civilians in retribution. The event culminated in a full-scale attack by the company, brilliantly and effectively executed, but for the unintended effects of the destruction of a portion of the town and the killing and wounding of a large number of non-combatants due to the level of lethality employed.

Clearly, this is not the goal of American OOTW. Just as

clearly, the kind of "surgical" operation required of the company was beyond its means and training.

As an alternate solution, such a company might play a supporting role—intelligence gathering, isolation of the objective to allow surgical assets such as Delta Force to execute the raid, and subsequent control of the situation through psychological operations, show of force, and area presence to maintain goodwill and prevent both a larger conflict and large-scale destruction of civilian infrastructure and civilian casualties inflicted by an angered OPFOR.

Another commander chose to surround the town and offer the enemy an opportunity to surrender. When the offer was not accepted, the commander initiated a raid with significant firepower and defeated the enemy forces. Again, the raid was well planned and executed, but the invitation to surrender gave the general an opportunity to escape, and resulted in significant damage and civilian casualties.

The advantage of the second approach lies in its impact on subsequent operations: Enemy forces might more quickly accept opportunities to surrender. Either approach, however, is likely to reduce goodwill toward U.S. combat forces if lethality is not balanced with restraint and its effects more precisely targeted.

All of this requires a fundamental change in our approach to force development and employment. The IBCT must not become a traditional, mounted infantry force with a combat focused METL and the capabilities of advanced information systems.

In its place, the Army must develop a force capable of dealing with the complexities involved in distributed OOTW and concurrent, though limited, combat operations. This force must be able to mount a significant offensive/defensive response to an increased threat in the short term.

Force Application and the Role of the IBCT

The integration of advanced information system technology is independent of the nature of any newly developed force. The IBCT provides a platform to develop a new force structure, and a platform to develop and integrate a new technology. Defining the role of the IBCT in the transformed Army requires that we consider each aspect separately.

There is no inherent tie between the application of force to achieve political ends and the technological means of application of such force at the company and platoon level. The IBCT seeks to combine these two goals. The result is a skewed perception, not only of the role of the IBCT, but of the FBCB2 as it relates to broader integration in the force at large.

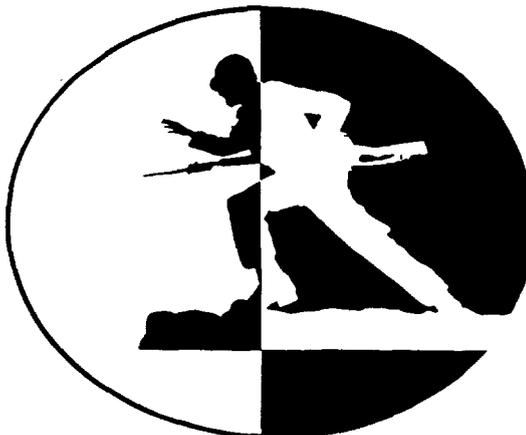
My recommendation is to continue using the IBCT to develop both a new force and a new information system compatible with all force components, but at the same time to recognize that the two are not contingent upon each other. I recommend independent IBCT and FBCB2 development.

This is not the stated goal of senior officers responsible for fielding the IBCT/FBCB2. However, recognizing the need for a functional FBCB2 as a necessary component of the IBCT does not mean that parallel development of the FBCB2 must occur at the user level, simultaneously with the development of tactics at the company level.

Synchronizing proposed refinements to the FBCB2 with full fielding to all components of the IBCT, concurrently with the fielding of the IBCT's equipment, offers a better opportunity for success than imposing a partial fielding that limits capabilities. In the interim, while FBCB2 development continues, forces should be trained on those specific tasks executed at platoon level and below.

The FBCB2 and the IBCT are not ready for full-scale, integrated, distributed operations at company and battalion levels. By their very nature, such operations require a functioning FBCB2, and the actual weapons platforms, instead of surrogates. Once we resolve the many issues arising from a restructuring of this magnitude, however, we will be better able to respond credibly and effectively to the challenges that will inevitably confront us.

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TRAINING NOTES



MOUT Training and the IPB

LIEUTENANT COLONEL GARY L. BROHAWN
FREDERICK J. DuPONT

In years past, the United States' Armed Forces have tried to follow a doctrine that would encourage isolating or bypassing urban terrain. As history has shown, however, we have not always been allowed to embrace this doctrinal objective. In some cases, it has been necessary to defend or attack within built-up areas for political or humanitarian reasons, rather than out of military necessity. Urban terrain offers unlimited positions for cover and concealment for a defender, while restricting mobility, observation, or employment of available combat power for the attacker. The defending commander can virtually tailor the terrain to his own design by channeling assault forces.

It has become clear that U.S. military forces will sometimes be required to operate in urban areas. Advances in technology have made it virtually impossible for enemy forces to conceal themselves in open terrain; furthermore, the rapid growth and expansion of urban areas, and populations, have limited the number of areas in which conflicts can be fought without involving non-combatants. Frequently, urban terrain embraces major avenues of communication and transportation facilities and supply, and ownership of these combat multipliers is of great importance to whichever side can control them. Given these facts, we can see that opposition forces will continue to exploit the advantages of seizing and controlling ur-

ban terrain, as well as access and egress to and from it.

As we address this issue of military operations on urban terrain (MOUT), we must no longer consider it a *condition* in which we apply doctrine, tactics, techniques, and procedures that were developed for open terrain. Instead, we must address the *environment*, with the understanding that it demands an approach based on possibilities, justified by necessity. Moreover, we must prepare soldiers and leaders for operations on what has proved to be the most complex terrain in which they can become involved. History has shown that operations within this environment are manpower and materiel intensive and that MOUT operations mean high casualties. Additionally, the potential of fratricide is dramatically higher on urban terrain. It is pointless to argue that we should not be there; the fact is that virtually every war we have ever fought as a nation has seen soldiers involved in combat on urban terrain. It is time to start answering the question, How do we prepare and train for urban operations?

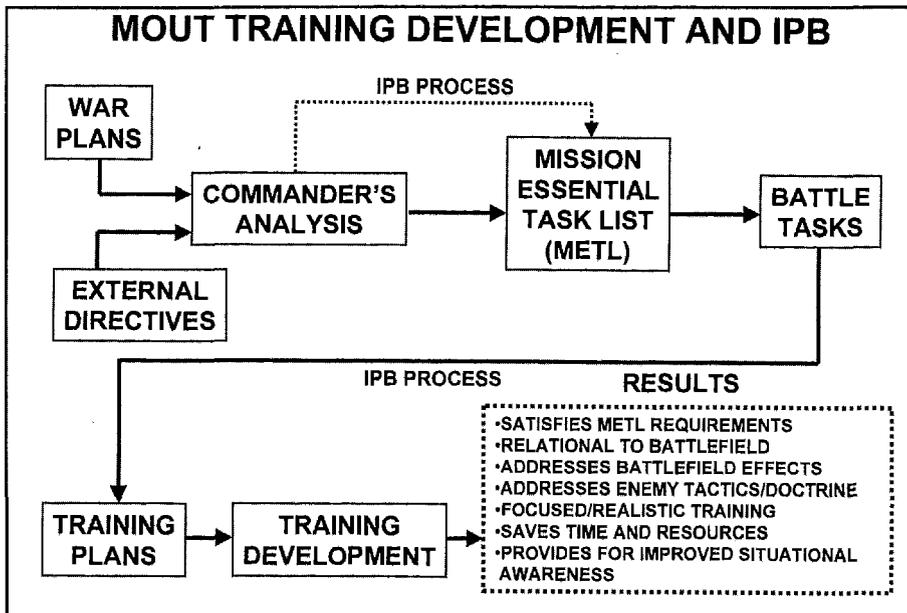
Currently our MOUT doctrine is being revised at both the operational and tactical levels. Many initiatives are under way that will improve our soldiers' capabilities through technology. While these initiatives are critical components of successful operations on urban terrain, initiatives alone do not

lead to success on the battlefield. We must develop the training plans and identify the mission essential task lists (METLs) that address the complexities of the urban environment.

In Field Manual 25-100, *Training the Force*, we are challenged "to prepare soldiers, leaders and units to deploy, fight, and win in combat at any intensity level, anywhere, anytime." It is with this understanding that we vigorously pursue new and improved ways to ensure that our training plans reflect and support mission requirements. We believe that the intelligence preparation of the battlefield (IPB) process is a valuable tool for identifying, focusing, and justifying training requirements for urban operations.

While we value the IPB process as a tool for conducting operational planning, it has another unrealized value for the commander. It can be used to determine training requirements for soldiers, leaders, commanders, and their staffs. We conduct the IPB through a four-step process of *defining the battlefield environment, describing the battlefield effects, evaluating the threat, and determining that threat's probable course of action.*

The most impressive benefit when applying the IPB process to training development and analysis is the fact that training requirements become more focused, and critical tasks seem to identify themselves. Additionally, leaders



become more aware of their responsibilities and leader tasks; special teams and individuals begin to realize the importance of their team and individual tasks; and soldiers at all levels have a better understanding of the environment in which they will operate. As we go through this process, various questions and concerns will come to mind.

Defining the battlefield environment. We believe that this first step is the most critical of the four-step process. If the leader cannot begin to visualize the environment, he can never begin to understand the training requirements it demands. One of the defining characteristics of the urban environment is its subterranean aspect. When we understand this one characteristic, we can then begin to identify some of the training requirements. As an example, if soldiers are to operate in the maze of underground passages beneath the streets, they will have to be trained on movement in that environment.

Defining the battlefield effects. By defining the battlefield effects, we determine what effects the environment will have on those operating in it. This assessment must be applied to soldiers, weapons, equipment, and training, from both the enemy and friendly perspectives. It is not uncommon for a certain characteristic of one environment to have a great effect on one force and little or none on another. One example that we find in subterranean conditions

is limited visibility. Based on this analysis, we may determine the need for additional training in the use of night vision devices.

Evaluating the threat. Evaluating the threat will identify doctrine, tactics, high-value targets, and threat capabilities. Identifying these capabilities will help leaders focus and identify their training requirements for urban operations. Again using the subterranean example, if we determine that one enemy tactic is to booby-trap subterranean passages, we will then determine the importance of training our personnel in the detection and neutralization of these devices. This process can also be used at this point in determining whether this area should be avoided; that is, are the risks greater than the advantages? The commander may determine that an area is too risky and choose to isolate it instead of entering it. The time saved by not training on subterranean movement techniques can then be used for other training requirements. On the other hand, if the commander determines that the benefits of controlling the subterranean plane are vital to mission success, he has used the IPB process to identify critical task training.

Determining enemy courses of action. During the process of determining the enemy's probable course of action, we attempt to determine his desired end-state or objective. This step in the IPB process allows us to look at our training plan realistically and determine

what effect it may have on that objective. If the plan calls for training on something that will have little or no effect on the enemy's accomplishment of his goals, we will then want to focus our training on an area that does. For example, we could spend a great deal of time training for subterranean operations before discovering that the enemy does not need subterranean passages to achieve his objective. We will have wasted valuable training time and resources and received no benefit from our efforts. This step in the IPB process helps to keep us focused on what is truly important—mission accomplishment.

We have provided some examples of how the IPB process can help leaders identify, focus, and justify training requirements. The accompanying chart will help identify where this process can be incorporated into the development of focused, meaningful training.

Military forces have always applied some form of intelligence analysis to help them plan and conduct operations. If the statement "we fight as we train" is true, it only makes sense to use this same process when developing training requirements. While this process can be applied to any environment or condition, it is critical for urban operations. The complexities found on urban terrain demand this type of approach to ensure that our soldiers are properly trained to fight, survive, and win.

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Joint Security Operations

Success Begins With the Basics

MAJOR DENNIS P. CHAPMAN

In 1996, a task force of 533 soldiers from the 3d Battalion, 126th Infantry, and the 146th Forward Support Battalion, Michigan Army National Guard, deployed on a two-week tour in support of the Summer Olympics. The battalion's mission was to help secure the Olympic Village on the campus of Georgia Technological University by observing and physically securing the perimeter of the village and searching all vehicles seeking entry.

Although this was a fairly simple mission, it offers some important insights into the conduct of operations other than war and domestic support operations—the types of missions the Army can expect to perform repeatedly in the future.

When the soldiers of the task force took their places on the perimeter, they became part of a massive joint security operation involving federal, state, and local agencies, as well as non-governmental organizations. The responsibility for physical security at the Olympic Village was shared by two provisional agencies, each formed especially for the Olympic mission: The Atlanta Committee for the Olympic Games (ACOG), and Georgia's State Olympic Law Enforcement Command (SOLEC).

The security measures at the Village consisted of two major components: checkpoint operations at entry and exit points, and surveillance operations on the Village perimeter, both designed to prevent physical penetration of the compound by unauthorized personnel:

The first line of defense was the checkpoint system. Access to the village by foot traffic was restricted to

specific entrances manned by ACOG security personnel, consisting of volunteers from police agencies throughout the world. Only authorized persons with specially provided passes were permitted to enter, and then only after passing through metal detectors. All bags and packages were inspected using x-ray scanners like those found at airports. The same procedures also applied to pedestrians moving between the various sectors within the Village.

Vehicular traffic into the Village was subject to even more rigorous procedures. Every vehicle attempting to enter was subject to a thorough internal and external search. Soldiers checked

The perimeter was physically manned by scores of National Guard soldiers from Michigan and Georgia, as well as law enforcement volunteers from numerous federal, state, and local agencies.

beneath, inside, on top of, and under the hood of every vehicle seeking entry, and opened every package found inside.

The other major component of the security effort was on the Olympic Village perimeter. The perimeter was secured by a seven-foot tall chain-link fence, equipped with electronic sensors to detect any tampering and supplemented by video surveillance. This was a formidable barrier to any would-be intruders, but the real obstacle was directly behind it: The perimeter was physically manned by scores of National Guard soldiers from Michigan and Georgia, as well as law enforce-

ment volunteers from numerous federal, state, and local agencies. Backing up these fence-line pickets were roving teams of soldiers who patrolled the streets throughout the Village.

Our task force made three major contributions to this security effort, providing the vehicle search teams, the roving patrols in the Olympic Village, and about half of the fence-line sentries. The task force organized itself into three eight-hour shifts. On each shift, 87 soldiers were assigned to the battalion's primary task of providing visual security on the fence-line perimeter; 40 were assigned to roving patrols within the Olympic Village; and 21 conducted vehicle search operations at the three entry points.

The soldiers on fence-line security duty performed a critical supporting role in the Olympic security mission. Unlike the soldiers of the Georgia Army National Guard and the state and federal law enforcement officers on the fence-line, our soldiers were neither armed nor specifically authorized to use force against intruders. The Georgia Guardsmen had received one week of specialized law enforcement training before assuming their posts on the perimeter. This training included instruction in basic police procedures such as apprehending suspects, use of force, and rules of engagement. Further, many of the Georgia troops were military policemen, already well versed in these subjects, as were the law enforcement agents on the fence. Upon completion of this training, these soldiers were sworn in as provisional law officers of the State of Georgia, thus receiving the authority to bear arms and enforce state

law. The soldiers of our battalion did not have access to similar training before deployment. Further, our status in Georgia was active duty for training, which made it neither legal nor advisable to arm our soldiers and empower them to use deadly force in executing their mission. Without the thorough training that the Georgia troops had, the risk of a tragic accident would have been too great, and any action taken by our soldiers would have been under the shadow of doubtful legal authority.

Without our Michigan soldiers on fence-line security, the sentries would have been 300-400 meters apart, a huge distance for a single soldier to monitor effectively. Thus, even unarmed, the soldiers greatly strengthened the perimeter by doubling the number of observers on the fence-line. Our soldiers and the armed Georgia troops alternated along the perimeter, so that if an incident occurred, armed back-up would never be more than a short distance away.

The psychological effect of the task force's presence on the perimeter was another critical contribution. Dressed in class-B uniforms and positioned prominently along the perimeter, our soldiers constituted a highly visible, thoroughly professional presence along the length of the perimeter. This made the fence-line boundary of the Olympic Village a much more intimidating and effective obstacle to anyone seeking unauthorized entry.

Despite the effectiveness of the fence-line security perimeter, command and control on the fence was difficult. The fence-line soldiers were under the operational control of SOLEC, which exercised control from a central command post inside the Olympic Village and communicated with the fence-line only by FM radios issued to the Georgia soldiers on the perimeter. This posed a problem, as it left our soldiers out of communication and wholly dependent upon the adjacent Georgia Guardsmen to keep them informed and to summon help in an emergency. To make matters worse, SOLEC provided no direct supervision of the fence-line sentries to enforce discipline along the perimeter. SOLEC envisioned indirect control of

the fence-line sentries by radio, with no supervisory role for the unit's organic chain of command.

We solved these problems through improvisation. In addition to the SOLEC fence-line security detail, our task force detailed 40 soldiers on each shift to roving patrols throughout the Olympic Village. These soldiers operated under the command of ACOG, not SOLEC. Although neither agency envisioned any operational relationship between these elements, we linked the two to form an improvised chain of command to supervise the fence-line sentries. Dividing the Olympic Village into several sectors, we assigned two junior leaders as the roving patrol in

The absolute prerequisite for success in missions of this kind is a solid foundation of pride, discipline, and cohesion within the unit.

each sector and charged them with enforcing discipline and standards among our fence-line sentries within their sector. Their primary task was to patrol the perimeter continuously and spend as much time as possible interacting with soldiers. This expedient was not a complete solution, because the roving patrol radios operated on a range of frequencies different from those of the fence-line radios. Nonetheless, it did allow us to maintain effective control over our soldiers on the fence line; unit commanders had radio communication with the roving patrols, who in turn had face-to-face contact with the sentries on the fence-line.

This control proved extremely important. Most of the task force's soldiers were light infantrymen accustomed to aggressive training on wartime METL tasks far more dynamic and exciting than the static security mission at the Olympic Village. They tackled the fence-line mission enthusiastically and with great professionalism and pride, but standing in the hot Georgia sun for hours at a time tended to take its toll. Without supervision, discipline would have suffered. Positive and frequent interaction between the soldiers on sen-

try duty and their leaders on roving patrol was absolutely critical to maintaining the morale and discipline of the troops, keeping them alert, and maintaining the professional demeanor so critical to their success. It was also critically important in maintaining the soldiers' welfare. Without the close supervision of the soldiers along the fence, we would have faced a serious risk of heat injuries. Having deployed from armories in Michigan and gone directly onto the Olympic Village perimeter in Atlanta, our soldiers had no opportunity to acclimatize. Only through constant attention by junior leaders on patrol were we able to ensure that the soldiers were supplied with water and hence kept properly hydrated.

The third component of our task force mission was vehicle search operations. Although carried out by the smallest of the three security elements of the task force, the vehicle search may have been the most critical of all, as it represented the only barrier between an unauthorized vehicle and the Olympic Village. Each of the three points set up for vehicle access into the Village was guarded by ACOG security personnel, and no vehicle could enter unless cleared by a search team. Selected members of these details received several hours of instruction on vehicle search and clearance techniques before assuming their duties. These junior leaders, in turn, trained their subordinates. The search teams conducted a thorough examination of every vehicle, checking undercarriages with angled mirrors, clambering up ladders to check vehicle roofs, searching trunks, truck cabs, and cabins, checking under hoods, opening all packages found inside, and confiscating any suspicious or inappropriate items.

The absolute prerequisite for success in missions of this kind is a solid foundation of pride, discipline, and cohesion within the unit. The one sure way to build these traits is challenging, aggressive training on the unit's wartime METL tasks. The plethora of peacekeeping, humanitarian, and other non-combat missions assigned to our Army since the end of the cold war has prompted some observers to argue in

favor of modifying METLs to include tasks supporting operations other than war. The Army certainly must develop doctrine to support peacekeeping and other missions facing it in the post-cold war era, as well as the skills and techniques with which to execute such missions. Likewise, when a specific mission, with identifiable parameters, is assigned to a unit or is reasonably foreseeable, then the unit must ascertain what tasks will be essential to mission accomplishment and proceed to train on them aggressively. When no such mission is on the horizon, however, units should avoid diluting their wartime METLs with non-combat tasks that will not contribute to accomplishing the wartime mission. No unit can hope to select and effectively train on all the tasks essential to every likely scenario, particularly in light of the shrinking pool of resources available for unit training. There simply are not enough resources available to train units to proficiency on their wartime METL and a contingency or peacekeeping METL at the same time. To reach proficiency, units must focus on one or the other. Normally that focus must be on the wartime METL, but the wartime METL will ordinarily be an excellent foundation to build on when assigned to a peacekeeping, stability, or support mission. While wartime tasks are often easily adapted to peacekeeping or other stability and support missions, it would be exceedingly difficult for a unit that has long neglected its wartime METL to turn about and adapt to a wartime environment. Perhaps the strongest argument in favor of aggressive training on wartime METL tasks as the best preparation for future stability and support operations lies in the very nature of armies. All military forces derive their credibility and psychological power, not from the ability to negotiate or debate, but from their ability to inflict damage and casualties on an enemy. Any military unit's effectiveness at separating combatants, enforcing peace, or stabilizing a dangerous situation is ultimately founded on that unit's ability to inflict unacceptable casualties on a belligerent if peaceable efforts fail. While we must develop the specialized tech-

niques necessary to execute future stability and support missions peacefully, these techniques will be useless if they are not backed by the credible threat of lethal force posed by a well-trained combat unit. An obvious way to minimize the tension between the wartime METL and the desire to prepare for future stability and support missions is to carefully select the units tasked with them. By assigning these missions to units whose wartime mission is at least analogous to the operation at hand, we capitalize on years of training on the wartime METL, reduce the training time needed before the unit can begin operations, and reduce the uncertainty created when soldiers are thrust into circumstances for which they are unprepared.

Our experience at the Olympics confirmed these observations. Most of the fence-line sentries were military policemen and infantrymen. The military police were obviously well-prepared for this mission; guarding the Olympic Village was very similar to such primary military police wartime missions as rear area security and even enemy prisoner of war (EPW) control, and they adapted easily. The mission for the infantrymen on the fence-line was not as familiar, but it still found them well prepared for the task. While not closely analogous to our unit METL, the mission did capitalize on our training to develop situational awareness in such tasks as moving tactically and maintaining local security, not to mention such basic soldier knowledge as the General Orders. By far, the most critical factor in the success of the mission was the unit's solid foundation of basic discipline. It enabled our soldiers to execute the mission in a highly effective and professional manner, even though some were not enthusiastic about the operation. The unit's long-standing commitment to performing all tasks to standard made this possible.

A number of factors stand out as important lessons for future operations of this type. The first is maintaining both the perception and the reality of authority. Even soldiers performing passive surveillance duties will be regarded as authority figures by the surrounding

community. This was dramatically demonstrated in the Olympic Village when a woman who was assaulted on a shuttle inside the Village ran directly to two of our soldiers for help. The soldiers promptly apprehended the suspect and turned him over to civilian authorities. It is critical that every soldier be able to handle any emergencies. They must have the authority to use reasonable force to defend themselves and others, the ability to render or summon medical aid promptly, and access to reinforcement by personnel with the ability and authority to handle whatever situation may arise. If the soldiers fail to respond effectively to such crises, their credibility will be eroded, and with it much of the deterrent value of their presence.

Another issue is maintaining discipline and effectiveness uniformly throughout the unit. One problem the task force faced was that the level of diligence and professionalism with which soldiers approached their duties varied from shift to shift, and from location to location within shifts. This phenomenon created the potential for a serious breach of security. Hostile parties may take note of these variations and attempt to exploit them by acting during the periods of lax discipline. For example, at the Olympic Village, truck drivers quickly learned which search details were the most thorough and tried to avoid inconvenience by entering the Village at points manned by less diligent personnel. While this example may seem innocuous enough, we must remember that truck drivers aren't the only parties who will take note of such differences and attempt to exploit them.

Finally, commanders must work hard to maintain the morale and discipline of their soldiers. Inevitably, a large percentage of soldiers may be less than enthusiastic about the various stability and support operations they will be charged to execute, and the Olympic Village mission was no exception. Many soldiers resented the mission, perceiving it as a distraction from the important business of tactical training on the wartime METL. Positive leadership was critical in overcoming this resistance and keeping the soldiers mo-

tivated and alert. Maintaining unit effectiveness required unit commanders and other leaders to continually stress the significance of the threat and our importance to the safety of the athletes.

The security mission at the Olympic Village was a great success. (The one tragic incident that did occur—the lethal effects of an explosive device—was not at the Village, but at the almost unguarded Centennial Park.) During the

entire Summer Games, not a single breach of security or violent incident occurred within the Olympic Village.. This, in itself, is a testament to the extraordinary security apparatus erected to protect the athletes at the Olympic Village. The soldiers of the task force played an important role in this success by bringing to bear the discipline, flexibility, and patience inherent in well-trained soldiers.

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Support by Fire

Live Fire Exercise

CAPTAIN BRET VAN POPPEL
CAPTAIN JOHN PAGANINI
CAPTAIN TREVOR BREDEKAMP

One of the most ignored collective tasks at platoon and company level is the execution of the overwatch/support by fire (SBF). With the most significant and powerful weapon systems organic or attached to a platoon or company, the SBF can accomplish several critical tasks that are essential to the success of an attacking element—*isolate, suppress, neutralize, and fix*. A correctly performed SBF, synchronized with indirect fires, enables an assault force to move safely through an assault position; it reduces an opponent's ability to mass fires, and hence is an effective force multiplier.

Overview and Training Objectives

In our unit, the Support by Fire Live Fire Exercise (SBF LFX) concept evolved from an exercise that was initially a realistic method of training weapons squads—in particular machinegun crews—in tactical crew drills (gun in action), target acquisition and adjustment, fire control and distribution, marksmanship, movement as a tactical element, seizure and establishment of the SBF position, and tactical withdrawal or consolidation and reorganization. Instead of the standard machine-

gun competition, in which gunners usually conduct shoot-offs on a static pop-up range, the SBF LFX places the weapons squad and all task organized attachments in a tactical situation, beginning with tactical movement and concluding with a platoon or company consolidation and reorganization. The support element reconnoiters a position, secures the area, seizes the terrain (whether covertly and unopposed or fighting into the position), tactically places weapons into action, and prepares for the direct fire support planned by the platoon leader.

With a few more resources and additional support, the SBF LFX expanded into a combined arms and coordination exercise. By adding the battalion's 81mm mortar platoon and all company 60mm sections in offset mortar firing positions, this training event accomplished many of the objectives specified in the battalion commander's training guidance. Companies and platoons also used the SBF LFX to develop solid tactics, techniques, and procedures (TTPs) for coordinating direct and indirect fire support, and the weapons squad leader's task of organizing M240B and M249 fires and controlling an antiarmor team

(M47 Dragon). Finally, the addition of organic indirect fire assets provided an outstanding leader development tool for platoon leaders in echelonment of fires—from artillery to mortars to direct-fire systems. The following are the training objectives used for the final product:

Leader Tasks:

- Train the task of *Develop and communicate plan*—platoon leader (PL), fire support officer (FSO), weapons squad leader (WSL).
- Train planning and coordination of indirect fires (PL, FSO, WSL).
- Train echelonment and synchronization of indirect and direct fires (PL).
- Train fire control and distribution (PL, WSL).
- Train synchronization of supporting fires with maneuver (PL).

Collective Tasks:

- Train tactical movement of support element (weapons, mortars).
- Develop TTPs for tactical seizure and establishment of SBF position (weapons).
- Train crew drill during establishment and execution (weapons, mortars).
- Train section tactical displacement (weapons, mortars).

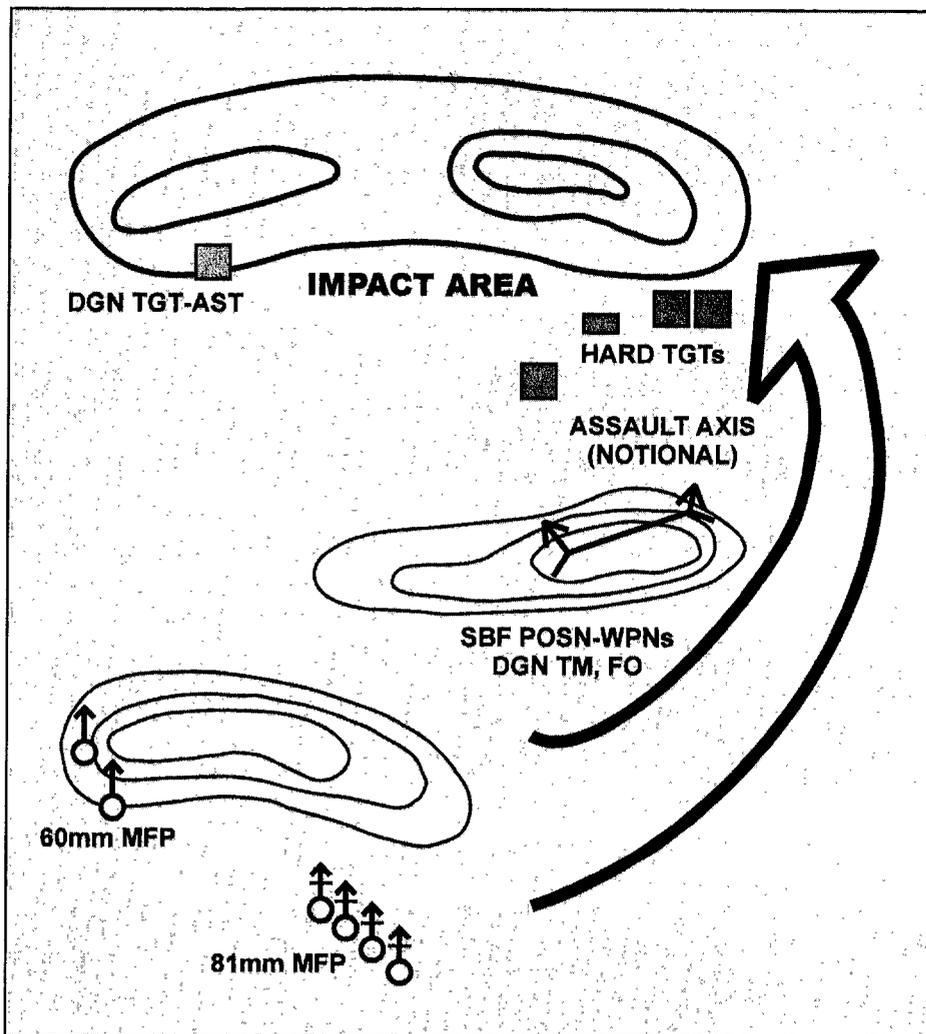


Figure 1

and establishment of SBF position (weapons).

- Train crew drill during establishment and execution (weapons, mortars).
- Train section tactical displacement (weapons, mortars).

Individual Tasks:

- Train individual movement techniques with M240B weapons.
- Train gunner acquisition skills in a tactical environment under daylight and limited visibility conditions.
- Fire, engage armor stationary target with M47 Dragon.

Range Setup

The type of range best suited for the SBF LFX is a dedicated impact area with hard targets or permanent silhouettes, as shown in Figure 1. The impact area permits the engagement of all mortar fire, M203 high-explosive, Dragon, and AT4, as well as the usual

complement of crew-served and individual fires. Mortars must be positioned so the gun-target line does not overfly the SBF or any offset positions (such as Dragon firing position). For our range, we employed one designated 81mm position and two 60mm positions, allowing the 60mm sections to train displacement during blank-fire and dry-fire iterations and concurrent training time. The platoon forward observer (FO) in this scenario is best suited for the SBF since no assault force could physically occupy the dedicated impact area. We positioned additional observers on an adjacent observation post (OP).

The existing hard targets—usually tank and APC silhouettes—were the only targetry available in the impact area. Once the weapons squad leader had seized the position, he designated hulks as bunkers or stationary armor

targets. We added stationary, fixed E-type silhouettes on the very front edge of the impact area to serve as targets of opportunity. Although this target array met the training objectives of the exercise, we recommend using target lifters and movers in the scenario (range and impact area constraints prevented this for our LFX). Target feedback was provided only through visual confirmation on hard targets and down-range feedback from E-type silhouettes on the close-in targets of opportunity.

For tactical control of the exercise, the platoon leader and platoon sergeant moved with the SBF element to a security halt position. After confirming the location, the platoon leader established a release point, and the SBF element, under the direction of the weapons squad leader, moved tactically, reconnoitered, and seized the SBF position. The platoon leader and platoon sergeant, observing from well behind the SBF location, called in checkpoints and locations for a notional assault force maneuvering into its assault position. The platoon leader ordered shift signals by FM while his radiotelephone operator (RTO) used visual signals (green star cluster, smoke, etc.) to simulate the advance of the assault element onto and across the objective. The platoon leader also designated counterattack targets and vehicular targets during the simulated assault; the weapons squad leader employed his antitank teams in accordance with the threat and the platoon leader's planning guidance.

Administrative and safety control of the exercise required many safety officers and NCOs, evolving into a battalion-level, week-long event. Two company commanders served as SBF safeties—one with the machineguns and one at the Dragon firing point (unfortunately, the Dragon firing point was offset about 50 meters from the machineguns, again due to range constraints). The 81mm mortar platoon leader and sergeant were safety personnel for their firing point; a company executive officer and the respective section leaders supervised the 60mm mortar firing points. Platoon sergeants acted as NCOICs and training supervisors at the Dragon firing point; the weapons squad

leader served as machinegun safety NCO. In order to maximize the training value for each platoon, one weapons squad from each company rotated through the range each day. This organization left one weapons squad in reserve, enabling the other two weapons squads in a company to conduct concurrent training and prepare. Rifle squads provided all the details for the range.

Tactical Observations and TTPs

Task Organization. A realistic and workable task organization evolved during the exercise. The weapons squad leader has many tasks to accomplish, direct, and supervise. With the addition of armor-killer teams (on our range, a Dragon team), the weapons squad leader has plenty to do when responsible for the SBF. We added the FO team to the SBF to help with fire coordination between indirect and direct systems and to help the weapons squad leader with command and control. A well-trained FO team can help in providing security for the SBF position (FO RTO), while also manning all FM systems and relaying information to the weapons squad leader.

One TTP that worked particularly well was the use of the weapons squad leader on the gun line to control all direct fires and antitank teams. The FO verbally, or using arm and hand signals, passed all information from the company fires net (FO PRC-119) to the weapons squad leader—shifting of targets and weapon systems, and announced the shot/splash “last round” from both the 60mm and 81mm crews. Additionally, the weapons squad leader passed off his PRC-126 to the FO, charging the FO team with relaying all information from the platoon leader to the weapons squad leader. This technique required many rehearsals but also yielded the best results. The SBF position now had a nerve center, and all information filtered through one location. The coordination of direct and indirect fires improved, and communication between SBF and the platoon leader improved because the FO team was far enough back off the gun line that FM transmissions were not drowned out by the M240Bs.

For tactical purposes, task organizing one or more line squads with the weapons squad on the SBF line assists the weapons squad leader in the occupation, fire distribution, and security. With one line squad, the weapons squad leader can tactically seize the SBF position without committing his platoon’s heavy weapons. Once in the position, he can use the riflemen in the squad for flank and rear security. The weapons squad leader must incorporate the M203s into the direct fire plan, on the basis of range to the objective. The M249 light machineguns from the line squad can be used to cover sectors of fire during barrel changes or malfunctions from the M240B. Finally, the weapons squad

We emphasized the tactical “seizure” of an SBF, not an “occupation.” The difference in terminology was critical, as one of the training objectives was to develop TTPs for tactically seizing an overwatch or SBF position.

leader, the senior squad leader in the platoon, can use the line squad leader as an additional command and control element, controlling the security elements or the displaced AT section.

Coordination of Direct and Indirect Fires. The coordination between direct and indirect fires, commonly referred to as echelonment of fires, was a critical leader training objective of the SBF LFX. All platoon leaders developed good TTPs for planning and executing echeloned fires during an attack. This exercise also showed a need for planning company and platoon fires and identified the critical players necessary to accomplish that. During the platoon fires planning, the attendees included the following (as a minimum):

- Company commander (if available).
- Company FSO (or FSNCO).
- Platoon FO and RTO.
- 60mm mortar section leader.
- WSL.
- PSG.

The platoon leader expressed his in-

tent for fires in specific, doctrinal terms and quantifiable results; the platoon FO and company FSO transposed this intent into the tasks necessary tasks to accomplish it. The mortar section leader, FO, and platoon leader determined how much continuous fire would be required in terms of time; for example, “10 minutes of 60mm mortar suppression.” The company FSO and mortar section leader then calculated firing frequency and determined a firing schedule to support the platoon’s tactical scheme.

The technique that was simplest for platoon leaders to employ and weapons squad leaders and FOs to coordinate was to set a specific time for each type of indirect fire-system. For example, the FSO/FSNCO or company commander coordinated the number of minutes of firing for assets above company level (“15 minutes of 155mm suppression, followed by 15 minutes of 81mm mortar suppression”). Time was the easiest quantifiable measure for platoon leaders to work with. Time-phasing indirect fire support with movement and maneuver, platoon leaders initiated 155mm fires when departing the security halt/release point. Platoon leaders learned to initiate 81mm fires *only* after the weapons squad leader had reconnoitered and confirmed a suitable SBF position. The 60mm fires were best reserved during the seizure of the SBF position, allowing the support element to establish its position with all weapon systems (all machineguns on tripods, antitank teams positioned, fields of fire hastily cleared, etc.). Upon receiving “shot last round”—always a white phosphorus round as a backup signal—the weapons squad leader initiated fires from the SBF.

Seizure of the Support-by-Fire Position. During the preparation phase—beginning with leader professional development sessions and including weapons squad rehearsals—company leadership must stress that the SBF LFX is more than just shooting targets from the SBF line.

Leaders stressed the “Silent-Violent-Silent” technique. This technique emphasizes tactical movement to and establishment of the SBF position; violent, planned, sustained suppressive

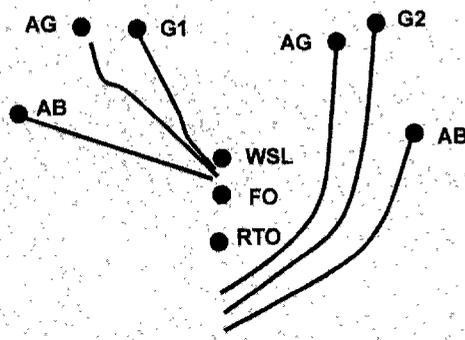
TRAINING NOTES

SBF, not an "occupation." The difference in terminology was critical, as one of the training objectives was to develop TTPs for tactically seizing an overwatch or SBF position. Also important is the connotation of the term "seize," which implies a direct-fire engagement or an attack to secure and occupy terrain. It was a significant teaching point for the weapons squads to eradicate the common notion that SBF and support elements casually walk into position, set up tripods, and prepare to fire. If the company has task organized a rifle squad to the SBF, the weapons squad leader can properly use the rifle squad in seizing the position to allow the machineguns security until they have to initiate fires onto the objective itself.

Assuming the SBF position was not held by an enemy OP, the TTPs that yielded the smallest tactical signature and proved to be the most efficient are shown in Figure 2. After reconnoitering and confirming the position, the weapons squad leader signals security (FO RTO and two ammunition bearers (ABs) and gun #1 (gunner) to move into position. Low crawling with the M240B, the gunner establishes on bipod. The next two men into position are the two assistant gunners (AGs), low crawling with tripod/traversing and elevation mechanism/flex mount assembled. AG #2 moves into position and sets in the tripod system; AG #1 takes a position next to gunner #1. The weapons squad leader now signals gunner #2 to move into position; he executes and immediately sets up on tripod (AG #2 already in position). When gun team #2 is up and scanning a hasty sector of fire, the weapons squad leader signals gun team #1 to set up on tripod. Once both guns are ready and on tripods, the weapons squad leader moves ABs into position to adjust rounds and the FO team to a position to observe and report.

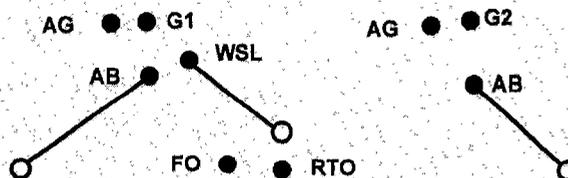
Not shown in Figure 2 is the positioning of the antitank teams. The weapons squad leader and antitank team reconnoitered positions that provided adequate fields of fire and had minimal obstacles in which Dragon system wires could be entangled. Backblast was also

Setting up position from last covered and concealed position:



G-1 moves into position, sets up on bipods to pull security. AG sets up to his left, AB sets up to left rear to pull rear/flank security. AG signals to WSL when team is set. WSL signals for G-2 to set up. AG moves first to set up tripod/T&E, then moves to the left of the position. G-2 moves up and sets up gun. AB moves to position to drop off ammo, then moves to right rear to pull rear/flank security. AG gives signal to WSL when team is up. WSL gives signal to AG (G-1) to set up on tripod. AG sets up tripod/T&E, then G-1 sets up the gun. AG gives signal to WSL when team is up.

Setting up position from last round inbound to firing position:



When the last indirect round is inbound, the FO signals the WSL. The WSL either signals the AB (G-1) when to fire (daylight hours). Or the WSL moves to the right of the G-1 and taps the gunner when to commence firing. When the WSL gets the signal from the FO, he directs the ABs to take position behind the gunners. From here the ABs will direct the impact of the rounds. The FO and RTO will pull rear/flank security. If antitank assets are available, the WSL will position them where they can get a good shot. The Dragon AG will pull rear/flank security for that element.

All movements on the support position will be low crouch, high crawl, or low crawl, depending on which movement technique is required to minimize detection by the enemy.

Figure 2

a consideration, and antitank positions for our range were not close enough to the SBF position for easy command and control. The weapons squad leader could not issue a fire command to the antitank team while controlling the gun line. Instead, he issued specific engagement criteria to the team and identified targets both verbally and with tracer rounds. Other options for a displaced antitank position include wire communications, although it increases the team's load.

Fire Control and Distribution. One of the hallmark training objectives of this exercise was fire control and distribution—the ability of the platoon leader

to communicate and the weapons squad leader to execute direct fires that are focused, distributed across the target, shifted as required, and massed to maximize support and protection of the assaulting element. The first step is planning; the platoon fires planning and rehearsal (discussed above) provided the PL an excellent method of defining exactly what he wanted and how best to accomplish his intent. Additionally, the exercise allows the platoon and company leaders to observe the weapons squad leader's distribution of fires on the objective based on the platoon leader's intent. Observer-controllers watched carefully for target fixation and

exercise allows the platoon and company leaders to observe the weapons squad leader's distribution of fires on the objective based on the platoon leader's intent. Observer-controllers watched carefully for target fixation and the weapons squad leader's execution of the *suppress* task.

For control of direct fires between assault and support elements, the platoon leader, platoon sergeant, and weapons squad leader determined specific engagement priorities. Platoon leaders employed M240Bs first against bunkers, then light-skinned vehicles, then personnel targets of opportunity; antitank teams against APCs, then light-skinned vehicles; M16/M4s against dismounted targets of opportunity, then to mark with tracers.

platoons had to plan and diligently rehearse shift signals. Striving for redundancy, we found that visual signals of pyrotechnics worked best as a primary means. Alternate signals included a hand-tossed rock with VS-17 strip and three-chemlight bundle (can be used day or night), and FM (never employed as primary due to unreliability). All platoons learned to plan for triple redundancy to ensure that signals were received by the SBF. For confirmation signals (from SBF back to assault), weapon squad leaders returned pyrotechnics. The alternate confirmation signal was usually FM. A tertiary signal was the weapons squad leader firing a tracer burst on the newly established limits, allowing both the SBF element and the maneuver element to identify the SBF's limits of fire.

At the SBF, weapons squad leaders used many different techniques for fire control. A combination of specific target reference points (TRPs), sectors, modified fire commands, and tracer fire yielded the most efficient and responsive fires. For fratricide prevention measures, weapons squad leaders assigned the machinegun closest to the assault element a right or left limit (metal to metal on tripod)—*no* fires from the entire gun line exceeded this limit. Weapons squad leaders also assigned specific TRPs on hard targets to reduce fire commands and shift fires more easily. Sectors were normally

employed during occupation and as alternate means of control, again to minimize fire commands. For all targets of opportunity, the weapons squad leader or ABs either engaged or the weapons squad leader directed machinegun fires by marking targets with tracers. While engaging targets from the SBF, the weapons squad leader directed searching, traversing, or other types of fire to sufficiently cover the target. ABs adjusted rounds onto target with specific adjustments ("up one, left three"), and adjusted guns for traversing and searching.

The M68 Close Combat Optic (CCO) worked very well with the M240B; many weapons squad leaders and gunners commended its accuracy. We recommend the following equipment ensembles during daylight hours:

- Gunner—M240B with M68 optic on rail mount, 4:1 tracer mix.
- AB—M4 with M68 CCO, binoculars, all tracer rounds.
- AG—M16.
- WSL—M4 with M68 CCO, binoculars, all tracer rounds.
- FO/FO RTO—M16 or M4 with CCO and binoculars.

At night, infrared (IR) laser discipline was a concern. Although this was not a problem during our exercise, IR lasers might have been confusing if an assault element had been on the ground. To discriminate between AN/PAQ-4Cs from weapons and target identification, one company experimented with a visible red-beam laser pointer. The pointer was a great success, as soldiers with night vision goggles could easily differentiate between the pointer and a PAQ-4C. Establishing an SOP at company level for marking with lasers was a successful technique. For this example, the base of fire element moves its lasers horizontally, allowing the machinegunners to mark targets with the traversing wheel. Members of the assault element mark targets by moving lasers vertically. During the SBF live fire, the platoon leader uses his PAQ-4C in the vertical fashion to simulate the assault force's marking while members of the SBF element mark targets by moving the laser horizontally.

We recommend the following en-

sembles for night operations:

- Gunner—M240B with M68 CCO and PVS-14 mounted on rail mount, 4:1 tracer mix, *or* M240B with PAQ-4C and PVS-7 or PVS-14 mounted on helmet.
- AB—M4 with PAQ-4C and PVS-7 mounted on helmet, tracer only.
- AG—M16 with PVS-14 (where available; night vision not required here).
- WSL—M4 with PAQ-4C, PVS-14 (or PVS-7) mounted on helmet with 3-power magnifier, laser pointer, tracer only.
- FO—M16 or M4, PVS-14 (or PVS-7) mounted on helmet.
- FO RTO—M16 or M4, night vision goggles if available.

These TTPs simplified fire commands and minimized confusion, especially for night iterations, during the SBF LFX.

In summary, a well-trained, lethal SBF is critical to the success of a platoon or company attack and must be trained under those tactical conditions. The SBF LFX is an effective and realistic training exercise for all platoon leadership and for machinegun crews and antitank teams, and will ensure that a deployed force can shoot straight, hit hard, and seize the initiative before the enemy can recover.

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Company-Level Search and Attack

Sharpening Warfighting Skills at the JRTC

CAPTAIN HAROLD D. BAKER, JR.

To succeed during low-intensity conflict, a company must have an established, but flexible, plan for conducting the *search and attack*. Because of the fluid environment, it is difficult to establish a single method of conducting a company-level search and attack. But with an understanding of the elements of *find*, *fix*, and *finish*, a company can establish standing operating procedures for planning, movement, and fire support that can be applied in almost every situation. Training and rehearsals before deployment are the keys to success because a search and attack mission tests all of the collective, leader, and individual tasks a rifle company must be able to execute.

In preparation for a JRTC rotation, my platoon leaders and I researched numerous sources on conducting the search and attack and spent an entire intensive training cycle refining the method we considered the soundest. The result was a combination of the *search and attack* and *approach march* techniques with two basic rules: Our unit would move as a company during daylight hours, and at night—with the exception of reconnaissance and surveillance (R&S) patrols—would limit movement to platoon-size units or larger.

Before deploying to the JRTC, the company trained for almost two weeks on search and attack operations. We started with the fundamental squad and fire team battle drills and the tasks of *Reaction to Contact*, *Perform Ambush*, *Reconnaissance*, and *Move Tactically*. Once the squads were proficient at these tasks, we progressed to platoon and company level operations. Using multiple training areas and a controlled op-

posing force (OPFOR) element, we were able to conduct long movements on different terrain each day, and I was able to decide when and where contact occurred. Thus, we were able to conduct quick after-action reviews with input from the OPFOR and then repeat the engagement if any problems were cited.

During the train-up, we refined the occupation of platoon patrol bases and the company assembly area. We also concentrated on determining a tactical formation for company movements that would provide adequate security, firepower, and ease of control. We eventually chose the company, platoon, and squad wedge formations. Although this formation was sometimes difficult to control, with practice the squads and platoons became comfortable with it. The company wedge allowed us to cover a substantial piece of ground without any portion of the formation losing the ability to provide or receive support from another element. The formation prevented the enemy from conducting a box attack because he could never flank the element in contact without running into another fire team or squad. To add more flexibility to the formation, the company's 60mm mortars moved in split sections. One gun was positioned with the headquarters element of the lead platoon to provide immediate suppressive fire from the direct lay or handheld mode. The other gun was positioned to the rear of the company headquarters, allowing the section enough reaction time to establish a firing position and place accurate fires on a predetermined target.

The training that proved the most worthwhile was a rigorous road march

program. By integrating road marches with marksmanship training, we provided the soldiers with the confidence that they could move over long distances and then fight and shoot accurately. Initiated almost eight months before the JRTC rotation, the program required soldiers to carry rucksacks weighing one-third of their body weights (no less than 50 pounds, and no more than 70) on a weekly basis; the program entailed six-mile marches weekly, a 10-miler each month, a 15-miler every three months, and a 30-miler every six months. Every two weeks, the road marches ended on live-fire ranges where the squads would immediately move into a tactical formation and conduct a *React to Contact* engagement.

Field Planning. A detailed intelligence preparation of the battlefield (IPB) and a terrain analysis are the key parts of the planning that take place at company level. Using data provided by the battalion S-2 as a guide, the platoon leaders and I examined the terrain in the company's sector and applied our basic knowledge of the way the enemy operated. The size of the company's sector, the number and the degree of restrictive and key terrain features in the area (rivers, swamps, large open areas, roads, trails), and the templated enemy positions guided the planning of the company's march objectives, route, and positioning of the assembly area and 60mm mortars. Although templated enemy positions were naturally designated march objectives, we planned other march objectives along the way—river crossing points, creek beds, and high ground. These objectives allowed an effective reconnaissance of the sector

and a determination of how much enemy activity had taken place.

We designated checkpoints along roads and trails throughout the sector to serve as casualty collection points as well as resupply points. We also pinpointed open areas in the sector as air medical evacuation pickup zones.

Movement. The size of the sector and the duration of the company's operations in it determined when and how deeply we infiltrated into our sector. Routinely, we moved at dusk approximately 200–300 meters into the sector, established a company assembly area, and pushed out two squad-sized R&S patrols. The patrols searched the immediate area and then lay in ambush along possible enemy travel corridors until midnight before rejoining the company main body. The area chosen for the assembly area was defensible and accessible to within 200 meters by vehicle for resupply operations. This area also served as the firing position for the company mortars in support of the next day's operation.

Unless augmented by a heavy weapons platoon (which is organic only to airborne and air assault battalions), the company's task organization resulted in two platoons traveling in a company column, platoons in wedge. The third platoon, acting as a fixing force, would move out of the company area each night when the R&S patrols returned and then situate itself in squad-sized ambushes along key terrain and likely enemy avenues of approach corresponding with the march objectives. The plan was that the ambushes would either catch enemy moving into the sector during the night or catch the enemy reinforcing or breaking contact with our company main body during daylight. When the company was augmented by a heavy weapons platoon, the third infantry platoon joined the company, which traveled in the company wedge, platoons in wedge. The heavy weapons platoon was used to block designated enemy infiltration and escape routes into the company's sector with a secondary mission as a quick reaction force.

Fire Support Plan. The company covered its movement through the sec-

tor with indirect fire by designating priority targets on march objectives. For the most part, this resulted in a priority target every 500 meters along the company's route. Phase lines corresponding with the minimum safe distances of the weapon system covering the targets in front of the company were used as target turn-off/turn-on points. As a back-up, the platoon leader and forward observer (FO) of the lead platoon entered the targets as "waypoints" into their precision lightweight global positioning system receivers (PLGRs), allowing them to calculate the precise minimum safe distance and adjust the guns to the next target as the lead elements of the company moved within that distance. As a result, the company in contact could immediately isolate or fix the enemy with indirect fires by firing a priority target and then destroying or suppressing him with adjustments.

To facilitate accurate fires, we used either a platoon FO positioned with a squad ambush or the heavy weapons platoon as observers for the registration of the 60mm mortars at first light each morning.

Sustaining Combat Power. Because search and attack missions involve constant physical activity throughout the day for extended periods, the company must have a plan to ensure that soldiers maintain their levels of strength and alertness. To reduce combat fatigue and protect the force, the company moved with only mission essential equipment. Rucksacks were cached in the company assembly area. Soldiers carried assault packs containing two MREs (meals, ready to eat), four quarts of water, a basic load of ammunition, a poncho, and poncho liner. Following the day's mission, the executive officer pushed the rucksacks and necessary supplies forward to a link-up point.

This same technique was used for pushing the mortars forward to the company at day's end; but when vehicle transportation was not feasible, the company moved back to the mortar position just before nightfall, made link-up, picked up rucksacks, and infiltrated into the next sector.

The company maintained 50 percent

security throughout the night in the assembly area and in ambushes. By rotating the ambush platoon and restricting night movements, soldiers were able to get four hours of sleep per night and recover from the rigors of the day's operation.

Actions on Contact. The typical daily conduct of the search and attack began 30 minutes before morning nautical twilight (BMNT) in an attempt to catch the enemy sleeping. The company would move within the vicinity of its first march objective, halt, and position crew-served weapons in overwatch. Each platoon would then push out reconnaissance elements to search the immediate area, all the while remaining within supporting distance of the platoon and company main body. Each squad leader was thoroughly briefed on the battalion's priority intelligence requirements, the suspected use of the area, and the sign that designated the area as a possible supply point, cache, or mortar site.

During chance contacts with the enemy, the lead platoon's task was to fix the enemy by establishing a base of fire. It did not chase the enemy, knowing that the rest of the company was there for support to its flank or rear. Immediately, the lead platoon's FO called a fire mission to the 60mm mortars, which placed fires on the nearest priority target to isolate the enemy. The FO then worked an *adjust fire* mission, using his PLGR and laser infrared observation set for accuracy. The enemy's size and actions determined whether bold adjustments were made to destroy him or fires were shifted onto a position immediately behind him. As the lead platoon established a base of fire and sent back a SALUTE report (size, activity, location, unit, time, and equipment), one of the trail platoons (finishing force) maneuvered to flank the enemy, and the other repositioned to provide security to the company's rear with a *be prepared* mission to reinforce either the support-by-fire or the assault element. Upon receiving the contact report, the heavy weapons platoon moved to block key routes into the area and stop the enemy's escape with a *be prepared* mission to reinforce and, if

needed, to evacuate casualties.

Following the contact, the company established a perimeter forward of the battle site for consolidation and reorganization and forwarded the results of the contact to the battalion tactical operations center. If friendly casualties were taken, the company first sergeant consolidated them and moved them to a check point for evacuation by the company executive officer and battalion medical assets or by the heavy weapons platoon.

When the company was not augmented by a heavy weapons platoon, the actions on contact were essentially the same, except that the flanking platoon left a squad as rear security before it moved. The proximity of the squads in ambush as well as the enemy situation dictated whether I committed them as reinforcements, directed them to another location to isolate the enemy, or simply kept them in position. As the company closed on a squad ambush position, we performed a link-up with the squad and integrated it into the company formations.

Control Measures. During a search and attack, mutual support must exist within the battalion as well as within the company. A system must be in place

for an adjacent company to reinforce a company in contact. By establishing checkpoints along company boundaries, integrating copies of the company's graphics, and forcing companies to report their locations every 500 meters, or every 30 minutes, the battalion commander is always aware of his force distribution, as are the battalion fire support element and the fire direction center. The battalion commander's ability to direct two or more companies against an enemy position is enhanced, and the process of clearing fires and directing battalion assets, such as OH-58D Kiowas, is faster. Company commanders are also aware of the location of the other companies, and by cross-talking on the battalion net, can easily direct another company to a check point for link-up or to block enemy reinforcements or withdrawal.

A battalion commander may choose to control his companies' rates of movement by numbering march objectives in sequence and having each company stop as it reaches the first one. The company then waits until the others have reached their march objectives, and then begins movement to the second march objective. Rehearsals are the key to this method. Although a com-

pany commander may feel hampered by it, it reduces the chance of a company becoming isolated while in contact with an overwhelming force. Again, with the battalion commander and the company commanders aware of each unit's location, the problems of clearing fires are significantly reduced.

Although the low-intensity conflict portion of a JRTC rotation lasts for only five to seven days, it should receive most of a company's training focus before deployment. The *search and attack*, more than any other operation, tests the inherent abilities of a light infantry company—moving long distances under combat load, reacting to contact, and positioning to repeat that sequence. *Search and attack* is not just walking through the woods, hoping to bump into the enemy. Success requires a well-thought-out plan that allows you to meet and fight the enemy on your terms—not his.

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Effective EIB Training

COMMAND SERGEANT MAJOR JEFFREY J. MELLINGER

The intent of the Expert Infantryman's Badge (EIB) is to enhance the morale and prestige of infantrymen who perform a tough and thankless job daily, gaining and maintaining the skills they will need on the battlefield. The badge is not meant to denigrate the skills and importance of the other vital and critical branches and specialties of the Army, but it is a symbol that infantrymen play a vital role in the defense of the nation and will do so in the future.

Although testing procedures have changed significantly over the years, it seems the results are usually about the same—roughly 10 percent of candidates qualify for the badge, while some units' success rates vary from 20 to 70 percent on the EIB test. I would like to offer some proven techniques that may help your unit improve its EIB success rate.

Site Selection. Not many units get to select the site of their EIB tests, but for those that do the following advice may

help: The site needs to be close enough that transportation (or the lack of it) doesn't cut into training time. Ideally, units should be able to march to the site, but not at the expense of normal daily routines such as personal hygiene, barracks maintenance, meals, and physical training. The site should also be far enough away that soldiers cannot be distracted by home, the post exchange, fellow soldiers, or others who may drive by.

The sequence of test stations is left to the discretion of the EIB board. Units are told before beginning training which tasks they will test and train on which day, as shown on the matrix. This method allows a unit to focus its training effort each day on selected tasks. The sequence permits a unit to conclude testing in four days, but it allows for five days for soldiers who miss testing for various reasons (sick call or injury). (The regulation says testing must be done in five days.)

Scorer Preparation. Except for preparing the soldiers, there is no more important task than selecting and training the scorers and NCOICs. When tasked for NCOs or soldiers to support the EIB, send your very best. Scorers must be of the highest caliber, absolutely honest and fair, and able to work under pressure (such as the kind a private first class feels when he has to tell a staff sergeant or a captain that he's a NO-GO).

According to USAIC Pamphlet 350-6, *The EIB Test*, scorers must prepare themselves for the administration of the test through a training phase, a rehearsal phase, and a certification phase. In my experience, three weeks (one per phase) is about right to prepare

for and execute the test. Throughout the preparation and execution portions of the test, scorers must be exempt from duties that would prevent their full participation. Failure to do so usually results in poorly trained or uninformed scorers who may incorrectly score a candidate, and affect the credibility of scoring.

The training phase requires that each scorer learn and master the tasks he will grade. It is not enough to have subject-matter experts grading each station. They must be fully capable of performing the task to standard, as well as properly administering and evaluating the same task. Many SMEs are very good at what they do, but don't necessarily disassemble an M16 according to established standards. They sometimes use shortcuts, bypass steps, or add techniques of their own. Although every station should be manned with SMEs, their preparation and competence must not be taken for granted.

It is during the preparation that the scorers ready their stations for the test. I've found that the best way to do this is to allow the individual stations to prepare according to their own wishes and ingenuity. Give them some guidance and then stand back. What should you

look for? Clean lanes, free of debris; camouflage netting; laminated instructions; and polished and starched graders, always quietly professional. The site must also be free of distractions. There should be no soda cans, coolers, radios, loud talking or laughing. While some of these items seem harmless enough, when the training and testing begins, the site should be professional, not only in appearance but in execution.

The rehearsal phase is next. During this phase, scorers take turns testing and critiquing each other. It is during this phase that EIB board members must be present—when standards are checked and reinforced and when the board certifies the scorers and NCOICs. Scorers should administer practice tests to each other, just as though it were test day. Reading the instructions verbatim is not just a requirement—it makes sense. If the task, conditions, and standards are read from the Instructions to Candidates each time, every soldier will hear the same thing the same way. You cannot tolerate joking or clowning on the site. You train the way you fight, and you practice the way you test. During practice exams, board members and examinees must challenge the scorers by asking questions or performing steps

Battalion EIB Training Matrix					
	Monday	Tuesday	Wednesday	Thursday	Friday
Train	Site preparation	Site preparation	Scorer practice	Scorer practice	Scorer practice
Rehearse	0900 B - Black	0900 A - Black	0900 A - Gold	0900 C - Black	0900 Open site
	C - RED	C - Gold	B - Red	B - Gold	
	Gold open	Red open	Black open	A - Red	
	1300 A - Land Nav	1300 B - Land Nav	1300 C - Land Nav	1300 Land Nav open	
Certify	0900 B - Black	0900 A - Black	0900 A - Gold	0900 C - Black	0900 Open Site
	C - Red	C - Gold	B - Red	B - Gold	
	Gold open	Red open	Black open	A - Red	
	1300 A - Land Nav	1300 B - Land Nav	1300 C - Land Nav	1300 Land Nav open	
Test	0530 APFT (All)	0500 B - Road March	0500 C - Road March	0500 A - Road March	0600 Road March Retest
	0900 B - Black	0530 APFT Retest	0900 A - Gold	0900 C - Black	0900 Open Retest
	C - Red	0900 A - Black	B - Red	B - Gold	1500 Awards Ceremony
	Gold open	C - Gold	Black open	A - Red	
	1300 A - Land Nav	Red open	1300 C - Land Nav	1300 Land Nav Retest	
		1300 B - Land Nav			
	Black Lane	Gold Lane	Red Lane		
	C - First Aid	G - Camouflage	J - M16A2		
	D - NBC	H - Commo	K - Hand grenades		
	F - Indirect fire	M - Salute	L - Mines		
	I - Map reading	R - .50 cal M2	O - M136		
			Q - M249		

incorrectly. At the conclusion of the test, critique each scorer.

The EIB board is responsible for certifying that each NCOIC and scorer is fully capable of performing and scoring his assigned tasks. Certification may occur before, during, or after the rehearsal phase, but during the rehearsal is best. If it is done before, you are likely to waste time teaching scorers their duties. If done after, you may not catch mistakes or problems early enough. During the rehearsal phase, you will be able to certify quickly those stations that are on target, and still have time to work with those who are having difficulty.

What should the board look for during the certification phase? Is the test site clearly marked? Are stations easily located? Where are the pre-test, post-test, and retest holding areas for each station? What can candidates or leaders do at each holding area? Is each station set up according to the instructions? Where are the water points? Mess area? Visitor parking? Control tent? Are there enough back-up training aids? Are all scorers certified and present? Does the test site present a professional appearance? Do scorers read verbatim the task, conditions, and standards to each examinee, using the same words and tone? Do scorers carefully observe each action? Is grading done to established standards, and without scorer interpretation or personal preference? Do scorers return each piece of equipment and the test site to the stated condition at the conclusion of each test? What are the procedures for candidates to follow to protest a decision? What about hearing with protective measures at the stations with weapons firing?

Once the scorers and NCOICs become certified, the board must ensure that the test remains consistent until completion. There is a tendency for conditions and/or standards to drift or change as time goes by. Each NCOIC and board member must be alert for these changes and stop them immediately. The purpose of certification is to ensure that graders test to establish standards, not to close approximations. The last candidate must receive the exact same test as the first.

Unit Preparation. Throughout the year, leaders can easily incorporate EIB task training into their schedules. Opportunity training (at ranges, while awaiting transportation, at formations) is highly effective for general preparation. As the test draws nearer, you must formalize your training and preparation, and incorporate EIB tasks into individual and collective training programs. If a unit earns few EIBs, there is likely to be a clear correlation to its lack of thorough training to standards and detailed preparation.

Again, don't train at the expense of daily routine duties. I have observed units that train from before dawn until after dark but with only marginal success. It is possible to overtrain soldiers and leave them so exhausted from preparation that they fail during testing. I don't advocate any weekend or evening training either. The normal duty day is enough, particularly if a unit is really making the most of its training.

Battle-focused training doctrine requires that squad leaders train their soldiers, but I still see units conducting "round-robin" training. The benefits of leaders training soldiers are obvious—squads train as teams, leaders earn more trust and respect from their soldiers, and the method builds cohesion. Besides that, whom will soldiers call upon for help in battle—the "resident experts" from Station #1, or their squad leaders? Additionally, by making leaders train their soldiers, we can easily measure leaders' ability to conduct training on the basic infantry and soldier skills tested during the EIB tests.

Assign every candidate to a squad leader for training. This includes platoon leaders, platoon sergeants, and staff officers. Assign headquarters soldiers (armorers, clerks) to squads as well. They can't train themselves.

As stated in USAIC Pamphlet 350-6, to achieve the best results, unit trainers should participate in the scorer's training to assist in preparing their soldiers for the test. Having the squad leaders present during scorer training and, more important, during certification enhances your prospects of earning EIBs. They'll be right there to see exactly how the test is run and can clarify any questions

about expected performance measures or standards. As in the earlier discussion about SMEs, squad leaders are SMEs, but they all have their own ways of doing things.

Soldier Preparation. Cool, calm, collected, and confident. That's how your soldiers need to be for the test, not rattled and pressured. I remember one of my squad leaders who failed the grenade task several years running. As he was sweating it out at his last station the year he earned the badge (with no NO-GOs), the commanding general walked up to him and said, in a loud voice, "Why so worried, Sergeant? This is the easiest station on the test!" You must begin instilling confidence and concentration under pressure long before test day. The soldiers must, in fact, be taught and developed every day.

Since we learn best when we execute hands-on performance tasks, practice, practice, and practice! Make your soldiers perform the tasks repeatedly, and encourage them when they fail. Show them how to execute each step properly. Inspect their equipment for proper fit, function, and serviceability.

Testing. At some point, generally during the training phase, have EIB committee members and leaders at all levels with EIBs start wearing the non-subdued badge on their uniforms. The colored metal badge is a readily recognizable symbol of what each candidate is seeking and is also a display of pride in earning so difficult a badge.

I believe every candidate should test at every station, regardless of his status for the badge. Even after a soldier fails to qualify, keeping him in the testing process is smart. This is probably the premier individual training event for the entire year. At no other time will squad leaders have the opportunity to spend two to four weeks of uninterrupted time training their soldiers on these very important combat survival skills. This isn't just about a badge; this is about individual combat skills training.

On the subject of training distractions, the chain of command can be the biggest. Keep them away from test stations. Allow them in the holding areas and routes of march, offering encouragement. But who needs a platoon

one or he's out of the running?

Every leader in the unit should participate in the road march if possible. While it is not a big ruck, or a particularly long walk, the act shows support for your soldiers. It is also a prime example of leading from the front. Sharing hardships is a key indicator of good leadership.

Awards Ceremony. The culminating event of the EIB test is the awards ceremony. I have seen units pin the EIB on at the conclusion of the last test event, but this fails to publicly recognize soldiers for this difficult test. The proper way to present soldiers their badges is in a formal ceremony, with

fellow soldiers, chains of command, and family members in attendance.

The ceremony should be organized and led entirely by NCOs, which also underscores that the NCO is the primary trainer of the Army. The command sergeants major and first sergeants, along with their commanders, should present a token number of EIBs, probably to senior NCOs and officers, but the squad leaders who trained the soldiers should present most of the awards.

While mass awards formations are fast and efficient, I like to separate those soldiers who earned the award with first-time GOs in every task. Put them out in front, and mention their

unique accomplishment. Also appropriate at the ceremony is the presentation of awards to the squad leaders whose results far exceeded expectations.

Make your squad leaders train their soldiers hard, to establish standards, and watch those EIBs come rolling in!

Command Sergeant Major Jeffrey J. Mellinger, when he wrote this article, was commandant of the U.S. Army Alaska NCO Academy, Fort Richardson. He was previously CSM of 1st Battalion, 75th Ranger Regiment; CSM of 3d Battalion, 10th Infantry, Fort Leonard Wood; senior advisor, 41st Separate Infantry Brigade, Oregon Army National Guard; and first sergeant, Company C, 4th Battalion, 9th Infantry, Fort Wainwright.

Own the Night? Or Shoot, Move, and Communicate Effectively in It?

CAPTAIN MARK S. LESLIE

Darkness is a friend to the skilled infantryman, according to Captain Sir Basil Liddell Hart (*Thoughts on War*, 1944). This statement is as true today as it was in 1944, if not more so, but I would have to edit it to read: Darkness is a friend to the skilled *and properly equipped* infantryman.

“Own the night” is the U.S. Army’s claim to the edge that we have over every potential adversary on the modern battlefield. For the most part, that is true—but only in the sense that we can see in limited visibility conditions because of our advanced night vision capabilities and their abundance in most of our infantry units. But do we truly own the night? Can we engage targets more effectively with these systems? Are we integrating them effectively into our qualification ranges and night live fire exercises?

Although our Army has the finest night vision devices in the world, for the most part we use them only for observation. We do not use them to fight

with, or use them along with our weapons to get the full effectiveness. We do not combine them and the weapons into one system as effectively as we should.

While I was a platoon leader in the 1st Battalion, 32d Infantry, 10th Mountain Division, I was tasked with developing a company training plan for a night qualification range. After re-

For the most part, we use our night vision devices only for observation. We do not combine them and the weapons into one system as effectively as we should.

searching our current Field Manual (FM) 23-9, *M16A1 and M16A2 Rifle Marksmanship*, and conferring with my noncommissioned officers, I recommended that we conduct a modified M16 night familiarization using the AN/PVS-7D and AN/PAQ-4. The decision to use these systems was based

on the fact that almost all of our riflemen had PVS-7Ds. In short, the FM seemed to be outdated—surpassed by our current technology and the number of night vision devices per platoon.

What we came up with was a three-phase plan: Pre-marksmanship instruction (PMI), a practical exercise, and the familiarization fire itself.

Three NCOs were tasked to prepare the PMI classes. They were given enough advance notice to be able to prepare good solid classes, rehearse, and request the necessary training aids. Each NCO was given a task, condition, and standard for his class. The three classes were: Night Firing Techniques, Firing With an AN/PVS-7D, and Zero and Engage Targets With an AN/PVS-7D and an AN/PAQ-4. As their references, the NCOs used FM 23-9, Soldier Technical Publication (STP) 7-11BCHM, the appropriate Technical Manual, and their own experience and expertise.

After the initial day qualification, the

TRAINING NOTES

Manual, and their own experience and expertise.

After the initial day qualification, the company was given an additional safety brief and an orientation on the range and range concept, which covered the way the range was to be conducted.

The company was then divided into three sections, and the round-robin series of PMI began. The soldiers assigned PAQ-4s were put in one firing order and sent first to the class on zeroing and engaging targets. During this class, each soldier, with the help of the NCOIC, zeroed the PAQ-4 to his assigned weapon. This was a key area: Each weapon had to be zeroed to the individual soldier, then the PAQ-4 had to be zeroed to the weapon by that same soldier. Once the two were mated and zeroed, any soldier could pick up the weapon and fire it as if it were his own individual weapon, so long as he was wearing the PVS-7.

The other two classes—Night Firing Techniques and Firing With the PVS-7D—were straight out of FM 23-9 and the TM, with the NCOs adding their own experience. Each rotation of round-robin classes took 30 minutes. For many of the soldiers, this was the first time they had been exposed to and trained in techniques developed specifically for night firing.

After the round-robin training, the three firing orders formed up for the night fire. The soldiers with PAQ-4s were the first to fire. Every soldier was to have the PVS-7D. The second firing order moved up to the firing points, with the soldiers of the first order to act as safeties. The standard night firing table for qualification was used. After firing, the first order left the firing line—leaving their weapons with the PAQ-4s mounted on them—and moved off the range, to be replaced by the next firing order. After the second firing order fired, they became safeties for the last order, and the safeties became the firers.

Since this was a familiarization and not a qualification, in the orientation brief I gave the platoon sergeants and squad leaders the option of having their soldiers fire their weapons with just the PVS-7Ds or having the first soldiers fire their weapons with the PAQ-4s mounted. Although most of them chose to fire with the PAQ-4, some opted to fire with just the PVS-7D. We did not yet have PAQ-4s assigned to every rifleman and wanted a test group for comparison.

The PMI NCOICs, the platoon sergeant, and I were on the firing line during each order with night observation devices to observe, correct any deficiencies, and answer any questions. When we conducted the training, we shared the range with a sister company, whose soldiers did not attend the PMI or use any night vision devices in their qualification. When the scores were announced, it was evident that many of that company's soldiers did not meet the standard of seven hits out of 30 silhouettes. Every man in our company qualified according to FM 23-9 standards, and most qualified Expert. Even soldiers who had difficulty qualifying during the day had no problem at night. One soldier who had failed to qualify during the day—even though he had been retrained and sent back to rezero—attended all of the round-robin training and, that night, shot 39 out of 40.

Our success was the direct result of several factors: First, the NCOs presented outstanding PMI instruction. This was the first time many of the soldiers had received PMI for a night fire. A second factor was the use of the AN/PVS-7Ds. The third, and probably the largest contributing factor, was the use of the AN/PAQ-4s.

As with every training event, much of it went well, but a few improvements and recommendations were noted during the after-action review:

- Take more time for the PAQ-4 class—an hour, instead of 30 minutes.

- Introduce artificial illumination, using parachute flares, during each firing order.

- Run all soldiers through a firing order with just the PVS-7s first, then add the PAQ-4s.

- Introduce firing positions other than the prone.

- Initiate ambidextrous firing.

- Teach soldiers in the PAQ-4 class not to splash their sector before a target appears.

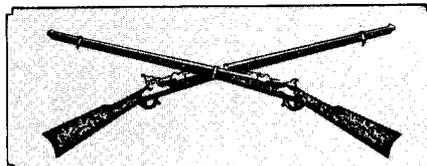
- Fix bayonets to counteract the natural tendency to fire high.

In addition, assault firing techniques could be taught and trained while wearing night observation devices; odd and difficult terrain could be built into the even, mown, landscape of the range; and urban terrain techniques could be trained, using a little imagination and relatively few additional training aids.

Over all, this excellent training event gave the soldiers confidence in their equipment and the leaders a base from which to expand their training programs.

As the tip of the spear, we should truly be able to shoot, move, and communicate in the night—not just *see* in it. The FM is there to provide guidelines and standards. But nothing says we as leaders cannot adopt a higher standard with our equipment on the basis of our experience and the desire to own the night in all its facets. Once we can move, shoot, and observe to the fullest extent of our capabilities, we can truly dominate the night and seize the initiative from any adversary.

Captain Mark S. Leslie served more than 12 years in the Army before his commissioning from the Officer Candidate School in 1997. In addition to serving as a rifle platoon leader in the 10th Mountain Division, he served in the 2d Battalion, 504th Infantry, 82d Airborne Division; in the long-range surveillance troop of the 1st Battalion, 17th Cavalry; in the XVIII Airborne Corps long-range surveillance company; and as a Ranger instructor.



BOOK REVIEWS



Battle-ax Division: From Africa to Italy with the 78th Division, 1942-45. By Ken Ford. Sutton Publishing, United Kingdom, 1999. 218 Pages, photographs, maps. \$34.95, hardcover. Reviewed by Major Dominic J. Caraccilo.

In 1942, Britain's 78th Division, commonly referred as the Battle-ax Division spearheaded the allied assault in North Africa during the Anglo-American landings of Operation *Torch*. While the division suffered more than 10,000 casualties in the ensuing year of combat, it remained in the fray for 18 more months until VE Day. From the deserts of the North African battles at Tebourda and Lonstop Hill to their final act rounding up *Wehrmacht* in Austria, to their participation as part of an Army of Occupation, the 78th Battle-ax Division remained, as author Ken Ford writes, "a close band of brothers."

Ford, a bookseller specializing in military books and author of four other World War II books, provides a unique account of the exploits of one of the United Kingdom's most celebrated Second World War Divisions. This book conveys some of the most grueling and costly fighting of the war, as indicated by the three Victoria Crosses won by its members.

Ford is quick to point out that the 78th "had the misfortune to serve in the unfashionable theaters of Tunisia and Italy" as part of the neglected First Army, as opposed to Montgomery's more publicized and better supported Eighth Army. Nonetheless, he combines his own compelling narrative with accompanying first-hand accounts that prove that the Division fought valiantly without peer on every front during the war. His book is at once a compelling chronology of a premiere fighting force a well-deserved tribute to the "close band of brothers who stayed together after the end of hostilities today."

For those with even a remote interest in the North African, Italian, and mainland European theaters of war will enjoy this book.

Slim the Standard-bearer: A Biography of Field-Marshal The Viscount Slim, KG,

GCB, GCMG, GCVO, GBE, DSO, MC. By Ronald Lewin. 1976; reprint, Wordsmith Editions, 1999. 350 Pages. Reviewed by Lieutenant Colonel Harold E. Raugh, Jr., U.S. Army, Retired.

One of the most charismatic and dynamic soldiers of the 20th century British Army was William Joseph Slim, later Field Marshal the Viscount Slim (1891-1970). His adventure-filled military career began upon his commissioning as an officer in 1914. Along the way, Slim commanded at every echelon from platoon to army group, all of them in combat, with the exception of battalion. The culmination of Slim's military career was his appointment in 1948 as Chief of the Imperial General Staff, the first Indian Army officer ever to serve as the professional head of the British Army.

Slim's greatest contributions were made during the Second World War. Early in the conflict he commanded the 10th Indian Infantry Brigade and led it in action against the Italians in Eritrea and the Sudan (1940-1941), then the 10th Indian Division against rebellious Iraqis and Vichy French in Syria (1941). After the January 1942 Japanese invasion of Burma, Slim was appointed commander of Burma Corps, and a few months later, of XV Corps. The following year, Slim assumed command of the Fourteenth Army and began a limited offensive in February 1944 in Arakan. By June 1944, Slim's "Forgotten Army" had decisively won the Imphal/Kohima battle, and thereafter successfully advanced eastward and recaptured Burma. At the end of the war, Slim was commanding Allied Land Forces, South East Asia.

In this superb military biography, historian Ronald Lewin chronicles not only what Slim accomplished, but more importantly, how he led and commanded soldiers. The author highlights Slim's humble background and, armed with his integrity, character, and intellect, Slim reached the pinnacle of his profession. In many respects, Slim's career and life personify selfless service and devotion to duty.

In writing this detailed yet balanced biography, the author evidently had unrestricted access to Slim's personal papers and life-long correspondence. Lewin also inter-

viewed numerous senior, knowledgeable military leaders, including Mountbatten, Auchinleck, O'Connor, Harding, and Templer. Footnotes, unfortunately, are frequently inadequate or missing, with many quotations totally undocumented. Various episodes and achievements of Slim's life are illustrated by 27 photographs, and six superb maps enhance one's understanding of Slim's most significant military operations.

Lewin's excellent and highly readable *Slim the Standardbearer* was originally published in 1976. The 1999 publication of this paperback edition is most welcome, as it makes this award-winning biography available to a new and wider audience. This book helps ensure that the life and military career of the competent, courageous, and self-effacing Slim, and the accomplishments of the soldiers he led—especially in Burma—will receive the credit they deserve.

First Infantry Division, World War II: The Big Red One. Second Volume. By Major General (Retired) Albert H. Smith, Jr., Senior Editor. Turner Publishing Company (P.O. Box 3101, Paducah, KY 42002-3101), 2000. Limited Edition. 139 Pages. Reviewed by Lieutenant Colonel Albert N. Garland, U.S. Army, Retired.

This book is filled with maps, photographs, Medal of Honor and unit citations, "war stories," and individual biographical sketches. It has been designed and produced with one major objective: to present, in General Smith's words, "a good basic historical reference for today's Division soldiers—as well as WWII veterans and their families." And while he says the book "is not a comprehensive historical work produced by professional historians," it can be of value to any historian who works with World War II material.

The book is dedicated to the memory of the late Command Sergeant Major Ted Dobil, who served with the 26th Infantry Regiment from 1940 to 1966, and the other "great NCOs who led the 1st Division into battle."

It leads off with a reprint of *The First*, which is a brief history of the division. Originally published in 1945 in Europe and

then republished, with addenda, in 1996 by the Division's museum here in the United States. *Infantry* magazine published a review of that book in its March-June 1997 issue.

This is followed by a section that honors the 16 division soldiers who were awarded the Medal of Honor during the war; 20 presidential unit citations earned by various division units; a description of the seven foreign decorations earned by the division during World War II; a statistical listing that shows casualties, campaigns (the division spent 443 days in combat during the war), decorations, and senior division officers; the "war stories" and individual biographical sketches; and a final section that is the story of the division's World War II monuments in France, Belgium, and Czechoslovakia.

Finally, on the book's last page, General Smith tells the story of the "Angel of the Big Red One," an angelic figure that is atop the 1st Division's memorial behind the Old Executive Office Building at 17th Street and Pennsylvania Avenue NW, in Washington, DC.

All Big Red One soldiers, past and present, can be proud of this book and the division's outstanding history of service to our country.

***Sword of the Border: Major General Jacob Jennings Brown, 1775-1828.* By John D. Morris. Kent State University Press, 2000. 348 Pages. \$35.00.** Reviewed by Colonel Cole C. Kingseed, U.S. Army.

Perhaps the least known, yet most successful, American general officer in the War of 1812 was Major General Jacob Jennings Brown. Over the course of the conflict, Brown defeated the British in four of the 18 battles in which more than 400 regulars were involved. Brown's victories at Sackets Harbor, Chippawa, Lundy's Lane, and the sortie at Fort Erie clearly mark him as the most effective American commander of the war. In the first full-length biography of Brown, author John D. Morris has compiled the most comprehensive biography of the officer whom Congress subsequently named the first Commanding General of the Army in June 1821.

Relying extensively on Brown's personal papers and the National and Canadian Archives, Morris views his subject as the war's most successful commander. The author devotes half his story to a chronological approach to Brown's service through the end of the War of 1812, then dedicates the last half of his biography to the period from 1815 until Brown's death in 1828, during

which Brown served as the senior officer of the United States Army. It is in Morris's analysis of the final chapters of Brown's illustrious career that *Sword of the Border* makes its most significant contributions.

Jacob Brown accepted a commission as captain of the New York militia in 1807. Two years later he was promoted to Colonel and rose steadily in rank. When the War of 1812 began, Brown was assigned to the New York-Canadian border, where he served with great distinction. Aply assisted by Winfield Scott, he defeated the British in several battles, culminating in his 1814 campaign on the Niagara frontier. For conspicuous service, Brown earned the commendation of Congress and was one of two major generals—the other being Andrew Jackson—retained in federal service after the war.

While Morris does a commendable job summarizing Brown's service during the war, he falls short in his analysis of Brown's tenure as Commanding General of the Army. Dedicating a single chapter to this critical period in Brown's career, Morris leaves the reader with only a short synopsis of Brown's achievements during the formative years of the professionalization of the officer corps. As the principal military advisor to the President and to the Secretary of War, Brown advised several presidential administrations and implemented executive decisions. He instituted a recruiting service, developed early Artillery and Infantry Schools of Practice, and submitted annual reports to the Secretary of War that addressed pertinent issues such as desertion, brevet rank, and pay incentives.

Brown's tenure as Commanding General, however, was not as pioneering as Morris indicates. An obvious admirer of Brown, Morris credits Brown with defining the office as it would largely remain until the army staff structure underwent reform under Secretary of War Elihu Root in the early twentieth century. Winfield Scott and the Civil War triumvirate of Ulysses S. Grant, William T. Sherman, and Philip Sheridan, probably exerted far more influence than Brown on defining the role and mission of the Commanding General's position. Moreover the author opines that many of the War Department reforms under John C. Calhoun deservedly belong to Brown and "the harmonizing affect of Brown's personality." In reality, Brown would have been far more effective had he not been stricken by a series of debilitating ailments during most of his career following the War of 1812.

In summary, Morris has successfully

filled a huge gap in the history of the U.S. Army. *Sword of the Border* is a major contribution to the historical literature of America's second war with Great Britain and provides an insightful analysis of the career of a much-neglected military commander. Though he did not achieve as much as the author asserts, Jacob Brown does deserve a higher position in the pantheon of American military heroes.

***The Soldier's Story: Vietnam in Their Own Words.* By Ron Steinman (TV Books, 1999. 367 Pages. \$27.95.** Reviewed by Dr. Joe P. Dunn, Converse College.

Several dozen collective Vietnam memoirs now exist. Because each individual's story adds to our knowledge of the multifarious experience, each collection has value. But these books do not differ much one from another, and one wonders how many more of this genre can possibly appear. This particular contribution is the companion volume to The Learning Channel's six-hour documentary series, "Vietnam: The Soldier's Story," produced by ABC News. Averaging more than 2.1 million viewers for each of the three nights of its initial showing, the program tied for the most watched series on The Learning Channel. The book's compiler, a news producer for ABC and NBC News, served as NBC Bureau Chief in Saigon for two years during the late 1960s and covered the Tet Offensive.

More than 150 veterans and subject matter experts were interviewed on and off camera for the documentary series, and 77 of these appear in the book. The interviews are divided into six topical chapters on some of the most dramatic events of the war: the Battle of the Ia Drang Valley, the Siege of Khe Sanh, the Tet Offensive, the Secret War, the Air War, and the Fall of Saigon. The essays are brief but quite interesting. Although all the military services are represented, the collection is less diverse than most books of this type. Non-combat troops (who made up 90 percent of Vietnam veterans), women, and combat soldiers during less high-profile periods of the war are excluded.

A captivating feature of this volume is that each interview includes a picture of the individual at the time, and the concluding section gives a current lengthy one-paragraph biography of that person today, with a current picture. I find these updates particularly engaging and instructive.

Is this volume better than the many others

in this genre? Not Really. It is well worth reading, but it is fairly standard for the field. For those who saw the television series, however, it will have special appeal.

Dear Harry: The Truman Administration Through Correspondence with Everyday Americans. By D.M. Giangreco and Kathryn Moore. Stackpole Books, 1999. 512 Pages. \$34.95. Reviewed by Lieutenant Colonel Albert N. Garland, U.S. Army, Retired.

On 12 April 1945, following the death of then-President Franklin D. Roosevelt, Harry S Truman, former U.S. Senator and Roosevelt's Vice-President, became the 33d President of the United States. Truman was virtually unknown to most of the U.S. populace, despite his sterling work as chairman of the Senate Select Committee to Investigate the National Defense Program, popularly known as the Truman Committee.

In putting together this book, the authors selected "letters, telegrams, and postcards. . . almost exclusively from the files of the Harry S Truman Library in Independence, Missouri" to show how the people of the country reacted to the many major events that occurred during President Truman's nearly eight years in office. As such, this is not a scholarly history of that administration; it does offer, rather, a peek into the nation's soul, a peek offered freely by the people themselves. (The authors could have added that they used a number of inter-White House staff memoranda and the results of several special studies.)

The book is divided into 10 chapters, each dealing with one or several subjects. Only three of the chapters are used for a single subject: Chapter 6, the relief of General MacArthur; Chapter 7, the atomic bomb; and Chapter 8, The Korean War; although there is some overlap in all of the chapters, a good amount of the material on Truman's decision to use the bomb against Japan is in Chapter 10. (Giangreco has written on this subject in an earlier effort for a professional military journal.)

The authors have provided enough historical material in each chapter to explain the proper settings at the times decisions were made.

For some reason, perhaps for levity, the authors conclude each chapter, regardless of its contents, with a query concerning whether or not the annual egg roll at the White House, which had been discontinued in 1939 because of the outbreak of World War II, would be held, and an answer to those queries by a White House staff mem-

ber. The answer at the end of each of the first nine chapters was No. At the end of Chapter 10, after the Eisenhower administration had taken over, the answer was Yes.

As one who lived through those times, I thoroughly enjoyed comparing my feelings at the time with those of my fellow citizens. Of course, I was in the military service during the Truman years and may have had a different view of the events as they unfolded. But I was convinced then, as I am now, that few of our presidents took office under more trying conditions or faced more serious problems both at home and abroad than did Harry Truman. His was an administration seemingly buffeted by crisis after crisis, and I believe he handled each at least as well as any of our succeeding presidents could have done. Many of Truman's decisions were criticized; in fact, most of them were, with negatives usually far outnumbering positives. In particular, his decision to integrate the armed forces and the Federal Civil Service in 1948 drew heavy criticism, as did his decision to recognize, in the same year, the new state of Israel.

But the most severe criticism came with his decision to relieve General MacArthur in 1951. Probably no Truman decision received as much criticism as this one, even though much of it had died down within six weeks. Here is one example: "One of the first telegrams to arrive at the White House was dispatched by a Phoenix, Arizona, department store owner and future Senator.... Simple and eloquent, it summed up what many Americans were thinking: 'How Stupid can you get?'" It was signed, Barry Goldwater. (I might say I agreed with the President's move.)

There are a few minor editorial glitches, which the authors have kindly called to my attention. These in no way affect the value of the book. But in one area I disagree with the authors' belief that Truman, in the years immediately following the end of the war in 1945, conducted a "dogged rear-guard action to minimize the impact of defense cuts." Just the opposite was true. Truman used his Secretary of Defense, Louis Johnson ("Louie Defense" to us) as a point man to gut the military services, thereby reducing the defense budget. It was not until the Soviets made their move against Berlin in 1948 that the administration's thinking changed. It was too late; we went to war in Korea with a poorly trained and equipped military force and paid a high price for the neglect.

Still, I recommend this book to you. It gives flavor to the times. It brings back memories of the many problems we faced after World War II, and how many were

solved. But there were others that are still around; for example, Truman believed in some form of national health service. Each president faces and will face his own set of problems and his own crises. Truman's actions, reactions, and decisions present a good guide to follow.

In the Combat Zone—Special Forces Since 1945. By Robin Neillands. New York University Press, 1998. 350 Pages. 350 Pages, photos. \$25.95. Reviewed by Michael F. Dilley.

Robin Neillands is a former Royal Marine Commando and the author of three previous books on British special units. He has also written a variety of other books with military themes on subjects ranging from the Middle Ages to more modern times. So what makes this book so special, covering as it does ground similar to that of several others just coming on the market?

One of the places I look to determine whether I think a book is worthwhile is its sources. If a military history doesn't have a listing of sources, I am less likely to buy it. Neilland's book *In the Combat Zone* lists books, official documents, interviews, and magazine articles among its sources. In addition, I have read some of his previous books and am familiar with his work. I want to stress "work." This is not just another *ho-hum* recounting, in broad terms, of the history of special forces units. In fact, Neilland says in his preface that those former special operators who helped him with his research did so "on the understanding that I told it straight. . . and did not. . . produce yet another 'gung ho heroes' epic." He has succeeded and, I suspect, earned the thanks of his sources.

This book attempts to cover, by way of sampling the various kind of special units since the end of World War II, various trouble spots throughout the world and how countries have reacted to those troubles. The accounts lead to the Gulf War of 1990-91. An appendix lists, by country, as many units as Neillands could find of the world's special forces. Although the book focuses on the military units, Neillands also touches on civilian counterparts where appropriate, including police organizations such as Germany's GSG-9, France's GIGN, and the United States' FBI Hostage Rescue Team.

As with other books by Neillands, I found this one interesting, well-written, and easy to read. Although a general military student may get some good points from this book, I suggest that it is intended for and will be better used by those who prefer to focus on

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special units. For those students, I highly recommend it.

***The All-Americans at War. The 82nd Division in the Great War, 1917-1918.* By James J. Cooke. Praeger, 1999. 168 Pages, photos, maps. \$55.00.** Reviewed by Colonel Christopher B. Timmers, U.S. Army.

I remember with fondness my first unit assignment as a new infantry lieutenant—the 1st Battalion, 325th Infantry, at Fort Bragg, North Carolina. In World War II, they were glider infantry. I was disappointed to learn that even though the 325th was now airborne infantry, the unit had no combat record of parachute assaults in that war. A silly thing, I know, but friends and classmates who were assigned to the 504th or 508th (both parachute infantry regiments in World War II) would sneer when they learned my regimental designation: “Oh, yeah,” they would condescend, “the glider riders.” (The message was clear: Real men arrived on the battlefield in parachute harnesses.) As time went on, I developed a pride in my battalion and its parent regiment. The 325th had its share of unit citations and individual decorations, and the soldiers assigned to it (now all jumpers) could go toe-to-toe with those from any other outfit. I knew vaguely that the 325th was part of the old 82d Division and had fought in the first World War, but its existence for me seemed to date from 1942, when an “Airborne” tag was affixed over the All-American patch. The First World War, for the most part, didn’t exist.

Well, it *did* exist. Men fought, died, and made innumerable sacrifices. And a substantial amount of the sacrifice from the American side came from the 82d Division. Thanks to James Cooke, junior officers, amateur historians, and serious scholars no longer have any excuses for ignorance. The story is told briskly and in detail. Cooke has managed to go beyond regimental histories and secure old letters, memoranda, out-of-print texts, and diary entries to tell a fascinating history. Next to the Korean War, World War I is probably the least understood and most neglected major conflict in U.S. history. In telling the story of the 82d, Cooke tells much of the story of our entire involvement in this war.

As a former All-American, I knew that York Theater at Bragg was named for Sergeant Alvin York, noted Tennessee marksman and recipient of the Medal of Honor, but it was inspiring to learn that Pike Field (another Bragg landmark) was posthu-

mously named for Lieutenant Colonel Emory Pike, the division’s first Medal of Honor recipient. And that Jonathan Wainwright, hero of the Bataan Death March, served in France as the division’s G-3.

The 82d of World War II fame is well known, and its service in the Dominican Republic, Vietnam, and more recently the Persian Gulf are all in recent memory. But World War I and the All Americans are rarely mentioned in the same sentence. Thanks to James Cooke, that omission is in the process of being corrected.

RECENT AND RECOMMENDED

***The Military Balance 1999-2000.* Published by Oxford University Press for the International Institute for Strategic Studies, 2000. \$132.00.**

***Horse Sweat and Powder Smoke: The First Texas Cavalry in the Civil War.* By Stanley S. McGowen. Texas A&M University, 1999. 248 Pages. \$29.95, Hardcover.**

***The Oxford Companion to American Military History.* Edited by John Whiteclay Chambers II. Oxford University Press, 2000. 950 Pages. \$60.00, Hardcover.**

***On Being a Superpower and Not Knowing What To Do About It: Scenarios and Security in the New Century.* By Seymour J. Deitchman. Westview Press, 2000. 362 Pages. \$32.00, Hardcover.**

***Tactics and the Experience of Battle in the Age of Napoleon.* By Rory Muir. Hardcover edition published in 1998. Yale University Press, 2000. 342 Pages. \$16.95.**

***Soldier's Study Guide.* Fourth edition. By CSM Walter J. Jackson, U.S. Army Retired. Stackpole, 2000. 160 Pages. \$12.95.**

***The Great War and Modern Memory.* By Paul Fussell. Originally published in 1975. Oxford University Press, 2000. 378 Pages. \$14.95, Softbound.**

***America's Struggle with Chemical-Biological Warfare.* By Albert J. Mauroni. Praeger, 2000. 320 Pages. \$65.00.**

***Patton's Ghost Corps: Cracking the Siegfried Line.* By Nathan N. Prefer. (Originally published 1998. Presidio, 2000. 228 Pages, maps, photographs. \$19.95, Softbound.**

***Hap Arnold and the Evolution of American Airpower.* By Dik Alan Daso. Smithsonian, 2000. 333 Pages. \$29.95.**

***Women in Vietnam: The Oral History.* By Ron Steinman. TV Books, 2000. 320 Pages, B&W photos. \$26.00.**

***A Military History of Canada: From Champlain to Kosovo.* Fourth edition. By Desmond Morton. McClelland & Stewart, 2000. 317 Pages, photographs. \$18.95, Softbound.**

***Guide to Military Operations Other Than War: Tactics, Techniques, & Procedures for Stability & Support Operations Domestic & International.* By Lieutenant Colonel Keith E. Bonn, U.S. Army, Retired. Stackpole, 2000. 368 Pages. \$19.95, Softbound.**

***The Battle for Pusan: A Korean War Memoir.* By Addison Terry. Presidio, 2000. 256 Pages. Maps, photographs. \$27.95.**

***Cigars, Whiskey and Winning: Leadership Lessons from General Ulysses S. Grant.* By Al Kaltman. Prentice Hall, 2000. 335 Pages. \$13.00, Softbound.**

***American Generalship: Character is Everything: The Art of Command.* By Edgar F. Puryear. Presidio, 2000. 350 Pages. \$34.95.**

***A Time of War: Remembering Guadalcanal, A Battle Without Maps.* By William H. Whyte. Fordham University Press, 2000. 148 Pages. \$17.50, Softbound.**

***We Band of Angels: The Untold Story of American Nurses Trapped on Bataan by the Japanese.* Hardcover edition 1999. Pocket Books, 2000. 327 Pages, photos and maps. \$13.95, Softbound.**

***Breakout: The Chosin Reservoir Campaign, Korea 1950.* By Martin Russ. First Published 1999. Penguin Books, 2000. 452 Pages. \$14.95, Softbound.**

***Kriegie: An American POW in Germany.* By Oscar G. Richard III. Louisiana State University Press, 2000. 140 Pages. \$24.95.**

***The Irish War: The Hidden Conflict Between the IRA and British Intelligence.* By Tony Geraghty. Johns Hopkins, 2000. 472 Pages. \$29.95, Hardcover.**

***The Road to War.* Revised Edition. By Richard Overy with Andrew Wheatcroft. Originally published 1989. Penguin, 2000. 463 Pages. \$14.95, Softbound.**

***The Delafield Commission and the American Military Profession.* By Matthew Moten. Texas A&M University Press, 2000. 288 Pages. \$47.95.**

***Battle for Korea: A History of the Korean Conflict.* By Robert J. Dvorchak. Originally published 1993. Combined Publishing, 2000. 320 Pages. \$24.95, Softbound.**

***Educating the U.S. Army: Arthur L. Wagner and Reform, 1875-1905.* By T.R. Brereton. University of Nebraska Press, 2000. 177 pages. \$45.00.**

***The Fighting Pattons.* By Brian M. Sobel. Originally published 1997. Dell Books, 2000. 416 Pages. \$6.50, Softbound.**

***The Quotable Soldier.* Edited by Lamar Underwood. Lyons Press, 2000. 288 Pages. \$20.00.**

***In Great Waters: The Epic Story of the Battle of the Atlantic 1939-45.* By Spencer Dunmore. McClelland and Stewart, 2000. 352 Pages. \$24.95.**

***The Fall of France: May-June 1940.* By Martin Marix Evans. Stackpole, 2000. 150 Pages (b&w and color plates). \$29.95.**

***Terrible Swift Sword: Union Artillery, Cavalry and Infantry, 1861-1865.* By John P. Langellier. American Soldier, His Uniform and His Equipment Series. Stackpole, 2000. 72 Pages.**

***General of the Army George C. Marshall, Soldier and Statesman.* By Ed Cray. Originally published 1990. Cooper Square Press, 2000. 847 Pages, \$29.95, Softbound.**

***Colonel Despard: The Life and Times of an Anglo-Irish Rebel.* By Clifford D. Comer. Combined Publishing, 2000. 333 Pages. \$29.95.**

***Brandenburg Division: Commandos of the Reich.* By Eric Lefevre. Histoire & Collections, 2000. 333 Pages. \$24.95.**

***The Thin Yellow Line.* By William Moore. Wordsworth Editions, 1999. 292 Pages. \$12.99, Softbound.**

***The Battle of Neuve Chapelle: French Flanders.* By Geoff Bridger. Leo Cooper, 2000. 144 Pages. \$16.95.**

***Shurik.* By Kyra Petrovskaya Wayne. Lyons Press, 2000. 224 Pages. \$14.95, Softbound.**

From the Editor

IT'S GOING TO BE A CLOSE ONE

Wherever we fight the next war, chances are it will be a close-range proposition. We consider the infantry fight as starting somewhere around 300 yards out and continuing on all the way to—and beyond—the objective itself, but for the rifleman, 300-yard shots will clearly be the exception rather than the rule, with the majority of his engagements being at 100 yards or less. To be sure, we need to train for the longer range opportunities, but every soldier must be able to hit those targets that appear unexpectedly and close-in. This is particularly true for combat support (CS) and combat service support (CSS) units. Maneuver units in contact with the enemy are totally dependent upon their logistical support in terms of services and virtually all classes of supply, and these CS and CSS units' survivability is essential. Our potential adversaries have long regarded our support base as an easy target, and we must train everyone to fight as infantry. Our Basic Combat Training Brigades are doing a superb job in that direction, and when their graduates finally arrive at their units to work as drivers, fuel handlers, clerks, or in any of the myriad specialties that sustain an Army, we must make sure that their ability to shoot first and accurately is not allowed to languish through disuse.

I realize the importance of snipers, and the devastating effect they will have on an enemy's command and control, crew-served weapons, reconnaissance, and artillery and air forward observers and controllers, and their value will never dissipate. But combat veterans of World War II and Korea—and my own experience in Vietnam—tell me that most engagements have taken place—and will still take place—somewhere shy of 100 yards, with the majority closer than 50 yards. German snipers on the Russian Front in World War II—and their Soviet adversaries—had opportunity for many long shots in open terrain and in the ruined expanse of Stalingrad, but most of their shots were still taken at less than 200 yards. Snipers who faced armor habitually held fire until they could be sure of hitting the driver's 2" by 4" view port, which often meant a shot at 60 yards or less. Japanese snipers frequently fired at ranges of 100-150 yards or less, and the soldier or Marine who spotted one of them knew he had to shoot fast and well.

We have trained to shoot accurately at the longer ranges, and this accuracy certainly carries over to the closer targets. Let us keep that skill of precision shooting, but work on getting those shots off faster. Remember, some of our likely adversaries have not had the advantage of the marksmanship training that we have, but they have Kalashnikovs or comparable weapons, and will attempt to get in as close as they can before being detected. Be ready, and make sure that the men—and women—in your care have the training, the weapons, and above all the will to shoot fast and straight when the time comes. And make no mistake about it: the time will come. The purpose of an Army is to fight and win its nation's wars. Train your soldiers to do that. Watch your lane.

RAE

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