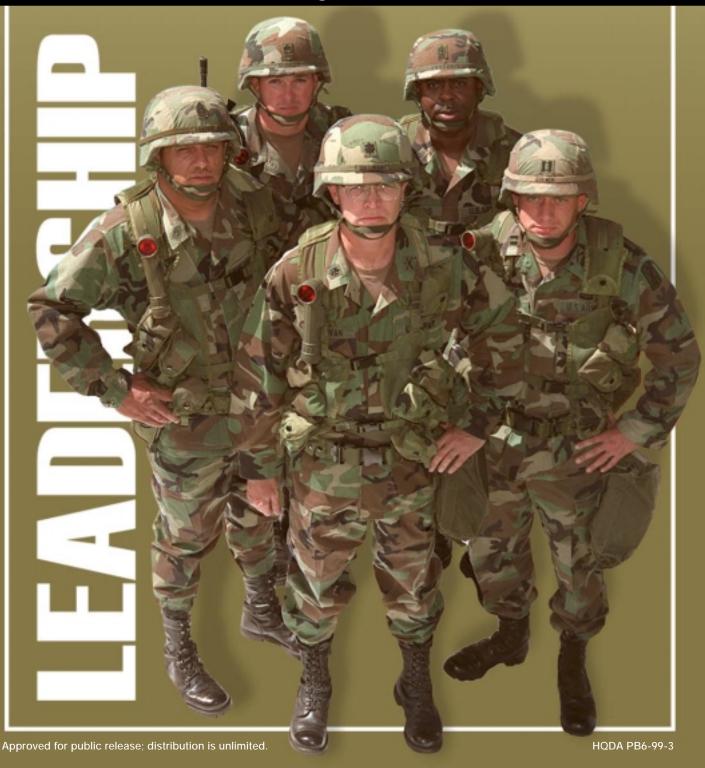
## FEGARIEN.

A Professional Bulletin for Redlegs

May-June 1999





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May-June 1999 HQDA PB6-99-3

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### **DEPARTMENTS**

1 FROM THE FIREBASE

**Front Cover:** Some leaders of 5-3 FA (MLRS), 17th FA Brigade, III Corps Artillery: (L to R) CSM Raymond L. Porter, LTC Ricki L. Sullivan and, from B Battery, Captain Jeffrey S. Gulick, 1SG Harry Francois III and SSG Richard E. Darrow. (Photo by Kevin Tucker, Fort SIII TSC)

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## **Army Values:** The Essence of Leadership

he 10 divisions that comprise our Army today are exceedingly busy and stretched to the utmost of their capabilities. The 1st Cavalry Division is on peacekeeping duty in Bosnia; 1st Armored and 1st Infantry that just returned from that same mission are refreshing their warfighting skills; while the 10th Mountain is in training to relieve the 1st Cav at the end of this year. The 2d Infantry Division continues to defend South Korea; the 3d Infantry is poised to deploy to Southwest Asia should the need arise; and the 4th Mechanized is busy reorganizing as our Army's first digitized division. The 25th Infantry Division (Light) along with the 82d and 101st Airborne Divisions stand ready as our contingency forces for quick, decisive response around the world. Couple these missions with the fact that we may miss our recruitment goal by 5,000 soldiers this year and many may wonder, "How can the Army possibly meet the ever-increasing challenges of the future?" That question I answer with one word: Leadership.

Leadership, basically, is the technique of getting a group of people to act in accord toward a common goal. That's a simple definition of a complex concept. The secret to being a successful leader in any organization is in discovering what motivates one's subordinates, what common ideal or belief they hold that will cause them to set aside their personal considerations for the good of the larger group—what unseen force causes soldiers to risk their lives for their country.

For some soldiers that motivation is pure patriotism, but that quality is far from universal. In fact, our soldiers enter the Army for a variety of reasons and their motivations for success are equally diverse. But for us to form cohesive units that can withstand increased operational tempo and the rigors of combat, we simply must have a shared values system. It's the only way our Army can remain the effective fighting force it has become.

To help leaders at all levels instill a common set of character traits in our soldiers, we will soon see publication and distribution of the new edition of *Field Manual 22-100 Army Leadership*. This manual recognizes the disparate cultural, educational and ethical backgrounds of our soldiers, as well as the need for a common set of moral principles, and offers the seven Army values as a framework for creating leaders of character who will guide our forces into the next century.

Loyalty, duty, respect, selfless-service, honor, integrity, personal couragethese are our values. They are not merely snappy sayings or suggested guidelines. If we understand them and make them our lives' very watchwords, they will be the glue that holds our units together and drives our soldiers to accomplish the mission when torrential downpours hit the firing point and bring down the camouflage nets two minutes before the time-on-target, when our howitzer throws a track in the middle of a night road march at the National Training Center or when we're called upon to risk our lives for our comrades, our country and for freedom around the world.

Living these values is a lot like doing push-ups. Practice is the only thing that will lead to improvement. No one ever maxed a physical fitness test by talking about exercise, and no one will ever become an effective leader in this Army by talking about our values. As we must constantly hone our basic soldier skills and our military occupational specialty (MOS) tasks, we must continually demonstrate, reinforce and demand adherence to these values. Without this set of shared principles, our Army would be nothing more than an armed mob dressed in camouflage.

Of course, we must remember the other basic principles of leadership: keep your people informed and give them clear guidance; be concerned for their personal safety and the welfare of their families; decentralize your operations



to the lowest possible level to build teamwork; and grow competent leaders at all levels. But above all, create a command environment where living Army values is a way of life. The examples we set as leaders both on and off the job inspire our soldiers to inculcate the same set of values we hold dear.

Detailed discussions of all our Army values are found in the pages of *Army Leadership*. As soon as it hits your unit, get the new FM 22-100 out of the box and into the hands of your soldiers. Read it, learn it and live it. It should become the most well-thumbed publication in your entire professional library. The framework for moral, adaptable, effective Army leadership is outlined in the book, but true leadership occurs only if our values are taken to heart by everyone in the unit from private to general.

In spite of the many challenging missions we may face, in spite of tightening constraints on our resources, in spite of the dizzying speed at which technology advances, our Army will continue to excel in the 21st century because we have wisely invested in becoming a values-based Army. We are a force that can respond to any contingency with both warrior spirit and humanitarian concern because our foundation-our bed rock—is solidly anchored by trained leaders guided by seven Army values: loyalty, duty, respect, selfless-service, honor, integrity and personal courage. Learn them. Live them. Teach them.



# Turning Challenges into Opportunities

by General Dennis J. Reimer, Chief of Staff of the Army



he challenges of today's Army are similar to the ones our Army has faced in the past: How do we keep the Army trained and ready? How do we conduct the most fundamental restructuring of the force since the end of World War II? And how do we do all that in an environment of constrained resources? These are not easy challenges. But it's the job of leaders to turn the challenges of today into opportunities for tomorrow.

How do we keep the Army trained and ready? Compounding the mission of keeping the Army trained and ready is the fast pace of operations. Right now, we have more than 30,000 soldiers deployed in 70 different countries on a daily basis. Since the end of the Cold War, the pace of Army operations has increased 300 percent.

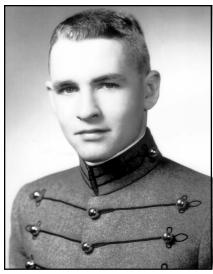
Then, we must ask ourselves the questions, "Trained and ready for what?" and "How do we measure our readiness?" In the past, we've determined "trained and ready" by our abilities to fulfill the dictates of our national military strategy.

During the Cold War, we had a strategy called "containment." Our job was to contain the Soviet threat, a very dangerous and difficult job, but we spent a lot of time as an Army figuring out how to do that. In 1989, we won the Cold War and, as I say to my Washington buddies, "We lost the best enemy we ever had." During the Cold War, we could go to Congress and ask for resources for modernization, training or to recruit and retain top-quality soldiers because the Soviets were modern and well-trained and our soldiers gave us the edge.

If you look at our force today, you see the US Army is pretty much committed—not only in terms of current and potential operations in Kosovo, but also in Bosnia and other operations around the world. The Army has been involved in more than 30 such operations since 1989.

The 3d Infantry Division [Fort Stewart, Georgia] is tethered to Southwest Asia, having taken over Operation Intrinsic Action. The 1st Cav [Fort Hood, Texas] has a brigade in Bosnia. Our two divisions in Europe [1st Armored and 1st Infantry Divisions] are tethered to the Balkans and have their hands full. The 4th Infantry Division [Fort Hood] is otherwise occupied designing the division for an uncertain future. I just named the five heavy divisions of our 10 divisions in the Army, and they are all committed in a manner that equates to one major theater of war. We've said to the Joint Chiefs that the Army can support one major theater war with our supporting a second only at great risk.

This is a time when we must be vigilant. I just came back from Korea and was very impressed with the readiness of that force—the 2d Infantry Division and our allies. They have made tremendous progress since I served over there. But to the 2d Division—to all our divisions—I say don't be distracted by



West Point Cadet Dennis J. Reimer, Class of 62, was chosen to be a company commander his senior year. Classmates predicted he would one day "go to the top."

what's happening around the world. Your job is to ensure you can defend the Korean peninsula or your part of the world—to keep the force trained and ready to do the job. We just don't know what lies ahead.

How do we fundamentally restructure the Army? Our second challenge is to restructure the Army—adapt it to the post-Cold War environment. Our Cold War force came in nice, tidy packages: corps, divisions, brigades and bat-

talions. But those packages don't necessarily fit in the post-Cold War world.

Our recent operations all have involved task forces such as Task Force Hawk in Albania—a mix and match of forces. The 5,000-man Task Force Hawk has Apaches, MLRS [multiple-launch rocket systems], ATACMS [Army tactical missile system], engineers, security forces such as Bradleys [fighting vehicles] and a number of other supporting arms. What we need is a head-quarters to command and control task forces like TF Hawk. That's why I've pushed so hard for Strike Force.

Today's Strike Force is a headquarters that can take the different forces from the arsenal of America's Cold War Army and configure them for our post-Cold War requirements. It would be able to handle 6,000 to 7,000 people from different capabilities, both heavy and light. It must be adaptable and deployable and an employable headquarters.

The challenge is that without Strike Force, we have to send a division or corps headquarters to command and control task forces such as Task Force Hawk—it just doesn't make sense to use that level of headquarters to control 5,000 people. We need those headquarters to command and control a much larger force.

We only have four corps in the Army. The Strike Force would complement



Future Chief of Staff of the Army (back row in the center) attends the Army's Ranger School at Fort Benning, Georgia, as a Second Lieutenant in the fall of 1962.



At the National Training Center (NTC), Fort Irwin, California, General Reimer stands before troops preparing to train to do the nation's business-perhaps as some of the 30,000 soldiers deployed in 70 countries on any given day.

those corps, particularly the XVIII Airborne Corps. Our XVIII Airborne Corps is really our "Strike Corps"—our fastest, most deployable corps. We can't afford to tie up our Strike Corps every time we deploy a task force of 4,000 or 5,000 people.

I've also said Strike Force will be a leader development laboratory. As we move the Army from the industrial age to the information age, there are new requirements on leaders. If we're not careful to develop the right leaders for the information age, all that will happen is the Army will be inundated with information.

We also must develop leaders and staffs with the skills to handle the wide range of operational responsibilities the Strike Force will have. They must know how to fight diverse systems and build teams quickly plus work the critical logistical piece.

The third thing Strike Force will do is serve as a prototype for the organization of the Army After Next. I'm not sure any of the organizations standard in today's Army will work in 2020. And we can't wait until 2020 to restructure the Army to meet the requirements for the new world order. We must do that now, and Strike Force is a start. If the experimentation at Fort Polk works, we could see Strike Force headquarters in, say, Europe or the Pacific. If we had a Strike Force on the ground today, it would be commanding and controlling Task Force Hawk.

As we look at all the Army's operations since 1989, the potential for the expansion of some current ones and the introduction of new ones, you can see why I have been such an advocate of *One Team, One Fight, One Future*. To meet today's commitments, we must be prepared to fight as a Total Army—one with the Reserve and Active Components fully integrated.

Fifty-four percent of the Army is in the Reserve Component—the Army National Guard, the United States Army Reserve. This is the largest percentage of Reserve Components we've had in the Army since the end of World War II; for example, it's four times higher than in 1942.

The mission of our Reserve Component elements and their contributions to the Total Army are expanding. If you look at operations since the end of the Cold War, they've always included Reserve Component units. More than 15,000 Army Reservists and National Guardsmen have mobilized to support Bosnia. So we've sent the message to America that we're going to use our great National Guard and Reserve soldiers more often.

A little bit closer to home—two-thirds of our artillery is in the National Guard. I participated in the decision to have such a large portion of the FA in the National Guard. I know that's a heavy rock in the ruck sack of the National Guard, but I have great confidence in their abilities.

The Army can't handle two major theater wars—we can't even handle one—without the Total Army. The 49th Armored Division [Texas Army Na-

tional Guard] will take over the mission in Bosnia starting in 2000, at that time, from the 10th Mountain Division. So, we're committed to a Total Army.

Now, in terms of restructuring for the future, the Army has institutionalized an effective change process—Force XXI. In it, we project ourselves out to 2020, look around to see what the Army looks like, look back to a current timeframe and then "connect the dots." And as we move forward, we check our movement in experiments.

Throughout this process, we must keep the US Army's core competencies [compel enemies to submit

to our will, deter potential adversaries, reassure our friends and allies, and support the nation] and the six imperatives synchronized over time [quality force; tough, realistic training; effective warfighting doctrine; right force mix; modernization for the future; and leader development]. It's not enough to synchronize them in 1999 and 2020. We must synchronize them in 2000, 2002, 2010, 2012 and so forth. And that's an interesting challenge, but I feel comfortable with the way we're headed.

The Army in 2020 will be based on knowledge, speed and power. Knowledge will come as we leverage information age technology. It also will come as we develop leaders who can leverage information dominance. Our leaders must be able to answer the questions, "Where is the enemy?" "What is he going to do?" and "How do I checkmate him?" To checkmate him, our force must be involved in every move he makes. That will allow us to destroy his will to resist and end the conflict quicker on terms that allow for a lasting peace. That's not something we've done recently.

Finding the answer to these three questions was the premise of the Task Force AWE [Advanced Warfighting Experiment] at Fort Irwin, California, [March 1997] and the Division Advanced Warfighting Experiment with the 4th Division at Fort Hood [November 1997]. If we can answer those questions, we can fundamentally change the way the Army operates.

Now, did these AWEs work perfectly? No, but there was enough potential there to tell us to "go for it." So we continue to stay focused on situational awareness that will lead us to information dominance.

The second trait the Army After Next will have is speed, and it has two parts. One, obviously, is to move a force quicker and farther to project more power faster. We've made tremendous strides in our strategic deployability. In Operations Desert Shield and Storm, it took 18 days to close a brigade into Southwest Asia. Today, because of prepositioned equipment, we can close a brigade into theater within 72 to 96 hours. We're moving in the right direction by bringing on the number of new fast transport ships and C17s to meet the requirements of deploying our forces. But we must lower our requirements.

One system being developed that will do that is HIMARS [high-mobility artillery rocket system]. HIMARS will complement light, heavy or special operations and is narrowing the gap between our heavy and light forces.

We also need the FDSWS [future direct support weapon system] to replace our M119 light howitzers. We must tap into technology to make a lighter—less than 5,000 pounds—and more mobile and agile howitzer to give our light forces greater punch. We need this system for our light forces.

Which introduces the second part of speed: tactical agility. Tied with situational awareness, we must be able to move fast enough on the battlefield to turn inside the enemy's decision cycle. To do that, we need leaders who can leverage information dominance for tactical agility and are comfortable with a certain degree of ambiguity that will inevitably be there. We need the speed to be adaptable enough to get the right force at the right time in the right numbers to the right place.

I can't describe the power of the Army After Next in terms of corps, divisions, brigades or other forces today. But I can tell you it will be a force with its Active and Reserve Components totally integrated.

The Army of 2020 probably will have a certain active force capability embedded in it, a capability that will allow it to operate for 12 hours. If a situation calls for 24-hour operations, an RC crew, a mirror image of the Active Component crew, will operate for the other 12 hours. If you combine that with our modernization efforts, such as turning night into day, we soon will be able to con-

duct 24-hour combat operations to completely beat down the enemy. In future 24-hour operations, the limiting factor is going to be human endurance.

Because we'll depend on a totally integrated force, we must build trust and confidence among our component leaders and ensure all achieve the same standards and same level of readiness. That's why some active Army commanders are over National Guard units and some National Guard commanders are over active Army units. For example, [Colonel] Mark Graham [active Army] is commanding the 40th Infantry Division Artillery, part of the California Army National Guard. That's why we have the teaming concept—the 49th Division teamed with the 1st Cav Division, the 40th Division teamed with the 4th Division. We hope to expand the concept to team the 10th [Mountain Division, Fort Drum, New York] and the 29th [Infantry Division (Light), Virginia Army National Guard] and other divisions. It will take a Total Army effort in Army After Next.

In addition, we've just announced the formation of two integrated divisions—the 7th Infantry Division at Fort Carson [Colorado] and the 24th Infantry Division at Fort Riley [Kansas]. The divisions each will consist of three National Guard enhanced brigades and an Active Component command and control headquarters.

We're also in the process of evaluating round-out, round-up capabilities where, say, a National Guard infantry company is either the third company in an active Army battalion as a round-out company or the fourth company in an active battalion as a round-up unit. Some active units are passing to the Reserve

Components. For example, B Company of the 14th Engineers at Fort Lewis, Washington, just passed to the National Guard and has a National Guard commander.

The biggest challenge in implementing the *One Team, One Fight, One Future* concept is dealing with uncertainty. Any time you have dramatic changes such as we have going on in the Army, you have uncertainty. And the Army is a very conservative organization, as it should be. We all recognize we're dealing with the national security of our nation, so we need to get it right. *One Team, One Fight, One Future* is much more than a bumper sticker—it's our future.

How do we do it all with constrained resources? The third area of Army challenges is operating in a resource-constrained environment. 1998 was a very interesting year because it focused on our resource challenges.

1998 was the eighth straight year of drawdowns. We actually started drawdown plans in 1990 when we were building up the force for Desert Shield and Storm. That means we have captains in their career courses who have never known an Army that wasn't drawing down.

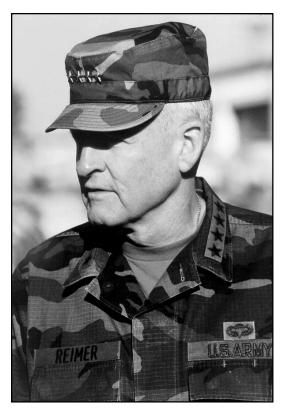
1998 was also the 13th straight year of declining dollars. If you straight line and then compare the last 10 years of Army budgets, the reductions have equaled \$750 billion worth of peace dividend savings. That's a sizeable amount.

Now in an environment of constant change in force structure and resources, we obviously did not get all the reductions totally right the first time. And so 1998 was the year we went back to Congress and said, "We've been good





GEN Reimer (left photo), shown here with LTG(R) David E. Ott, US FA Association President, is honored with a Miltary Tattoo that set music to the events of his career at the Association's annual meeting on 14 April during the Senior Fire Support Conference at Fort Sill. On the right, GEN Reimer shakes the hand of his Director of the Army Staff, another Redleg, LTG John A. Dubia, who is congratulating him on the tattoo.



"As I look back on 37 years in the Army, I know that Field Artillery was absolutely the right branch for me....As General David Ott says, 'Not all are priviledged to be Field Artillerymen.'"

stewards and done what we had to do. But now we need some more money." Basically, I told the President what I told the members of Congress, "You have two choices: either give us money or change the national military strategy. You must recognize we can't execute our current national military strategy unless you're willing to commit the resources we need to execute it."

The Army does not receive one-third of the defense dollars—only about 25 percent. We must increase that proportion because, as current events in the Balkans point out, the US needs a ground force to get the job done.

To give America the peace dividend, we restructured our force modernization plan—fine tuned or modified programs, cutting out more than 100 of them. Today we only have two new major programs in the Army modernization budget. One is Comanche [observation and attack helicopter] and the other is Crusader [future self-propelled howitzer]. Both are absolutely critical.

We need Crusader to leverage the tremendous power of the brigade combat team. Our M109 howitzers have served us well for 35 years, but we've productimproved them to the maximum extent possible. We need Crusader to maintain the edge.

Crusader will give us three times the capabilities of Paladin. If we had Crusader today, we would have deployed it to Albania. Its increased range and rate of fire plus mobility and agility would make it an excellent weapon for Task Force Hawk. Although we could use Crusader today, it also bridges our capabilities to Army After Next. Comanche will be our "quarterback" of the digitized battlefield. It will enable us to leverage the advanced air and ground situational awareness capabilities we'll have in Army XXI and the Army After Next.

How does one lead change for tomorrow's Army? As we go through this change process, we must identify those things we don't want to change, which is as important, if not more important, than determining what must change. We need leaders who understand that the Army must keep the fundamentals, such as the intelli-

gence preparation of the battlefield [IPB], the commander's intent and the commander's critical information requirements [CCIR], etc. Although we'll need to adjust the military decision-making process [MDMP], the basic decide-detect-deliver-assess targeting process will remain valid. The information age will help us do these things, only better and faster.

One constant must be our core values: loyalty, duty, selfless-service, respect, honesty, integrity and personal courage. In the past few years as we've worked through change, we've encountered a number of problems. If you look closely at them, you'll see that at the foundation is the fact we had lost touch with our values. So I've reemphasized our core values in the United States Army. We must never lose sight of them—they are our map for an uncertain future.

The second piece we must retain—must always emphasize—is standards. Now I realize I'm addressing Field Artillerymen who set the standard for standards in the Army. When I was at Fort Sill in the basic course, the instructors taught us how to sharpen our pencils because they put a great deal of

emphasis on precision—on standards. When you start to fall off standards, you're on a slippery slope.

Change is leader-intensive business. You must never lose the focus on soldiers because you're too busy or distracted by other challenges. The human aspect of change is much more difficult than the technological aspect.

As I look back on 37 years in the Army, I know that Field Artillery was absolutely the right branch for me. The Field Artillery has led the way in a number of areas: setting and maintaining high standards, digitizing the force and innovativeness, and Redlegs are now bridging the gap into joint operations. As [Lieutenant] General David Ott [retired, President of the US FA Association] says, "Not all are privileged to be Field Artillerymen."

So, meeting all of our challenges depends on you and our other Army leaders today and tomorrow. Leaders make things happen—leaders turn challenges into opportunities for the Army and America.

Editor's Note: This article was taken from General Reimer's participation in the Senior Fire Support Conference at the Field Artillery School, Fort Sill, Oklahoma, on 15 April 1999.



General Dennis J. Reimer became the 33d Chief of Staff of the Army on 20 June 1995. His previous assignment was as the Commanding General of Forces Command at Fort McPherson, Georgia. Also at the Pentagon, he served as Vice Chief of Staff of the Army and Deputy Chief of Staff for Operations and Plans during Operation Desert Storm, the latter while simultaneously serving as the Senior Member of the Military Staff Committee of the United Nations. He commanded the 4th Infantry Division (Mechanized) at Fort Carson, Colorado, and was Assistant Chief of Staff (C3/J3) of the US Combined Forces Command in the Republic of Korea. Among other assignments, he served as Commander of III Corps Artillery and Deputy Assistant Commandant of the Field Artillery School, both at Fort Sill: Chief of Staff of the 8th Infantry Division (Mechanized) and Commander of the 8th Division Artillery in Germany; and Commander of the 1st Battalion, 27th Field Artillery of the 4th Infantry Division. General Reimer will retire from the Army on 21 June.

## **FA Leaders**Lane Training

he 1st Battalion, 129th Field Artillery (1-129 FA) of the 135th Field Artillery Brigade, Missouri National Guard, completed its 1998 annual training (AT) exercise at Dugway Proving Ground, Utah. The battalion experienced many training firsts that significantly increased its combat readiness. One event that set the tone for the battalion's success during AT was the execution of a Field Artillery (FA) Leaders Lane for its three firing batteries.

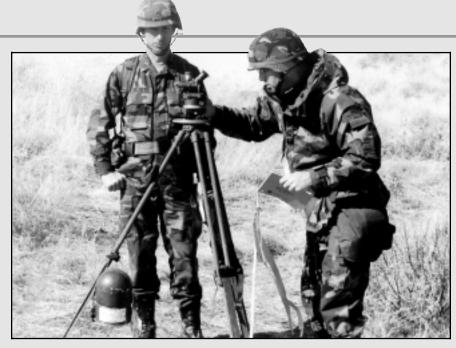
The 8th Training Support Battalion (TSBn) Field Artillery, part of the 120th Infantry Training Brigade at Fort Hood, Texas, planned, coordinated and facilitated the lane training. The training was designed to strengthen the pre-mobilization warfighting skills of the battery leadership: battery commander (BC), first sergeant (1SG), platoon leader (PL), platoon sergeant (PSG) and gunnery sergeant (GSG).

The 8th TSBn designed FA Leaders Lane training after observing a trend among units during training: battery leaders were not tactically proficient in their abilities to plan, coordinate, execute and sustain operations-complex and perishable skills. This method of training focuses on those critical leader skills and builds a foundation for success during AT and, ultimately, combat.

The FA Leaders Lane is performanceoriented and gives leaders an opportunity to make mistakes and ask questions without the soldiers present. It offers a unique opportunity to strengthen leaders' knowledge of doctrine; tactics, techniques and procedures (TTP); pre-combat inspections (PCI); and standing operating procedures (SOP).

Raising the level of knowledge and confidence of unit leaders correlates directly with increasing the confidence soldiers have in them. Whether in the Active Component (AC) or Reserve Component (RC), soldiers who believe in their leaders are more likely to increase unit recruitment and retention.

What is a Leaders Lane? "Training Circular [TC] 25-10 A Leader's Guide to Lane Training" defines lane training as a process for training company-sized or smaller units on collective tasks (prerequisites: soldier and leader individual



SFC Thomas Richey, 8th TSBn Trainer, reviews aiming circle procedures with CPT Mast, Commander of A Battery, 1-129 FA, during Leaders Lane training at Dugway Proving Ground.

tasks and battle drills) supporting a unit's mission-essential task list (METL). The FA Leaders Lane concept is unlike other lane training. It is not a roll-on/roll-off lane focusing on the execution of a particular task or battle drill. The Leaders Lane is training vice an event.

The training starts during the fall in conjunction with an inactive duty training (IDT) and can carry over into the spring. The result is the unit executes two or three Leaders Lanes before AT, giving the battery leadership a basic knowledge of those critical leader skills needed to fight and win on tomorrow's battlefield.

How does it work? FA Leaders Lane training has four prerequisites for success. First, participants must stay focused on the purpose of the training. Second, they must be prepared for performance-oriented training. Third, the battalion leadership must believe in it. And finally, the FA Leaders Lane is unitspecific-no two units' lane training are the same. The FA Leaders Lane is based on the individual unit's METL assessment and performance shortcomings identified during the previous AT exercise and IDT weekends.

The training works best when planned and executed at the start of AT tactical assembly area (TAA) operations. Conducting the FA Leaders Lane while the unit is in the TAA sets the tone for the entire exercise. The FA Leaders Lane training takes about four hours, but the actual time for any given unit is driven by its mission, enemy, terrain, troops and time available (METT-T). During 1-129

FA's Leaders Lane, the 8th TSBn relied on the "round robin" technique to train the three firing batteries-simple and easy to execute. It consisted of four stations located in the vicinity of 1-129 FA's TAA. The battalion provided four aiming circles and one M198 howitzer. It also had its survey section emplace four orienting stations (OS) and one end-of-orienting-line (EOL).

The tasks comprising the four stations were Station #1: Aiming Circle (M2A2) Drills; Station #2: Troop-Leading Procedures; Station #3: Reconnaissance, Selection and Occupation of a Position (RSOP) Procedures; and Station #4: Planning a Battery Defense. Each station had of 50 minutes of training followed by 10 minutes of questions and answers. The leadership was divided into four groups consisting of four to six personnel. For the best interaction and sharing of information and responsibilities, the groups need an equal representation of battery leadership: BC, 1SG, PL, PSG and GSG.

The FA Leaders Lane reinforces the premise that battery leaders, like soldiers, require teaching, coaching and mentoring. This training technique also will work for the FA battalion's combat service support batteries, field trains and combat trains and can be executed at the battery, battalion and brigade levels in AC as well as RC units.

MAJ David G. Johnson, FA Observer-Controller/Trainer, 8 TSBn FA 120 IN Bde, Fort Hood, TX

## Top Ten Traits for

by Colonel Rhett A. Hernandez

7ith the 21st century rapidly approaching, the revolution in fires continues. Sophisticated information-age technology, increased situational awareness, advanced weapons systems with extended ranges and munitions with enhanced lethality indicate a significantly different future. These changes are so powerful that the final destination of fire support and the Field Artillery remains unknown.

Since 1996, Division XXI experimentation has provided lessons learned and insights into 21st century warfare. These lessons highlight a digital battlefield with increased pace, tempo and com-

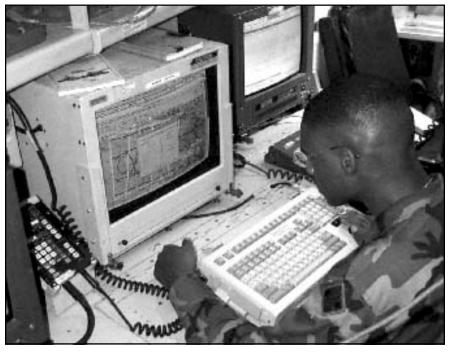
plexity.

While operating on this experimental digital battlefield, the 4th Infantry Division (Mechanized) Artillery, Fort Hood, Texas, used new systems to demonstrate improved lethality, survivability and sustainability. The fires that this experimental force (EXFOR) provided during the division advanced warfighting experiment (DAWE) supported the Field Artillery vision—"A more technologically advanced, potent and agile Field Artillery force relying as always on well-trained, dedicated, and motivated leaders and soldiers to ensure success."

Achieving this vision requires time, patience and strong leadership. FA officers stand at the forefront of this change and are the critical ingredient to realizing this vision.

This article considers how the ongoing change associated with Division XXI is having an impact on you, the junior leader—our leaders of the future. This is not an effort to redefine leadership. Basic leadership principles remain unchanged and timeless. To be an effective leader, you must influence others to do what needs to be done.

However, the transition to Division XXI is providing insights into leadership traits required of you to lead tomorrow. Although not new, these traits gain significance given the type of change we're experiencing. Our participation in Division XXI experiments



and redesign and our focus on remaining trained and ready highlight traits essential for you to lead in Division XXI. You must have character, pursue a vision, have a broad perspective, maintain a positive attitude, empower others, develop the future, serve soldiers, listen more, make decisions and act decisively.

10. Possess character. First, consider the future battlefield. We have identified the potential that the battlefield will become more impersonal. You can expect to fight from greater distances, with teams separated from you, the leader, for extended periods of time in an environment where your presence may be less than today's leader's and at an increased tempo and pace not yet fully realized. As we transition to Division XXI, digitization will not replace leaders, and the need for leaders of character remains our number one priority. As always, leaders will need to inspire soldiers to do the right thing.

For you to lead successfully in these conditions, you must have character and be able to instill values, teamwork, standards and discipline in your unit. Soldiers must trust you and have confidence in you as their leader; they must allow you to influence them.

You gain trust through your daily words and actions. As a leader, you must embody Army values, maintain integrity, treat all with dignity and respect, and demonstrate a genuine concern for soldiers and families. You must be the unit role model.

Take this seriously. If you expect soldiers to do the right thing in your absence, character cannot be "all talk." As demonstrated by your actions, your character will commit soldiers to follow you onto the next battlefield.

Character precedes vision. Soldiers follow leaders of character first, and then they pursue a worthwhile cause.

**9. Pursue vision**. Soldiers need to know not only who you are but also where you are going. Vision—a simple, ideal image of the future—provides direction.

Regardless of experimentation and change, our force must maintain a warfighting spirit and remain trained and ready. Division XXI systems leverage technology, increase digitization and pursue information dominance. We know the combined effects of these systems will significantly impact how we fight and train. Fires will be different. As we lead fires into the 21st century, our vision must adjust to the many unknowns.

## Future Leaders



As a result, the 4th Infantry Division Artillery has developed a vision statement to guide our journey: "Iron Gunners...a proud, disciplined, trained and ready team of competent warriors with leaders who care for soldiers and families and who are actively leading fires into the 21st century." Without vision, our journey could easily take us where we do not want to go.

So, what can you do to prepare for your journey? First, recognize that everyone has a role in moving Field Artillery and fire support into the future. Your role is to ensure the vision clearly articulates where you are headed in a way easily understood by all and recognizes the powerful change occurring. Simultaneously, you are uniquely positioned to maintain critical elements of the past. Not everything should change. You have to help determine what to keep as is and what to change. Play an active role in pursuing your future.

Second, you must recognize that you can't dictate a vision. Building a vision is a team effort; an effective vision is one that's shared by the organization. Once accepted, everyone has something to aim for, all have a role to play and all have something to be proud of. Everyone must understand that this described standard of excellence makes your organization unique. You, as the leader, provide the catalyst and enthusiasm required to inspire others to understand, accept and execute the vision.

Finally, to develop vision, you must take time to think. Thinking and understanding what comes next is more important than acting without purpose. Seek the right balance between thinking and acting. Thinking then acting keep you moving in the right direction.

Going in the wrong direction can have some long-lasting effects, just as being too narrowly focused can hinder progress.

**8. Develop a broad perspective**. Although a narrow focus is absolutely essential at times, the future guarantees that leaders need a wide field of view. Even our most junior leaders need to start developing a broad perspective. The days of solving one problem at a time in isolation are in the past.

Given our information systems and the connectivity among systems, essentially everything is interrelated. When the FA had the only digital systems on the battlefield, developing a stovepipe system was acceptable. However, today's suite of digital systems touches all battlefield operating systems (BOS) and requires extensive vertical and horizontal integration.

Now our systems build on and rely on each other. This provides faster information sharing and often allows the system to make decisions for the operator based on previously defined requirements.

Given this environment, you must recognize that more information will be available than you are used to and that everything you receive is interrelated. Further, information will present itself through mediums you are not necessarily comfortable with. Accepting this as your future environment is the first step in developing a broad perspective.

Next, you cannot be afraid of these new systems or ignore them. You must understand how they work, know how to use them and make everyone else do the same. But don't become a "digital geek." Remember, you are a leader and warfighter. You use these systems to help you lead.

You can start developing a broader view by asking yourself, "Who else needs to know?" This simple question

forces you to think broader and share information while avoiding surprises and reducing potential second-order effects generally found in a narrowly focused view.

An integrated systemic approach in all you do is important to a broad perspective and helps you develop the right attitude.

7. Maintain a positive attitude. Leaders must have positive attitudes to deal with the changes we are experiencing. Our experimentation and division reorganization identifies new lessons learned and requires us to adjust our way of doing business. All this information provides great insights into what could be, but none of the changes suggested by these insights are perfect or frustration free. Technology is changing too rapidly to think everything will be absolutely right the first time. You must accept constant change with its inherent challenges and look forward to growing through change.

Your excitement, enthusiasm and confidence in your unit's ability to affect positive change is infectious to soldiers. This requires a willingness to learn and improve, comfort in dealing with the unknown, pride in leading change, pursuit of creative solutions and absolute refusal to quit. Your attitude will touch everyone.

Here are a few areas to frame your attitude about leading in the 21st cen-



Given our information systems and the connectivity among systems, essentially everything is interrelated.

tury. First, accept digitization and commit to use it to improve our ability to provide responsive, lethal fires. That's where we're going—you are our future and will get us there. Make the digits work, understand the processes and know how to use the systems to improve our warfighting capability. Be known as a change catalyst—not a barrier.

Second, focus on the basics. Leaders must determine the competencies required for digitization. Start by being competent on the basics, not lost in the digits. This competence requires an understanding of analog systems before becoming too focused on the digital requirements. Eventually, digital skills become critical, but you must first understand how to operate today in a non-digital environment. This will make your transition easier. If you lack this understanding, expect personal frustration from your inability to understand the world the digits are operating in. This will affect your attitude.

Third, realize that digits move quickly in this environment and many things occur simultaneously. And, if you try to do it all, you will be overwhelmed.

**6. Empower others.** Division XXI will not lead to over-control by leaders. In a digital environment, there's too much going on at a speed too fast for any one leader to keep up with everything. A vision of a "laptop officer" sitting away from the future battlefield able to control everything is inaccurate.

Improved communications and cheaper and faster computers are providing more information at unprecedented rates. However, if we expect to use this information in a timely way and stay ahead of our enemy's decision-making cycle, then we must synchronize fires faster than we can today. Increased demands to share information and to have technical skills will exceed the capability of any one individual.

The correct vision is one of expert smaller teams operating in a collaborative environment while dispersed on the battle-field to ensure the timely attack of targets. Decisions often will be made at the lowest level, precluding you from controlling everything.

There are a few things you can do to prepare yourself to empower others to make the most of your information-age unit. Start by ensuring you don't create the expectation that everyone will know everything, or everyone will be disappointed. Recognizing that all our systems are interrelated, identify who is on your team. You'll find your teammates work in all the BOS and often are not located with you. You must understand what they contribute and work as a team to leverage each other.

Next, identify what you really need to know and control, what you expect others to know and do, and then practice operating together. Practice is the only way you can test your expectations and check how you have empowered others. In a digitized force, empowering others becomes even more critical than in today's force.

Digitization blurs the line between the leader and the led. You can't afford to miss the power of your soldiers, leave your NCOs behind or have officers unfocused. You must prepare everyone for the future.

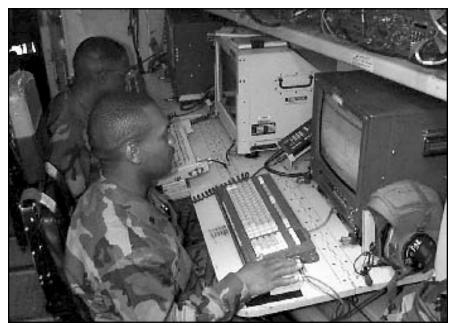
5. Develop the future. Informationage technology requires a force capable of operating information-age systems. The skills required are more technical and complex than for analog systems. Imagine computers connected by large databases with visual displays, pull-down menus and touch screens that are not always as user-friendly as you would like. Information will continue to flow, and processes will defer to the default. An unintended default can achieve a perfect solution to the wrong problem.

If you don't want to be a victim of digital systems, you must know how they operate. Start investing now in developing yourself, your NCOs and your soldiers. Recognize this is a new way of communicating that requires significant training to eliminate a fear of the unknown and develop digital skills.

You do this by learning more about digital systems and automation. You must gain a better appreciation of the systems you'll use. Start thinking about how you can use these systems to support the planning process, aid decision-making and make fires more responsive. The more time you invest now, the more prepared you will become.

Next, ensure you invest in the personal and professional development of your NCOs and soldiers. With everyone operating in a digital world, no one is exempt. There's always something to learn when change is continuous. Schoolhouse instruction, college courses and strong unit training programs will improve individual competence and confidence.

When you finally arrive in a Division XXI unit, train hard. Gaining technology and equipping units is the easy part. Training is the tough part and requires your full attention. Your digital skills will be perishable and require continual practice. In the field, be ruthless in using and stressing all digital systems. Fight the urge to "go voice." In garrison, insist on and conduct well-defined digital sustainment training programs. Finally, in all training, focus on integrating fires into combined arms training—that's what we do and that's how we'll fight.



Digitization blurs the line between the leader and the led. You can't afford to miss the power of your soldiers, leave your NCOs behind or have officers unfocused. You must prepare everyone for the future.



Even as technology develops, information expands and battlefield conditions change, our soldiers remain our centerpiece.

Tomorrow's soldiers and leaders must be learners today. The payoff is well worth the investment, and you owe it to yourself and the soldiers you serve.

**4. Serve soldiers**. A leader's passion for serving soldiers in the next century must not be any less than the leader's today. Division XXI experiments demonstrated a more lethal division with fewer soldiers than today's division. Even as technology develops, information expands and battlefield conditions change, our soldiers remain our centerpiece.

The best way to prepare to serve soldiers in the 21st century is to ensure your leadership is personal—without followers, leaders don't exist. Human values, emotions and needs are best influenced by people, not machines. In your unit, fight anyone's urge to make leadership impersonal.

You must remain committed to serving soldiers. A genuine passion for soldiers and families that provides opportunity, maintains dignity and focuses on challenging training demonstrates your commitment. Periodically ask yourself why you serve. If your heart is not in it, then you shouldn't lead in the 21st century. The human dimension is too invaluable a combat multiplier to get lost in the digits.

Your ability to listen to soldiers is an important part of your assessing your commitment to serving soldiers.

**3. Listen more**. Our soldiers are at the heart of the changes occurring in Divi-

sion XXI. They are better than any machine. Time and again we have placed equipment in their hands and asked them to make it work. They always deliver: identify solutions, provide critical feedback and practice workarounds. With the new equipment, the soldiers become experts long before their leaders.

The best way for you to take advantage of your soldiers' expertise is to listen more and talk less. Involve soldiers early, provide them an opportunity "to tell it like it is" and embrace their comments. When you do, soldiers become excited, and you will be amazed at what you'll learn.

Ensure you focus intensely when listening. Do not just go through the motions—your soldiers will know. Be involved. Ask questions, obtain feedback and do something with the information they share.

No individual has all the answers, and the more you listen, the more you'll learn. Also, spend more time thinking about what your soldiers say. Their comments are relevant and essential to progress and improve your understanding. Listening more will help you make better decisions.

**2. Make decisions.** After listening, make decisions. Digitization does not replace the human mind, but it can easily stress a leader's ability to keep up with all the information and commit to a course of action. Our sensors provide

real-time targetable data. However, the window to strike fleeting targets is small and successful engagement requires immediate action. Even with the best decision support tools, leaders still make decisions.

To prepare yourself to operate where timing is essential, you must first understand the decision support tools available and how to leverage them. Ask yourself how you can best use these tools to assist your decision-making.

Second, do not allow leaders at higher levels to make decisions that are best made by leaders at lower echelons. Insist on decisions being made at the lowest level.

Third, practice making decisions. Practice is the only way to gain experience and improve. Establish an environment where no one is afraid of making mistakes and everyone learns from mistakes. Decisions are an essential part of your actions, and you must act.

1. Attack now. Finally, don't wait. Every leader has the responsibility to lead change. Although a digitized force is just beginning and the path is not clearly marked, significant change lies ahead. Your creativity, flexibility and action must keep the Army moving in the right direction.

Now is the time for a warrior spirit and an attack mentality. Standing still and doing nothing is not an option. So, move out. The 21st century is here—Attack, Attack, Attack!



Colonel Rhett A. Hernandez commands the 4th Infantry Division (Mechanized) Artillery at Fort Hood, Texas. His experience has been in heavy divisions; since 1981, he has been training in digitized Field Artillery units. In his previous assignment, he was the Senior Field Artillery Branch Representative and Strategic Planner for the Officer Personnel Management System (OPMS) XXI Task Force in the Office of the Chief of Staff of the Army at the Pentagon. Before serving on the OPMS XXI Task Force, he commanded the 3d Battalion, 16th Field Artillery in the 4th Infantry Division. He also served as a Brigade Fire Support Officer, Battalion Executive Officer and S3 and Commander of two batteries in the 1st Infantry Division (Mechanized) at Fort Riley, Kansas, and in Germany. Colonel Hernandez is a graduate of the National War College in Washington, DC.

New Wine in New Bottles

Revitalizing Battle Staff Training

by Dr. Karol G. Ross, Dr. Linda G. Pierce, Colonel Peter S. Corpac and Lieutenant Colonel Christopher T. Fulton

Discussion in military affairs [of the 2010 to 2025 timeframe] has centered around the impact of technology on weapon systems, but a more profound level of efficiency will derive from new organizational structures and training strategies that promise to leverage and capitalize the most from new technologies.

"Army After Next Project, First Annual Report" June 1996

he key to success on the future battlefield is in the mental capabilities of our future combat leaders—in the minds of the commander and his battle staff. Technology and the accompanying technical skills will be ever-changing. Tactical versatility, flexibility and adaptability are the only battlefield skills that will remain permanent.

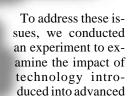
Lessons learned and predictions made by senior leaders compel us to identify training strategies for improving advanced battle staff skills. This article describes our approach to revitalizing battle staff training to develop the conceptual skills the commander and his battle staff need now and in the future.

Training Conceptual Skills for the Future. As we look to the future, we cannot depend on the automation of fire support processes alone for Field Artillery (FA) success on the battlefield. In fact, "spot reports" from the future indicate that envisioned operations will place more stress on staff performance. Continuing technological evolution and changing operational requirements are creating the need for an entirely new level of staff training and performance.

Mastery of subject matter has become a subordinate task to the overarching goals of knowing how to formulate problems; how an area of knowledge is structured; how to find, manage and share information; and how to respond with agile decisions. A greater level and different types of proficiency must be attained during advanced training, and the carry-over to the field environment must be more substantial.

Fortunately, the technology that compels us to process information more quickly, often with several objectives in mind, also brings us new capabilities to learn those skills. However, new technology does not usually come with simple instructions on how to integrate it into training.

New Wine in Old Bottles. The Depth and Simultaneous Attack Battle Laboratory (D&SA Battle Lab) and the Army Research Laboratory (ARL) at Fort Sill, Oklahoma, are leveraging emerging training technology to improve fire support institutional training. We evaluate what steps could be taken to improve training and whether or not new technology is providing the desired impact on training.



training at the Field Artillery School, also at Fort Sill. Small group instruction in the Field Artillery Officer Advanced Course (FAOAC)—now called the FA Captains Career Course (FACCC)—was the setting for the experiment.

We compared the learning process and the performance of students after training, evaluating the results of the sections with and without advanced technology available in their classrooms. It was hypothesized that if classrooms with advanced technology (simulation and tactical equipment emulation) were improving training, we would see more student interaction and more exploratory behavior (consulting a variety of information sources) during problem solving. We also expected that the students would feel more immersed in and satisfied with the learning process. Differences in the learning process would then lead to better post-training performance by those students using advanced technology during training.

Observations of several FAOAC practical exercises indicated there were equally high levels of student-initiated verbal interaction and student informationseeking behaviors during learning, regardless of the presence or absence of simulation technology in the classroom. However, there were differences between the two conditions on a student satisfaction survey. The data indicated that small group instruction produced satisfactory learning experiences in both settings but that students in the non-simulation classrooms were significantly more satisfied with the learning experience.

Students in the non-simulation classrooms agreed more strongly that the practical exercises helped them remember and apply knowledge when needed and prepared them to learn more about operations in the future operations. Students in the non-simulation classrooms also disagreed more strongly that the exercises were often boring and wasted too much time.

There were no significant differences in exam scores and training outcomes as rated by instructors or student selfratings of performance in a capstone exercise after training.

We concluded that overlaying new technology onto existing processes did not yield the desired gains. Our conclusions appear to concur with those found regarding the integration of automation in business and industry processes. The implementation of technology without substantial thought as to the underlying process to be supported will not be suc-

cessful. We, therefore, sought to better understand the nature of advanced military learning needed in the face of new requirements so we could more effectively support the training process.

Strategy for Conceptual Skills Development. The art of fire support, like any art, requires judgment and creativity practiced in multiple experiences. These skills can be achieved only through a process of apprenticeship with an expert and a great deal of experience.

We begin the development of conceptual skills in the art of fire support by introducing the student to problems that stretch the foundation already achieved in the technical aspects of fires. We familiarize him with and initiate him into rich contexts and team collaboration that are characteristic of the military art. Learning theory provides a model of cognitive apprenticeship that can guide training prior to the student's actual apprenticeship with experts in authentic settings.

The learning theory of constructivism and cognitive flexibility support our understanding and development of tools for cognitive apprenticeship. This virtual apprenticeship model requires that all instruction take place within a rich, authentic context. The student must have authentic opportunities to form hypotheses about complex situations, gather data, look at problems from multiple perspectives and try out a variety of so-

"Spot reports" from the future indicate that envisioned operations will place more stress on staff performance. Continuing technological evolution and changing operational requirements are creating the need for an entirely new level of staff training and performance.

Overarching, Authentic Context

Visual Representations, Not Text

Multiple Perspectives

Interesting, Complex Problems

Facilitation to Push Officers Past Current Understanding

Learner Control of Exploration of Concepts

Multiple Iterations

Continuous Opportunities for Self-Assessment

Opportunities to Test Skills in New Contexts

Elements of Training for Advanced Cognitive Skills Development

lutions. Only by providing training tools that support this kind of sustained exploration can we expect the advanced student to gain the cognitive skills necessary for future performance in high-cost settings. Training development should include the elements listed in the figure.

Hypermedia, a relatively new technology in training and education, can support the incorporation of these elements into new training products. Hypermedia uses multimedia as well as relational databases to allow the development of flexibly structured training tools. These tools support student exploration of a large, complex context or scenario through multiple links and presentation of information in a variety of media.

Army training with its emphasis on experience and the "train as you fight" perspective has integrated some of the principles found in constructivism. However, the implementation is incomplete. Some pieces are missing in the way advanced training is designed and executed; these pieces would bring the training more in line with what research tells us is most effective.

While the Army strives for authentic training through the use of simulations in unit and institutional training, an opportunity to explore the rich context of a battlefield situation is often available only in high-cost situations. Technology has not yet been used to introduce students to the complexity of cognition and collaboration in battlefield environments outside high-cost training situations. And in rich environments, such as our combat training centers (CTCs), expectations for expert performance are

high. This limits the opportunities for sustained exploration—the appropriate learning mode for many "non-expert" training participants.

Prior to full-scale, high-cost simulations, we must reinforce the essential tasks of communicating and understanding intentions, priorities and capabilities. We must provide low-cost opportunities for training participants to explore situations from several perspectives and develop an appreciation for the level of collaboration necessary for success. Currently, we rely on disjointed and abstracted cases instead of the presentation of rich situations. We need to provide challenges and guidance for officers to work through complex situations.

New Wine in New Bottles. A paradigm shift is taking place in education and industry as constructivist principles of instruction are adopted. Some elements of this new paradigm are already in place in advanced military training due to intuitively guided training developments based on the experiences and observations of senior officers. However, there has been no articulation of the underlying learning process as found

in the educational research literature

To support successful advanced training, the military can build on its existing training strengths by more clearly understanding the underlying learning process. To help adapt the constructivist approach to advanced military training, we began designing and developing a proof-of-principle product. The product is a PC-based cognitive skills training tool set in a rich context. We envision the use of the tool to precede participation in full-scale simulation.

Such PC-based training in advanced cognitive skills in military environments is relatively rare today. But new technologies such as "wizards" (intelligent agents), powerful PC-based authoring tools, linkage of interactive databases to graphical interfaces and random access to information through hyperlinks now make it possible to move in that direction.

Our battalion task force simulation contains four levels of training embedded in two rich, overarching scenarios. The training focuses on assessment and planning skills.

First Level. This level has an optional set of tutorials on advanced FA concepts. These concepts are the basis for skill performance in the art of fire support as determined by a survey of experienced FAOAC instructors and FA battalion staff officers.

The tutorials are taught through problem solving and are set in the context of a scenario on National Training Center (NTC) desert terrain at Fort Irwin, California—a familiar environment for most mid-career officers. Tutorials are available on an optional basis to introduce new students to key concepts or to fill in gaps/refresh the knowledge of advanced students. Nine tutorials are included on topics such as the top-down fire planning process.

Second Level. The second level of training places the student in the role of the fire support officer (FSO) in the ongoing scenario on NTC terrain. In all levels of training, the student can return to the advanced concepts tutorials and access tactical products specific to the scenario.

Access to doctrinal references is provided through an electronic link to the

As our future comes closer, we must prepare our commanders and their battle staffs to formulate problems; understand how areas of knowledge are structured; find, manage and share information; and respond with agile decisions. (Photo by Kevin Tucker, Fort SIII TSC)

Army Doctrine and Training Digital Library (ADTDL) at Fort Eustis, Virginia, and various expert perspectives on the problems are presented. This resource material allows us to present interesting, complex problems requiring the student to search for information.

In this second level of training, the student's computer interface is a representation of an FSO workspace in the M577 command post. This visual interface contains a number of "pop-up" tools to support planning activities, such as problem solving, and includes maps, overlay creation tools and realistic views of the actual terrain of interest.

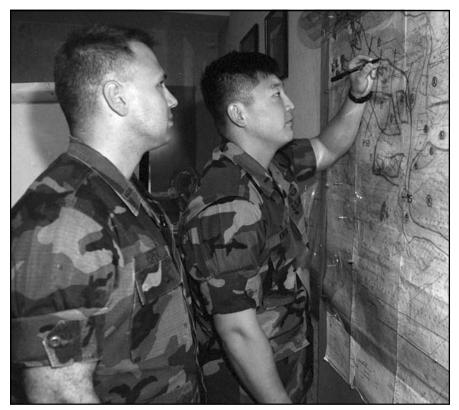
The second level of training focuses specifically on understanding the scenario from multiple perspectives. Without having to acquire the expertise of each staff officer responsible for each battlefield operating system (BOS), the student is given various assignments to complete as part of the planning process that are not normally part of FSO tasks. In this way, the FA officer gains an appreciation of the concerns, considerations and capabilities of the total spectrum of the force.

As assignments are completed, an

embedded simulation allows the student to test his plan. Multiple iterations are available so the student can correct misconceptions and test the plan again.

Third Level. After completing the BOS-focused level of training, the student is assigned to the role of FSO in a Northeast Asia campaign. At this level, the tool is much more interactive. The student works under time pressure to complete aspects of the planning process in response to video and audio presentations of the situation and the commander's intent. The student has control of the learning process at this point in that he can go back to the tutorials if desired, can repeat BOS-level tasks to clarify understanding and can access tactical and reference material in any order desired.

Facilitation is provided by "intelligent agents" who communicate via radio transmission or appear in the work area to inquire about the status and quality of products. Facilitation is also provided by the occasional



Army training with its emphasis on experience and the "train as you fight" perspective has integrated some of the principles found in constructivism. However, the implementation is incomplete. (Photo by Kevin Tucker, Fort Sill TSC)

appearance of experts who give their perspective on the problem at hand.

The student can choose to test the plan via simulation when he is ready; if he runs out of time, the plan will begin execution automatically. The student can revise and test the plan multiple times, if desired. He may access a possible expert solution once he has tried his own solution at least once. Both of these capabilities offer many opportunities for self-assessment.

Fourth Level. The student progresses along a campaign timeline of events defined as vignettes in the third level. At the conclusion of each vignette, the student is "temporarily reassigned" as an FSO in a variety of locations around the world for one vignette and then returned to the campaign. These reassignments are the fourth level: the challenge vignettes.

The student has the opportunity to test the understanding he has gained in previous levels via varying situations in the challenge vignettes. Any campaign or challenge vignette the student has completed is available for him to explore again as desired.

We will complete the battalion task force prototype-training tool as part of an Army Research Laboratory program in July 1999. Then we'll schedule evaluations by students and instructors in FACCC during the summer. This tool will provide a lower cost, higher access training context for complex cognitive skills than is currently available. As a result, students will be better prepared to benefit from full-scale simulation training later in the course and in their unit training to follow.

The battalion task force tool described here is only one possible application of the constructivist approach we've developed. We also have created a program of instruction (POI) in adaptive thinking for Army Experiment 6. This experimental POI was used for advanced tactics students during the 1999 spring term at the Command and General Staff College. We currently are evaluating the results. We also are examining the feasibility of a brigade combat team (BCT) product as well as the integration of digital battlefield systems into all PC-based products.

As our future comes closer, we must prepare our commanders and their battle staffs to formulate problems; understand how areas of knowledge are structured; find, manage and share information; and respond with agile decisions. We must design training to build their

cognitive skills—judgment and creativity experienced in multiple iterations in rich, authentic environments—to lead and fight on tomorrow's battlefield.

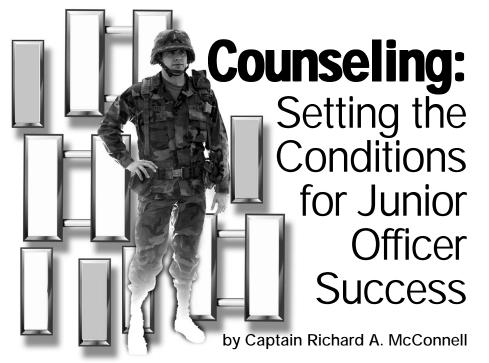


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Dr. Linda G. Pierce is Chief of the ARL Human Research and Engineering Directorate, Fort Sill Field Element. She supports the FA School and Depth and Simultaneous Attack Battle Laboratory (D&SA Battle Lab) as Chief of the Simulations Branch. Her programs include using simulations for training and system acquisition, assessing team performance and defining decision-making processes in highly automated environments. She holds a Doctorate of Philosophy in Industrial and Organizational Psychology from Texas Tech University.

Colonel Peter S. Corpac is the Deputy Director of the D&SA Battle Lab. He commanded Task Force 2-3 Field Artillery, part of the US 1st Armored Division's Task Force Eagle in Bosnia-Herzegovina in 1995. Among other assignments, he served on the joint staff of the Pacific Command at Schofield Barracks, Hawaii, and as Executive Officer of the 4th Battalion, 5th Field Artillery of the 1st Infantry Division (Mechanized) in Germany. He's a graduate of the Army War College, Carlisle Barracks, Pennsylvania, and holds a master's degree in National Security and Strategic Studies from the Naval War College, Newport, Rhode Island, and an MBA from the University of San Francisco.

Lieutenant Colonel Christopher T. Fulton is the Chief of the Experiments and Demonstrations Branch of the D&SA Battle Lab at Fort Sill. Previous assignments include serving as Operations Officer for the 1st Infantry Division Artillery and 1st Battalion, 6th Field Artillery, both in Germany; Instructor and Assistant Professor in the Department of Physical Education for the US Military Academy at West Point and Commander of two batteries. He holds a Master of Science in Physical Education from Indiana University.



You have a large responsibility for the success of your employees. Their jobs and careers depend on how well you rate their performance. How much they develop and whether they develop at all depends on the quality, honesty and frequency of your feedback. This is a wonderful opportunity to help them develop.

The New Manager's Handbook by Brad Thompson Irwin Professional Publishing, New York, 1995

It's true, the Army has a counseling policy to give its junior officers feedback and develop them professionally. We have a new officer evaluation report (OER) and a new method to track junior leader development that incorporates the principles of counseling. But many junior officers receive performance counseling without quantitative goals geared toward facilitating their success during the rating period. If the purpose of counseling is to help the officer accomplish his mission, are we setting the conditions for success?

From April to September 1998, I conducted a survey of 254 captains and promotable first lieutenants, both Active and Reserve Components, in five FAOfficer Advanced Courses (FAOACs) at the Field Artillery School, Fort Sill, Oklahoma. (See the figure.) The purpose of the survey was to determine the students' perceptions of counseling what counseling they had received and what counseling they planned as future supervisors. The student population was recently counseled as lieutenants and soon will be counseling lieutenants as battery commanders under the new OER system. The responses include 10 Marine Corps students. Although the survey was not scientific, it did serve as a significant indicator of FA junior officer perceptions about counseling.

Survey Results. This survey indicates the name of the Army's counseling "game" is *Clue*. The object of the game is to move your game piece around the board (work place) and by process of elimination, determine the weapon, person and place of the crime (job tasks and procedures to be accomplished). Finally, you establish "who done it" (what the boss sees as success).

The students' lack of clarity of what was expected of them on the job is evidenced by more than 50 percent of the respondents stating they received performance counseling with no clearly defined goals. "Performance counseling" is not effective if the subordinate walks away not knowing what needs to be performed to succeed.

The Army has standards for everything, including counseling. Any unit preparing for an Army training and evaluation program (ARTEP) will be able to determine the standard for the relevant tasks and train to achieve those standards. The standards for counseling are found in the "AR 623-105 Officer Evaluation Reporting System," Para-

graph 2-11 b. The AR says the boss must discuss the scope of the rated officers duties within 30 days of the beginning of the rating period, including at least the ratee's duty description and performance objectives he must meet. In addition, the supervisor must counsel the rated officer "throughout the rated period." If we had a counseling "ARTEP" today to determine our compliance with the standards, we would not get a "Go."

The survey found there was no universal understanding of counseling standards. Responses indicated a range of counseling standards. Forty-two percent said they were unsure of what their units' counseling policies were or if there were counseling policies. Even though 58 percent of the respondents were aware of counseling policies, how those policies were applied varied widely.

Sixty-one percent of survey respondents stated they were not counseled enough. This response identifies a disparity between the Army's counseling policy and how we actually counsel junior officers. The Army has emphasized counseling soldiers for years. With the advent of the new DA Form 67-9 Officer Evaluation Report and the DA Form 67-9-1 Officer Evaluation Report Support Form, the Army has reconfirmed its commitment to counseling subordinate officers.

In my experience, it's common to see unit first sergeants reminding their platoon sergeants to get their soldiers' monthly counseling statements completed. Sergeants major across the Army often inspect first sergeants to ensure their NCO quarterly counseling statements are completed and up-to-date. While we as leaders are busy enforcing counseling for enlisted personnel, too often we tell subordinate officers, "Hey, your OER is due—get me your dash one [support form], ASAP."

If the Army professional counseling process were a game, it should not be *Clue*, but football. We as leaders should be coaches, developing the players in the game. We develop players by telling them what game they are playing (job description); reviewing the game films with them, correcting problems and encouraging strengths (counseling); and tracking their development for more playing time or special teams (appraisals or performance reviews).

The survey is encouraging in one respect. While more than 60 percent did not believe they were counseled enough,

1. You are:	D. Selected both A & B3%		
A. Active 49%	E. Write in: yearly, biannually1%		
B. Reserve 4%	F. No answer 26%		
C. Reserve/Guard 47%	8. How often did you counsel subordinates?		
2. If you were counseled, was your counseling:	A. Every 30 days 13%		
A. Performance 79%	B. Quarterly39%		
B. Disciplinary 3%	C. As needed 35%		
C. Both 15%	D. Write in: yearly, biannually1%		
D. No answer 2%	E. Selected B & C6%		
E. Write in: no counseling ever done 1%	F. Selected A & C		
3. You received performance counseling:	G. No answer 4%		
A. Every time counseled 47%	9. Do you believe you were counseled enough?		
B. Half the time counseled 21%	A. Yes33%		
C. Almost never, never or rarely 32%	B. No 64%		
4. You received disciplinary counseling:	C. No answer 3%		
A. Every time counseled4%	10. You would describe counseling as:		
B. Half the time counseled 6%	A. Helpful tool to ensure mission accomplish-		
C. Almost never, never, few, once 89%	ment 89%		
D. No answer 1%	B. Useful only as enclosures for chapter and		
5. Your counseling established clearly	UCMJ action 5%		
defined goals:	C. A waste of time4%		
A. Most of the time 42%	D. No answer 2%		
B. Half of the time 32%	11. As a commander, you would:		
C. Almost never25%	A. Ensure mandatory counseling occurs every 30		
D. Write in: never been counseled 1%	days for all soldiers in your unit		
6. Did your units have a counseling policy?	B. Ensure mandatory counseling occurs for		
A. Yes 58%	enlisted soldiers every 30 days and for officers		
B. No 28%	as needed45%		
C. Unsure13%	C. Delegate to section chiefs to ensure counsel-		
D. Write in: yes, but not followed 1%	ing occurs10%		
7. If yes, how often was counseling supposed	D. Selected A & B		
to take place?	E. Selected B & C		
A. Every 30 days 11%	F. Write in: Reserves are time-challenged to		
B. Quarterly 36%	complete counseling or theme variation 6%		
C. As needed 23%	G. No answer 4%		

Survey of 254 Students in Five FA Officer Advanced Courses

89 percent of our future battery commanders believe counseling is helpful to accomplish missions. These responses indicate a dissatisfaction with our current officer counseling system, yet an understanding of its potential.

The Army expects leaders to set the azimuth for the organization, publish standards and inspect those standards for compliance. FM 22-101 Leadership Counseling says, "Counseling is the responsibility of every leader" and that there is a need "...for leaders at all levels in the Army to counsel effectively." Although Army counseling policy makes no distinction among ranks, the survey results and my observations in units indicate that there are differences in frequency and commitment to the process.

**Recommendations.** One difference between officer and enlisted counseling is inspection. One old saying—"That which you do not check will not happen"—reflects that leaders inspect what

they deem important. Based on the survey, I recommend the following:

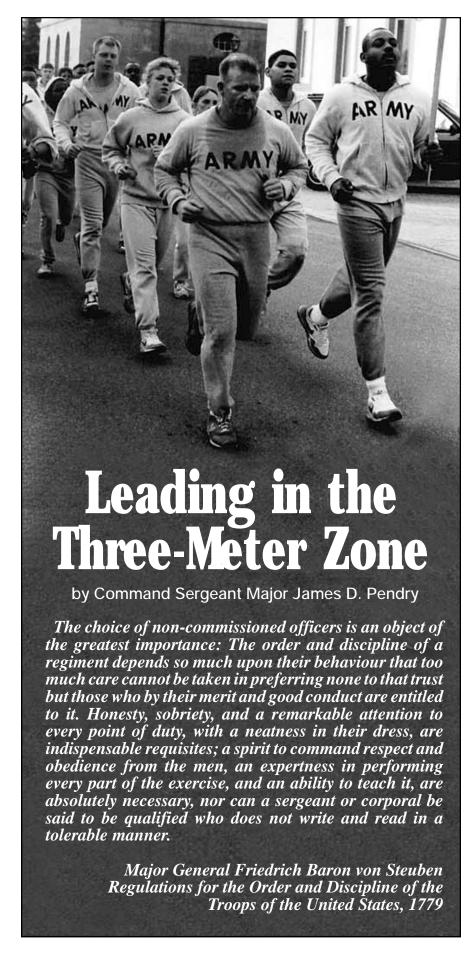
- Make officer counseling inspectable under the command inspection program.
- Incorporate more counseling instruction into the captains career course and pre-command course.
- Gear counseling instruction toward counseling strategies, inspection techniques and role-playing; these would be in addition to the current instruction on the regulations and forms.
- Teach leaders how to coach subordinates

Today's Army is a total force consisting of both Active and Reserve Components. Timely and effective counseling is critical to the successful synthesis of these diverse groups into an effective organization able to accomplish its mission. A counseling and coaching system that expects junior leaders to "figure it out" is not adequate. For all the Army's new technology, success on the mod-

ern-day battlefield could be thwarted by a lack of good old-fashioned face-toface communication.



Captain Richard A. McConnell recently was assigned as Special Assistant to the Chief of Field Artillery and Commanding General of Fort Sill, Oklahoma. In his previous assignment, he was the Senior Instructor in the Fire Direction Branch of the Gunnery Department in the Field Artillery School, also at Fort Sill. He commanded Headquarters and Headquarters Battery and served as Assistant S3 in the 41st Field Artillery Brigade, V Corps Artillery in Germany. Among other assignments, he was a Platoon Leader and Platoon Fire Direction Officer (FDO) in C Battery, 5th Battalion, 8th Field Artillery of the 18th Field Artillery Brigade, the battery forward deployed to Fort Campbell, Kentucky. He was a Battery FDO in the 1st Battalion, 320th Field Artillery, 101st Airborne Division (Air Assault) in the Gulf during Operation Desert Storm.



In the beginning, standing between independence and the superpower of the day, we were an Army of citizen soldiers in desperate need of professional leadership, discipline and training. Today, we're the world's best trained, most powerful and professionally led Army. We owe our strength to a willingness to change when necessary and the good sense to understand and leave alone the enduring things that must never change. Ours has been a dramatic evolution from a collection of citizen soldier militia units to the force of Desert Storm.

While you think of that evolution, consider this: Of all the changes that have kept us powerful, one thing *has* never and *can* never change if we are to remain so: the on-the-ground leadership embraced by von Steuben's expectations and carried out daily by NCO leaders.

This article discusses how NCO leaders must internalize von Steuben's expectations and serve as a model for soldiers and how to care for soldiers in the three-meter zone.

### Setting the Example

- The choice of non-commissioned officers is an object of the greatest importance... The most important leadering that goes on in the Army is that which occurs closest to soldiers—in the threemeter zone. Soldiers are molded, good and bad, by the leadership events that happen within three meters of them. NCO leadership easily is the most important level of leadership to our Army. The expectations for NCO leaders today remain virtually unchanged since von Steuben penned them in 1779.
- ...too much care cannot be taken in preferring none to that trust... The first leader a soldier meets in the process of becoming a soldier is an NCO. The soldier-NCO relationship begins immediately. We model standards, maintain discipline, train and care for soldiers, provide them with answers and lead them. NCO leaders must understand the influence we have on the Army because of our close relationships with soldiers.

Consciously or not, we lead by example. Soldiers learn how to lead and take care of soldiers by copying the model provided by their three-meter zone NCO. The enduring nature of our trade requires us to focus on the things that make good leaders.

• ...those who by their merit and good conduct....Honesty, sobriety... We must

internalize and live values. It's nice that we've fashioned values reminders to hang around our necks. The values "credit card" for our wallets is nice too. But those things are just reminders. Soldiers do not learn values from a list on a tag or credit card; they learn the values of their NCO.

It's easy to memorize the book definitions of our seven core values—loyalty, duty, respect, selfless service, honor, integrity and personal courage. The same can be said about the personal values of candor, courage, compassion, commitment and competence. The difficult task is internalizing what each value means and understanding how our soldiers learn them from us. Our values are the Army's foundation; they endure. Our soldiers learn them from us—NCO leaders.

• ...an expertness in performing every part of the exercise... We must master leadership competencies. We all have the challenge of completing a soulsearching, honest self-assessment of our knowledge, skills and abilities.

Everything important to an NCO leader's proficiency is found in *FM* 22-100 Military Leadership: communications, supervision, teaching and counseling, soldier-team development, technical and tactical proficiency, decision making, planning, use of available systems and professional ethics. Whether we're a high-tech, low-tech or no-tech army, these competencies endure.

- ...a spirit to command respect... To lead soldiers, we must gain their trust and confidence. We gain their trust and confidence by showing them we're worthy of it—consistently living values and demonstrating character and proficiency by mastering the leadership competencies. Then soldiers will give us the ability to lead them.
- ...a remarkable attention to every point of duty, with a neatness in their dress... We are the standard. Select a subject, anything from physical fitness to equipment maintenance to wear of the uniform, and you can find published standards for it. The subject is not important. What's important is that soldiers do not go to a book to look up a standard for something. Instead, they look to their closest NCO leader for the standard.

We are watched every minute of everyday whether at the shoppette or on the firing line. Soldiers observe us and copy us because what we model *is* the standard. Every NCO's three-meter zone

is a mirror image of the standard he models.

• The order and discipline of a regiment depends so much upon their behaviour... We create the environment for discipline. Discipline comes from self-discipline. NCO leaders with good self-discipline habits build well-disciplined soldiers and units.

We must enforce published rules, regulations and what we know to be moral and legal. Selectively choosing to disobey or disregard a regulation or standard, no matter how insignificant it seems at the time, is not acceptable. If we make that choice, we demonstrate poor self-discipline and raise soldiers, future leaders and units with poor discipline habits.

We must have purpose and direction. All good leaders know where they're going and when they get there. They have personal priorities based on their knowledge of our Army, past and present. They use that knowledge to establish the right direction for themselves and their soldiers. NCO leaders apply "personal battle focus" to their lives.

• ...nor can a sergeant or corporal be said to be qualified who does not write and read in a tolerable manner. We have to model for soldiers a system of self-assessment that tells us where we are in our professional and personal lives. From those assessments, we develop a plan to get where we want and need to be. We execute our plan, reassess and then make another plan. Much like the battle-focused training management cycle, we model for soldiers a personal continuous improvement system—personal battle focus.

These are just some of the enduring traits NCO leaders must have to grow soldiers into good three-meter zone leaders, but that's just half the story. Not only must we show them how we work to make ourselves better leaders, we also must show them how to take care of soldiers. They learn that from us too.

### Caring for Soldiers

• Know your soldiers. It's important to understand what *knowing* soldiers means. Often we model that capturing as much information about a person as possible and recording it in our leader's notebook equals knowing them. There is much more to knowing a soldier than recording his or her weapon zero, PT score and last counseling date in a notebook.

What's just as important is to know things like the environment your soldier comes from. Was it a farm? The inner city? Large family? Only child? This information gives you insight into the person and is more important than knowing his stats.

Knowing where a soldier comes from may help you understand why the soldier acts or reacts in a certain manner. A soldier from a large family, for example, may not need much privacy and will readily adapt to a group, whereas the opposite may be true for an only child. This insight also may help you understand the soldier's perceptions about you and the business of being a soldier—perceptions you may have to counter by demonstrating that no one is more professional. Make sure that the



We are watched every minute of everyday whether at the shoppette or on the firing line. Soldiers observe us and copy us because what we model *is* the standard.

knowledge you have of your soldiers extends beyond the stats in your leader's notebook.

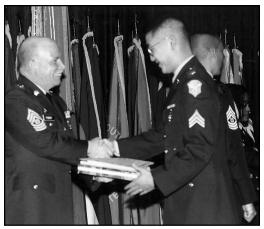
• Respect soldiers. My son standing in front of me as a brand new Army private caused my view of soldiers to take on a different hue. Every private is the son or daughter of someone. We have to treat them with the same dignity and respect as we treat our own sons and daughters. That does not imply that we relax a standard or are less firm when building discipline. It means if we train hard, enforce standards and build discipline we give that son or daughter the best possible chance to survive.

Treating soldiers with dignity and respect does not equal softening the environment. What's important and enduring is that the private you mold by example today is the NCO leader who will be taking care of *your* son or daughter tomorrow.

• Motivate soldiers—have the ...spirit to command...obedience... How do we motivate soldiers? We often model for soldiers that motivation is directly related to the muscles used for push-ups. So naturally, the more we exercise those muscles for our soldiers, the more motivated we believe they will be. I could easily break into a sermon here about what motivation is or isn't, but I won't do that. Just trust me when I tell you it has little to do with push-ups.

Caring leaders who are positive role models and out-front leaders motivate soldiers. Motivating leaders understand the importance of sharing the difficult times with their soldiers. Sergeant Major John G. Stepanek captured the spirit of motivating soldiers in a speech to officer basic students (OBC) at their graduation that was printed in *Army Digest*, August 1967: "As a Senior NCO Sees It" (Pages 5 and 6). In his speech to the young officers, Sergeant Major Stepanek said,

From most of us, you can expect... courage to match your courage, guts to match your guts, endurance to match your endurance, motivation to match your motivation, esprit to match your esprit, a desire for achievement to match your desire for achievement. You can expect a love of God, a love of country and a love of duty to match your love of God, your love of country and your love of duty. We won't mind the heat if you sweat with us, and we won't mind the cold if you shiver with us.



Respect soldiers-every private is the son or daughter of someone. CSM Pendry shakes the hand of son Sergeant Pendry.

• Train soldiers ...[have] an ability to teach... NCOs are the Army's principal trainers charged with its most important aspect—individual training. Individual training is the foundation for everything in the Army. No commander can complete a mission, training or real, without soldiers well-trained in individual skills.

Sometimes, for different reasons, we lose sight of that critical element of soldier care. We must be intimately familiar with our role in training and understand our battle-focused training system. And remember this: How you teach and train your soldiers to keep them current in their jobs and basic soldier survival skills is how they will do it when they replace you.

Every NCO leader leaves a legacy, good or bad, with the piece of the Army he leads. Never forget the enduring nature of our business. If you have led a team, squad, platoon or any sized element in the Army, you have influenced many. Each member of that element has transferred some of your characteristics, good or bad, to another squad or platoon. By the nature of what we do, each of us stands to influence hundreds and maybe, if we stick around long enough, even thousands—a staggering thought isn't it? As you ponder the ramifications of your legacy, I'll leave you with one more enduring aspect of leadership to mull over: Chickenship.

I heard a story once. It was about a couple of neighbors. They were old retired folks living alone. One was an old man, the other an old woman. Both loved gardening and both were quite good at it. The old man, however, always had the most beautiful roses you could imagine. No matter how hard the old

woman worked at her roses, they were never as good as his. She tried very hard to find out what he was doing differently than she, but never could.

One day out of frustration, she finally asked the old gentleman his secret. He walked into his garden shack and came back with a bucket. "Here's what I use," he said, as he passed her a bucket full of chicken droppings.

The old lady was surprised that he'd shared his secret with her. She was determined to have roses as good as his. Every couple of days, she went out and put a generous helping of the droppings on her roses. Soon, however, her roses began to droop over and die. Right away she ac-

cused the old man of lying to her. She told him she'd been putting the droppings on every couple of days and now, thanks to him, her roses were dead.

"There's your problem," said the old man, "you've used too much. Too much will cause them to quit growing, might even kill 'em. You just apply a little bit at the right time, and they'll do fine."

Leadership is a lot like fertilizing roses. The right amount and type applied at the right time will get the job done. It will have a nurturing affect and allow those you are leading the opportunity to grow. But be careful about the amount you use. Because, "too much will cause them to quit growing, might even kill 'em."

Don't turn your leadership into chickenship.

on a comp

Command Sergeant Major (CSM) James D. Pendry has been the installation CSM of Fort Myer Military Community that encompasses Fort Myer, Virginia, and Fort McNair, District of Columbia, since 1995. In other assignments, he was the CSM of the 284th Combat Service Support Battalion that had the Headquarters and Headquarters Company (HHC) for the US Army in Europe (USAREUR) and Seventh Army in Heidelberg, Germany; First Sergeant of 26th HHC, Support Group and an Operations Sergeant for Headquarters, USAREUR and Seventh Army also in Heidelberg. He also was a Drill Sergeant at Fort McClellan, Alabama. CSM Pendry has an Associate's of Liberal Arts from City College of Chicago and is working on his Bachelor of Science in Business Administration from Strayer University, Arlington, Virginia. He is a graduate of the Army Management Staff College at Fort Belvoir, Virginia. His book The Three Meter Zone: Common Sense Leadership for NCOs was released by Presidio Press of Novato, California, in April.

# Tactical Targets from National Assets:

The Precision SIGINT Targeting System

by Lieutenant Commander Michael V. Cooperwood, USN, and John F. Petrik

arget acquisition is an old and honored task of the artillery. Over the years, gunners have developed the habit of relying on themselves and their organic assets to identify and locate targets—thus accounting for the Field Artillery's historical array of target-locating radars, aerial observers and forward observers. These all provided gunners and rocketeers accurate, timely targets.

Unfortunately, some systems external to the fire support system have not been as easy to exploit. They have different purposes and are quite properly reserved for those purposes, lack the requisite accuracy or responsiveness needed for a rapidly shifting target set (they've been optimized for other sorts of collection), or they're simply owned by someone else and the artillery either doesn't know about them or can't get its hands on the information they generate.

Given the capabilities of some of those external systems, it somehow seems a waste not to take advantage of them. They are, after all, paid for and in place. They're also increasingly available.

One way to access existing national assets with enough precision for tactical targeting is the Office of Naval Research's (ONR's) signals intelligence (SIGINT) targeting system. This article is about SIGINT, its proven ability to provide data for cannon fires on enemy radar systems and its promising future.

Precision SIGINT Targeting System (PSTS). The United States Navy has devised a system that enables the artillery to use non-organic targeting assets to great advantage. For the past four years, ONR has been working on an advanced concept technology demonstration (ACTD) designed to take advantage of cutting edge, currently available systems to develop targets cooperatively using both tactical and national assets. This PSTS ACTD concluded its final demonstration in Sep-

tember 1998. It showed we can detect and target battlefield radars quickly and accurately enough for cannon and rocket attack.

Signals intelligence can seem like a black art to outsiders, but in conception



An Army tactical missile system (ATACMS) firing. PSTS is especially well-suited for acquiring targets for attack by this long-range Field Artillery system.

it's relatively simple. Joint Pub 1-02 the Department of Defense Dictionary of Military and Associated Terms defines SIGINT as "a category of intelligence comprising either individually or in combination all communications intelligence, electronics intelligence and foreign instrumentation signals intelligence, however transmitted."

SIGINT assets collect whatever the enemy is emanating and process the information into intelligence (and now into targets). Locating an enemy radio transmitter by radio direction finding would be a common example of how SIGINT exploits the enemy's emissions. The PSTS mission was to find out how to combine national and tactical systems' intelligence data to accurately locate an enemy target in near-real time.

National Assets (No Vaporware, Please). "National assets," which you may have heard referred to as "national technical means," are those systems commonly used for treaty verification and other purposes as directed by the intelligence community under the control of the Director of the Central Intelligence. For example, when President Reagan told Chairman Gorbachev that



This RC-12 Guardrail aircraft is the kind that participated in the PSTS ACTD.

we should "trust, but verify," he had national assets in mind to do much of the necessary verification. We can say that the national assets we're concerned with in this context include a variety of SIGINT assets, but that's about as far as we can go in this unclassified forum.

PSTS is a way tactical operators can derive direct and visible benefits from national SIGINT assets down to echelons below corps. PSTS takes all the security requirements into account and gets accurate target locations into the fire direction center (FDC) after only a brief time for data processing and transmission.

Tactical SIGINT Assets. The other part of PSTS' target acquisition concept consists of tactical SIGINT assets. These are by no means denizens of the open-source world, but in general they operate at lower levels of classification than do the national systems. But they often lack the accuracy needed for tactical targeting, are limited in both timeliness and area of coverage and also tend to do their work outside normal fire support channels.

After a number of preliminary demonstrations, the ONR fixed on US Forces in Korea as the place to demonstrate the use of the SIGINT targeting system. We used a Guardrail aircraft (RC-12 electronic intelligence aircraft controlled at the corps level) from the 3d Military Intelligence Battalion, intelligence and fire support elements (FSEs) in the 2d Infantry Division and the 155-mm howitzers of the 2d Battalion, 17th Field Artillery for the PSTS ACTD. We demonstrated that information from widely separated echelons could be fused cooperatively into targets.

The Test. The PSTS ACTD chose to work against two Army systems that stood in as surrogates for a larger set of typical threat radars we confront in Korea. The Q-36 Firefinder provided a weapons-locating radar to work against the light and special division interim while the sensor (LDIS) served as the generic air defense radar. Both of these are relatively young, capable systems designed to resist acquisition, so they represented a fairly tough challenge.

The communication links PSTS used were for the most part in place. The 2d Infantry Division used its organic intelligence nets to talk to Guardrail. Guardrail connected to the national assets via satellite over the division's tactical related application (TRAP) system. TRAP is the Defense Department's worldwide

electronic intelligence broadcasting network.

During the demonstration, Guardrail acquired a signal of interest (this is what Guardrail was built to do) and "tipped" the national assets so they could tune in to the same signal at an agreed time in the near future. (This sort of cooperation is known as "tip-tune.")

The data the national assets picked up on the same emitter were transmitted to a central processing site, fused into a geolocation product (that is, an accurate location of the target), and transmitted via TRAP and other means back to operators in the 3d Military Intelligence and 2d Infantry Division. There the target reentered ordinary intelligence and fire support channels, finishing its career as a fire mission for the 2d of the 17th.

Anyone experienced in how things can go wrong will immediately point out that an unusually large number of different agencies had to cooperate in this fire mission and that processing a call-for-fire near Ouijonbu via the equivalent of a phone line 9,000 miles long is not a plan that inspires confidence. This proved to be one of those occasions, however, in which Aristotle's dictum that experience can be the mother



This PSTS operator's station was demonstrated during exercises in Korea.

of illusion was entirely correct. The system actually worked.

Accurate and Timely Enough for Attack by Cannons. The results were very encouraging. When the ACTD started, ONR initially found it could locate radars only to an accuracy of around 1,000 meters. But as PSTS improved over the ACTD's four years, it was able to generate targets sufficiently accurate for attack by cannon systems. This is significantly better than what had been available from earlier SIGINT targeting systems.

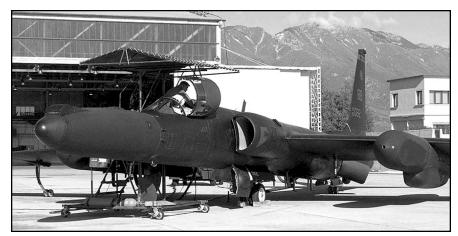
### What's an Advanced Concept Technology Demonstration?

One of the goals of acquisition reform is to find better ways of buying the technology that's going to give warfighters the winning edge. A relatively new kind of program called the advanced concept technology demonstration (ACTD) represents one approach to this goal.

ACTDs take state-of-the-art, mature technology and turn it quickly and affordably into something the fighting forces can use. They do this by involving the operating forces in the demonstrations and using their feedback to adjust and improve the systems being demonstrated during this relatively informal phase of their life cycle. Projects are selected as ACTDs on the basis of four criteria.

- 1. The project's technologies and operational approaches must either offer a potential solution to an important military problem or introduce a significant new capability.
- 2. The technologies involved must be mature.
- 3. The project must have an executable program and a management plan.
- 4. The project must be completed in no more than four years and, if successful, provide operational support for the system it leaves in the field for at least two more.

At the conclusion of an ACTD, the Department of Defense (DoD) makes one of three possible decisions. It may terminate or restructure the ACTD on the basis of lessons learned. It may move the ACTD into the formal acquisition process at an advanced milestone. Or, finally, it may transition the technology developed directly to the warfighter with little further development or procurement—if the system is mature enough. PSTS is one of the first successful ACTDs and is awaiting a DoD decision.



An Air Force U-2 in Aviano, Italy, in support of Operation Allied Force, the NATO intervention in Kosovo. The U-2 is one of the aircraft that can be equipped to collect for PSTS.



The hog-nosed RC-135 reconnaissance aircraft, Rivet Joint, with its extensive antennae array, provides vital real-time battle management information to mission planners, commanders and warfighters. Rivet Joint aircraft are among the platforms to which PSTS may be extended.

PSTS' order-of-magnitude increase in target location accuracy along with the greatly improved timeliness of fused targeting information is a real boon to the commander who must destroy, neutralize or suppress-quickly-a wide range of critical targets. The average time from a Guardrail tip to the TRAP dissemination of the target location was less than 12 minutes. We expect that PSTS soon will reduce this time to the six- to seven-minute range, but even 12 minutes is well within the operational cycle and dwell time of the threat systems ONR had in mind. (For you foreign equipment buffs, PSTS works against well-known systems like Fan Song, Flat Face, Low Blow, Pork Trough, Tin Shield, Drum Tilt, Team Work, Fire Can and Whiff.)

PSTS Lessons and Challenges. The first lesson is a simple one, but one that fire supporters cannot relearn too often when they work with their intelligence comrades: tasking the assets is crucial to getting the best intel support. FSEs must work closely with their S2/G2 counterparts to take advantage of the new capability PSTS represents.

Second, the current state-of-the-art in communications and data processing permit the sort of widely distributed collaboration PSTS demonstrated. The Navy calls this approach "network-centric," and it has promise. Having a large number of cooperating agencies linked by a complex communications architecture is no longer quite the source of Clausewitzian friction it was only a few years ago.

Best of all, the demonstration left a new system and a new operational capability in place for the US Forces Korea. We left a processing capability for electronic intelligence targets that has a 24-hour, seven-day-a-week satellite communications link to connect forces in Korea to the Kunia Regional SIGINT Operations Center. The secure system allows coalition forces to address multilevel security issues and provides an interim capability to conduct PSTS aircraft/overhead operations.

The system's future holds further challenges. Some of these are relatively straightforward. ONR has demonstrated PSTS with Guardrail and has handed the program over to another organization, the Airborne Overhead Interoperability Office (AOIO), that is extending PSTS' capabilities to other airborne platforms, including the EP-3, EC-135 Rivet Joint and U-2.

Other issues involve overcoming limitations on our resources. The tactical receive equipment (TRE) operators use to receive TRAP broadcasts isn't as widely available as one would like. TRE is necessary to allow PSTS-generated information to reach firing batteries in time to make a difference in combat. There are enough TRE sets to give us a useful capability, but their distribution may need to be adjusted to make better use of them.

Other issues present more complex and intriguing challenges. The AOIO programs following the now concluded PSTS ACTD are trying to extend the capability from radars to other kinds of emitters, particularly communications emitters. When we succeed in demonstrating the ability to target not only radars, but also radios—tactical-national communications intelligence targeting—PSTS will realize its full potential.

If you are interested in PSTS and are fortunate enough to be stationed in Korea, inquire through your fire support personnel. If you're not over there, we invite you to see the information available on this and other programs at the ONR web site: http://www.onr.navy.mil. To go directly to the PSTS web page, follow the links to http://web/fie.com/w3get/www.onr.navy.mil:80/scitech/inter/psts.htm.

The precision SIGINT targeting system provides one of those happy occasions when you realize that all the pieces of a solution were always there before your eyes. It was just a matter of seeing and exploiting them as an organized whole. And in this case, the ONR did just that.



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ongratulations! Your selection for battalion command culminates years of preparation for significant responsibilities. During this period between your selection and assumption of command, there are a myriad of details for you to consider training requirements, command philosophy, relationship with your soonto-be command sergeant major (CSM), scheduled major training events, community support, leader developmentall seemingly disparate issues to be addressed by you during this "interregnum." But before you take the colors, I propose you consider one more category important to your unit's success: your new lieutenants.

You, as the battalion commander, will have the greatest span of influence on your unit. That means that over time, your battalion will walk, talk and act like you. For example, if a battalion is sent on a long deployment and the commander grows a mustache—just watch. Or perhaps he starts using a high-speed notebook to keep track of his tasks and personnel data—just watch. Or he starts carrying a stick to outline in the dirt his tactical concept for the employment of the battalion—just watch. Over time, battalion leaders at all levels will grow mustaches, use high-speed notebooks and carry sticks. It's an indication of the pervasive influence you'll have over the battalion.

So, if the battalion commander is the single most influential person in determining if the battalion is high-performing or merely adequate, then who is number two? Although your CSM is vital and your right-hand man, he is not number two. Your first sergeants...battery commanders...soldiers?Unquestionably, all contribute significantly-but none are number two. The second group most able to influence the battalion's performance is not based on its level of responsibility but rather on its potential as an untapped source of high-payoff leaders: your new lieutenants.

The New Lieutenant. Your lieutenants bring high zest and enthusiasm but low technical and tactical competence

### Tapping into Lieutenant Power for a High-Performing **Battalion**

by Brigadier General Lawrence R. Adair



to your battalion. They are like their advanced individual training (AIT) enlisted counterparts in this regard: full of energy but short on wisdom and experience.

But look closer. Look at your table of organization and equipment (TOE) to identify where you're authorized lieutenants. Their positions are at the critical juncture between the command group deciding to perform a task and the senior NCOs who make it happen. The lieutenants' education, maturity, ability to learn and especially their potential to develop is why they are there in the hands of experienced NCOs. They are there to learn how the Army operates.

The lieutenants' experience at officer basic course (OBC) was centered on preparing him for this beginning. Even though your lieutenants have been in the Army for months, they don't really begin to experience "The Army" until they get to their first units—including your battalion. It's how we develop future leaders.

Think back on what your OBC instructor said: "Today I'm are going to teach you how to perform 'task X.' I'm going to show you one way to perform this task, but there are many ways to do it. Your first battalion will have an SOP [standing operating procedures] describing precisely how it executes this task." Or, perhaps, "Lieutenant, that's a great question, but I don't have the time or resources to teach you that task. When you get to your first battalion, they'll show you how to do that." Sound familiar? It's the same today. Subliminally, we tell our OBC students they won't experience the Army until they arrive at their first battalion.

Most of us would indicate that one of the most important reasons why we stayed in the Army goes back to how we were introduced to it in our first battalion. When commissioned, the lieutenant incurs an obligation to serve. If through serving in his first unit he finds the Army as outstanding, it causes him to move from obligation to commitment. The lieutenant doesn't understand this at first, but he will in time. He comes to you full of energy and ready to learn what you have to offer but not yet vested in our Army like your other battalion leaders are. Your lieutenants are receptive, positive and "moldable." Because of these characteristics, your group of lieutenants can have a disproportionate influence on the battalion's performance. But first, they must have focus.

The Focused Lieutenant. The "entry argument" for combat operations in the FA is the battalion because we fight as battalions. No commander calls for "battery" fires to kill a high-payoff target. We mass battalion fires on these critical targets. You must ensure that your leaders are focused on the artillery's entry argument.

Lieutenants should focus first on the battalion and then on the battery. Everything of importance has a battalion focus to it: time-on-target (TOT), start and rendezvous points on road marches, maintenance management—even *social* events. It's by battalion units that we're most effective. And your lieutenants should be made to feel they are an important part of the successes of your battalion.

When a lieutenant is assigned to a battery, he naturally will work to make himself an important part of the team. He accomplishes this by learning his craft, becoming increasingly proficient in his primary duty and showing considerable enthusiasm for the many additional duties assigned to him. Inside the "womb" of the battery, he tends to emplace some "battery designed" blinders to events around him. With this limited focus, he "sees" the battery commander and the first sergeant. When you "bend" the lieutenant's blinders to see the battalion around him, you're on the road to having lieutenants actively engaged in making your battalion highperforming.

When I "grade" the performance of a lieutenant, I look for teamwork at the battalion level. For example, an officer who has mastered his primary duty, has become an expert in his additional duties and has optimized a new piece of equipment for his battery is a solid "B." The officer in another battery who also has mastered his primary and additional duties, has figured out how to make the new equipment better for the soldiers of his battery and has shared that information with a fellow lieutenant is a solid "B+." Finally, the officer who has gone yet one step further by spreading the new procedures he devised to maximize the new gear to lieutenants battalion-wide in a way that brings no undue attention to himself is an "A." That lieutenant is thinking and working for the entire battalion. And when your lieutenants come together as a group and work to make the battalion as good as it can be, the journey is easier by tenfold.

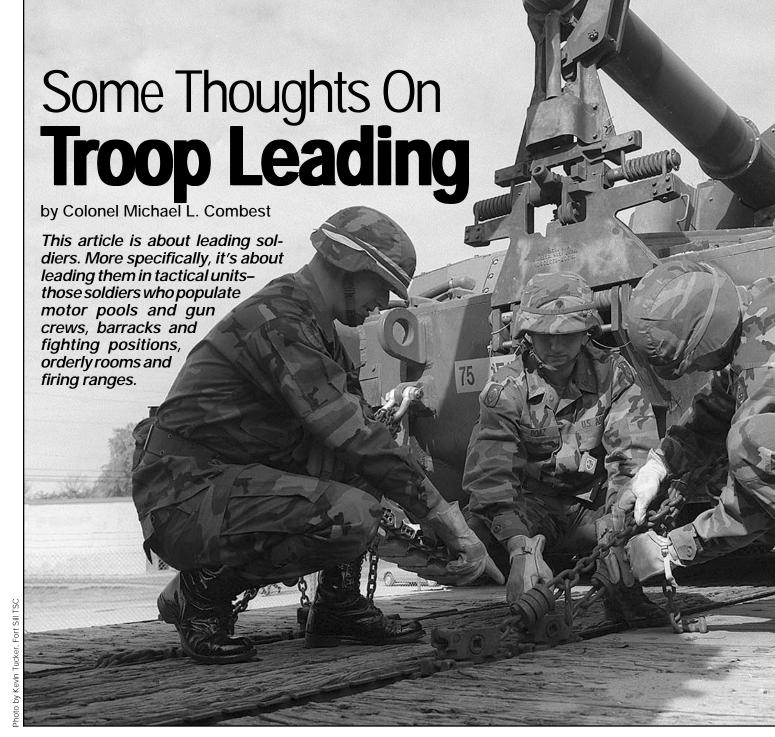
A method to access and focus this powerful group is through a program of leader development or, in this instance, lieutenant development. A field grade officer should give these new lieutenants the battalion perspective, but not you. As the battalion commander and the senior rater for your lieutenants, you might inhibit the dialogue that's central to this technique. The best choice is the battalion executive officer (XO) who is a member of the command group but not in the rating chain of the majority of these inexperienced officers.

About once every six weeks, the XO meets with the battalion's lieutenants as their "platoon leader." For each of these platoon sessions, the XO leads a discussion or class on a subject that reinforces the role of the lieutenants in the battalion. The underlying message of each meeting is that battalion focus is key to their collective success. The XO answers the lieutenants' many questions regarding life in a battalion. Over time, the lieutenants will view themselves as a coherent group and influencing agent in the battalion, and your outfit will be better for it.

Tapping into these high-payoff leader resources is just one more technique for you to think about as you take battalion command. But I guarantee, your lieutenants have the energy and enthusiasm to propel their leader talents for extraordinary effect on your battalion's performance—if you provide the focus and guidance to unleash their potential.



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here is scarce discussion of leadership theory or doctrine in this essay. This is more -10 than Clausewitz. The aim is to offer practical advice to officers and NCOs from section through brigade levels on leading the soldiers in their charge. Here, then, are a few troop leading observations and rules of thumb.

Remember Gideon. When fighting the Midianite nation, Gideon, the Old Testament Israelite general, gave his small army of 300 some very simple battlefield guidance. He told them to "Look on me, and do likewise...as I do so shall ye do"(Judges 7:17). His soldiers complied, and the vastly out-

numbered Israelites defeated their enemies handily. The lesson of Gideon is clear—set the standard, be the example.

Your personal example and conduct are easily the most powerful messages you send about what you require of your soldiers. You may tell your soldiers what you want them to be with words, but you tell them what you expect them to be with your actions. Soldiers will tend toward your example long after they've forgotten your speeches, proclamations and exhortations. The majority will never read your written policies. But they will know and conform to the policies you establish by action.

Rest assured that your soldiers watch closely to see if you urge them down one

path while you take another. They constantly and correctly measure your actions and conduct to see if you demand as much or more of yourself as you do of them. And they watch with great interest to see if what you preach is in synch with what you practice.

"Remember Gideon" is a rule that subsumes a variety of other observations, two of which follow.

Where you are is who you are. If you want to establish the field as the most important place to be, go to the field. If you expect your unit to be dedicated to motor pool activities, go to the motor pool. If you want to encourage participation in the officer and NCO club, go there.



The corollary to this observation is that you can be known by where you don't go. A leader who never finds an opportunity to spend time in the field or in the motor pool or on the range quickly establishes his priorities as being everywhere but those places. And no amount of words claiming otherwise will dispel the notion. Similarly, leaders who can't find the time to attend and support graduation ceremonies, community events, hospitals and so on are letting it be known that they do not consider them important

The "where you are" rule also carries an issue of timing. Where you are constantly is who you are generally. Leaders whose top priority is training spend time in training-related activities. Leaders whose top priority is a strong community spend time at community-related affairs. Likewise, where you are at critical moments reveals who you are and how you lead.

If you aren't seen doing physical training (PT), you aren't doing PT. Participation in physical training is, in the eyes of soldiers, a bell-weather indicator of how serious a leader is about living up to the standards he sets for his unit. It is one of the most effective means you have of establishing a bona fide Gideon factor. So be there. And participate. And be seen doing so.

You don't have to run in every formation or be seen by every soldier—at the battalion or brigade levels, you can't. Troops know if you're there and they know if you actively participate or if you walk around "checking out PT."

They are also quick to recognize the type of leader who always manages to have some critical meeting or special breakfast or hot phone call during PT. And don't try to pawn off your absence from the PT field with the claim that you have a "special" or alternate PT regimen that you do at home or in the evening. No one will buy that, and it only makes you look ridiculous.

There's an interesting grade-related phenomenon that applies to the PT rule. The more junior a leader is, the more he will be conspicuous by his absence. The more senior the leader, the more he will be conspicuous by his presence.

Don't accept failure. It's common to hear soldiers of all ranks speak fondly of command climates where people have freedom to fail. Offering subordinates the freedom to fail is a vice not a virtue. The only sure thing one learns from failure is how to fail. We learn to succeed by succeeding.

Falling short of required or established goals and objectives only has merit if it leads directly to an analysis of what went wrong followed by another shot at the task. Allowing a unit or individual soldier to try hard but fall short and stop there sends the very bad message that good effort is good enough. It isn't. Successfully accomplishing established objectives is good enough.

This doesn't mean every try ends in success. It doesn't even mean that the second or third does. Successful leaders understand that training is an iterative process and that success often requires attempting, falling short, attempting

again and, perhaps, falling short repeatedly before achieving a "target hit." Equally important, they understand that settling for anything but a target hit sets a standard of accepting substandard performance.

Not accepting failure does not mean the leader has to be outraged or angered at attempts that fall short of a goal. It does, however, mean he is unwilling to accept a final level of execution that's not to standard. It implies a determination to commit and recommit the time, energy and resources required to succeed.

Caring is action, not emotion. It's universally understood that one of a leader's principal roles is caring for the soldiers in his charge. It is not so well understood that caring has little to do with feeling and everything to do with action.

Genuine caring is evidenced in the things a leader does to ensure his soldiers are properly trained and equipped, well-fed, well-housed, paid on time, coached and encouraged and so on. Leader care generally falls into two broad categories of action.

Inspecting. Routinely, the good leader inspects soldiers' equipment and documentation to ensure they have what they need to execute their mission and care for themselves and their families.

That means inspecting (personally and through the chain of command) TA-50, socks, underwear, uniforms and shaving kits far enough in advance of field exercises and deployments to ensure soldiers have and take all the serviceable "stuff" they will need to complete an exercise.

Inspect—yes, inspect—leave and earning statements (LES) to ensure that Jones' pay foul-up got fixed and he's not going to receive "no pay due" for the second pay period in a row. Inspect to see that first line leaders are helping soldiers prevent pay problems. Inspect to see that the chain of command is following through on correcting pay problems rather than simply identifying them repeatedly. Pay problems should be fixed in one pay period.

Inspect billets on weekends with CQs and staff duty to see that there's toilet paper in the latrines, the latrines are functional, air conditioning or heat works and noise levels are reasonable.

Inspect—casually and informally, of course—the facilities that families rely on for essential services. Set up an office call with facility managers at their locations. Arrange for a facility tour to

get a feel for the type and quality of service being provided. The vast majority of people who run facilities such as day care, PXs, commissaries, gymnasiums and libraries are thrilled to have leadership take an active interest in their agencies and love to show them off. During your "inspection," ask them what problems they deal with and how you and your chain of command can help them.

Finally, an essential aspect of inspecting is following through. Inspecting without correcting is not the work of a leader who cares for his soldiers. Correcting deficiencies and fixing problems prepares soldiers to succeed.

Preparing. Genuinely concerned leaders prepare their subordinates to succeed at every opportunity. On the surface, this statement seems intuitively obvious, but it is often ignored on a variety of fronts.

Take, for example, Specialist Jones who has been in the primary zone for E-5 for four months but is yet to be recommended to go before the promotion board because, according to his section and platoon leadership, "He's just not

ready." Just-not-ready too often translates into Specialist Jones' not being prepared by his chain of command. It means his section chief didn't begin readying him for the promotion board five or six months before he became eligible. It also means Jones' battalion or battery or platoon leadership did not create the requirement for him to be prepared when first eligible.

Preparation is more than simply telling soldiers about upcoming events that will affect them and then leaving the outcome in their hands. Caring leadership gives diagnostic PT tests in advance of for-record tests to identify weaknesses. They then ensure that remedial training takes place. Caring leadership knows that Specialist Smith has a general test (GT) score of 95 and takes steps to help him raise it to the 110 threshold so he can enter the reenlistment window with more than one reenlistment option.

Caring preparation is not to be confused with warmth and kindness. It means work—hard work—for the soldiers and leader. Caring preparation means establishing high standards for

soldiers and applying the effort to achieve and sustain those standards. It means leaders accepting responsibility for the performance of their subordinates.

Enthusiasm is contagious, so is the lack of it. Be enthusiastic. Your subordinates take their cues from you. If you want your unit to approach the challenges of soldiering with determined, optimistic enthusiasm, do the same. Come to work determined that every soldier will know that you revel in being a soldier—everyday.

This doesn't mean rah-rah cheerleading everyday. But it does mean approaching duties and tasks with good humor and energy, especially those that are undesirable. Remember, your unit probably doesn't need your enthusiasm to perform the great and wonderful missions. It needs your enthusiasm when assigned the dirty, dreary missions that everybody avoids.

It doesn't need your enthusiasm and optimism when it's on a winning streak; everybody deals well with good fortune. Your soldiers need your positive determination, optimism and energy most when times are tough and things aren't going well. Great leaders motivate and inspire their soldiers when things go wrong because they know things will get better quickly—they'll make it happen.

Indeed, great leaders take advantage of adversity. They see tough times as opportunities to get a good look at the quality of their own and their subordinates' leadership. Disappointments are valuable for seeing which leaders respond with determined, optimistic, enthusiastic resolve and which ones panic or throw in the towel.

One more thing about enthusiasm. Execute your boss's policies and orders with the same spirit and energy that you expect your subordinates to execute yours. You will quickly discover that your subordinates do likewise.

Soldiers and units are who they are everyday. Units that are aggressive, tough, disciplined, proud and full of initiative everyday will be tough, aggressive, disciplined, proud and full of initiative on Army training and evaluation programs (ARTEPs), for important inspections and in battle. Units that stress themselves, who routinely demand the most from every soldier and leader, find themselves easily able to deal with major events and stressful challenges.

Contrarily, units that routinely operate in a laid-back, relaxed, take-it-as-it-



Leaders inspect (personally and through the chain of command) TA-50, socks, underwear, uniforms and shaving kits far enough in advance of field exercises and deployments to ensure soldiers have and take all the serviceable "stuff" they will need to complete an exercise.

comes manner and try and spin up for the big test are usually disappointed. Units and soldiers are like athletes...how they practice is how they play.

What does this mean practically? Every so often, you must reach beyond what you and your soldiers can comfortably handle. Don't back off from missions because they're hard. Take them. In fact, seek them because they're hard. Raise the bar in PT or rifle marksmanship or SIDPERS (standard installation/division personnel system) or maintenance or barracks appearance or whatever to a level that at first seems a little out of reach. Then go for it. And don't accept a good try as good enough. You'll be pleasantly surprised.

Decide what you want your reputation to be, then earn it. Every soldier and unit in the Army earns a reputation. Most are okay, some are outstanding, some are poor. Surprisingly, most soldiers and units never sit down and decide what reputation they want. Many, if not most, leaders fail to tell their subordinates what they expect people to say about X battery or Y battalion. Consequently, most soldiers show up for work everyday, do what's required and gain a reputation of showing up for work everyday and doing what's required.

As the leader, your unit's and soldiers' reputations are largely in your hands. You and your troops are judged by those around you—higher, lower, left and right—by a surprisingly small number of standards: reliability, willingness to support, timeliness, accuracy, appearance, personality and discipline. You, the leader, can and ought to decide how you want to be thought of in those areas.

Meet with your chain of command and go through a simple drill of asking "What do we want our overall reputation to be? What type of unit do we want to be known as?" My guess is that just about everyone will want to be known as a "go-to" unit—when you need it done now, done right and done without sniveling, go to the old 75th.

Having determined the go-to reputation as being one you want, ask and honestly answer some basic questions to see if that is who you are. "Do we willingly accept taskings or does it take an act of Congress to get us to take a grass cutting detail? Do we readily take the easy taskings but try to push the tough ones off on someone else? Are we on time with reports and are they accurate? If we commit to something,

do we follow through or does someone need to always come along behind us and check our performance? Do we look for opportunities to help out or do we do only what's specifically tasked?" The list goes on and on.

In addition to an overall reputation, decide what specifically you want to be known for. PT studs? If so, commit to it and pursue a PT average of 270. Want to be known as warfighters? Inform your subordinate leaders and ensure your training reflects it. (By the way, it's tough to be known as warfighters and never leave garrison.)

When you've finished deciding what general and specific reputations you want, you'll probably end up with something like, "When people talk about the 33d, they think absolutely reliable, great re-up program, focused on warfighting and takes great care of families."

Deciding what you want your reputation to be is the easy part. The real test is earning that reputation. A unit that finds a hundred valid reasons why it can't take the tough taskings will not be known as a go-to outfit. And neither will its leaders.

Know what you're doing—know your job. The importance of this absurdly self-evident rule cannot be overstated. (And it wouldn't be in this discussion if it weren't violated with no little frequency.) Whatever unit you lead, you must have the knowledge to make it and your soldiers perform the right actions to the right standards. An energetic, charismatic leader who doesn't know what he's doing tactically, technically, administratively or logistically, in most cases, will lead his unit charismatically to ruin.

Nothing can compensate for a lack of competence in the essentials. Great people skills can't make up for not knowing how to employ a battery's weapons. No amount of social grace or physical fitness will redeem a maintenance program run by someone who doesn't know how to tie scheduled services to a training program. Intellectual prowess is no substitute for ignorance in gunnery basics.

This doesn't imply that a leader has to master every weapon and support system in his unit. At the battalion and brigade levels, this becomes nigh-on to impossible. However, the leader must know how essential systems fit into schemes of fire and maneuver. He must master the foundation systems of his units. A howitzer battalion or battery

commander who is not a master of that weapon is poorly prepared to direct its employment. A service battery first sergeant who doesn't know how to drive a heavy expanded-mobility tactical truck (HEMTT) is ill-suited to supervise its use.

An essential aspect of "knowing what you're doing" is knowing what your position requires of you. Battalion commanders who were great battery commanders but fail to learn the full scope of their new duties most likely will fail to be great in their new role. Outstanding section chiefs who fail to learn the scope of responsibility of a platoon sergeant will be, at best, an average platoon sergeant. The reason is obvious: one can have a wealth of tactical and technical knowledge but be unaware of how to apply it and thus be ineffective.

Upon assuming a new leadership position (prior to it, if possible), make it a priority to find out what's required of you. Go quickly to the traditional sources of information: subordinates, peers, highers and standard operating procedures (SOPs). Just knowing what's required of you and your unit puts a reputation for excellence within striking distance.

That's it. The thoughts in this paper are by no means a complete discussion of leading troops. Nor are they iron clad rules to be applied with mathematical precision. However, when combined with some reflection, experience and dedication, they may prove helpful to those who lead the world's best soldiers.



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# New Career Path for FA Targeting Technician 131A

by Chief Warrant Officer Three Donald F. Cooper

By selecting, training and positioning warrant officers (WOs) in targeting, FA intelligence officer (FAIO) and counterfire officer (CFO) positions, the FA WO restructuring program begun in 1993 has completed its initial phase of replacing Active Component (AC) FA officers. The National Guard is currently at about 50 percent implementation of its restructuring effort.

The intent of the program is to grow targeting experts with a zero-sum gain

in personnel. The initiative will help the FA better use WO expertise and cross-fertilize targeting experience between heavy and light units and from the higher to lower echelons, building on successful procedures.

We had to transition our accession and training requirements to produce FA Targeting Technicians Military Occupational Specialty (MOS) 131A while maintaining some key skills of the restructured Target Acquisition Radar Technician MOS 131A program. By

achieving the personnel strength to support the restructuring program, we have reached the pivotal implementation point: the development and institutionalization of a new career path for MOS 131A. (See Figure 1 for a sample career path sequence.) The FA targeting technician can no longer follow the previous career path of our current senior WOs. The Army and, more specifically, the FA must clearly understand the new progression to senior positions and the responsibilities of today's FA WOs.

One challenge presented by the restructuring program has been the loss of seniority within the career field. Currently the field is 75 percent short in CW4s and CW5s due to retirements. However, this is not an obstacle—most of these senior warrant officers had experience in areas other than targeting, the position areas they would be filling at their senior ranks. We now have an opportunity to develop new targeting technicians and institutionalize the Army's targeting WO positions and ex-

pertise while retaining the WOs' subject matter expertise on FA target acquisition systems.

This article addresses the analysis of our structure, accession program, individual training and education, distribution and professional development aspects of the new career path for FA targeting technicians. The logical starting point in a new career path development using the select-train-utilize model in WO development is accessions.

Accession Program. To ensure we get the best WO applicants, we recently overhauled our accession prerequisites. The prerequisites now include an armed services vocational aptitude battery (ASVAB) score of 110 or higher in the electronics (EL), general technical (GT) and FA aptitude areas; six college credit hours of English and math from an accredited university; and a letter of recommendation from a senior WO in MOS 131A.

The intent of these measures is to select applicants for training from the top percentage of all services' enlisted soldiers with the proven aptitude to ex-

### WO Basic Course for MOS 131A

WO1 Radar Section Leader on an AN/TPQ-36 Firefinder Radar (1-2 Years)

Joint Firepower Control Course-Air Ground Operations School (JFCC-AGOS)

CW2 Targeting Officer at a Maneuver Brigade (1-2 Years)

CW2 Radar Section Leader on an AN/TPQ-37 Firefinder Radar (1-2 Years)

CW2 Assistant Counterfire Officer (1 Year)

CW2 Observer/Controller at a Combat Training Center (JRTC, NTC, CMTC) (2 Years)

131A WO Advanced Course with the Joint Nuclear Operations and Targeting Course as Follow-On

CW3 FA School Instructor/Writer (2-3 Years)

Joint AeroSpace Command and Control Course (JAC<sup>2</sup>C)

CW3 FA Brigade Counterfire Officer (2 Years)

Joint Targeting School

CW3 Division FA Intelligence Officer (2 Years)

CW4 Corps Artillery Targeting Officer (2 Years)

CW4 Combat Developer (2 Years)

CW5 FA Proponency Officer for 131A (2 to 3 Years)

Figure 1: Sample WO 131A Radar Technician Career Development Sequence



Training was addressed by aligning the WO basic and advanced courses with tactical aspects of the officer basic course (OBC) and captains career course (CCC) and the technical applications of target acquisition (TA) asset management and the targeting process.

cel in the highly technical applications of MOS 131A. This is extremely important for the strength and credibility of the MOS, especially now while we're compensating for the shortage of senior 131As by manning the field with a large population of WO1s and CW2s.

The next critical component of the restructuring program is to develop the training function in select-train-utilize methodology.

**Training 131As.** We addressed training by aligning the WO basic and advanced courses with tactical aspects of the officer basic course (OBC) and captains career course (CCC) and the technical applications of target acquisition (TA) asset management and the targeting process. The focus of the instructional changes has been to expand our warrant officers' understanding of the military decision-making process and how to integrate targeting and TA asset management into an operational plan (OPLAN). Additionally, the instruction now emphasizes automation, simulations, and nuclear and joint targeting.

Training a new FA targeting technician must not end at the WO basic and advanced courses. The courses only give the WO a foundation that he must build on in home-station training and by attending additional schooling, such as the Joint Firepower Control Course (JFCC) at Nellis AFB, Nevada; Joint Aerospace Command and Control Course (JAC<sup>2</sup> C) at Hurlburt Field, Florida; and Joint Targeting Course at Navy Marine Intelligence Center, Dam

Neck, Virginia. The MOS 131A portion of AR 611-112 Manual of Warrant Officer Military Occupational Specialties is being revised to include additional skill codes for those 131As who have attended targeting schools or courses.

**131A Mentorship.** Training must be accompanied by a comprehensive unit mentoring program to ensure WO success in the field. Each organization must develop a mentoring program to integrate the new WO into the organization and provide a professional development plan to move him along his career path.

These programs must progressively develop the tactical and technical skills the WO needs for warfighting and involve the organization's commanders, field grade officers and senior WOs. Carefully integrating new targeting technicians into the organization will ensure that the complex functions of TA asset management and targeting tactics, techniques and procedures (TTP) are shared, demonstrated and understood. This, along with sharing lessons learned and unit standing operating procedures (SOP), will make the WO and his organization more likely to succeed on the battlefield, whether it's a simulated one in the Battle Command Training Program (BCTP) or one on the ground at another combat training center (CTC).

Effective mentoring programs must reinforce and develop professional values and ethics, teamwork and problem solving skills, an understanding of the expectations of the command, officer-WO-enlisted relationships, counseling,

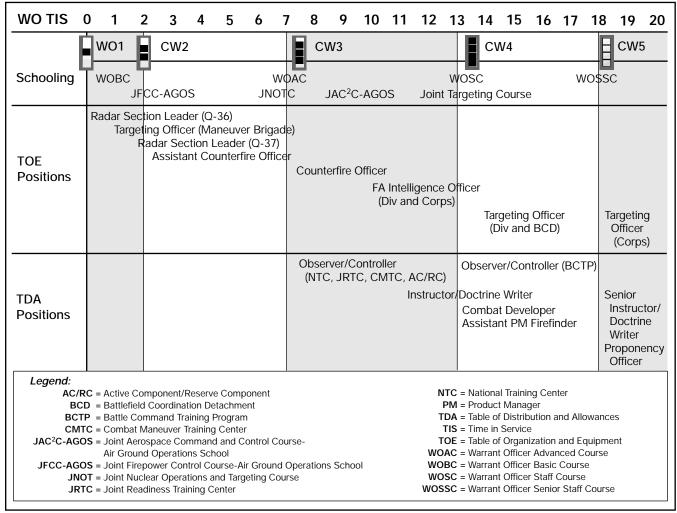


Figure 2: FA Targeting Technician Life Cycle Development Model

officer lifestyle and culture and, most importantly, leadership. Finally, the senior 131As in an organization must advise the commander, staff and subordinate WOs on what additional schooling and targeting positions the junior WOs need for further development.

To make the mentoring program successful, the FA must have a vision of managing the career field to ensure our nominative positions with senior WOs are filled with the best possible choices to support the development of 131As. With such a small field, we must ensure our top performers are assigned to these nominative positions, helping to prepare junior WOs for senior grades.

Senior WOs will require backgrounds in tactical targeting applications, technical systems usage, maintenance management and connectivity of the systems that will make fire support effective on current and future battlefields. Several nominative positions must be closely managed to ensure the health of the MOS. They include, but are not

limited to, CTC observer/controllers, service school instructors and doctrine writers, combat developers and the assistant product manager (PM) for PM Firefinder. Linked with the valuable experience gained in the division and corps artillery organizations, these positions will produce the senior WOs needed to represent and mentor the branch.

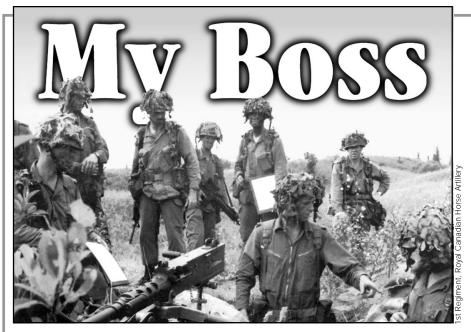
The senior positions available to the FA WO are diversified: battlefield coordination detachment (BCD), divisional and corps artillery targeting officers, FA intelligence officers, combat developers, instructors, doctrine writers and the proponent officer for the MOS. To develop the skills and expertise to successfully fill these positions, a new career path for the FA WO had to be established—the new life cycle development model (see Figure 2).

The new WO, his chain of command, his career manager and the FA school must understand the developmental sequence of MOS 131A. It requires a team effort across the FA to ensure our

WOs are successful in this new career path designed to provide effective and timely targeting to support today's Army and the Army of the 21st century.



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y Boss loves being a soldier and loves to lead soldiers. He's not spending time in command because it's good for his career or because it will set him up for a good staff position in a headquarters somewhere. He enjoys imparting his training and leadership philosophies to his subordinates and letting them develop their own styles. He's comfortable speaking with and listening to soldiers man-toman without an air of pretension or superiority. He stays highly visible to his subordinates and not locked up in his office. He always shows up for morning PT, no matter how bitterly cold or steaming hot it is. He is in good physical condition and expects no less of his subordinates.

To my Boss, trust and integrity are not just words; they are a credo. If he gives you his word on something, he feels honor-bound to abide by it. He does not demand your trust and loyalty just because he has been appointed your commander; he expects to earn it, just as you'll earn his.

When presented a problem, my Boss will seek and accept advice from his subordinates, when applicable. But when the time comes to make the decision, he won't hesitate. He'll give firm, concise direction as to what he wants accomplished but not how he wants you to do it. He's confident enough to leave you to carry out his orders in a fashion most suitable to your style of leadership. But beware, for he will check on your progress to ensure all is going well.

My Boss would never malign his boss in front of us or ever force us, his subordinates, to perform an activity for the sole purpose of currying favor with his boss. Should my Boss be taken to task by his boss for a problem in his command, my Boss would have the courage to take responsibility for the problem and then ensure the problem was solved within the unit.

My Boss is a disciplinarian who believes the discipline of mind and body makes a person strong. Despite his views on discipline, he's not without compassion. He's always fair when punishment is required. In his mind "the time will fit the crime"—he won't make an example of any soldier.

### Canadian Army Principles of Leadership

- · Achieve professional competence.
- Appreciate your own strengths and limitations and pursue self-improvement.
- · Seek and accept responsibility.
- · Lead by example.
- Make sure your followers know your meaning and intent, then lead them to the accomplishment of the mission.
- Know your soldiers and promote their welfare.
- Develop the leadership potential of your followers.
- · Make sound and timely decisions.
- Train your soldiers as a team and employ them up to their capabilities.
- Keep your followers informed of the mission, the changing situation and the overall picture.

My Boss is extremely knowledgeable in all aspects of his job. Every time our unit goes on an exercise, I learn something from him. He's a good teacher and is patient enough to allow subordinates to make mistakes when learning. But he can't abide laziness or errors made in basic skills.

My Boss does not want "Yes Men" in his command. He takes great stock in counsel received from his subordinate leaders. He knows that, as the commander, he will not always be able to see or know everything going on in his command. He also realizes that his subordinate leaders may have a better feel for what's really happening "on the street." As a result, he knows he must rely on those same leaders to solve the problem if they can or bring it to him to solve or take higher still.

The Boss expects his subordinate leaders to be problem solvers and lead by example. He counts on them to build a team spirit in the unit, which makes it a good place to work and call home.

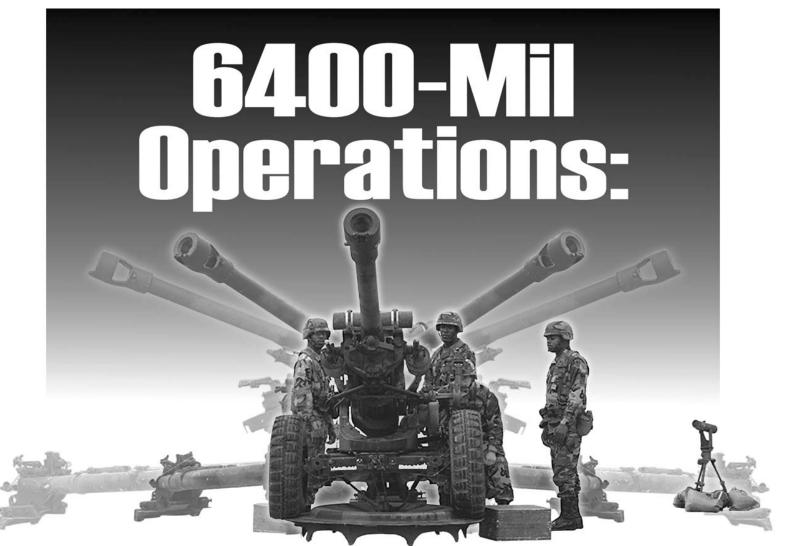
My Boss knows he has only been given the honor of commanding his unit for a short time before he moves on, but he will not use the unit as his personal spring board for bigger and better things. He will not leave us feeling tired and used. Instead, he will challenge and care for us and our morale. And when his time in command is done, he will look back and know he did the best he could.

My Boss is not a real, live person. He's a compilation of several bosses I've had and bosses I wish I'd had. He encompasses leadership styles, characteristics and ideas adopted from many famous soldiers through the years. Most importantly, he has many attributes that all leaders must strive to perfect to give our soldiers the leadership they deserve.

[Editor's Note: This piece was taken from an article of the same title printed in the Canadian Forces' Gunner Bulletin, Issue Number 28, Summer 1998, Pages 7 and 8.]



Capt Todd S. Scharlach, FA Instructor-in-Gunnery Royal Canadian Artillery School Canadian Forces Base Gagetown, New Brunswick, Canada



### **Timely Fires in All Directions**

by Captain Michael J. Forsyth and Sergeants First Class Jeffrey M. Hoppert and Michael A. Jensen

t the Joint Readiness Training Center (JRTC), Fort Polk, Louisiana, firing units must provide 6400-mil fires in the low-intensity phase of the rotation, yet too many units come lacking proficiency in 6400-mil operations. Units tend to fail to conduct timely, effective 6400-mil operations because their home-station training has been designed with a live-fire mindset limited by their impact areas. The nonlinear JRTC battlefield is similar to the one we faced in Vietnam and requires 6400-mil fires to support maneuver elements.

The purpose of this article is to provide tactics, techniques and procedures (TTP) for timely, accurate fires in any direction. Here are some of the most common problems that the observer/

controllers (O/Cs) at the JRTC witness month after month. Units have a tendency to choose position areas (PAs) that don't facilitate 6400-mil operations, fail to position equipment properly in the firing location, emplace their aiming references incorrectly or fail to compute the executive officer's minimum quadrant elevation (XO's min QE), terrain gun position corrections (TGPCs) and graphical firing table (GFT) settings for all eight octants. Failing to perform any of these steps leads to the unit's failure to deliver timely, massed and accurate fires in all directions.

Choosing a Position Area. The most important aspect of providing 6400-mil fires is choosing a position that facilitates this mission. Optimally, a 6400-

mil firing location will sit on high ground in a clearing with the nearest screening crest a minimum of 200 meters from the guns. The position must be large enough to emplace all guns yet maintain the distance between the guns and the screening crest. The advance party initially checks the site-to-crest using an M2 aiming circle or an M2 compass around the point to verify that the screening crest is not a problem at that location.

The position cannot be a woodline firing position used to mask the battery's location. Because the battery is exposed in a position that facilitates 6400-mil firing, the leaders must ensure the position also facilitates 360-degree security.

Preparing the Gun Positions. Preparation of the gun positions starts with the advance party. Under the direction of the gunnery sergeant, the advance party designates the physical layout of each position. The gunny designates gun positions that facilitate 6400-mil firing.

Each gun guide marks the azimuth-offire on the ground and prepares the individual gun position for occupation. The gun guide levels the ground where the baseplate will rest to eliminate cant. Each guide has a tent stake with a piece of engineer tape tied to it the length of the trails plus five feet as a buffer zone for the length of the tube. The guide pounds the stake into the ground where he wants the baseplate to rest. He then extends the engineer tape to its maximum length and walks around the position. As he walks around the arc, the guide scratches out the path of the trail's traverse. When the gun arrives, the section places nothing inside this arc that can impede the traverse of the trails.

The section chief positions his vehicles, section equipment and fighting position based on the arc the gun guide scratched into the ground. The chief positions the trucks away from the gun's traverse arc so the trails and tube can turn a full circle without impediment.

Another consideration for positioning the trucks is min QE. Preferably, the section will dig the vehicles in using engineer assets so the vehicles are below ground level and close to the section. But the chief may have to position the vehicles far enough away to reduce the angle of the site to an acceptable elevation.

Next, the chief places his gun section equipment outside the arc. The platoon/battery should have a standard layout of its equipment, so the unit can cross-level cannon crewmembers to different sections during degraded operations.

Last, the chief designates the locations of his section's fighting positions. Once again, he ensures these are outside the traverse arc. If a section digs its fighting positions too close to the arc, it could drop a trail into the fighting position, preventing its engagement of targets along that azimuth.

After the equipment is ready to fire, the section improves the gun position to facilitate responsiveness to fire missions. First it digs a trench the entire 6400-mil traverse arc of the trails. This facilitates firing out-of-traverse missions because the spades are automati-

cally dug in for the full circumference of the trails.

While digging the trenches, the section traverses the howitzer to all eight octants, placing an azimuth marker either at the end of the tube or the trails. This makes it easy for the chief to find the azimuth he's supposed to lay on during an out-of-traverse fire mission. (Pulling out a compass and digging in spades wastes too many precious seconds during fire missions.) Using these simple steps, a section can shave minutes off its response time for out-of-traverse missions.

While traversing the gun to dig a trench and mark azimuths, the chief also validates he can see his aiming references in all eight octants. If the section emplaces the aiming references along the same line of sight (i.e., the collimator and aiming poles in line to the left rear of the trails), it's highly probable the gunner

won't be able to see them in an out-oftraverse mission that has a significant change in azimuth. Therefore, the chief emplaces them at different angles to the site. Then he validates that the gunner can see at least one of them in each octant when they traverse to trench and set out azimuth markers.

In conjunction, the chief checks site-to-crest for each octant. After setting out his azimuth markers for that octant and checking aiming references, the chief traverses left and right of the azimuth, recording the site-to-crest to the highest point along that octant. (See Figure 1.)

The chief keeps his data organized and reports all eight sets of data to the platoon leader or executive officer (PL/XO) for computation of min QE. If the chief does not record the data systematically, he could inadvertently report bogus information for an octant, setting up a potential safety problem.

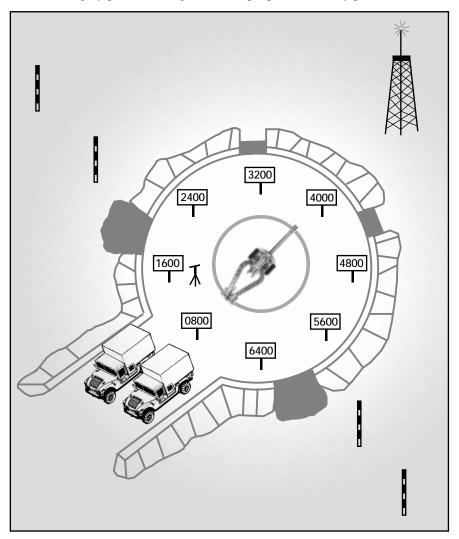


Figure 1: To ensure the gun is capable of firing 6400-mils, the section chief verifies the aiming references for all azimuths in the position area (PA) and records the site-to-crest for each octant. (The PA in this figure is only one example.)

Leader Checks and Rehearsal. Once the guns complete their tasks, the "Big 3"—PL/XO, chief of firing battery and gunnery sergeant—verify the tasks were performed properly. They start at opposite ends of the line-of-metal, checking each gun systematically. The leaders verify the aiming references, physical layout of the gun positions and defensibility.

The section chief submits a report to the PL/XO for each gun with its site-to-crest for all eight octants recorded on it. The PL/XO then computes the min QE problem for all octants.

If any of the guns has a significant min QE problem for an octant, the PL/XO takes steps to correct the problem. Then he briefs the fire direction center (FDC) on his computations. The Big 3 check to ensure the guns can engage any target in all directions.

The final check of the line-of-metal is a rehearsal. The PL/XO has the FDC work up dry-fire missions for each octant. The FDC then sends dry missions to one gun at a time to verify each gun's ability to engage targets in any direction. One of the Big 3 posts himself on each gun during the rehearsal. Once the rehearsal is complete, the PL/XO knows his guns can fully support the maneuver elements in all directions.

Tasks in the FDC. Operations requiring the firing element to provide 6400-mil coverage are more demanding on the FDC than operations in the impact area. Because the FDC computes firing data for all eight octants, it also computes TGPCs and GFT settings for each octant. Also, the FDC records and tracks the min QE data for each octant, once the PL/XO computes it.

The toughest part about 6400-mil operations in the FDC is managing the data. To make the task easier, the FDC can record the data for min QE, TGPCs and GFT settings for each of the eight octants.

The first piece of data the FDC needs is the min QE. The PL/XO must compute the min QE for several charges across the eight octants. The charges he computes are the ones for the likely range-to-targets in the operational area. This requires the PL/XO and the FDC to have a thorough knowledge of the mission and locations of targets and supported units. Once the PL/XO delivers the min QE data to the FDC, the FDC records the data on a wheel depicting the octants as shown in Figure 2. The FDC posts the chart conspicuously for quick reference during fire missions.

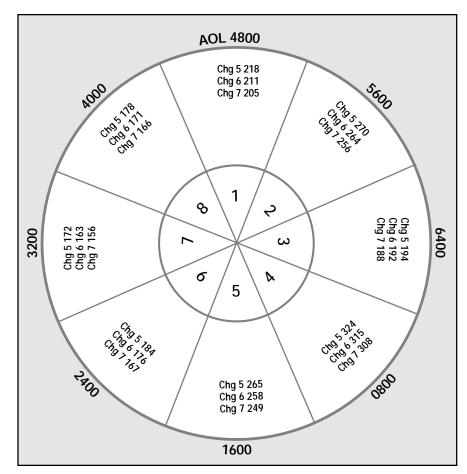


Figure 2: Minimum Quadrant Elevation for 6400-Mil Operations. The FDC records the Min QE data on a diagram similar to the one shown in Figure 1 and posts the chart conspicuously for quick reference during firing missions. The example in this figure has the azimuth of lay (AOL) as the 4800 octant.

Next, the FDC computes TGPCs for the position area. The FDC uses a center of battery ghost piece as the base piece to compute the corrections. It computes corrections for the most likely charges, just as the PL/XO does for min QE. Also, it computes corrections for all desired sheafs and shell families (highexplosive, improved conventional munitions, etc.) If the unit only has a short time to prepare, it should compute its TGPCs for open sheaf, the most frequent sheaf required for the standard fire order in low-intensity conflict; however, if in the course of the battle the unit needs to fire a different sheaf, it *must* compute the TGPCs for that sheaf.

The unit uses TGPCs when digital gun display units (GDUs) are inoperative on the gun line. The TGPCs facilitate sending gun commands to the pieces by allowing the FDC to send one set of data over the voice net and having the guns apply individual corrections. If an FDC fails to compute TGPCs for all eight octants based on several charges, sheafs and shell families, when a fire mission

comes down and GDUs are inoperative, the FDC must send several sets of firing data. This slows responsiveness considerably.

As with min QE, the FDC records the TGPCs on a wheel and posts it for quick reference (See Figure 3). It is imperative that the FDC exercise care and attention to detail in recording and managing this data to prevent the application of the wrong charge, sheaf or munition data. In addition to the FDC, the gun line records the TGPCs in a fashion that makes the data easy to apply when needed; the Big 3 ensure the gun line has the data available.

Finally, the FDC computes GFT settings for all azimuths. The FDC may have to use GFT settings if the battery computer system (BCS) goes down, forcing the FDC to operate manually. Again, the FDC uses likely ranges-to-targets to compute the charges.

To derive the settings, the FDC conducts a dry-fire mission in the BCS for each octant and charge. It then places the corrections for the primary azimuth

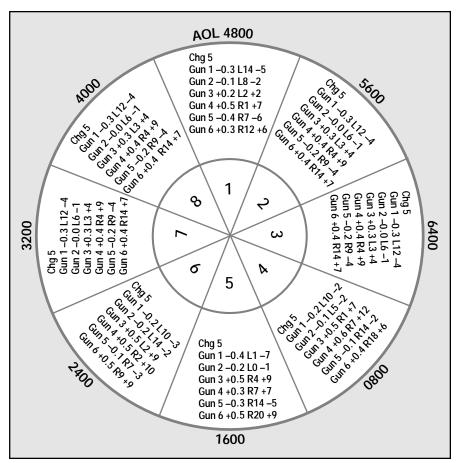


Figure 3: TGPCs for 6400-Mil Operations. The FDC computes TGPCs with the "center of battery" as a ghost base piece. (This example is of TGPCs for a Charge 5, open sheaf fire mission using high-explosive munitions.)

Octant 1 4400 to 5200- Chg 5 Rg 5000 EL 345 Ti 24.3 GFT Df Corr L6
Octant 2 5200 to 6000- Chg 4 Rg 4350 EL 325 Ti 18.5 GFT Df Corr R2
Octant 3 6000 to 0400- Chg 5 Rg 4800 EL 307 Ti 20.8 GFT Df Corr L3
Octant 4 0400 to 1200- Chg 5 Rg 5000 EL 346 Ti 24.5 GFT Df Corr L4
Octant 5 1200 to 2000- Chg 5 Rg 5000 EL 350 Ti 24.7 GFT Df Corr L3
Octant 6 2000 to 2800- Chg 6 Rg 6850 EL 336 Ti 23.7 GFT Df Corr L4
Octant 7 2800 to 3600- Chg 4 Rg 4350 EL 322 Ti 18.3 GFT Df Corr L1
Octant 8 3600 to 4400- Chg 5 Rg 5000 EL 348 Ti 24.6 GFT Df Corr R5

Figure 4: GFT Settings for 6400-Mil Operations. The FDC places the corrections for the primary azimuth on the GFT and records the data for all octants as shown here.

- 1. Compute the data (sample): Chart Range 5000, Chart Deflection 1867; Octant 1 Time 24.3, QE 345, Drift Left 6
  - Octant 1 is the primary azimuth, and Octant 4 is the azimuth of the fire mission.
  - Octant 4 deflection correction is left 4; the difference in time settings between the two octants is +0.2 and the difference in elevation is +1.
- 2. Apply the differences to the Octant 1 data to obtain the data to fire:

Time Setting Octant 1	24.3	Deflection 1867	QE 345
(Difference Between Octants 1&4)	+0.2	L10	+1
(Data to Fire)	24.5	1877	346

Figure 5: FDC Method for Computing Quick Corrections for 6400-Mil Operations. The FDC uses this method to quickly compute firing data in emergencies.

on the GFT and records the data for all octants. (See Figure 4.)

If the FDC receives a fire mission in an octant other than the primary azimuth, it places the setting for that azimuth on the appropriate GFT, if time allows. If not, the FDC can use the method shown in Figure 5 to make quick corrections to firing data. The method in Figure 5 is not as accurate as the doctrinal GFT setting and only should be used in an emergency.

Too many times, units wait until an out-of-traverse mission comes in before solving for 6400-mil fires. The result is slow, inaccurate fires with the firing element failing to mass.

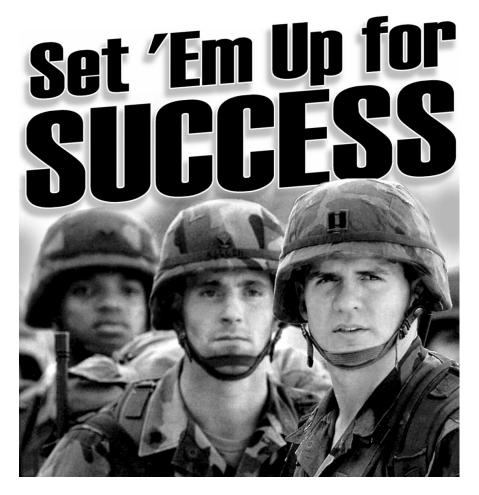
The difference between providing timely, accurate fires versus slow fires that miss the target is leaders who are proactive. Using the procedures outlined in this article, any FA unit can provide massed, timely and accurate fire for maneuver units—in any direction they need them.



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By Major John W. Amberg II

llowing input, pushing people to make the most of themselves, setting the standards and remaining technically and tactically proficient are keys to successful leadership. Although these actions are important, there's more to leadership.

Good leaders set their people up for success. In most cases, if the leader will just smooth the path ahead, the soldier will succeed.

Leaders must understand how to facilitate their soldiers' success. There are five reasons why soldiers fail to do what their leaders tell them to do: the means are not available, priorities aren't clear, the soldier doesn't understand the job, he forgets or he makes a conscious decision not to perform the task.

From his perspective, the leader can blindly see the soldier as failing, regardless of the reason for the failure. But to empower soldiers and create a high-performing organization, the leader must recognize the five reasons for failure and set the soldier up for success.

1. The soldier doesn't have the means. The soldier can fail because he

doesn't have enough training, time or equipment, tools or other resources to accomplish the task. When a leader gives a young soldier a mission and the soldier says, "Yes, I can do it," the leader can mistake the soldier's can-do attitude for validation of his skills and knowledge to accomplish the task. The leader then doesn't give the soldier the guidance or assistance he needs. When the soldier fails, the leader can mistake the failure as the soldier's—instead of his own.

The thinking leader will ask questions to determine the root of the failure and turn the failure into a learning experience for the soldier. The leader can counsel the soldier and give him the training he needs. In the future, the wiser leader will assign a task, ask the soldier questions to indicate his ability to execute the task and then give him the guidance and assistance he needs.

As a lieutenant, I had a brand new gunnery sergeant who assured me he knew how to set up an aiming circle. One day when I was in the field selecting howitzer positions, I noticed him fumbling with the aiming circle. With the platoon only five minutes away, the aiming circle was not ready. I contacted the fire direction officer (FDO) and told him to adjust the route to give me another 20 minutes. Then I went through a quick class with my sergeant, and he laid the platoon correctly. From then on, that gunnery sergeant knew he could ask questions without fear of backlash.

When the leader facilitates the soldier's doing his job, the soldier feels successful, which breeds more success. At the same time, the leader gains the trust of the soldier who gains the confidence of the leader—surely a recipe for high-performance.

2. Priorities are not clear. Soldiers can have conflicting demands. Today, many soldiers' duffel bags are packed and ready for rapid deployment to an operation half way around the world. These same soldiers must keep all their vehicles and weapons systems combat ready while, perhaps, training on new systems. They must pull duty in the battery and complete post red-cycle taskings—sometimes as an entire battery. These soldiers must conduct the daily business of training, attending meetings, pulling routine maintenance on vehicles, conducting inventories and taking classes on everything from sexual harassment to taxes. Their plate is constantly overflowing with tasks and focus is difficult. Leaders must carefully communicate the priority of any task being assigned so soldiers can accomplish the most important task first and meet the leader's expectation.

One Friday, I invited the battalion commander to hand out awards at our battery's close-of-business formation. The battery was going to the field the next Monday to train with our new Paladins. The fielding team had been using our Paladins for classes in the motor pool all week before the field-training portion that next week. My boss was not happy when he took time from his busy schedule and only one-third of my soldiers showed up for the formation.

The soldiers had had conflicting demands. They were all fired up to succeed with their new howitzers on Monday; their platoon sergeants had set the priority of loading and preparing their vehicles in the motor pool. At the same time, the first sergeant had set the priority of being at the formation. I had told them to be ready for the field—but I had told the first sergeant I wanted them at formation.

Initially, frustration was high; but once we understood the conflicting guidance, we moved on. We all knew that our soldiers could and would do whatever we, as their leaders, told them to do, but there must be focus.

**3.** The soldier doesn't understand the task. Taking the picture in your head and painting it in a subordinate's head so he understands the task and can execute it is probably the hardest part about being a leader. Often the challenge will be compounded by delegation of the task further down the chain.

The urge to take charge and do it yourself may seem constant. Instead, the leader should assess what's happening to accomplish the task and compare it with his guidance. Then, as necessary, he should clarify the mission or amend his guidance.

Leaders must think clearly and communicate effectively. That's not news. But the corollary is that the leader must learn to identify when his subordinates don't understand the mission, take responsibility and communicate more effectively. That includes listening to the soldier.

Most soldiers and subordinate leaders wake up each morning wanting to succeed. If empowered, they will accomplish their missions. One of the most useful tools to set them up for success is the backbrief—"I got it, Sir," or "Good to go, Sir," is not always sufficient. If the soldier "has it," he won't mind telling you what he "has." And if he has it, he won't recite your instructions back to you word for word (a sure sign he doesn't understand the task).

The soldier usually succeeds when the leader's explanation is clear and the soldier listens. While explaining the mission, the leader should reduce distractions as much as possible.

**4.** The soldier forgets the task. This reason for failure doesn't happen often. But in rare cases, it can bring you to your knees. I contend that a soldier's forgetting to accomplish a task is, again, the leader's responsibility. The leader has to have the systems in place to keep the soldier from forgetting. This can be as simple as the leader's ensuring the soldier makes a note of it; 3x5 cards and US Government pens can be part of your soldiers' uniform.

Other leader solutions are to set suspenses and times for in-progress reviews (IPRs). The requirement for the soldier to provide his leader a brief update can keep him from forgetting. Having a time dedicated for leader-toleader updates can work well. Usually the last 15 minutes or so of the day while the motor pool is being swept and tools and equipment are being secured is a good time for leaders who have delegated tasks to update their leaders. These updates shouldn't take a lot of time—in fact, the briefer the better.

Creating lists and adding them to the unit standing operating procedures (SOP) is another means to see that specific tasks are accomplished. The list can be part of pre-combat checks (PCCs) or pre-combat inspections (PCIs). During our execution of two National Training Center rotations at Fort Irwin, California, we used this technique, and the battery was more efficient and successful.

**5.** The soldier makes a conscious decision not to do what he is told. This is not as far-fetched as it sounds. It happens and every such event requires action by the leader.

Up until now we have looked at positive means to help soldiers accomplish their tasks. Disciplining a soldier is never fun, but in some cases it's necessary. But before a leader disciplines a soldier, he must first understand why the soldier failed.

One reason the soldier doesn't get the job done may be because he's lazy. One suggestion to motivate action is to provide a written list of tasks with suspenses and standards to be met and then involve the soldier's chain of command to ensure he accomplishes the tasks. But the leader, say a platoon leader, should not provide the written expectations to a section chief without the platoon sergeant's being aware of what's going on.

Another reason a soldier fails is because he just chooses not to do the task. Everyone at some time or another has dropped a ball—just let it drop—hopefully not a glass one. The key for the leader is that there must be consequences for the soldier's dropping the ball or he will drop balls throughout his stay in the Army. The consequence may be nothing more than reminding the soldier of the importance of the task and telling him to "pick up the ball and get it back in the air." It may take an eye-to-eye stern discussion ending with his commitment to never let such a failure happen again. It may even be necessary to provide some type of administrative action if the performance is habitual.

Most soldiers will accept responsibility for their failures and take their lumps,

becoming more likely to uphold the standard in the future. Respect, discipline and pride remain in units when there are consequences to failing to perform.

One final and very rare reason a soldier consciously chooses to disobey a leader is when he thinks the leader is issuing an unlawful order. In this case, the soldier must use his chain of command and report the incident.

Everyday too many leaders react negatively as the first option to soldier failures. In fact, many of these leaders have set their soldiers up to fail. Chewing out soldiers—reacting negatively—does not motivate soldiers or build their loyalty. The key is the leader's constructive reaction to failure. The alternative is a zero-defects climate.

These five reasons for failures are instructive for those who lead the high-quality soldiers in the Army today. However, on rare occasion, a good leader will not be able to motivate a soldier to perform while all the conditions for success are present. Under those circumstances, the soldier may be unfit for the Army. The thinking leader who understands why soldiers fail to perform will know the difference.

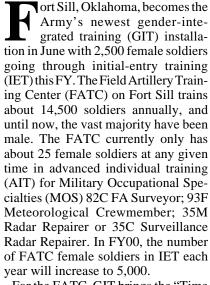
Coach Bear Bryant once said that if Alabama lost, it was his fault, and if Alabama won, it was the players' fault. Great units have leaders who set the conditions for soldier successes, which leads to soldiers who have the confidence to take advantage of those opportunities and execute.



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# Leadership is Leadership Regardless of Gender

by Lieutenant Colonel Ann L. Horner



For the FATC, GIT brings the "Time on Target" Brigade into the mainstream of a highly visible Army mission: training soldiers to standard, regardless of gender, and getting the job done right. The new GIT mission is the result of the Army's closing Fort McClellan, Alabama, which conducted GIT, and the increasing number of female soldiers entering the Army. The current plan is for Fort Leonard Wood, Missouri, to take over Fort Sill's GIT in FY05 when it completes the construction of additional facilities to handle the training load.

As the commander of the only training battalion in the FATC that has female drill sergeants and female AIT soldiers, I have been asked, "What are the differences in leading men and women?" The question implies an underlying belief that the different genders call for different leadership. My reply: soldiers are soldiers—regardless of gender.

Those leaders who approach soldiers with an attitude that women require a different kind of leadership style will not produce the best soldiers for our Army. Certainly, it takes sound leadership to lead *any* soldiers. Each soldier is unique. Leaders must assess the individual soldier's competence, motiva-

tion and commitment to ensure they take timely and appropriate leadership actions. But effective leaders avoid putting any special gender "spin" on their leadership.

Effective leadership is fair, firm and equitable for all soldiers. This sounds so simple, yet we continue to categorize soldiers and struggle with the presence of certain groups in our Army-especially women.

The Canadian Army Lessons Learned Centre at Kingston, Ontario, published the booklet "Lessons Learned—Leadership in a Mixed Gender Environment" in 1998. The document captures the Canadian Army's 10 years of experience in integrating women soldiers into many non-traditional specialties, including the combat arms. The Canadians' experiences revealed, "Almost every negative issue associated with gender integration has its roots in inappropriate leadership."

The Canadian Army found the keys to successfully integrating women include a positive command attitude that sets the conditions for success; equitable leadership and discipline in units that allow no favoritism, no harassment, no fraternization or segregation; and an absolute insistence on enforcing and adhering to the standards published for all soldiers, regardless of gender. These observations are fundamental for leaders everywhere.

Establish a positive climate. Leaders constantly must be involved in setting the conditions for the success of soldiers and units. They ensure sufficient resources, personnel and time are allotted to accomplish the mission. They establish standards that are clearly communicated and enforced. The positive tone set in guidance and expectations influences the attitudes of subordinates.

After 20 years in the Field Artillery, I know the role of women in the Army continues to be controversial. Nevertheless, it is increasingly apparent that the Army cannot fill its ranks and accomplish all its missions without women soldiers. Leaders must be "part of the solu-



tion" in accepting all soldiers and integrating them into their units.

Provide equitable leadership. Leaders must scrupulously enforce fairness and equal discipline for every soldier in the unit. Every soldier, male or female, deserves a unit climate free of favoritism, harassment, fraternization and segregation.

After the highly publicized sexual harassment incidents that occurred at the training center at Aberdeen Proving Ground, Maryland, the Chief of Staff of the Army directed every leader and soldier receive a chain teaching called "Consideration of Others." The bottom line communicated was that every soldier must be an equal member of the Army team and every soldier on the team deserves to be treated with dignity and respect.

While much attention has been focused on eradicating sexual harassment, we also must ensure favoritism has no place in our units. Women soldiers don't need (and most don't desire) special attention. For example, with the announcement of the new GIT mission at Fort Sill, the FATC began receiving media requests to cover the story of the first fill of women soldiers in basic training. I predict the media attention thrust on these "firsts" will be a source of confusion and resentment for every soldier in the unit.

The Army's newly updated fraternization policy provides strict guidance on prohibited relationships between the genders and different ranks. Importantly, it upholds the absolute need for integrity in the chain of command and prohibits those relationships that could "create an actual or predictable adverse impact on discipline, authority, morale or mission accomplishment." A leader who turns a blind eye to fraternization will do irreparable damage to his (or her) unit.

**Enforce the same standard.** Finally, there can be only one standard for all soldiers. Leaders must clearly communicate that standard, demand adherence

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to it and rigidly enforce it. Perceptions of a double standard between male and female soldiers kill both morale and cohesion in the unit—erode the team members' confidence in each other.

The physical demands of basic training are considerable. Yet we do no service to our women soldiers if we compromise the standards and allow them to perform less than what should be required of them. Training soldiers to standard is taking care of soldiers. The integration of women into our Army has been hindered over the years by leaders' enforcing standards unevenly.

To be sure, some soldiers will take advantage of a double standard, if allowed. But most soldiers want to pull their own weight and will flourish under the kind of leadership that requires all soldiers to meet one standard. Subordinate leaders must know their chain of command will support them in fairly enforcing one standard for all soldiers.

The FATC has planned and prepared for the arrival of the new female trainees. Without question, some things had to change to accommodate gender-integrated training. The brigade has interfaced with other GIT installations and sponsored cadre classes and briefings on a wide range of subjects. These include physical fitness training/injury prevention, medical support, trainee relationships, uniform and grooming standards—just to name a few.

Fort Sill has changed a number of post facilities to accommodate the incoming female soldiers. For example, the FATC mini-PX now stocks more of some items and many new items to meet the needs

of a larger number of female basic trainees. The barbershop is prepared to style women's hair and the troop medical clinic to treat new health concerns.

Fort Sill will receive many new women drill sergeants. While it is certainly desirable to have them involved in training and serve as role models for our women soldiers, their absence would not doom the FATC to failure. The FATC's ultimate success will be rooted in sticking to its training philosophy: provide spirited, disciplined, team-oriented soldiers who are physically and mentally prepared to meet the challenges in today's Army.

It doesn't take a woman drill sergeant or a woman battalion commander to train women soldiers. It takes leaders who are committed to providing that positive command climate where standards are enforced for all soldiers and every soldier is an equal member of the team—regardless of gender. And the same is true throughout the Army.



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