

# ENGINEER

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**United States Army Engineer School**  
**573-563-8080 / DSN 676-8080**

**COMMANDANT**

**MG William H. McCoy**  
563-6116  
<william.h.mccoy@us.army.mil>

**ASSISTANT COMMANDANT**

**BG (P) John E. Sterling, Jr.**  
563-6192  
<john.e.sterling@us.army.mil>

**REGIMENTAL COMMAND SERGEANT MAJOR**

**CSM Clinton J. Pearson**  
563-8060  
<clinton.pearson@us.army.mil>

**DEPUTY ASSISTANT COMMANDANT**

**COL Lou L. Marich**  
563-8080  
<lou.marich@us.army.mil>

**DEPUTY ASSISTANT COMMANDANT-USAR**

**COL Loretta Deaner**  
563-8045  
<loretta.angela.deaner@us.army.mil>

**DEPUTY ASSISTANT COMMANDANT-ARNG**

**LTC Steven K. Knutzen**  
563-8046  
<steven.knutzen@us.army.mil>

**CHIEF OF STAFF**

**LTC Alfred Pantano**  
563-7116  
<alfred.pantano@us.army.mil>

**TRADOC SYSTEMS MANAGER - ASSURED MOBILITY**

**COL Robert W. Nicholson**  
563-4081  
<robert.nicholson@us.army.mil>

**TRADOC PROGRAM INTEGRATION OFFICE-TERRAIN DATA**

**COL Thomas Crabtree**  
329-1908  
<thomas.crabtree@us.army.mil>

**COMMANDER, 1st ENGINEER BRIGADE**

**COL Bjarne Iverson**  
596-0224, DSN 581-0224  
<bjarne.iverson@us.army.mil>

**DIRECTOR OF TRAINING AND LEADER DEVELOPMENT**

**COL Paul W. Kelly**  
563-4093  
<paul.w.kelly@us.army.mil>

**DIRECTOR OF ENVIRONMENTAL INTEGRATION**

**Dr. Rebecca Johnson**  
329-1931  
<rebecca.johnson1@us.army.mil>

**DIRECTOR OF FUTURES CENTER-ENGINEER**

**COL Richard M. Hornack**  
563-7955  
<richard.hornack@us.army.mil>

**HUMANITARIAN DEMINING TRAINING CENTER**

**Mr. Rodney A. Robideau**  
596-3870  
<rodney.a.robideau@us.army.mil>

**COUNTER EXPLOSIVE HAZARDS CENTER**

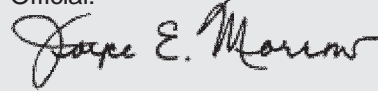
**LTC Kent D. Savre**  
593-8142  
<kent.savre@us.army.mil>

By Order of the Secretary of the Army:

GEORGE W. CASEY, JR.

*General, United States Army*  
*Chief of Staff*

Official:



JOYCE E. MORROW

*Administrative Assistant to the*  
*Secretary of the Army*

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# ENGINEER

The Professional Bulletin of Army Engineers

April-June 2007

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## UNITED STATES ARMY ENGINEER SCHOOL

### COMMANDANT

Major General  
William H. McCoy

### MANAGING EDITOR

Shirley Bridges

### EDITORS

Rick Brunk

Cheryl Green

### GRAPHIC DESIGNER

Jennifer Morgan

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# Clear The Way

By Major General William H. McCoy  
Commandant, United States Army Engineer School



On behalf of Jill and me and the entire engineer Family at your home of Fort Leonard Wood, I extend best wishes and enormous appreciation for the entire Team, to include Soldiers, Families, civilians, and loved ones. It is truly our privilege and pleasure to meet many of you and thank you personally for your service.

In May, many members of our Team were afforded the opportunity to participate in ENFORCE 2007. The St. Louis portion was hosted by the Army Engineer Association, led by COL(RET) Jack O'Neil and CSM(RET) Julius Nutter. BG(P) Jack Sterling updated the Regiment on engineer support to the War on Terrorism, the transformation of the Regiment, and the Future Force. His brief is posted for your viewing and use on the Engineer School homepage. I appreciate and applaud the efforts of our Councils of Colonels and Command Sergeants Major to identify, discuss, and address the most critical matters related to the future of our Regiment. Great work was completed, but there is much work yet to be done. The vendor displays reinforced the greatest of our total team, Army, and Nation.

Day 3 began on a beautiful day at Fort Wood with the colors of many of our units and Soldiers of 1st Engineer Brigade representing the Regiment on the field. It was fitting and heartwarming to say the least. Later that morning, we officially dedicated the new Counter Explosive Hazards Center (CEHC) in honor and memory of SFC Paul Ray Smith (MOH winner, 4 April 2003, Baghdad). This beautiful facility enhances our ability to train our Soldiers to defeat the great IED threat. I was honored to participate in the ceremony with Mrs. Birgit Smith, CW2 Bill Smock (INARNG Soldier-Artist who painted and donated the portrait of SFC Smith), and LTC(P) Kent Savre (CEHC Director). The memorial service at the Engineer Memorial Grove was a great tribute and honor to our 231 fallen engineer Soldiers since the beginning of the War on Terrorism. It was our distinct privilege to have the 52d Chief of Engineers, LTG Robert Van Antwerp, join us at Fort Leonard Wood and address our Soldiers and leaders. We ended the day with the Regimental Ball, during which we recognized many of our great Active, Reserve, and National Guard Soldiers and leaders. I'd like to again thank everyone for their support to and participation in ENFORCE 2007,



*Engineers in Full-Spectrum Operations.* I look forward to next year.

I would like to take a moment to address training of the Regiment. I'm proud of the Soldiers and leaders of the 1st Engineer Brigade who are responsible for training our growing force. They consistently achieve excellence in training, adjusting to emerging trends and TTP, while significantly constrained by resources—most notably personnel. The CEHC is fully engaged in a surge of counter IED training, preparing deploying forces for Iraq and Afghanistan. We are preparing for the move of the Explosive Ordnance Clearance Agent (EOCA) Course from

Red Stone Arsenal to Fort Leonard Wood beginning this September with the pre-positioning of the lead cadre. Given the continued effects of IEDs on our forces by our enemy and the important changes to the blow-in-place (BIP) policy in Iraq, I ask engineer commanders and leaders to prioritize attendance of our Sappers at the two-week R2C2-Sapper Course and soon to be four-week EOCA Course. These courses are invaluable to protecting the force and defeating this threat.

As is often the case in the Army, summer comes with the transition and farewell of great leaders and Families. Notably, the Maneuver Support Center and the Engineer School farewell two great engineer officers, COL Bobby Nicholson and COL Paul Kelly, and their Families as they retire after nearly six decades of distinguished service to the Army. Our Regiment greatly benefited from their service, and it goes without saying that we will miss them greatly. As we enjoy summer activities and drive the roadways of America, I ask everyone to remain extremely vigilant of the risks and hazards that abound. Already this year, we have lost far too many Soldiers, Army civilians, and Family members to motor vehicle (several without seatbelts), motorcycle, and drowning accidents. I need your help by watching out for each other, using the battle buddy system, employing composite risk management in all that you do, on and off duty, and employing safe practices to protect yourselves and your Families and friends. Proper use of alcohol is a never-ending concern. You are all too important to us, each other, and our Army and Nation to lose you to senseless and preventable accidents. Enjoy your summer, best wishes to you and your Families, and may all the greatest blessings be bestowed upon our Soldiers, civilians, and Families deployed and supporting our Nation at war.

# Lead The Way

By *Command Sergeant Major Clinton J. Pearson*  
*United States Army Engineer School*



## ENFORCE 2007

I would like to take this opportunity to welcome LTG Robert Van Antwerp, and his wife Paula, as the 52d Chief of Engineers and thank the command team of the 1st Engineer Brigade for their efforts in making ENFORCE 2007 the success that it was. Under the leadership of COL Iverson and CSM Falaniko, the Soldiers and civilians of the brigade showed their dedication to the mission by working tirelessly throughout the weeks leading up to and during the conference. Thanks also to the Army Engineer Association's COL (R) Jack O'Neil and CSM (R) Julius Nutter for their hours of support throughout the week and to all the vendors for their outstanding displays and great information. Thanks for all you continue to do for our Regiment and for helping make ENFORCE 2007 such a success.



We kicked off ENFORCE in St. Louis with an evening ice breaker, where we were able to rekindle old friendships and meet new people. This year's breakout sessions were a great opportunity for us to discuss important issues about the future transformation of our Regiment. Newly activated units since the last ENFORCE joined the engineer Regimental colors for the Regimental Review ceremony. The new Counter Explosive Hazards Center (CEHC) building was dedicated to Medal of Honor recipient SFC Paul Ray Smith. We took the time to honor our fallen sappers during a solemn memorial ceremony at the Engineer Memorial Grove. This somber event served as a reminder that freedom isn't free. We are forever in their debt, and our thoughts and prayers are with the families of every Soldier who has made the ultimate sacrifice. We continue to pray for those Soldiers who are deployed in harm's way.

As we progressed throughout the day, we received the State of the Regiment address from LTG Van Antwerp, who spoke with words of wisdom. During this year's Regimental Ball, we announced the gold DeFluery award recipient, LTG Elvin R. "Vald" Heiberg III, the 46th Chief of Engineers; the Itschner awards; and the Best Sapper awards. It was good to see all of the Regiment's leaders again, back here at the home of the engineers, engaged in the shaping of our future in support of our transforming Army. I especially want to thank the Engineer Branch Sergeant Major, the Engineer Personnel Proponency Sergeant Major, and the 416th ENCOM Sergeant Major for taking time out of their busy schedules to be a part

of the Council of Sergeants Major. Their presence during our conference was historic, and the insights they have on what's important in our Army, its future, and the initiatives being worked were of great value to us all.

One of the aspects of ENFORCE that is extremely important to the future of our Regiment is the interaction that results when we all come together on common ground. This year proved to be very beneficial because we were able to extract recommendations on important issues such as professional and personal development for all Soldiers, MOS consolidation, assignment and training considerations, promotion considerations, and force structure and equipment modernization.

## Best Sapper Competition

The Regiment's 3d Annual Best Sapper Competition was held from 30 April - 3 May 2007. There were 13 teams of high-speed and motivated sappers that entered the competition. However, we can only have one 1st place with a runner-up and 3d place, so in 1st place were 1LT Krug and SSG Flores; 2d place went to CPT Evangelista and CPT Winkelmann; and 3d place winners were 1LT Gillman and SGT Paulson. This was the best competition yet! I would like to thank the sponsors that supported our engineer Soldiers. For next year's competition, I encourage all commanders and sergeants major to plan ahead and come to Fort Leonard Wood to show your support to our sappers.

In closing, let me say thanks for your dedicated support to our great Regiment. It is held in high esteem, and that is due largely to all your efforts. We are always on the cutting edge of full-spectrum engineering with the energy of taking care of each other, our Soldiers, and their Families—while giving our total support to mission accomplishment. Be proud of who you are, and always let those around you know that you are a proud member of the best Regiment in our Army. God bless you all.

Essayons!! Engineers Lead the Way!

**CSM's Note:** I want to publicly thank and say farewell to the CSMs who will leave the Army this year after having served with all their being, mind, heart, and body. Our Regiment will be forever in their debt. Their presence in their units will certainly be missed.

# STATE OF THE REGIMENT

## ONE TEAM – RELEVANT, READY, RESPONSIVE, RELIABLE

By Mr. Rick Brunk

Lieutenant General Robert L. Van Antwerp became Chief of Engineers and Commander of the United States Corps of Engineers on 18 May 2007, taking charge of the nation's leading public engineering agency. His previous assignment was as Commanding General, United States Army Accessions Command and Deputy Commanding General for Initial Military Training at Fort Monroe, Virginia. Other assignments include the United States Army Maneuver Support Center and Fort Leonard Wood, Missouri, and Commandant, United States Army Engineer School; United States Army Corps of Engineers Los Angeles District; the United States Army Division, South Atlantic, Atlanta, Georgia; and the 326th Engineer Battalion, 101st Airborne Division (Air Assault), during Operations Desert Shield and Desert Storm.

Just days after assuming duties as the 52d Chief of Engineers and commander of the United States Army Corps of Engineers, LTG Robert L. Van Antwerp spoke to senior engineer leaders at ENFORCE 2007 at Fort Leonard Wood about the State of the Regiment, focusing more on how to improve for the future than on the Regiment's current state.

"Continuity and change: There will be both," he said, "so get ready for them. We're going to recalibrate this organization. We're going to see if we've got it right. And if we've got it right, we're going to drive on." He introduced two acronyms to explain how that would happen: SIW (share ideas willingly) and SIS (steal ideas shamelessly). He said that if we're willing to share division to division, district to district, training battalion to training battalion, and company to company, we won't have to invent everything ourselves. He said that almost every good idea has already been thought of and that this was one area where we can steal shamelessly.

LTG Van Antwerp talked about working on the *Army Strong* campaign. He said that a New York advertising firm sent some of their personnel to Fort Jackson to basic training to help develop a new slogan for the Army. For four and a half days, they did everything that the basic trainees did during that time. At the graduation ceremony, they remarked that they thought they were pretty strong when they got there but that now they were *Army Strong*. Thus, the slogan was born. LTG Van Antwerp has taken it a step further by asking "What does *Army Strong* mean to engineers?" The answer, *Army Strong*,

*Engineer Ready*, was depicted in a short video with the following definitions of the motto: <sup>1</sup>

Webster defines *ready*  
As being prepared mentally or physically  
For some experience or action;  
Prepared for immediate use.  
But with all due respect to Webster,  
There's ready,  
And then there's *Engineer Ready*.  
It is a physical readiness.  
It is an emotional readiness.  
It is a readiness of character,  
And a readiness of purpose.  
It is a readiness to do good today,  
And a readiness to do well tomorrow.  
It is a readiness to obey,  
And a readiness to command.  
It is a readiness to build,  
And a readiness to tear down.  
It is a readiness to get yourself over,  
And a readiness to get over yourself.  
There is nothing on this green earth  
That is more ready  
Than the U.S. Army Corps of Engineers.  
Because there is nothing on this green earth  
That is more ready  
Than the Soldiers and Civilians  
Of the U.S. Army Corps of Engineers.  
*Army Strong, Engineer Ready!*

LTG Van Antwerp said that the nearly four months between his nomination for the post and final Congressional confirmation helped prepare him for his new job. "The first thing it did was build a passion in my heart for what we do. I don't think that just liking something inspires. I think you have to love it." The delay also helped him solidify the Regiment's top priorities, which are listed below, but not necessarily in order of their importance.

- Support the Global War on Terrorism (GWOT) and expeditionary missions.
- Enhance the quality of support to Soldiers, Civilians, Families, and the public.
- Complete the transformation of the Theater Engineer Commands.
- Effectively prepare for and respond to disasters.
- Enable Gulf Coast recovery.
- Deliver military, civil works, research and development (R&D) and regulatory programs and projects.

In addition, there are three tenets which are inherent in each of the priorities. They are—

- Communicate transparently. “This means that if I’m at risk, you tell me about it. You don’t keep that from me, because I have a right to know, whether I’m a citizen, a stakeholder, or whatever.”
- Focus on your mission. “You have to think about relationships—the people, the center of gravity—to get the mission done.”
- Team with industry. “I’m going to use a different word from ‘partnering.’ I think we have to *team* with industry,” he said, and he used a sports metaphor to compare the relationship between the Regiment and industry. “What is partnering, and what does being on the same team mean? If you had a basketball team, you’d look at every team member, and every team member has to contribute. But what about when you have a project and you’re counting on part of that industry team to deliver that project on time. Are they not part of your team? Are they just another partner, or are they really a part of the team? I think they’re a part of the team. We have about 35,000 employees in the Corps of Engineers, and there are about 300,000 under contract to us,” he said. He explained that the team concept will be important during his tenure as Chief of Engineers.

“The priorities are *what to do*. This is my philosophy of *how to do it*,” he said, pointing to the word *T.E.A.M.* on a slide. “If you think about a team, what do you think about? For one thing, you think about teammates. I depend on you, and you depend on me. We’ve got to do our jobs separately to do it together. In the ultimate game, it’s not about any individual. I love it when a player gets up and says, ‘I did it for the team.’”

“**T** - stands for *trust*. How are we viewed out there? Do you think they trust us? Are we trusted internally? Are we trusted externally? In one sense, I mean trust in your communications. When we talk about strategic communications, it means that what you say is true. There’s a sort of contract in trust, that when you say you’re going to do something, you deliver it on time. My gut feeling is that there are a lot of people out there who don’t trust us, not like they should. Not for an organization as dependable and incredible as we are. So we’ve got to work on that trust.”



**LTG Robert L. Van Antwerp, Chief of Engineers and Commander of USACE, gave the “State of the Regiment” address during ENFORCE 2007.**

“**E** - stands for *excellence*. What goes into excellence? It’s measured in a lot of different ways. You know it when you see it. It’s not an ordinary way of doing things; it’s an extraordinary way of doing things. When we do excellent work and they say thanks, we’re going to say, ‘It’s been our pleasure.’ Not just ‘You’re welcome,’ but ‘It’s been our pleasure,’ because it is our pleasure to serve.

“**A** - stands for *It’s all about people*. When you get to know me well, you’ll know that’s where it is for me. That’s why I’m still in. That’s why I want to stay and do this.”

“**M** – stands for *motivating*. A lot of it is your personal example. When you get the right talent and they set the right example, it’s motivating.”

“When you do all these ‘team’ things, you’ll leave a legacy. And don’t we want to leave what’s right for the next generation? What we’re doing today is going to make a difference tomorrow.”

LTG Van Antwerp ended by saying, “I’m thrilled to be your Chief of Engineers. I’m honored. It’s a privilege. I didn’t request it or even aspire to it. But when offered, I was willing, and I’m passionate about doing it—for 4 years or 10 years or whatever. I thank you for what you’re doing; I commend you for what you’ve done. ... I want to be with you when we do what we’re going to do. I think we have a bright future. Not only that, we’ve got the leaders and the people to get it done. So let’s go out and do it.”



*Mr. Brunk is the editor of the Engineer Professional Bulletin. Previously, he edited the Fort Leonard Wood newspaper, Guidon.*

#### **Endnote**

<sup>1</sup>The Army Strong, *Engineer Ready* video shown during the Chief of Engineers address was put together by Major Dawn Conniff, Headquarters, U.S. Army Corps of Engineers.



# Training the Neglected Core of Army Leadership – Troop-Leading Procedures

By Lieutenant Colonel Charles Olsen, Major David Sierakowski, Major Ronald Holden, and Command Sergeant Major John Laudonio

**A**nyone who has served at a mobilization training center (MTC) has probably observed something similar to the following scenario when working with highly cross-leveled Army National Guard or United States Army Reserve units led by inexperienced commanders and/or key leaders:

- ✓ *About 48 hours ago, First Lieutenant Smith looked at his training schedule to confirm that his detachment would conduct a combat patrol convoy and improvised explosive device defeat (IED-D) training, but failed to clarify the intent, standards of training, and exact start time.*
- ✓ *Two hours prior to commencement of the combat patrol convoy, confusion reigns in the unit, because 20 Soldiers did not receive advance notification of required equipment. Four Soldiers suddenly announce that they have dental appointments.*
- ✓ *Due to an unannounced state dignitary visit, the commander cancelled yesterday's training meeting that was to finalize the unit tactical standing operating procedure (TACSOP) and determine the best unit crew configuration options.*
- ✓ *A platoon sergeant suddenly reports two HMMWVs and an M2 non-mission capable, and the supply sergeant has no crew-served weapon (CSW) blank adaptors for the training.*
- ✓ *The unit arrives on time on Range 29, but at the wrong entrance.*
- ✓ *The executive officer (XO) worked until 0200 to complete 80 percent of an operations order (OPORD)...by herself.*
- ✓ *The same XO answers at least 20 "What's going on?" questions that morning.*
- ✓ *Instead of rehearsing crew drills, a squad leader tells his Soldiers, "You'll find out everything when you get to the lane."*

If the step sequence of these eight shortcomings seems very familiar, congratulate yourself on being one of a minority of military leaders who has memorized and understands troop-leading procedures (TLP). Last year, TLP were cited as a key training focus area for all deploying U.S. units by LTG Russell Honoré, First United States Army commander, in his 20 Absolute Training Rules.<sup>1</sup> TLP get a lot of lip service, but are often considered merely another tool for company-level leaders; the military decision-making process (MDMP) is the related leadership tool for battalions and above.<sup>2</sup> Yet successful, seasoned military leaders at all levels conduct TLP out of habit, keeping their teams informed through warning orders (WARNOs), getting out of the tactical operations center (TOC) to reconnoiter, using the MDMP to complete their plans, etc. TLP are considered *procedures*, and the Army's previous leadership manual (Field Manual [FM] 22-100) cited TLP, but surprisingly and sadly you won't find this word sequence in FM 6-22, the Army's newest leadership manual.<sup>3</sup>

*"To accelerate the transformation of our training...and develop adaptive, multiskilled leaders, we must achieve full-spectrum capability with full-spectrum training."*

General Peter J. Schoomaker  
Chief of Staff, U.S. Army  
"Transformation of Training"  
(May 9, 2006) pp 1-2.

The First Army commander is not among those who have left TLP out of his leadership lexicon. He has stipulated that observer-controller/trainers (OC/Ts) at every MTC will supervise to ensure that no collective training occurs until TLP are done to standard.<sup>4</sup> Observer-trainer-mentors (OTMs) ensure that every mobilizing unit that comes through the 181st Infantry Brigade at Fort McCoy, Wisconsin, receives two days



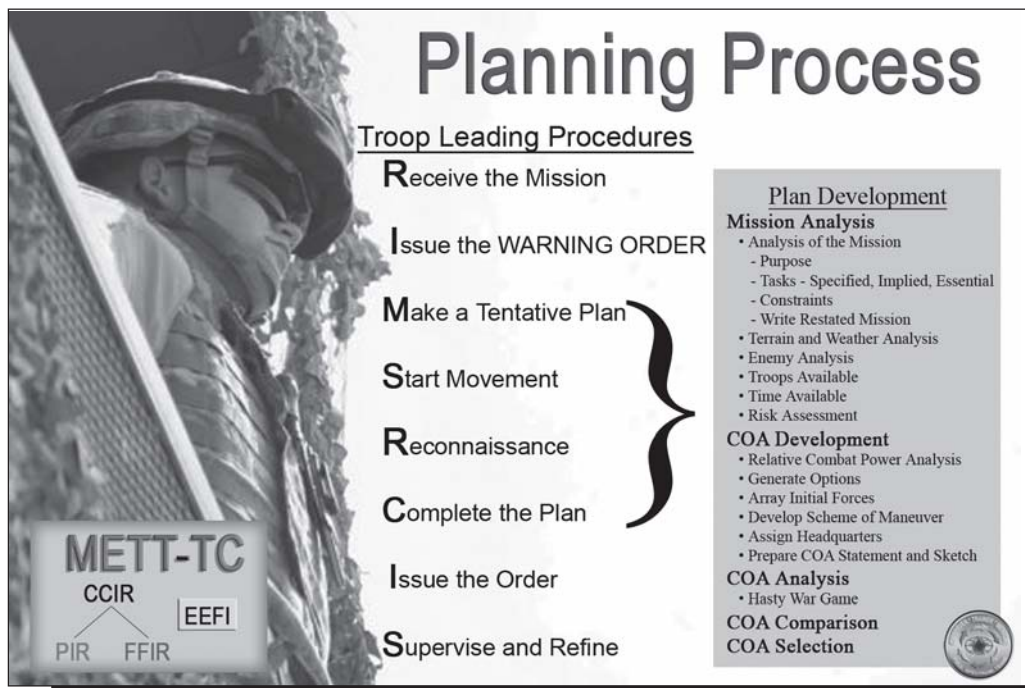


Figure 1

of formal, counterinsurgency (COIN)-based TLP and MDMP instruction. The essence of TLP is shown in Figure 1.

This article addresses the critical need for OTMs during National Guard/Reserve post-mobilization training, the key components of a successful program, and a typical day for an OTM. If you are returning from a deployment, you may find your talents ideally suited to be an OTM to instill TLP, lessons learned, and leadership principles in this year's deploying leaders during their postmobilization training.<sup>5</sup>

### Definitions

**Observer-trainer-mentor.** You may never have heard of an OTM, which is not surprising since the authors of this article created the acronym. Unlike OC/Ts—who are responsible for controlling and training Soldiers on specific individual or collective tasks or a specific training event (such as urban operations, hand grenade employment, or an S2 section evaluation during an Army Training and Evaluation Program [ARTEP])—OTMs are experienced leaders assigned to mobilizing units for the duration of their predeployment training cycle to provide mentorship and continuity of assessment. They fulfill the role/need of a higher “chain of command” for independent combat support units when none are present at the MTC. OTMs move beyond the “control” duties of OC/Ts and instill sound daily TLP in units and train leaders *how to think* vs. *what to think*, to prepare them for the nonlinear decisions required in a COIN environment. Since the end of Desert Storm, pin-on time to captain has been reduced by more than 25 percent, resulting in less operational experience for company commanders; OTMs share their years of experience with these young commanders.<sup>6</sup> Prior to deployment, OTMs are also responsible for identifying those few leaders who lack the capacity to lead in combat and train their replacements.

**Troop-leading procedures.** TLP are a sequence of actions that enable the commander or platoon leader to use available time effectively and efficiently in the planning, preparing, executing, and assessing of combat missions; they also assist leaders in making, issuing, and supervising OPORDs. TLP are integrally coupled with the MDMP.<sup>7</sup>

### Mobilization 101

**M**TCs execute required individual and collective Coalition Forces Land Component Command (CFLCC) and United States Army Forces Command (FORSCOM) training to validate units for deployment. For some units, this can exceed 200 tasks.<sup>8</sup> When a unit receives a mobilization order at its home station, commanders are faced with a broad scope of logistics, personnel, family readiness, and training planning. They are also transitioning and assuming new responsibilities from their handful of “full timer” Active Guard and Reserve staff members.

The unit receives expert guidance from the mobilization assistance team (MAT). In addition, its assigned training support brigade (TSB) provides a unit mobilization assistor (UMA) to work with the unit at home station. The UMA helps the commander understand the mobilization process and tracks administrative and logistical requirements. It is a hectic environment and not a good time or place to learn the basics of team building and neglected TLP. Once the unit arrives at the MTC, UMAs provide the link between the unit and the MAT to address the unit's logistical and administrative needs and to validate that every Soldier achieves the standard in required individual and collective tasks.<sup>9</sup> Training support battalions (TSBNs) provide the OC/Ts to train each of the major training lanes. OTMs complete the picture.

## OTM Evolution

In February 2006, the commander of 2d Brigade, 85th Division (now 181st Infantry Brigade, First Army Division East), and the Fort McCoy installation commander prepared for the influx of separate combat support units and Soldiers and Airmen who would be conducting mobilization readiness training at Fort McCoy in 2006. During a training visit to Camp Shelby earlier that year, the 2d Brigade commander observed how the commander of 4th Battalion, 87th Division, assigned battalion commanders and command sergeants major as “combat counterparts” to train and advise the battalion-level leaders of the 1-34th Brigade Combat Team (BCT) on a daily basis.<sup>10</sup> Upon returning to Fort McCoy, the 2d Brigade commander formed a team of field grade officers and senior noncommissioned officers (NCOs) from the 1st Brigade, 85th Division (Training Support), augmented later by ten recently redeployed Operation Iraqi Freedom (OIF)/Operation Enduring Freedom (OEF) Operation Warrior Trainer (OWT) leaders to train and mentor down to the company level. He added a fourth tier of training support to his existing team concept (See Figure 2):

- MAT/mobilization unit inprocessing center (MUIC) (installation resources, training synchronization, and unit validation)
- TSBns (training lane execution and ARTEPs)
- 181st Infantry Brigade staff (coordinate functional, specialty, and new equipment training).
- The fourth tier of training support would be OTMs who would train leaders in areas such as COIN MDMP, TLP, maintenance management, Uniform Code of Military Justice (UCMJ), time management, why we fight, TACSOP/mission-essential task list (METL) development, and fitness programs.



Figure 2

## OTM Need

BCTs bring their own chain of command for their Soldiers. The missing piece at many MTCs is a chain of influence between the TSB/installation commanders and non-BCT mobilized units. OTM field grade officers and senior NCOs provide the necessary support. In the case of Fort McCoy in 2006, OTMs represented a “higher echelon of command” between separate unit commanders with different needs and issues. OTMs gave the TSB commander and installation commander the eyes and muscle to train and enforce standards.

Accelerated deployment cycles and personnel turnover often lead to increased personnel cross-leveling, which can make it difficult for a commander to build and lead a cohesive unit during the train-up cycle.<sup>11</sup> This is especially true if it is a combat support unit that is not organic to a BCT. Junior commanders in these units are often accustomed to operating relatively independently at their armories without battalion/brigade staff nearby. In the limited time available during weekend battle training assemblies, TLP often take a back seat to the complex individual military occupational specialty (MOS) and specialized schools and training needed in postal, medical, engineer, logistics, signal, and finance units.

National Guard and Reserve Soldiers bring a valuable skill set dimension to COIN operations that the Active Army may not. Civilian skills are often aligned with, and augment, military duties. Moreover, civilian professions often provide a useful common ground with international military or agency counterparts in-theater. The authors of this article are all mobilized reservists and know the value that reservists bring to the fight. However, the mathematical reality of our system is that even the most dedicated reservists usually do not possess the years of day-to-day military experiences as their Active Army peers. It is a challenge for some leaders to make the transition from a battle training assembly leader, where informal interactions among all ranks are common, to an Active Army leader who faces tough personnel decisions on a daily basis.

OTMs remind leaders that their Soldiers need leadership vs. “likership.” In addition, many leaders need to let go of linear doctrine and learn new COIN doctrine and terms. OTMs get them up to speed fast on doctrinal changes (to include an acronym primer tool) and expose them to cutting edge Knowledge Management Centers such as the Battle Command Knowledge System (BCKS) and the Center for Army Lessons Learned (CALL). We include leader-based practical exercises in escalation of forces (EOF), cultural negotiations, contemporary leadership challenges, and a full-spectrum staff (and modified company-level) MDMP involving all six lines of effort (LOE) depicted in Figure 3.

If units arriving at MTC McCoy have a low level of physical fitness and weight-control readiness, the OTMs provide nutrition and fitness guidance for the leaders to conduct challenging, safe, battle-focused physical training (PT). Units often increase their average Army Physical Fitness Test (APFT)

scores considerably after implementing the OTM frequency, intensity, type, and time (FITT) exercise program and the First Army tactical foot march requirements.

Deploying National Guard and Reserve officers and senior NCOs at Fort McCoy should know the 8 steps of TLP prior to leader training. (Less-than-successful Reserve unit training experiences primarily stem from lack of TLP knowledge.) In addition, basic command functions that may require OTM training at the MTC include conducting a formal maintenance precombat inspection (PCI), administering an Article 15 hearing, reading a Materiel Condition Status Report, conducting an effective training meeting, and establishing an effective and responsive Prevention of Sexual Harassment (POSH)/Equal Opportunity (EO) program. Since dedicated citizen-Soldiers don't have the benefit of experiencing these events 365 days a year like their Active Army counterparts, OTMs fill these training gaps by going beyond validation requirements—they teach leadership skills for life.

*"We must continually think about the junior commissioned or noncommissioned officer who has to make a huge decision, often with life or death consequences, in the blink of an eye. There is no substitute for flexible, adaptive leadership."*—General David H. Petraeus<sup>12</sup>

### Launching the OTM Full-Spectrum Team

In March 2006, the OTM officer in charge (OIC) visited the Combined Arms Center (CAC) for a week to learn and implement the latest COIN and full-spectrum leadership doctrine. It was here that the CAC commander, Lieutenant General (now General) David H. Petraeus, instilled the *Engine of Change* concept to train leaders in full-spectrum operations along the six lines of effort shown in Figure 3 and to learn the lessons from an article called "Winning the Peace – the Requirement for Full-Spectrum Operations."<sup>13</sup> The CAC team advocated training leaders *how to think* vs. *what to think*.

The OTM OIC concluded that OC/Ts are imperative during training events but that OC/T infers "controlling" leaders. Upon completion of "scheduled training" for the day, the OC/T approach is not desirable when leaders take charge of their units and TLP for the next day are just beginning. In discussing leadership, the word "mentoring" is referred to in 25 paragraphs of FM 6-22; OTMs would train and mentor leaders to guide them and let them learn on their own through experience. Certainly a control (or higher command) function

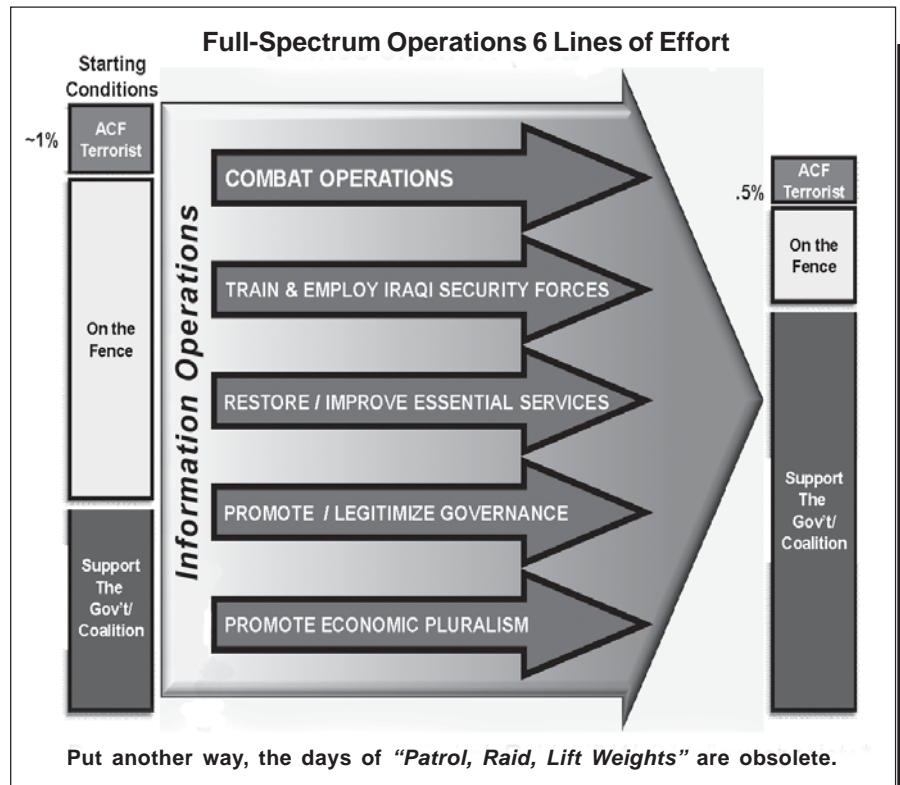


Figure 3

would be an option, but only when critical questioning and suggestions failed. The OTM OIC promised the CAC leaders that "check the block" and/or "turn-key" training would not be an option for the OTM full-spectrum team (OTM FST) in training leaders to win.

Napoleon Bonaparte once said, "You can ask me for anything you like, except time."<sup>14</sup> This applies to good TLP as well as to the fact that the OTM FST had less than a month to prepare before the first units arrived. Within 3 weeks, the basic OTM processes had been developed, a 44-topic leader training program (LTP) had been constructed, the OTM team concept for mobilizing units had been created, and the OTM unit logo had been designed.<sup>15</sup> On 14 March 2006, the OTM FST began training its first unit. From after-action reports (AARs), unit exit surveys, and shared best practices, the OTMs learned how to improve for every mobilizing unit thereafter.<sup>16</sup>

### The OTM Mission

The 181st Infantry Brigade OTM FST ensures that every unit deploying into theater has competent and confident officers and NCOs who know how to lead their Soldiers and win in a COIN environment. The OTM FST executes four key training functions:

- A full-spectrum LTP to train required FORSCOM leader tasks.
- A professional development program (PDP) to train key leader tasks outside of FORSCOM requirements.

OTM Leader Training Program	
Specified Tasks	
(Required FORSCOM Change 8 Leader Training)	
3A - COE/Full-Spectrum Operations/Why We Fight	
3C - Perform Cultural Negotiations	
3E - Lethal/Nonlethal Operations	
3I - Risk Management	
3L - TACSOP Development	
3O - Fitness/Combat Stress	
3S - COIN Fundamentals	
3U - PCC/PCI	
3Z - IPB	
4D1 - TLP/OPORDs	
4D2 - C2 and MDMP	
4D2 - Information Operations	
4D2 - EBO (p61)	
5B5 - Establish Company TOC	
	<b>Brigade Commander Specified Tasks</b>
	1. TLP
	2. OPORDs
	3. Implement EO/POSH Program
	4. AR 15-6/UCMJ Overview
	5. Conduct AARs
	6. Supply/Maintenance Management
	7. Role of Commander/First Sergeant
	8. Tactical Communications
	9. Leader OPSEC Considerations
	10. Rear Detachment Commander/FRG
	11. RSOI OPLAN

Figure 4

- Ongoing coaching and mentorship via embedded OTM teams to build unit TLP and cohesion.
- Unit leadership assessments using the “Big 10” process for the 181st Infantry Brigade commander.

**Leader Training Program.** Within two weeks of unit arrival, the leadership training team conducts the four-day LTP for officers and NCOs in the grade of E8 and above. Concurrently, NCOs in the grade of E4(P) to E7 receive two days of the NCO Leader Training Program (NCOLTP) (taught 100 percent by NCOs!). The LTP covers 17 core leadership topics and the NCOLTP covers 9 core topics. Figure 4 shows 14 required CFLCC leader training topics along with 11 others directed by the 181st Infantry Brigade commander. The training is heavy on practical exercises and OPORD creation. The OTM has an AAR from every unit, and so far, feedback from units has been extremely positive. Among the most popular blocks of training are “Why We Fight” and “Killology,” which address the “why” of OIF/OEF in a frank manner that is lacking in most training and media channels. Figure 5, page 8, depicts the full training list offered by the OTM FST.

**Professional Development Program.** The 21 topics in the PDP (Figure 5) are “electives” that most unit leaders need refresher training in. These hands-on topics are trained during the last day of the LTP, as selected by each unit commander, and trained at the unit during rare “open” unit training time periods. Generally, once a unit tried one PDP course, other PDPs would follow. The commander of the 395th Finance Battalion scheduled his leaders for virtually every PDP during his unit training time.<sup>17</sup>

**Team Program.** A field grade officer and senior NCO are assigned to OTM up to three mobilizing units for the duration of a unit’s predeployment training cycle. We prefer that OTMs

cover multiple units, since we believe that a “24/7” presence stifles unit leader growth and their ability to take charge.<sup>18</sup> FM 6-22 states that the Army relies on “mentorship” as a leader development system that compresses and accelerates development of professional expertise, maturity, and conceptual and team-building skills.<sup>19</sup> The short mobilization cycle is compressed to say the least!

Figure 6, page 12, depicts the 20 primary duties of an OTM team with a unit. Being an effective OTM starts with training and enforcing the First Army commander’s 20 Absolute Training Rules which specify, among other things, that units will execute TLP with daily precombat checks (PCCs), risk assessments, and OPORDs. They also engage in critical questioning, coaching, and sharing of their recent OIF/OEF experience. OTMs also share more than 54 leader tools ranging from PCC/PCI checklists to leader book inserts. One example in our “OTM Tool Kit” is the checklist of subjects to cover during a relief-in-place (RIP)/transfer-of-authority (TOA) video-conference (VTC) (Figure 7, page 13).

**Big 10 Assessment Program.** Every 48 hours, the OTM team compiles a unit leadership assessment, known as the “Big 10” evaluation, to assess and track unit leadership progress. OTMs counsel unit leaders and the results are briefed to the TSB commander at the weekly “Eagles Call” briefs. Commanders sequentially brief status and improvement plans and learn from (and amidst) their peers in a heightened “command and staff” environment. The first five of the “Big 10” criteria are derived from TLP, while the last five are more specific to unit cohesion, safety, and fitness.<sup>20</sup> Units are rated from 1 to 5 with “1” being the lowest. A “4” indicates that the unit is fully proficient in the tasks. A “5” indicates that subordinate leaders are also fully proficient, and the unit executes above standard in these areas even in the absence of the commander and noncommissioned officer in charge (NCOIC). The unit progress is tracked and the unit is classified *green*, *amber*, or *red* accordingly. Figure 8, page 14, depicts an example of a Big 10 Progress Track and Figure 9, page 14, shows a sample of a Big 10 Daily Assessment.<sup>21</sup>

### TLP Notes, Quotes, and Comments

**R**eceive the mission. Too often, leaders do not receive or clearly understand all five “Ws.” Insist on it, particularly the “Why,” which helps clarify effects and commander’s intent. Get the desired end state.

**Issue a Warning Order.** How many AARs in the history of the Army have started with “We need to communicate better.” Well, it starts here. Don’t wait until you have all the facts—get word out to your Soldiers so they can get moving on steps 4 and 8. One unit posted signs all over its TOC that read, “Who else needs to know!”

## Sample OTM Leadership Team – “Full-Spectrum” Training Program

<u>Leadership Training Program (LTP) for E8 and Up</u>	<u>Battalion</u>	<u>Company/Detachment</u>
1. LTP Introduction	X	X
2. OTM Overview/OIF Theater Update (1.0 hr)	X	X
3. Why We Fight/Killology (1.5 hr)	X	X
4. OPORDs/Problem Solving/Leadership Tools (2.0 hr)	X	X
5. Troop-Leading Procedures (3.5 hr)	X	
6. COIN Military Decision Making Process (4.0 hr)	X	
7. Award/Officer Efficiency Report (OER)/NCO Efficiency Report NCOER) Updates (1.0 hr)	X	X
8. Casualty Administration and Reporting Procedures (1.0 hr)	X	X
9. Command Philosophy/Developmental Counseling (1.0 hr)	X	X
10. Article 15-6/EO/POSH Leader Issues (1.5)	X	X
11. Implementing a Fitness/Nutrition Program (1.5 hr)	X	X
12. Contemporary operating environment (COE)/FM 3.0 new 2006/ FM 7.1/Terms/Effects-Based Operations (EBO) (1.0 hr)	X	X
13. COIN/Full-Spectrum Operations (6 lines) (1.5 hr)	X	X
14. Intelligence Preparation of the Battlefield (1.0 hr)	X	X
15. Conducting Training Meetings (1.0 hr)	X	
16. Conducting an AAR (1.0 hr)	X	X
17. Cultural Negotiations for Leaders (1.5 hr)	X	X
18. EOF, IED-D Basics, and OIF Operations Q&A (2.0 hr)	X	X
19. Safety – Risk Management and Assessments (1.0 hr)	X	X
20. SOP and METL Development (1.0 hr)	X	X
21. Maintenance/Supply Management for Leaders (1.0 hr)	X	X
 <b><u>Professional Development Training (PDT) – Additional Optional Leader Training</u></b>		
1. Operational Terms, Graphics, and Symbols (1.5 hr)	X	X
2. Role of the commander/XO/1SG/PSG (1.0 hr)	X	
3. Developing a Command Philosophy and Vision	X	X
4. Microsoft Office Techniques and Tips (1.0 hr)	X	X
5. Weapons of Mass Destruction (WMD)/Bioterrorism Primer (1.5 hr)	X	X
6. Establishing a Company TOC (1.0 hr)		X
7. Financial Readiness for Leaders (1.0 hr)	X	X
8. Army Command and Control (C2) Digital Systems (1.0 hr)	X	X
9. Combat Support Overview (1.0 hr)		X
10. Traditional Customs and Courtesies of the Service (1.0 hr)	X	X
11. Tactical Communications Techniques and Joint Network Node (JNN) (1.0 hr)	X	X
12. Motivating Soldiers (1.0 hr)	X	X
13. IED Defeat MDMP/Earthmoving Fundamentals (2.0 hr)	X	X
14. Joint Operations Overview	X	
15. Blue Force Tracker	X	X
16. Language Lab	X	X
17. “Why We Fight” Movie Series (History Channel)	X	X
18. JAG Q&A 2-6445 (ROE, EOF, Article 15-6, SH, EO, Misc.)	X	X
 <b><u>NCO Leader Training Program (NCOLT)</u></b>		
1. Conducting PCI/PCC (2.0 hr)		
2. Implementing a PT Program (1.5 hr)		
3. Risk Assessment (1.0 hr)		
4. CASEVAC/Medical Evacuation (MEDEVAC) for Leaders (1.0 hr)		
5. Section/Squad TLP/MDMP/OPORDs (3.5 hr)		
6. Conducting Training and AAR to Standard (1.0 hr)		
7. NCOERS/Counseling Subordinates, and Leader Books (2.0 hr)		
8. Conducting a Platoon Training Meeting (1.0 hr)		
9. F/Counter RCIED (Remote-Control Improvised Explosive Device) Electronic Warfare (CREW)/OIF Operations Q&A (2.0 hrs)		

**Figure 5**

**Make a Tentative Plan.** This is the Army's 7-step problem-solving process, starting with "Determine the best way to (insert mission here). Experienced NCOs provide some great courses of action—if they are involved and are asked. Get solid facts and intelligence preparation of the battlefield (IPB) and use pattern analysis to help with assumptions. This step is where leaders step away from their "checklists on what to think" and develop courses of action that incorporate lethal and nonlethal means. As one COIN expert stated, "Counterinsurgency requires an excruciatingly fine calibration of lethal force. Not enough of it means you will cede the offensive to your enemy, yet too much means you will alienate the noncombatants whose support you need."<sup>22</sup>

**Start Necessary Movement.** Preventive maintenance checks and services (PMCS), risk assessments, and PCCs are part of movement, and every first-line supervisor needs to conduct them. Getting smart on something falls in this category as well. If you are a Level I medical unit and there may be some Level II operations involved, read the FMs to get smart fast.

**Reconnoiter.** Officers must get out in their area of operation to know what's going on externally. Let NCOs run the unit. Human intelligence is key in COIN reconnaissance. Management is about the present—the "What" and "How." Leadership is about the future—the "Why," "When," and "Where."<sup>23</sup> Get out and lead.

**Complete the Plan.** This does not mean sending out 20 e-mail messages helter-skelter. The Army has a knowledge management tool to transform information into a concise, usable, value-added product—it's called an OPORD, and good units use it consistently.

- Don't—
  - Create a book; use graphics vs. words for your scheme of maneuver.
  - Include TACSOP items in your OPORD; that information is already known.
  - Regurgitate the higher order. Omit fluff and anything not related to your area of operation.
- Do—
  - Give your subordinate elements their own individual mission statements in the Concept of Operations-Maneuver paragraph (3.a.1).<sup>24</sup>
  - Include a timeline and phases.
  - Address all six full-spectrum lines of effort.

### Sample of OTM Team Duties and Unit Mentorship Training Program

1. Establish presence at key meetings and act as a "sounding board" and mentor for leaders.
2. Train and evaluate TLP: PCC/PCI, MDMP, risk, OPORDs.
3. Assist unit with battle-focused PT program: three ruck marches and two APFTs.
4. Mentor leaders and act as higher command as required (simulated higher chain) to enhance readiness.
5. Share tools and best practices. Provide OTM CD set of all LTP topics and latest TTP and graphic training aids (GTAs).
6. Complete 4-page checklist and initial assessment with commander (SARC, UMO, rear detachment).
7. Help develop unit RSOI OPORD.
8. Assist with building leadership teams, Individual Ready Reserve (IRR) Soldier integration, and command climate.
9. Enforce maintenance PCIs, weapons discipline, and safety.
10. Share CSW PCI and individual weapons qualification (IWQ) PMI improvement technique.
11. Train unit in home station multipliers (rear detachment, HTN, Family Readiness Group (FRG), newsletter).
12. Help create FRG video presentation of your unit's training.
13. Assist with revised TACSOP/METL implementation.
14. Identify training issues with commanders 96 hours out; provide UTT Professional Training.
15. Help facilitate ongoing contact with parent and RIP/TOA units (e-mail and VTC).
16. Be the link between your unit and brigade commander (the UA to the MAT is your link to installation).

**Figure 6**

- Nail down implied tasks in tasks to maneuver units (pin the rose on one element) or coordinating instructions (most/all elements).
- Involve the XO, first sergeant, and supply sergeant in Paragraph 4.

**Issue the Order.** This means verbally, at a battle update briefing (BUB), or via a command post of the future (CPOF) icon. Have different people brief it. Use visuals and use the brief-back technique. Invite support personnel.

**Supervise/Rehearse.**

- PCIs are leader responsibilities to spot-check PCCs.
- Don't just visually inspect; ask questions concerning each Soldier mission, TACSOP, etc., to check mental readiness and confirm information flow.
- Ask hypothetical questions requiring thought (for example, execute a casualty evacuation [CASEVAC], intelligence spot report, or rules of engagement [ROE] decision).
- Mix different *conditions* into rehearsals. The task and standards may stay the same, but vary the conditions (for example, presence of civilians on the battlefield [COB], media, and/or Iraqi Security Force [ISF]).

## Sample of OTM Subjects for Mobilizing Unit to Cover With RIP/TOA Unit

### Commander Subjects:

1. Organizational chart/contact information for military, nongovernment organizations (NGOs), ISF, mayors, etc.
2. Mission-specific requirements/trends/TTP/local EOF policy.
3. Verbatim copy of unit's mission (written at the battalion-level or higher).
4. Task organization. How did their unit change, and what caused the change?
5. Mistakes made in the first 60 days. How did your unit take casualties?
6. Most dangerous enemy course of action for mission/CSS scenario.
7. Past Article 15-6 investigations (point of contact [POC] for legal/UCMJ actions, past and pending).
8. Welcome packet, including map and POCs for the FOB you are going to.
9. Most common 25 – 50 Arabic phrases (with correct dialect) used in your job.
10. Top 5 recommendations of things to do more of during UTT.

### NCOIC Subjects:

1. RIP/TOA ceremony setup.
2. APFT site – previous trends and recommendations.
3. Medical support – POC list for previously used facilities.
4. Leave and pass procedures; forms required; Red Cross message chain of events.
5. Housing issues/mess facilities/morale, welfare, and recreation (MWR) facilities/church services.
6. Memorial service set-up/commo black-out procedures.
7. Maintenance requirements/additional assets available.
8. Finance support (usually home state offers best help).
9. Promotions, reenlistments, and schools in-theater.
10. Uniform, safety, Army warrior training (AWT) (formerly weapons tactics trainer [WTT] and common task testing [CTT]) policies.

### Staff Subjects:

1. Graphic layout of the TOC – try to mirror conditions during your ARTEP.
2. Higher locations and POCs for direct support (DS)/general support (GS) maintenance, personnel actions, and logistics.
3. POC for maintenance assets, such as transportation management plan (TMP) NODs, weapons, BFT, Warlock, ASIPS.
4. Container express (military shipping container) (CONEX) movement timeline, in and out, and POC for customs officials.
5. Key schools and training to be completed prior to arrival.
6. Required and recommended training while in-theater or reception, staging, onward-movement, and integration (RSOI).

Figure 7

## A Day as an OTM

**W**hat might a typical day for an OTM team assigned to cover three units during peak cycle look like?

**0600** – Meet Unit X leaders to ensure that they have completed a proper risk assessment with the latest hazards and controls for the day's training. Spot-check equipment and Soldiers preparing to conduct a 5-mile road march; on this day, only four out of six know the top risks and countermeasures, and 20 percent fail to meet the proper uniform standard. The chain of command, not the OTM, corrects the faults, and the unit makes their SP.

**0700** – Meet Unit Z leader conducting PT, check the Soldiers again, and coach them on fitness techniques. Stop unit training after noticing that they didn't take enough time for some of the Soldiers in their unit to stretch. Ensure that weapons are 100 percent integrated into battle-focused PT training.

**0745** – Meet Unit Y leaders after combatives training for the same PCC/PCI purpose. Listen to and advise the unit commander about a tough personnel decision being considered.

**0900** – Attend the mobilization synchronization meeting (sync meeting) with the UMAs assigned to each unit. Work with our OTM MAT liaison officer to ensure that training for the next week is properly scheduled for each of their units.

**1100** – Meet Unit Y at urban operations training and help share some TTP on training Soldiers on some TTP learned in Iraq. Ensure that the NCOs check to see if their Soldiers are properly clearing their M4 weapons at a clearing barrel.

**1200** – The OTM officer shares a meal, ready to eat (MRE) with the Unit X commander and explains how to complete an Article 15-6 investigation concerning a blank negligent discharge incident. Query the commander on plans for Soldier and unit corrective training and pin down the commander on when he personally will address the entire unit on the severity

of this kind of incident. Discuss other issues with him that are “keeping him up at night.”

**1300** – The OTM NCO heads over to the NCOLTP as an instructor to train 60 NCOs from three different units in leader CASEVAC procedures and how to write an OPORD that focuses on getting leaders to identify implied, and not just specified, tasks. Finish with a hands-on practical exercise in the forward operating base (FOB).

**1300** – The OTM officer reports as the assistant instructor at LTP for teaching junior officers the roles and responsibilities of an NCO and coaching them on counseling procedures. He gives two real-life OEF examples that he faced, which generates a 20-minute discussion on alternate courses of action.

**1430** – Document and complete all three “Big 10” evaluations and stop by the OTM TOC to update the section OIC on the leadership status of units and get further guidance. Lieutenant colonel OTMs work primarily with battalions and staffs, but add support to their five OTM teams as needed.

**1600** – Attend brigade commander’s weekly “Eagles Call” meeting for two of his commanders. Mentor the Unit Z commander prior to the meeting on his “Big 10” evaluation, obtain his improvement plan, and rehearse his briefing. Meet afterwards with the Unit X commander and first sergeant to review their performance and discuss how to improve their military briefing style.

**1730** – Go back to one or all of the units to conduct an AAR of training for the week. Hear the Unit X OPORD brief at their BUB; interject some brief-back questions to break the silence at the end.

**1900** – Attend a unit training meeting and share observations with unit leaders. OTMs are included in the unit BUB agenda right before the NCOIC and commander. The OTM conducts

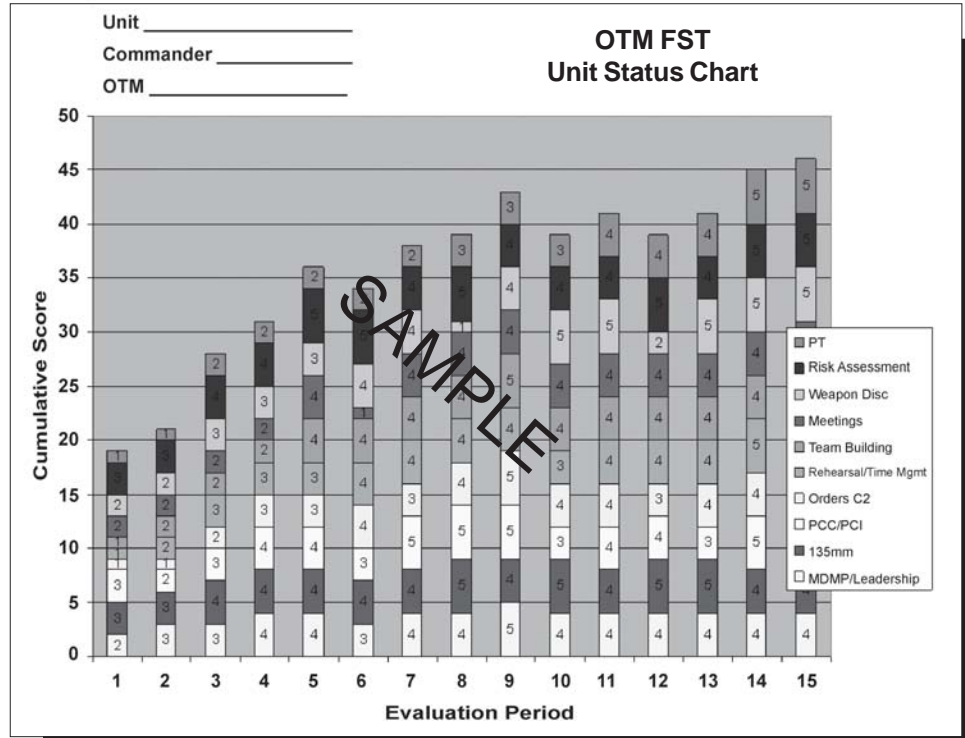


Figure 8

the biweekly 15 minutes of officer professional development (OPD)/NCO professional development (NCOPD) for the unit. Today’s topic is “Improving Family Readiness Group Operations” and sharing the “Top 10” questions to ask at tomorrow’s VTC with their RIP/TOA unit. Praise the 1st Platoon leader for his conduct of realistic EOF rehearsals.

OTM FST Unit Status Chart		
Big 10	Grade (1-5)	Comments
MDMP/Leadership	3	Disconnect within squad leaders on executing commander’s intent for UTT WTT tasks—commander AAR corrected
135 mm	2	Good DA 2406 maintenance tracking process. One team ate in the dining facility (DFAC), in spite of being directed to eat in the FOB (27 Sep)
PCC/PCI	4	100% of spot-checked Soldiers had DA 1156, media rules, Soldier rules, dog tags; 80% had leader books.
Orders/C2	2	Unit failed to issue WARNO, and only issued paragraph 2 during base defense
Rehearsals/Time Management	4	Conducting rehearsals using FOB sand table. Unit was on time for every training event over the past week.
Team Building	3	1SG taking more of a lead, because the commander is now allowing him to run individual training. Climate survey for 8 Nov.
Training/CUB Meetings	4	Best BUB to date (20 Oct) with XO running meeting and succinct information presented to the commander.
Weapons Discipline	2	Three observed incidents of muzzle awareness “flashing” of other Soldiers; 80% of the weapons were cleaned and inspected.
Risk Assessments	5	RA added three hazards/countermeasures for cold; there was 100% Soldier implementation; a 2d pair of socks was part of the SOP.
Physical Fitness	4	92% pass rate, up from a 64% pass rate on the first test. Score average up from 220 to 250.
Fully capable of executing mission in-theater		No issues preventing attainment of green status
		Major leadership/training issues—no improvement

Figure 9



**2000** – Grade and prepare findings for the Unit Y Command Climate Survey that it initiated last week. One of the platoon leaders excels at automation but does not appear to have the skill set to lead Soldiers effectively. He has not improved with mentoring, and the survey bears out this observation. Begin preparing a draft letter of recommendation for the brigade commander to reassign him to a staff job.

**2100** – Check e-mail, and check out a route clearance article as requested by a platoon sergeant on the BCKS at <<https://bcks.army.mil>>. Conduct personal PCIs prepared for the next day, and do everything possible to help Soldiers survive and win in a full-spectrum COIN environment.

## Conclusion

**T**he 181st Infantry Brigade OTM LTP was reviewed by the First Army commander in the summer of 2006. He designated the OTM FST to mail disk copies of the OTM TACSOP and training presentations/practical exercises to every mobilization station in the United States. Short of deploying to win the War on Terrorism, there may not be a more important mission than training Soldiers to win in a full-spectrum environment. OTMs are always enforcing theater immersion by enforcing and sharing the words of deployed leaders like the NCOIC of the deployed Brigade Support Battalion of the 1-34th Brigade Combat Team, who wrote: “Keep telling your Soldiers out there that TLP, PCCs, PCIs, and wearing all of their protective gear is imperative for their survival. We have had so many Soldiers walk away from their ruined vehicles with nothing more than an exciting story, due to their safety equipment. It is heavy and uncomfortable but sure beats dying.”<sup>25</sup>

We will sergeant major, and we will “Train to Win.”



*Lieutenant Colonel Olsen is the director of the 181st Infantry Brigade OTM Leadership Training Program that trained more than 2,600 deploying leaders at Fort McCoy, Wisconsin, in 2006. He has served in 13 different countries as a signal officer and foreign area officer (FAO) during 15 years of active service and 5 years of Reserve and National Guard service. He is a marketing manager for Ford Motor Company with an MBA from the University of Wisconsin.*

*Major Sierakowski is the primary instructor for the OTM Leadership Training Program. He is a signal officer and Opposing Force (OPFOR) subject matter expert with more than 21 years of the National Guard and Reserve experience, to include membership on the Army National Guard Biathlon Team. He works as a civil engineer for Ciorba Group, Inc., in Illinois.*

*Major Holden was the executive officer of the OTM Leader Training Program for most of 2006. He is an air defense artillery officer with more than 23 years of service. He served as a senior MiTT Leader during OIF II/OIF III from 2004-05.*

*Sergeant Major Laudonio is the NCOIC of the Mobilization Assistance Team at Fort McCoy, Wisconsin. He has served more than 30 years in the Army and has completed four OIF/OEF tours, including Iraq; Afghanistan; Guantanamo Bay, Cuba; and Eastern Europe. His most recent experience in Iraq was with a transportation company, which logged more than one million miles driving throughout Iraq.*

## Endnotes

<sup>1</sup> Major General Russel L Honoré, First Army OC/T Leaderbook, Rule #5 and #6, 30 October 2006.

<sup>2</sup> FM 22-100, *Army Leadership*, 31 August 1999, paragraph 2-114. During tactical operations, decision making and planning are enhanced by two methodologies: the MDMP and the TLP. Battalion and higher echelons follow the MDMP. Company and lower echelons follow the TLP.

<sup>3</sup> FM 6-22, *Army Leadership (Competent, Confident, and Agile)* dated October 2006. Many Army publications are not lacking in training TLP. For those who want to dig deep into TLP, FM 3-21.9, *Tactical Employment of Antiarmor Platoons and Companies*, is a sound example of breaking down of TLP.

<sup>4</sup> First Army Training Rules, Rule #5 and #6, dated June 2006.

<sup>5</sup> National Guard and Reserve soldiers returning from OIF/OEF can join the Operation Warrior Trainer (OWT) Program and serve on active duty an additional 12 months at an MTC to share their knowledge and TTP. <<http://www.first.army.mil/owt.htm>>.

<sup>6</sup> Brigadier Nigel R.F. Aylwin-Foster, “Changing the Army for Counterinsurgency Operations,” *Military Review*, November-December 2005, pages 2-15.

<sup>7</sup> FM 3-21-91, Section II, Paragraph 2-7. Specific steps of the MDMP help coordinate staff and commander responsibilities. The company commander and platoon leader have subordinate leaders, but not a staff, which places the burden of planning on their shoulders. TLP reflect this reality while incorporating the spirit, language, and general process of the MDMP to assist in the preparation of an OPORD.

<sup>8</sup> OIF Change 8 to FORSCOM Regulation, March 2007.

<sup>9</sup> The installation and TSB commander will not validate a deploying unit until requirements are met.

<sup>10</sup> The 4th Brigade, 87th Division, commander implemented his combat counterpart program in the Fall of 2005, using his TSBn commanders and command sergeants major as the “OTMs.” assigned at battalion level for the six battalions of the 1-34th BCT. Special thanks to the 1-167 RSTA Squadron, who demonstrated outstanding MDMP/TLP and painted an example of what right looks like.

<sup>11</sup> At least 8 of the 96 units that trained and deployed from Fort McCoy in 2007 were over 50 percent cross-leveled according to MTC McCoy MAT BUB charts, to include a unit with members from more than 30 different states.

<sup>12</sup> LTG David H. Petraeus, "Learning Counterinsurgency: Observations from Soldiering in Iraq," *Military Review*, January-February 2006, pages 2-12.

<sup>13</sup> MG Peter Chiarelli and MAJ Patrick Michaelis, "Winning the Peace – The Requirement for Full-spectrum Operations," *Military Review*, July-August 2005, pages 4-17. <<http://www.au.af.mil/au/awc/awcgate/milreview/chiarelli.pdf>>. Accessed 26 April 2007.

<sup>14</sup> The Lessons of History, <<http://www.mackenzieinstitute.com/1998/newsletter070198.htm>>.

<sup>15</sup> OTM Full-Spectrum Team Logo created by MAJ David Sierakowski, March 2006 (see page 6.)

<sup>16</sup> The 4th Cavalry Brigade played a large role in augmenting the 181st Infantry Brigade training efforts during the peak mobilization season in 2006 by assuming several training lanes and providing OTMs for three engineer battalions. They developed the concept of the "Big 8" evaluation criteria, which were revised into the "Big 10" criteria depicted in the article.

<sup>17</sup> The commander of the 395th Finance Battalion helped validate almost every PDP topic with great AAR feedback.

<sup>18</sup> Remember when you were a young leader. Was your commander there 24/7; or instead, did he/she let you learn mainly from your NCOs and make some mistakes in private?

<sup>19</sup> FM 6-22.

<sup>20</sup> 4th Cavalry Brigade's "Big 8" Assessment Tool was the forerunner of the 181st Infantry Brigade's "Big 10".

<sup>21</sup> 135MM = Class I, II, V and Maintenance and Movement.

<sup>22</sup> Major John Nagl, "The Counterinsurgent," *New York Times Magazine*, January 11, 2004, page 7.

<sup>23</sup> Hans Finzel, *Top 10 Mistakes Leaders Make*, Wheaton, Illinois: Victor Books, 1994.

<sup>24</sup> FM 7-10 "page 44; "Maneuver: Address each subordinate element by name and give them their mission statement."

<sup>25</sup> The commander of the BSB, 1-34th BCT, and the commander of the 1-167th RSTA Squadron have sent 1st Brigade, 85th Division, leaders numerous lessons learned and exemplify the "full-spectrum operations" in their newsletters at <<http://www.redbullweb.com/24.html>> and <<http://www.neguard.com/UNITS/1-167cav/index.htm>>.

## Regimental Awards

**E**ach year, we recognize the best engineer company, lieutenant, noncommissioned officer, and enlisted Soldier—in each of the components—for outstanding contributions and service to our Regiment and Army. Every engineer unit in the Regiment can submit the name and achievements of its best of the best to compete in these distinguished award competitions. Only the finest engineer companies and Soldiers are selected as recipients of these awards. The Soldiers will carry throughout their careers the distinction and recognition of being the Engineer Branch's best and brightest Soldiers and leaders. Following are the results of the 2006 selection boards for the Itschner and Outstanding Engineer Platoon Leader (Grizzly) Awards, the Sturgis Medal, and the Van Autreve Award:

### Active Army

*Itschner Award:* United States Army Forces Command (FORSCOM) nominee, 618th Engineer Support Company (ESC) Airborne (ABN), Fort Bragg, North Carolina.

*Outstanding Engineer Platoon Leader (Grizzly) Award:* United States Army Europe (USAREUR) nominee, First Lieutenant Tobias K. Watson, Charlie Company, 40th Engineer Battalion, 1st Armored Division Engineer Brigade.

*Sturgis Medal:* United States Army Pacific (USARPAC) nominee, Sergeant First Class Jeffery Goodman, 66th Engineer Company, 2d Stryker Brigade Combat Team (SBCT), 25th Infantry Division.

*Van Autreve Award:* FORSCOM nominee, Corporal Kevin C. O'Quinn, Headquarters & Headquarters Company (HHC), 27th Engineer Battalion, 20th Engineer Brigade.

### United States Army Reserve

*Itschner Award:* Detachment 1/961st Engineer Battalion (Combat) (Heavy), Wisconsin United States Army Reserve.

*Outstanding Engineer Platoon Leader (Grizzly) Award:* First Lieutenant Wesley T. Craiglow, Bravo Company, 489th Engineer Battalion, Arkansas United States Army Reserve.

*Sturgis Medal:* Staff Sergeant Nathaniel C. Day, Charlie Company, 489th Engineer Battalion, Arkansas United States Army Reserve.

*Van Autreve Award:* No nomination.

### Army National Guard

*Itschner Award:* 913th Engineer Company (CSE), Tennessee Army National Guard.

*Outstanding Engineer Platoon Leader (Grizzly) Award:* First Lieutenant Terry D. Durham, Charlie Company, 201st Engineer Battalion, Kentucky Army National Guard.

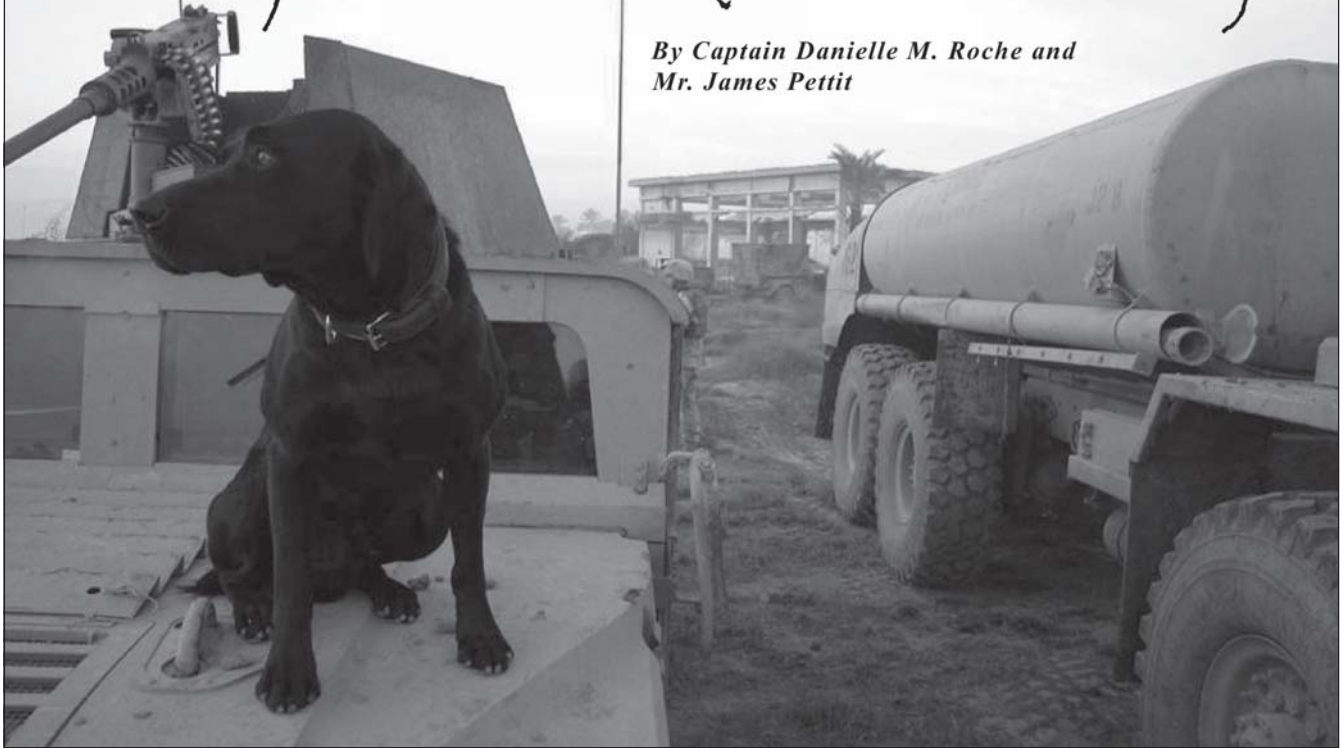
*Sturgis Medal:* Sergeant Guy M. Stevens, Alpha Company, 164th Engineer Battalion, Missouri Army National Guard.

*Van Autreve Award:* Specialist Paul D. Simpson, 191st Engineer Company, Ohio Army National Guard.

The award recipients were recognized at ENFORCE 2007, 20-24 May 2007, at Fort Leonard Wood, Missouri.

# U.S. Army Engineer Specialized Search Dogs

By Captain Danielle M. Roche and  
Mr. James Pettit



In 2002, the United States Army Engineer Regiment was directed by the Vice Chief of Staff of the Army to establish a unique dog detachment at Fort Leonard Wood, Missouri. Training for two types of engineer detection dogs was specified—mine detection dogs (MDDs) and specialized search dogs (SSDs). Each type of dog would have different capabilities and operational uses but would share the same mission: minimizing the threat to Soldiers from explosive hazards. Since 2003, trained teams consisting of a handler and a military working dog have been continuously deployed to Afghanistan and Iraq, served in National Training Center rotations, and provided countless demonstrations and briefings to educate the U.S. military about the capabilities, limitations, and employment techniques of MDD and SSD teams. In 2005, the detachment reorganized and grew to three detachments. More growth of the engineer dog teams is planned to occur in 2008.

While MDDs are trained to find land mines and buried unexploded ordnance, SSDs are trained to find firearms, ammunition, and explosives during route searches, building searches, open areas, and vehicle searches at all threat levels. SSDs always work under the direct control of their handler. The SSD concept is based on the firearms, ammunition, explosive detection dogs developed by the British Army for use in counterterrorist operations. The United Kingdom (UK) is currently the world leader in training explosive detection

dogs and produces some of the highest quality dogs available. Using the knowledge base and experience from the UK, the U.S. Army hired several retired UK dog trainers to serve as instructors for the United States Air Force SSD course at Lackland Air Force Base, Texas, and the United States Army Engineer School MDD course at Fort Leonard Wood.

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*“...dogs provide a fast and efficient  
detection capability that can  
save lives.”*

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The four-month SSD course trains combat engineers along with Marines, Airmen, and military police Soldiers. Before the training moved to Lackland Air Force Base, the training was performed at Fort Leonard Wood, where three graduating classes trained a total of 21 Soldiers to be SSD handlers.

To obtain the maximum value from the services of trained MDD and SSD teams, it is essential to have a sound understanding of the capabilities and conditions for their employment. Both types of dogs provide a fast and efficient detection capability that can save lives. They have excellent mobility and utility over ground that is not accessible to vehicles and other mechanical clearance and detection



**A handler and his SSD search an area for suspicious devices.**

equipment. They can detect a device without touching the device itself, providing safety to the handler and those around them. The dogs can recognize mines, unexploded ordnance, explosives, firearms, and ammunition by the distinct odor of the explosives or other components of the devices. The dogs then show a change in behavior, recognizable by the handler, indicating that they have discovered a scent they have been trained to locate.

Using dogs is much faster than using mechanical or manual searches and reduces the time spent on searches. However, the actual continuous working time and the number of tasks that the teams can perform will depend on the ability and character of the individual dog. Engineer dogs are trained to be bold, to be steady under gunfire, and not to be distracted by other animals. They can work in areas and situations where personnel, movement, and noises are present. It is imperative to note that dog teams are not a stand-alone system for conducting detection operations. The teams require security at all times, and may often require an escort to assist in maneuvering through areas. If the mission dictates that an obstacle or threat must be cleared, engineers or explosive ordnance disposal (EOD) personnel will be required. Dog handlers are not trained for deactivating, destroying, or clearing obstacles or threats.

One challenge to the use of dogs in detection operations is the fact that a dog can only be handled by one Soldier at a time. Because of the extensive training and the rapport that the team must develop, there is only one handler per dog and one dog per handler. Dogs may suffer a lowering of performance if excessive distracting elements are present, may be reluctant to negotiate areas that may prove physically

harmful, and may be of little value for searching persons. The dogs are trained to work with Soldiers who always carry weapons and explosives, so using the dogs to search persons could confuse the dogs.

Commanders are encouraged to request SSD teams before entering areas with a high probability of encountering improvised explosive devices (IEDs), weapon caches, or explosives. Once a team is assigned to support a mission and the handler is briefed, the commander should obtain the handler's recommendations for the most effective employment of the team and the best working positions, consistent with the factors that influence the dog's detection capabilities. The dog team should participate in any mission rehearsals. The commander must ensure that security and safety are

provided for the team at all times. For extended missions, dog teams require administrative, logistical, and operational support. They also require veterinary support throughout a deployment, but the United States Army Veterinary Command handles this at most deployment locations. The engineer dog detachments have assigned veterinary technicians that deploy with the dog teams. The teams deploy with field expedient kennel facilities sufficient for short-term operations but require semipermanent facilities for long-term operations.

Based on the support requirements detailed above, SSD teams usually are based at forward operating bases. This allows SSD handlers to conduct the required realistic training and gives them access to theater-specific firearms, ammunition, and explosives to maintain the proficiency of the dog teams for maximum mission effectiveness. It is in the commander's interest that the dogs be familiar with every known explosive and other casualty-producing device that the unit may encounter. Although the dogs receive continuation training when not on missions, the handlers' access to the latest items is limited. When possible, supported units should provide samples of any new or different devices encountered in the field so the dogs can become familiar and proficient with finding them. EOD units can best assist the dog teams with specific training aids.

Lastly, before a dog is introduced to a new operational environment, the team should be given the time and resources to practice searching under appropriate conditions. This ensures that the dog is physically capable of locating explosives and other casualty-producing devices in the specific theater of operation.



**A handler displays buried explosives found by his SSD.**

Before a dog team goes operational, several accreditation tests are conducted. Testing of SSDs and handlers is mandatory and occurs in three phases:

- Predeployment confirmation testing in the United States.
- In-theater testing at the base camp or in an established training area.
- On-site confirmation testing before any live operations.

The dog teams have a strict standard of performance and rigorous testing procedures. These can be compared with a driver's license test, which aims to establish confidence in the ability to perform under some conditions without testing against all possible conditions. The same principle applies for a dog's operational accreditation test. Its purpose is to provide confidence in a basic capability to detect explosives. Passing an operational accreditation test is evidence of confidence and trust.

The greater complexity and danger of explosives detection requires that the proficiency standards for SSD teams be significantly higher than for any other type of dog team. Therefore, certification depends on the demonstrated knowledge and handling skill of the handler and the explosives detection rate of the SSD. Handler proficiency is evaluated by having the handler demonstrate detailed knowledge of the characteristics of each of the explosives the team is trained to detect, how these explosives may be used in explosive devices,

and specific operational techniques used in the theater of operation.



*Captain Roche is the commander of the 94th Engineer Detachment (Canine), Fort Leonard Wood, Missouri, and is an SSD supervisor. Her previous assignment was support platoon leader for Headquarters, Headquarters Company, 2d Engineer Battalion, 2d Infantry Division, Camp Castle, Korea. She is a graduate of George Mason University, Fairfax, Virginia, with a bachelor's in health and fitness.*

*Mr. Pettit developed and stood up the Engineer Detection Dog Program starting in 2001 and is the technical advisor to the Engineer Regiment on the use of detection dogs. He works for the Counter Explosive Hazards Center at the United States Army Engineer School, Fort Leonard Wood, Missouri.*



# DIVE COMPANY EXPERIENCES NORTHWEST DIVING

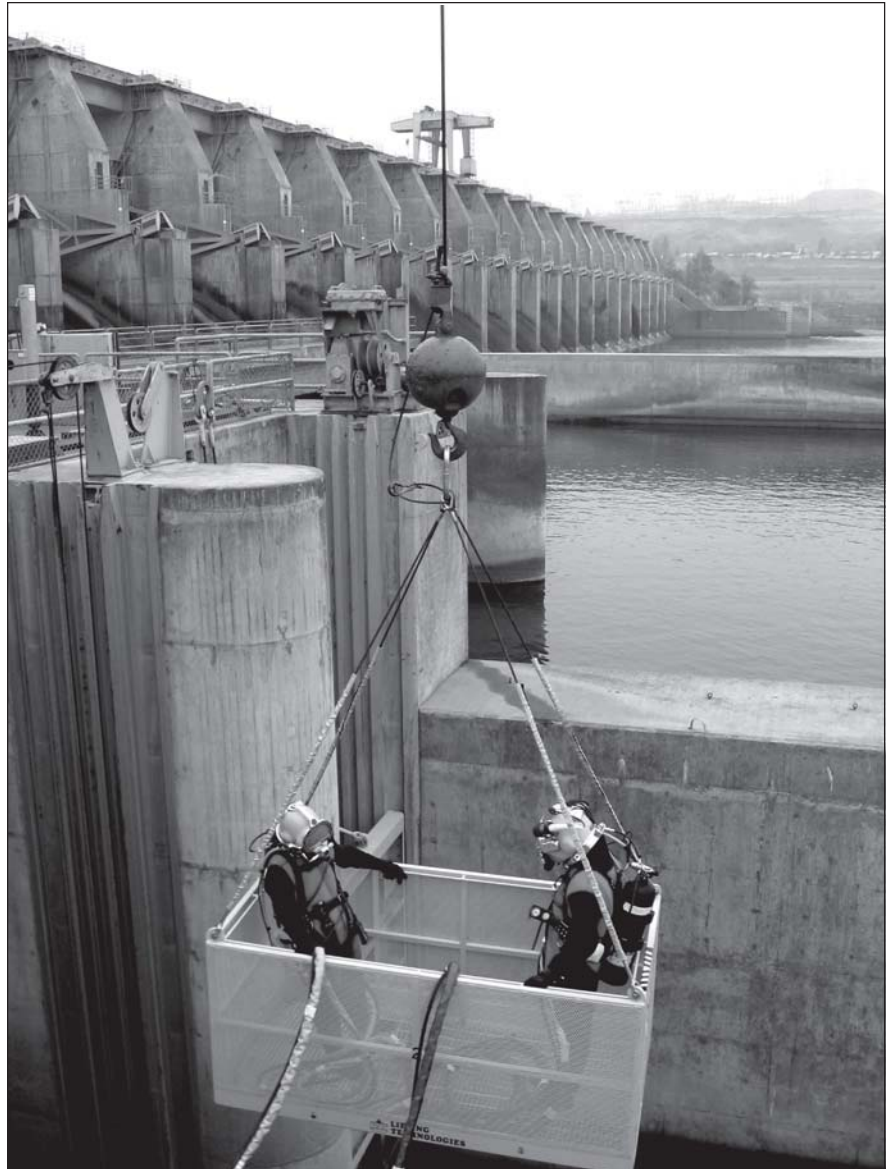
By First Lieutenant Brett D. Evans

**T**he northwest is known for inclement weather; it's not usually a question of *if* it will rain, but rather *when*. Divers from the 511th Engineer Light Diving Team worked for 2 weeks in temperatures ranging from the low 20s to high 30s while conducting dive operations in support of the United States Army Corps of Engineers® (USACE) Portland District. After 7 consecutive days of rain, everyone could feel the cold, especially those tending divers 60 feet below.

USACE tasked the 511th to conduct a variety of repairs, improvements, and inspections on the John Day, The Dalles, and the Bonneville Dams. All three dams are located on the Columbia River Basin east of Portland, Oregon. This is the most hydroelectrically developed river system in the world and includes more than 400 dams of all types. The three dams alone are capable of producing 5.3 million kilowatts of power at peak production.<sup>1</sup> That's enough to meet the electrical needs of four cities the size of Seattle, Washington, or 2,300,000 homes.<sup>2</sup>

The diving conditions on the Columbia River are also different than one might expect. Depths can exceed 150 feet in many parts of the river, and water temperatures in the winter usually average 42 degrees Fahrenheit. The 511th used hot water suits to combat the effects of hypothermia while diving. An insulated pipe in the umbilical line links the diver to surface support and carries the hot water down to the suit.

The dive team began the operation at the John Day Dam on 4 December 2006. The team conducted inspections on the dam's north-side spillway and installed a cover plate over a discharge pipe. USACE engineers needed the 511th to determine if backwash and debris were



**Two engineer divers enter the water at The Dalles Dam to conduct inspections and maintenance.**

eroding the spillway apron on the downriver side of the John Day Dam, so they spent 2 days recording footage and taking measurements to provide USACE personnel the information needed for future improvements.


At The Dalles Dam, divers were tasked with two jobs. The first task was to install dogging devices, which hold headgates to the upriver side of the dam. Headgates are massive structures designed to hold back water at a pressure of 14,000 pounds



The stand-by diver sits on a bench, prepared to react in the event of an emergency.

per square inch. The second task was to inspect the north-side fish ladder gate seals. Fish ladders are a system of concrete steps that allow fish to swim upriver to spawn.

Final operations were conducted at the Bonneville Dam from 11-15 December 2006. At this site, the 511th cleaned gate seals, installed water-level gauges for the fish ladders, and removed debris from the upriver trash racks (a cagelike attachment that collects large debris). The accumulated debris found on the trash racks can consist of many things—from logs to dead animals. On this mission, the 511th manually removed small logs, which in some cases required the use of a crowbar and some ingenuity.

The mission was a success. Despite the rain and cold, the dive team completed 17 dive evolutions in 9 days, for a total of more than 41 hours of bottom time—the time from when the diver leaves the surface in descent until he begins ascent. It was estimated that USACE saved \$66,000 by requesting assistance from the 511th to conduct these tasks. Not only was this mission a unique diving opportunity for the 511th, but it also allowed the unit to foster interservice cooperation with the USACE Portland District. 

*First Lieutenant Evans is the platoon leader for the 511th Engineer Light Diving Team with the U.S. Army Dive Company (Provisional) at Fort Eustis,*

*Virginia. He is a graduate of the Engineer Officer Basic Course, the Marine and Engineer Dive Officer (MEDO) Course at the Naval Diving and Salvage Training Center, and the Sapper Leader Course. He holds a bachelor's in liberal studies from the University of Montana, Missoula, Montana.*

#### Endnotes

<sup>1</sup>United States Army Corps of Engineers Portland District, <<http://www.nwp.usace.army.mil/op>>, accessed on 8 February 2007.

<sup>2</sup>Ibid.

# USACE Achieves Major Milestone at Superfund Site

By Mr. Eugene R. Urbanik

**I**n February, the United States Army Corps of Engineers® (USACE) New York District achieved a major milestone when it began the demolition of the industrial park facility at the Cornell-Dubilier Electronics Superfund<sup>1</sup> site.

From 1936 to 1962, Cornell-Dubilier Electronics, Incorporated, manufactured electronic parts and components in South Plainfield, New Jersey. It is alleged that during its operations, the company dumped polychlorinated biphenyls (PCB)-contaminated materials and other hazardous substances directly onto site soils. Since then, numerous companies have operated at the site as tenants. It is estimated that 8,700 residents live within one mile, more than 500 live within a

quarter mile, and some live less than 200 feet from the site.

The New Jersey State Department of Environmental Protection recognized the magnitude of the problem and requested assistance from the United States Environmental Protection Agency (EPA). The EPA's Region II conducted soil borings at the site and surrounding properties. The soil at the site is contaminated with volatile organic compounds and PCBs. Also, building interiors at the site contain elevated levels of PCBs and metals that are probable human carcinogens (substances known or suspected to cause cancer). Contamination was extensive and uncontrolled—impacting sediment, soil, and groundwater and posing

potential health risks to residents and tenants. The EPA requested assistance from USACE to clean up the site.

The magnitude and nature of the clean-up project provided an opportunity for a team to be assembled with specialists from three USACE districts and two divisions. Personnel from each district play a critical role in the project. The New York District leads the remedial action phase by managing a cost-reimbursable contract for the residential property work and a fixed-price contract for the demolition of the current industrial park that is located at the site of the former Cornell-Dubilier Electronics facility. The Environmental Residency of

*(Continued on page 25)*



**Demolition began at the Cornell-Dubilier Electronics Superfund site in February 2007.**



# THE ARMY'S NEWEST MOS

By Sergeant Major Ethan A. Jones

**F**or the first time in fifteen years, the Army has a new career management field (CMF) and military occupational specialty (MOS). The United States Army Acquisition Support Center (USAASC) has introduced CMF 51, Acquisition, Logistics, and Technology (AL&T) and MOS 51C, AL&T Contracting Noncommissioned Officer (NCO), into the full-spectrum Army. These NCOs will have the potential to become warranted Contingency Contracting Officers (CCOs) who are authorized by law to procure supplies and services and provide minor construction in support of deployed forces, which is vital to mission success.

AL&T Contracting NCOs will be assigned to the Army Sustainment Command (ASC), formerly the Army Field Support Command (AFSC), at Rock Island, Illinois. These NCOs will perform their contingency contracting mission and roles while assigned to units such as contracting support brigades, contingency contracting battalions, senior contingency contracting teams, and contingency contracting teams. All contracting commands, units, and teams are a part of the modular contracting force structure and the Army Force Generation (ARFORGEN) cycle, providing contingency contracting support anywhere, anytime. These units and teams will be evaluated and assessed during National Training Center,

Joint Readiness Training Center, and Joint Multinational Readiness Center rotations and joint exercises.

USAASC, as the proponent for CMF 51 and MOS 51C, will be responsible for the life cycle management process—consisting of recruitment, retention, individual training and education, distribution, sustainment, professional development, and separation—for the new CMF and Contracting NCOs. Effective 1 October 2007, Soldiers from any MOS, in the rank of staff sergeant through sergeant first class, with less than 10 years of active duty service in the Active Army, United States Army Reserve, and Army National Guard—and who meet the prerequisites for MOS 51C—will be allowed to request reclassification.

As the Army continues to restructure to deter, deny, and defeat U.S. adversaries anywhere in the world, the contingency contracting military workforce is redefining itself to meet the requirements of supporting both conventional and unconventional forces. A brigade combat team must have the capability to sustain itself for the first 30 days of an operation. To achieve this goal, innovative and creative support is required, and contracting is one of the many force multipliers to make that happen.

For more information, contact Major James Bamburg, the MOS 51C proponent, at 703-805-2732, or <[james.bamburg@us.army.mil](mailto:james.bamburg@us.army.mil)>.



*Sergeant Major Jones serves as the Army's senior contracting NCO and principal technical NCO advisor to the Assistant Secretary of the Army (Acquisition, Logistics & Technology) and ASA (ALT) Military Deputy. He also serves as the senior enlisted advisor to the Director, Army Contracting Agency. He holds a bachelor's in public relations and in mass communication from Paine University, Augusta, Georgia, and is pursuing a master's in acquisition management from American Graduate University, Covina, California.*



# Fallen Hero Honored by Engineer Regiment and Soldier-Artist

By Mr. Christian DeLuca

**D**uring ENFORCE 2007, the Engineer Regiment honored one of its own by dedicating the new state-of-the-art Counter Explosive Hazards Center (CEHC) to Sergeant First Class (SFC) Paul R. Smith, an 11th Engineer Battalion Soldier who made the ultimate sacrifice when his task force was violently attacked by enemy forces near the Baghdad International Airport on 4 April 2003. Hastily forming a defense with the men and equipment he had available, Smith braved hostile enemy fire in order to engage the attacking force and evacuate wounded Soldiers. Two year later, on 4 April 2005, SFC Smith was posthumously awarded the Medal of Honor for "...acts of gallantry and intrepidity above and beyond the call of duty..."<sup>1</sup>



An oil painting of SFC Paul R. Smith by military artist CW2 William Smock was dedicated to the CEHC,

It seemed appropriate to Fort Leonard Wood officials to dedicate the CEHC facility, which is "designed to find solutions to the most prolific and dangerous threat to our Army,"<sup>2</sup> to SFC Smith, "who epitomizes everything we look up to in a Soldier, sapper, and leader and who all of the Engineer Regiment looks up to as a hero."<sup>3</sup>

During the dedication ceremony, a Medal of Honor flag, presented by President George W. Bush to SFC Smith's widow Birgit, was on display. In addition, she unveiled two paintings dedicated to the building. One of the paintings, entitled "The Firefight in the Courtyard," depicts the battle that took Smith's life. It was painted by Patrick Haskett, an Army veteran and military

artist, and dedicated by BAE Systems, a contractor that produces defense systems for the military. The second is a portrait of Smith in his desert camouflage uniform, painted and dedicated by Chief Warrant Officer 2 (CW2) William Smock, 1-163d Field Artillery Battalion, Indiana Army National Guard. Smock presented a second portrait to Birgit Smith.

The Chief of Staff at the United States Army Engineer School had met CW2 Smock while deployed to Iraq, and when the idea came about to hang a portrait of SFC Smith in the CEHC building, Smock's name was the first to come to mind to paint it. An e-mail was sent to Smock, asking him if he would be

interested in painting SFC Smith's portrait. After reading what had been written about Smith, Smock responded saying that he would paint two portraits—an oil painting to hang in the CEHC building and a watercolor painting to be presented to Birgit Smith.

Although Smith's was the first portrait Smock has done to honor a fallen Soldier, the National Guardsman—who is an elementary art teacher in civilian life—has been painting for Soldiers for some time now.

Smock has been a part of the Indiana Army National Guard since he joined the 113th Engineer Battalion in 1971. He was commissioned a second lieutenant in 1976 and worked his way up the ranks to lieutenant colonel. Unable to progress from there—and not ready to get out of the military—Smock decided

to resign his commission as a lieutenant colonel in April 2004 to become a warrant officer to deploy to Iraq. He had friends who were deploying overseas, and he wanted to go too. As a radar warrant officer, he could stay in the Indiana National Guard and deploy with his unit to Iraq.

Smock was finally scheduled to be deployed to Iraq at the beginning of 2005, with the 139th Field Artillery. So at Christmas in 2004, he told his children not to buy him anything because he wouldn't be able to take it with him. But they got him something anyway—a calendar, filled with family pictures. When he saw them, he started to cry. He




**This watercolor portrait was painted by CW2 Smock and presented to SFC Paul R. Smith's wife Birgit Smith.**

turned to January and saw a picture he hadn't seen in 20 years. And as he flipped through the months, tears were streaming down his face as his mind replayed the events in the photos.

In Iraq, CW2 Smock ran a Q 36 radar at night to locate enemy mortar and rocket positions. And during the day, to help pass the time, he began painting landscapes with a small watercolor set that a teacher friend had sent him. He looked at his paintings of Radar Hill, where his unit was located, and he looked at the calendar his children had given him, and he decided to make a calendar for each of the 15 Indiana National Guardsmen. After finishing the first 12 paintings, he sent them to his daughter to have the calendars made. (As it turned out, he not only painted calendars for Soldiers in his unit but also for Soldiers from the five battalions and the firemen stationed in the same area.)

CW2 Smock painted the calendars for Soldiers to have for their enjoyment, as a memory of a part of their life they will not forget. It was his way of saying thank-you to them for serving our country. His dedication to his country, as well as to his fellow Soldiers, make

him an inspiring example of what it means to be a citizen-Soldier. 

*Mr. DeLuca is a photojournalist with the Fort Leonard Wood newspaper, the Guidon. He served as a combat correspondent with the United States Marines from 1997 to 2001. He is a graduate of the Basic Journalism Course and the Intermediate Photojournalism Course at the Defense Information School, Fort Meade, Maryland, and holds a bachelor's in film studies.*

*Photos by Christian DeLuca.*

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#### **Endnotes**

<sup>1</sup> SFC Paul R. Smith's Medal of Honor citation. See *Engineer*, July-September 2005, back cover, for complete citation.


<sup>2</sup> CEHC building dedication remarks by MG William H. McCoy, Commanding General, United States Army Maneuver Support Center and Fort Leonard Wood, 23 May 2007.

<sup>3</sup> CEHC building dedication remarks by LTC Kent Savre, CEHC director, 23 May 2007.

*("USACE Achieves Major Milestone," continued from page 22)*

the New Jersey Area Office is managing on-site construction activities; the Baltimore District is managing key commercial real estate relocation services; and the Kansas City District is responsible for remedial design and technical assistance.

Current work includes demolition and environmental abatement of 18 industrial buildings, transporting contaminated material to disposal facilities, and soil removal at four residential homes. Extensive safety procedures are in place to protect the health of residents in and near the site. Future work includes a railroad spur installation to reduce transportation and disposal costs, on-site soil treatment of the industrial park materials, the investigation of 59 additional residential properties, and wetlands and groundwater investigation.

The project, which has several more phases before completion, is expected to cost more than \$80 million. The industrial park soil remediation will begin after the demolition is completed in 18 months, and the overall project is expected to be completed by 2011. 

*Mr. Urbanik, the New Jersey Area Engineer, is a licensed professional engineer and professional planner in the state of New Jersey. A retired Army Reserve lieutenant colonel, he is a graduate of the Command and General Staff College and holds a bachelor's in civil engineering from Rutgers College of Engineering.*

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#### **Endnote**

<sup>1</sup>The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), referred to as Superfund, authorizes the Environmental Protection Agency to respond to releases or threatened releases of hazardous substances that may threaten public health or the environment. Superfund sites are the nation's worst toxic waste sites.

# ENFORCE 2007



The Army Engineer Regiment honored its past, celebrated its present, and envisioned its future during ENFORCE 2007 from 20-24 May. The activities began in St. Louis, Missouri, with the Army Engineer Association (AEA) Engineer Regimental Training Conference, which included two days of United States Army Engineer School, United States Army Corps of Engineers, and industry briefings, all focusing on the ENFORCE theme "Engineers in Full-Spectrum Operations."



Activities began on Fort Leonard Wood on 23 May with a ceremonial Regimental Review at the United States Army Maneuver Support Center plaza.

The new Counter Explosive Hazards Center (CEHC) was dedicated to Medal of Honor recipient SFC Paul R. Smith, an 11th Engineer Battalion Soldier who was killed during a firefight with Iraqi forces in 2003. This Medal of Honor flag was presented to Birgit Smith by President George W. Bush in 2005.



CW2 William Smock painted this oil portrait of SFC Paul R. Smith and dedicated it to the CEHC. He presented a watercolor portrait to SFC Smith's wife, Birgit Smith.





**"The Firefight in the Courtyard," painted by Patrick Haskett, depicts the battle scene that took SFC Paul R. Smith's life.**



**The Regiment held a remembrance service at the Engineer Memorial Grove for 67 engineer Soldiers who gave their lives during the past year in the War on Terrorism. Their sacrifice will never be forgotten.**

Photo by Christian DeLuca



**In his "State of the Regiment" address, Chief of Engineers LTG Robert L. Van Antwerp talked about working on the "Army Strong" campaign, and he introduced a motto that fits the Regiment: "Engineer Ready."**



**The Regimental Ball included the presentation of the Honorable, Outstanding Engineer Platoon Leader (Grizzly), Sergeant Major, and Best Sapper Competition Awards, as well as the Sturgis and de Fleury Medals.**



**ENFORCE concluded on 24 May with a Council of Colonels, a Council of Sergeants Major, the United States Army Corps of Engineers Commanders Meeting, a Regimental barbecue, and a golf tournament.**

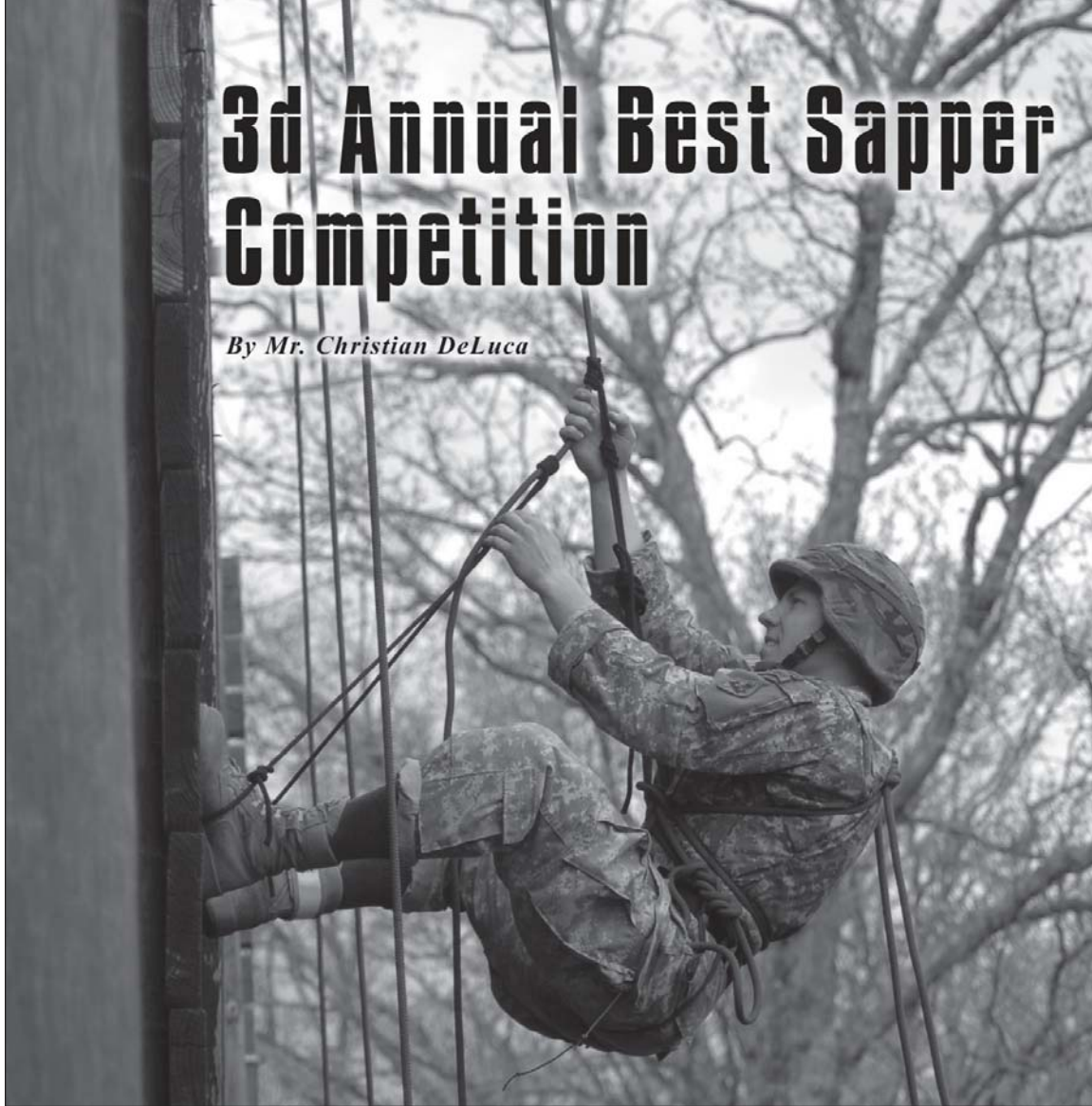
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*Captions by Christian DeLuca, Fort Leonard Wood Guidon staff.*

*Photos not identified are by Mike Curtis and Mark Scovell, Fort Leonard Wood Multimedia Visual Information Service Center.*

# 3d Annual Best Sapper Competition

*By Mr. Christian DeLuca*



**T**he 3d annual Best Sapper Competition at Fort Leonard Wood, Missouri, lived up to its name 1 to 3 May as mental and physical exhaustion took its toll on seven of the thirteen 2-man teams, leaving only six to cross the finish line—and one to be named best Sapper team. The “Tropic Lightning” team from the 66th Engineer Company, Schofield Barracks, Hawaii, took top honors in the grueling three-day ordeal that tested the combat engineer skills of participants, while subjecting them to substantial physical strain.

Over the three-day course, competitors must—

- Pass a physical fitness test.
- Perform a military operations on urbanized terrain (MOUT) breach of two exterior doors using explosive breaching methods.
- Tie knots used in mountaineering.
- Use an AN/PSS-12 mine detector to locate five mines.
- Qualify on the grenade range.
- Calculate the placement of timber cutting, steel cutting, breaching, and field expedient charges.
- Construct and swim with a poncho raft.
- Negotiate a vertical obstacle using the prusik climbing technique and the buddy rappel technique.
- Identify threat mines.
- Transmit a 9-line improvised explosive device (IED) report.
- Assemble and perform a function check of weapon systems.
- Destroy a wooden target using an abatis charge.
- Engage targets with pistol, rifle, and squad automatic weapon.
- Perform a MOUT breach, enter, and clear a building and engage multiple targets.
- Calculate and place an inert charge on a steel target.
- Provide combat lifesaver (CLS) medical care to injured Soldiers.
- Transmit a 9-line medical evacuation (MEDEVAC) request.
- Destroy a concrete target using a counterforce charge.
- Perform a 9-mile run with nine arduous “mystery” events.

## Sapper Teams

- |  |   |
|--|---|
| 1. First Lieutenant Mark Gillman<br>Sergeant Gordon Paulson              | 66th Engineer Company<br>Schofield Barracks, Hawaii     |
| 2. First Lieutenant Colby Krug<br>Staff Sergeant Erasmo Flores           | 66th Engineer Company<br>Schofield Barracks, Hawaii     |
| 3. Captain John Evangelista<br>Captain Jason Winkelmann                  | 554th Engineer Battalion<br>Fort Leonard Wood, Missouri |
| 4. Second Lieutenant Christopher Vernon<br>Second Lieutenant Brad Miller | 554th Engineer Battalion<br>Fort Leonard Wood, Missouri |
| 5. Staff Sergeant Douglas LeBoeuf<br>Second Lieutenant Kenneth Stover    | 554th Engineer Battalion<br>Fort Leonard Wood, Missouri |
| 6. Sergeant First Class Eric Prescott<br>First Lieutenant Alex Viox      | 911th Engineer Company<br>Fort Belvoir, Virginia        |
| 7. Specialist Michael Cessaro<br>Specialist James Parthemer              | 37th Engineer Battalion<br>Fort Bragg, North Carolina   |
| 8. Sergeant Brian Telega<br>Specialist David Menjares                    | 37th Engineer Battalion<br>Fort Bragg, North Carolina   |
| 9. Specialist Nicholas Wardwell<br>Specialist Jarred Wade                | 50th Engineer Company<br>Fort Leonard Wood, Missouri    |
| 10. Sergeant Jeremy Gaspard<br>Sergeant Aaron Cole                       | 50th Engineer Company<br>Fort Leonard Wood, Missouri    |
| 11. Staff Sergeant Kevin Wiseman<br>First Lieutenant Daniel Hayes        | 515th Engineer Company<br>Fort Leonard Wood, Missouri   |
| 12. Specialist Robert Overstreet<br>Sergeant Jeremy Coffman              | 5th Engineer Battalion<br>Fort Leonard Wood, Missouri   |
| 13. Sergeant Michael Robinson<br>Specialist Jose Payes                   | 5th Engineer Battalion<br>Fort Leonard Wood, Missouri   |

## 2007 Best Sapper Competition Winners\*

### Overall

First Place	Team 2
Second Place	Team 3
Third Place	Team 1

### Events

1. Physical Fitness Test	Team 3
2. CLS Evaluation	Team 2
3. 9-Line MEDEVAC Request	Team 6
4. MOUT Breach I	Team 2
	Team 3
5. Steel-Cutting Charge Evaluation	Team 1
	Team 3
6. Timber-Cutting Charge Evaluation	Team 1
	Team 3
	Team 4
	Team 6
7. Grenade Range Qualification	Team 6
8. Demolition Calculation	Team 1

9. Threat Mine Identification	Team 6
10. Knots	Team 1
11. Counterforce Evaluation	Team 1
	Team 3
	Team 4
12. 9-Mile Run	Team 1
13. AN/SS-12 Mine Detector Evaluation	Team 1
14. Poncho Raft Swim	Team 2
15. Stress Shoot	Team 8
16. Weapons Assembly Evaluation	Team 1
	Team 2
17. 9-Line IED Report	Team 3
18. MOUT Breach II	Team 1
	Team 2
	Team 3
19. Prusik Climb and Buddy Rappel Evaluation	Team 3

\* Multiple entries indicate that more than one team achieved maximum scores.



**A team from the 66th Engineer Company prepares their charge during the steel-cutting charge evaluation.**

Team 2, from the 66th Engineer Company, which also placed in last year's competition, said they came back to the competition for just one reason—to win. They said the



**A team prepares for the breaching event in the competition.**

competition seemed to be a little tougher than they remembered from last year.

During the awards brunch, Major General William H. McCoy, United States Army Maneuver Support Center and Fort Leonard Wood commanding general, said that all the participants should consider themselves winners.

"I'm tremendously proud of the competitors," Major General McCoy said. "To go through what we put you through these past couple of days, you should all be proud of yourselves individually."

A Soldier from another team said nothing he had done before compared to the Best Sapper Competition. Although he had been through a lot of training, he said it was the toughest thing he had ever done in his life. The commander of the 577th Engineer Battalion, the sponsoring unit, said the competition allows Sappers to test their skills and will, while increasing their esprit de corps. Teams compete for about 58 hours and cover about 50 miles. The events test their combat engineer and infantry skills.

The winning team was presented with a bust of retired Lieutenant General Robert B. Flowers, former Chief of Engineers, on 23 May during ENFORCE 2007.



*Mr. DeLuca is a photojournalist with the Fort Leonard Wood newspaper, the Guidon. He served as a combat correspondent with the United States Marines from 1997 to 2001. He is a graduate of the Basic Journalism Course and the Intermediate Photojournalism Course at the Defense Information School, Fort Meade, Maryland, and holds a bachelor's in film studies.*

Photos by Christian DeLuca





# Integrating Lessons Learned at MANSCEN

By Sergeant First Class Paul A. Zacher (Retired)

With the Army heavily engaged throughout the world, the Combined Arms Center (CAC) at Fort Leavenworth, Kansas, recognized the need to share lessons learned quickly with the rest of the Army. The collection and dissemination of lessons learned to predeploying units, leaders, and Soldiers greatly enhances the success of our Army by providing valuable tools to those who need them most. In March 2006, the CAC commander implemented an initiative for sharing Army lessons learned. Lessons Learned Integration (L2I) spreads lessons learned by capturing and sharing emerging “best practices”; relevant observations, insights, and lessons (OILs); and tactics, techniques, and procedures (TTP) from the operating force.

Last August, the Center for Army Lessons Learned (CALL) at Fort Leavenworth trained and sent out more than 40 L2I analysts to implement and strengthen already existing L2I programs at most United States Army Training and Doctrine Command (TRADOC) professional military education (PME) centers and schools and operational centers such as divisional headquarters. The analysts, all civilian contractors, are retired or former active duty personnel who have expertise and experience with the proponent they are assigned to. At the Fort Leonard Wood, Missouri,

United States Army Maneuver Support Center (MANSCEN) Directorate of Training (MDOT), L2I analysts support each of the three schools and MANSCEN.

The L2I analysts provide support to TRADOC centers and schools by researching and analyzing issues identified by their proponents or from an array of information sites and systems. The analysts have vast amounts of resources at their disposal and the ability to collaborate with other analysts worldwide to provide support to their activity.

Collection and Analysis Teams (CAATs), another asset available to L2I analysts, are deployed worldwide by CALL to collect relevant and real-time data to be shared. These CAATs, consisting of subject matter experts from many branches and schools, go through a training program prior to the collection process, spend a week collecting data from designated units, and then summarize their findings to be used later in publications, TTP, or lessons learned. Since 11 September 2001, CALL has published hundreds of publications and answered more than 5,000 requests for information (RFIs) annually.

L2I analysts provide many benefits; valuable and useful information has been provided to MANSCEN and the schools for dissemination to leaders and Soldiers

through the newly-developed MANSCEN L2I Microsoft® SharePoint website. Relevant and branch-validated information from the field is rapidly shared with appropriate leaders, training developers, and instructors to supplement lesson plans without the need to rewrite programs of instruction (POIs) or doctrine.

L2I analysts are also the direct link to CALL for RFIs or publication requests and for establishing and maintaining the information flow between other analysts where similar units have the same need for information sharing. They “push” information relevant to their activity’s needs by “pulling” it from CALL or other resources, thereby alleviating the need for their activity to spend valuable resources. Optimizing the L2I program requires a collaborative effort between the schools and the L2I analysts in pushing and pulling resources to benefit Soldiers in training.

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*For more information on how the Engineer School L2I analyst can support you, call (573) 563-5340 or e-mail <[paul.a.zacher@us.army.mil](mailto:paul.a.zacher@us.army.mil)>.*



*Sergeant First Class Zacher (Retired) is the Lessons Learned Integration Analyst for the United States Army Engineer School, Fort Leonard Wood, Missouri.*



# Community Pines for Beach Season

By Dr. JoAnne Castagna

If you make a trip to Bradley Beach on the New Jersey shore during the winter months, you may be surprised to see residents walking their dogs along the water, riding bikes on the promenade, and surfing the ice-cold waves in wet suits.

A team of United States Army Corps of Engineers® personnel witnessed this on a February day a couple of years ago when they visited this beach that draws more than 100,000 beachgoers annually. It was obvious that the residents yearn for beach season. Especially since the very dunes they were observing were created by the residents themselves, using donated Christmas trees, in an effort to protect the mile-long shoreline the Corps had restored earlier.

The Bradley Beach shoreline had experienced erosion due to previous storms and was in need of sand nourishment. In July 1999, the New York District began a sand nourishment project on Bradley Beach in Monmouth County as part of the Corps's Sandy Hook to Barnegat Inlet Beach Erosion Control Project. The Corps had 3.1 million cubic yards of sand placed on the shore, which added over 200 feet of beachfront and created seven groin notches and four outfall extensions.

Dunes weren't needed for protection in this area because of the naturally high backshore, so they weren't included in the Corps's project. However, after the project was completed in January 2001, Bradley Beach residents wanted to take an additional step to protect the Corps's work, so they started creating beach dunes using donated Christmas trees. According to the operating supervisor of the Public Works Department for Bradley Beach, a life-long resident there, they

wanted to protect the beach's promenade from future storms and give it a look that no other town had.

Beach dunes control erosion by limiting windblown sand loss. In addition, residents wanted to block out noise on the beaches. Now the only noise heard is the sound of the waves and birds. The dunes also protect beach residents' homes and provide them a beautiful oceanfront and privacy.

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*“...Bradley Beach residents wanted to take an additional step to protect the Corps's work, so they started creating beach dunes using donated Christmas trees.”*

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Bradley Beach isn't the first community along the 21-mile Sandy Hook to Barnegat Inlet Beach Erosion Control Project area to create dunes—Manasquan Beach and Monmouth Beach created dunes using fencing and dune grass or a combination of planting and fencing—but they are the first to use Christmas trees. Every January, the residents place their donated pine Christmas trees on the curbside and a Public Works Department truck picks them up.

In 2005, to support the dunes that were being created, the community designed a dune system called a sawtooth design.



**Christmas trees from the past holiday season are placed on the ocean side of the sand dunes where they capture sand blowing inland from the ocean and eventually form permanent dunes.**


Snow fences were placed on an angle along the promenade side of the dune to support the dune system and make the beach look appealing from the shore side. As trees are being collected, the Bradley Beach Public Works Department places them on the ocean side of the sand dune where they eventually form permanent dunes. This year the trees were laid down north to south on the east side of the beach, and next year they will do the west side.

As in previous years, dune grass will be planted on top of the dunes. When the project first began, residents of Bradley Beach planted 50,000 plugs of dune grass on the dunes to keep them anchored. The community is in the process of receiving a grant for an additional 25,000 to 50,000 plugs of dune grass that will be planted this spring.

The beach dunes have proved to be successful, and the placement of Christmas trees—in combination with the snow fencing and dune grass—has been effective in capturing sand blowing inland from the ocean. Since the beginning of this community project, an estimated 28,000 trees have been used to create a stretch of dunes 25 feet wide and 10 feet high along the mile-long oceanfront.

Community officials are very supportive of the project and think it's beneficial to the public. The mayor of Bradley Beach, a strong supporter and the financier for the project, stated that walking through the dunes from the promenade to the beach feels like leaving one world for another. He will be funding

the project until 2008, the year the dune project is expected to be completed. It's this type of community involvement that the Corps likes to see. A proactive municipal Public Works Department is a beneficial addition to any federal or state beach erosion control project. Bradley Beach is trying to aggressively maintain the sand that was placed there and is an active participant in the project's success.

The dunes at Bradley Beach have also proved to be beneficial to the environment, because they provide a more diverse habitat than just sand alone—creating a sanctuary for sparrows and attracting all kinds of insects for wild birds to eat. The residents also find the dunes appealing. Not only are they excited about the beautiful scenery, but they now have a personal connection with the beach since their donated trees will be there forever. 

*Dr. Castagna is a technical writer-editor for the United States Army Corps of Engineers, New York District. She can be reached at <[joanne.castagna@usace.army.mil](mailto:joanne.castagna@usace.army.mil)>.*



Photo by Barbara Dindl, Fort Drum Housing Office



# Real Estate Program Places Military Families in Homes

By Dr. JoAnne Castagna

**W**hile stationed in Denmark in 2006, a military couple was living in a tight two-bedroom townhouse with four newly adopted teenage sisters. Their Family grew quite large, quite fast. Living in these crowded conditions, and not thinking that life could get even more challenging, the Army called the Soldier to Afghanistan and the wife to Fort Drum, New York. She packed up her daughters and arrived at the installation in urgent need of a home. Fort Drum, located on 107,265 acres in upstate New York's North Country, is home to the Army's 10th Mountain Division, which trains and deploys thousands of troops.

Because of the Army's new way of doing business, hundreds of military Families are now being stationed stateside. The Army is experiencing its biggest organizational change since World War II. It's changing from a force that was prepared to take on one or two potential wars at one time to an expeditionary force that can deploy continuously to different parts of the

world to fight the War on Terrorism. This restructuring is requiring Soldiers and their Families serving overseas to return stateside, placing an urgent need on quality housing.

To prepare for this, Army installations such as Fort Drum are eliminating inadequate housing and facilities and improving and constructing others. The United States Army Corps of Engineers®, the Army's construction agent, is

building barracks for single Soldiers on the installation. But while Family housing is being built, military Families are in urgent need of affordable off-post housing. The Army, which is traditionally about 80 percent rental, provides Soldiers a base allotment toward housing, whether they reside on- or offpost.

In February 2005, the Fort Drum housing team informed the Corps's New



Photo by Barbara Dindl, Fort Drum Housing Office

**A developer renovated a school to be used as homes for Fort Drum military Families.**



**The Divarty Barracks are being constructed at Fort Drum to house single Soldiers.**

York District that 2,100 temporary, affordable, quality homes outside of the installation, but within commuting distance, were needed by 2009. New York District personnel, in cooperation with the housing team, began researching the nearby civilian community. The area within a 30-mile radius of Fort Drum is semirural, and the area outside the 30-mile radius is completely rural; Syracuse, New York, is the nearest city.

The New York District created the Domestic Lease Program around the same time. The program encourages land developers to construct or rehabilitate new housing specifically for Soldiers and their Families at installations where housing is hard to find. Under the program, developers are offered a government lease. The developer provides the money for utility services, refuse collection, and maintenance when they are not part of the lease contract.

The District began an education campaign within the 30-mile radius of Fort Drum to inform residents about the program and the Army's need for quality housing. They also placed advertisements in local newspapers, posted flyers, mailed letters, and made telephone calls to a host of institutions—including banks and financial lenders, real estate property associations, community groups, realtors, churches, the Chamber of Commerce, apartment complexes, land surveyors, and assessors. The District encouraged banks and financial institutions to lend money for construction, refurbishments, and new development of housing in a moderate and affordable range. They also worked

with interested developers on their unique development needs, educated them about the market, and offered assistance with state and local officials. In addition, the District held meetings with mayors and city and town officials to express the positive economic impact the program would have on their community, and they spoke with the county office responsible for certificates of occupancy to expedite the permit process.

In the spring of 2005, developer Mike Treanor and Associates contacted the Corps about the program. The company had purchased an apartment complex close to the installation with the intent of developing the property into new housing units and thought these units might be suitable for Army Families. The Corps visited the property to ensure that it met Army housing criteria. Then the developer borrowed money from a financial lender and used it to create 33 new housing units—sending a positive message to the market early on. Since then, Mike Treanor and Associates have renovated more than 40 homes and purchased a factory to develop into an additional 32 apartments.

Clover Management, one of the largest developers of affordable housing in New York, also contacted the Corps with interest in the program. In September 2006, the company signed a contract for 103 acres just outside of Fort Drum to build 648 apartments—418 with two bedrooms and 230 with three bedrooms. The complex will also provide an Olympic-size swimming pool, a community room, and a physical fitness facility.

Military Families are benefiting from the innovative program to include the Family that moved from Denmark. They were housed “right outside the gate” of the installation with “plenty of room, neighbors, a real yard, and room to breathe.”

The program is beneficial to other people also. The government would normally select one developer to do all of the work, but this program creates a natural free market approach with healthy competition. The New York District is encouraging other Corps districts to implement this program: the Alaska District implemented it last summer.

The Domestic Lease Program is improving the economy of the community, because it brings in more residents and revenue to the area, creates jobs for developers and service industries, and improves the infrastructure by rehabilitating existing homes and creating new ones. The program is providing quality, affordable temporary housing close to Fort Drum for military Families. The potential housing built around Fort Drum, at no cost to the government, is now more than \$100,000,000.

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*For more information about the Domestic Lease Program, contact the author at <joanne.castagna@usace.army.mil>.*



*Dr. Castagna is a technical writer-editor for the United States Army Corps of Engineers, New York District.*



## National Guard Uses Technical Colleges to Train Soldiers

By Captain James B. Richmond

**I**n a joint venture, Kentucky Army National Guard engineers and the Kentucky Community and Technical College System (KCTCS) have implemented a program that provides Soldiers the opportunity to attend college-accredited classes in carpentry, electrical wiring, plumbing, and heavy equipment operation during drill weekends. The Kentucky National Guard is transitioning two mechanized combat engineer battalions—the 201st Engineer Battalion and the 206th Engineer Battalion—into a multirole engineer force.

The 201st Engineer Battalion commander realized that the Soldiers needed training in their new military occupational specialty at a beginner's level, but they were waiting on the equipment to be fielded to support it. The unit thought of various ways to train—such as building small sheds and roads at local training areas—but they kept running into the problem of equipment. In a collaborative effort, the 206th Engineer Battalion commander and an instructor at KCTCS came up with a unique way to solve the problem: Train the Soldiers at the local technical schools, using school equipment and certified instructors, thus giving college credit to the Soldiers. At first it seemed too good to be true, but after doing their homework both battalion commanders agreed that it was the best course of action.

The solution for paying for the training was made possible by the Kentucky Tuition Incentive Program. Under this program, Soldiers can receive tuition assistance for attending any state-funded school, as long as they are in good standing in their unit. The battalions presented the program to the State Education Officer and gained her support.



Photo by Staff Sergeant Nathan Roe, Kentucky Army National Guard

**A Soldier trains on carpentry skills under the supervision of instructors from the Kentucky Community and Technical College System.**



**Soldiers from the 207th Horizontal Company, 201st Engineer Battalion, learn to operate loaders and backhoes.**

The second problem was how to overlay the accreditation requirements of these courses during a National Guard training-year calendar of one weekend a month and still be able to conduct the mandatory training requirements of being an engineer Soldier. The brigade operations noncommissioned officer arranged a conference with the KCTCS leadership and developed a training calendar that required five drill weekends.

Together they developed a training plan that allowed the instructors the time needed to teach the skills that would also meet the requirements for the college credit. The Soldiers had a whole day of drill to dedicate to instruction, allowing school administrators to develop a lesson plan that worked.

The school system was able to offer the following courses:

- Beginning Carpentry Lab to 21W (carpentry and masonry specialist) Soldiers
- Installation of Plumbing and Fixtures to 21K (plumber) Soldiers
- Basic Alternating Current (AC) Circuits Lab to 21R (interior electrician) Soldiers
- Heavy Equipment Operation to 21E (heavy construction equipment operator) Soldiers

The 201st Engineer Battalion began training with KCTCS in early 2007 and will complete the final coursework in August or September.

This program is a win-win situation. The Soldiers get quality instruction in their new MOS and college credit, KCTCS enrollment is up, and no equipment was required other than what was on hand already.



*Captain Richmond is the Training Officer for the 201st Engineer Battalion, Kentucky Army National Guard, Ashland, Kentucky.*



## Dedication

The following members of the Engineer Regiment have been lost in the War on Terrorism since the last issue of *Engineer*. We dedicate this issue to them.

Ardron, Sergeant Brian D.	425th Brigade Special Troops Battalion, 25th Infantry Division	Fort Richardson, Alaska
Beadles, Specialist Jason J.	887th Engineer Company, 326th Engineer Battalion	Fort Campbell, Kentucky
Burge, Staff Sergeant Jerry C.	8th Cavalry Regiment, 1st Cavalry Division	Fort Hood, Texas
Davis, Specialist Michael W.	425th Brigade Special Troops Battalion, 25th Infantry Division	Fort Richardson, Alaska
Franklin, Private First Class Michael W.	44th Engineer Battalion, 2d Infantry Division	Camp Howze, Korea
Grothe, Specialist Kelly B.	Bravo Company, 321st Engineer Battalion	Hayden Lake, Idaho
Jones, First Lieutenant Ryan P.	4th Brigade Special Troops Battalion, 1st Infantry Division	Fort Riley, Kansas
Liggett, Private First Class Robert A.	2d Battalion, 69th Armor Regiment, 3d Infantry Division	Fort Benning, Georgia
McDonald, Specialist Sean K.	9th Engineer Battalion, 1st Infantry Division	Wiesbaden, Germany
Schwab, Staff Sergeant Coby G.	Bravo Company, 321st Engineer Battalion	Hayden Lake, Idaho
Smallwood, Specialist Erich S.	Alpha Company, 875th Engineer Battalion	Marked Tree, Arkansas
Sunsin-Pineda, Specialist Astor A.	4th Brigade Special Troops Battalion, 1st Infantry Division	Fort Riley, Kansas
Weaver, Staff Sergeant Shannon V.	425th Brigade Special Troops Battalion, 25th Infantry Division	Fort Richardson, Alaska

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# Rethinking How We Train

By Captain Nils N. French

**W**hen organizations are faced with an overwhelming quantity of *what* must be done, sometimes there's little time to consider *how* it must be done. This article focuses on the *how*, suggesting new approaches to the way future engineer leaders are trained. The article doesn't imply that these methods aren't currently being applied, and the author acknowledges having already witnessed their application. Chances are, however, that some of the ideas are new and will thus be of value. It is also realized that there may be valid reasons why the methods cannot be applied—whether related to logistics or the aims of training in general. Lastly, these ideas are not original to the author, but a compendium of the suggestions of others.

## Training for the 21st Century

**Y**ale University graduates Claudia Wallis and Sonja Steptoe coauthored a *TIME* magazine article titled "How to Bring Our Schools out of the 20th Century."<sup>1</sup> The respected journalistic researchers in the field of education and learning believe that a chasm exists between most schools and the real world. The outside world has changed, but inside the schools of America much is as it was 100 years ago (desks, pens, notes, and students listening to teachers for hours). The authors suggest that students should be taught differently to develop "21st century skills"—broadly grouped into teamwork, information, and thinking skills.

### Teamwork Skills

Most innovations today are made by groups not individuals, increasing the importance of teamwork skills. Wallis and Steptoe draw this from the experience of former Lockheed Martin CEO Norman Augustine, who notes that there is a need to emphasize communication skills, the ability to work in teams, and the ability to work with different cultures. Students must collaborate and solve problems in small groups and apply learning to real-world scenarios (which results in better learning than the "chalk-and-talk" approach). The pertinence to the military is obvious; leaders must solve problems in group settings from corps-level staffs down to platoon and squad levels. Much of our training is already approached in this way.

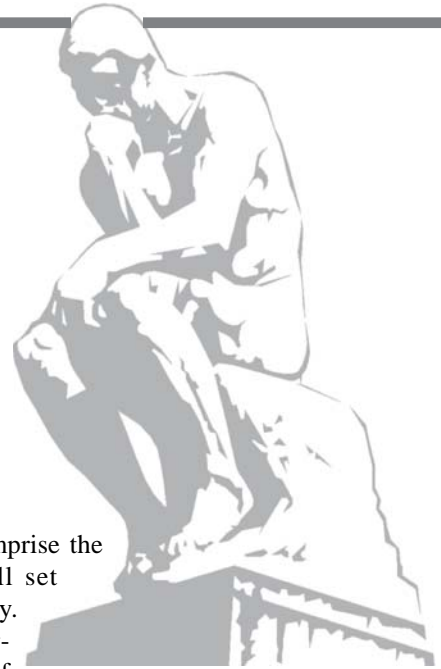
### Information Skills

These skills comprise the next essential skill set for the 21st century.

Karen Bruett, Director of Education of the Partnership for 21st Century Skills, a leading advocacy group that draws from the expertise of educators and business leaders, notes that the 21st century has brought an overflow of information and a proliferation of the media that forces us to separate the reliable from the unreliable. Students must rapidly process and learn to manage, interpret, validate, and act on new information. The ability to judge objectivity and carefully assess *what* is known and *how* it is known is becoming critical. We notice the same overflow of information and resultant need for judgment in our tactical operations centers and headquarters as the number of sensors and sources on the battlefield increase steadily with the pace of technology. This increase in the amount of information available also means that information that was previously memorized is now readily available electronically, enabling a shift from memorization to a more solid understanding of the fundamentals that permit the understanding of complex concepts.

### Thinking Skills

Wallis and Steptoe indicate that the approach to thinking skills must change as well. They note that the modern world has put a premium on creativity and innovation, and students must learn to see patterns where other people only see chaos—similar to the application to pattern analysis in the improvised explosive device (IED) fight. In essence, the ability to solve abstract problems is vital. To train in this capacity, it is essential that the curriculum dwell on key concepts that are taught in depth and in careful sequence while avoiding a deluge of forgettable details as is "so often served in U.S. classrooms." Students must develop portable skills: critical thinking, cross-discipline thinking, the ability to make connections between ideas, and the ability to keep learning.





## Training for the Contemporary Operating Environment

A monograph titled “Teaching Maneuver Warfare”<sup>2</sup> by retired United States Marine Corps Colonel Michael Duncan Wyly, a former Vice President of the Marine Corps University, suggests that styles of fighting have changed and styles of teaching must therefore change as well. Old doctrine called for centrally controlled, closely orchestrated, slow-moving battles, and training was done in much the same way. Now we face a fast-paced, loosely controlled, decentralized fight where we must be responsive to a changing situation. How we train the force must shift accordingly. The teaching style must adapt to become less controlled and highly responsive.

Wyly proposes that the central focus in training should be to equip future leaders to make decisions. This is one of the rare qualities sought in combat leaders, since the ability to make decisions determines mission success in the contemporary operating environment (COE). Wyly stresses that this ability must be focused on more than content, methodology, or procedures.

To accomplish this, several methods are given. Historical and hypothetical case studies, graded classroom discussion of assigned reading, and terrain walks are suggested. Wyly notes that instructors can give students exercises with varying situations where limited knowledge of the terrain and the enemy must be considered in a fixed amount of time and students then clearly express their decided intent in a brief order. Definitions, procedures, and weapons capabilities must be narrowed down to the essential and put into a useful printed form so they can be learned through hands-on experience. The focus of the instructor must be on the decisive action that the COE demands.

### Training for Adult Students

Special considerations must be made for adult students. The National Victim Assistance Agency (NVAA), which manages a comprehensive nationwide curriculum for adult students, highlights these considerations in a publication titled “The Ultimate Adult Educator.”<sup>3</sup> Their suggestions are specific and based on the NVAA’s extensive experience and research in the field of adult learning.

When teaching adults, the key consideration is that they must be in charge of their own learning. Instructors do not have the ability to implant ideas and skills in adult students’ minds. They can only suggest and guide them, and their main role is thus managing the process through which the adult students learn, encouraging them to use their own judgment and decision-making capabilities. Adults are more likely to accept and absorb learning if they arrive at the idea themselves. Knowing this, the practice of giving adult students information

to memorize must be discarded and activities that allow students to generate concepts and ideas must be used instead.

Furthermore, adult students respond better when material is presented through a variety of instructional methods, as opposed to a single, repeated style (Microsoft PowerPoint® is a possible example). As with younger students, adults learn best by doing. Different from younger students, adults are best motivated to learn *when they need to know*, and instructors must help them ask themselves why they need the information, how they can use it, and how they will benefit from it. These unique considerations are important, although they are not necessarily obvious, and their application is vital when dealing with adult students.

### Conclusion

Several interesting points have been raised during this study. The first common thread that emerges is the need to focus on critical thinking and decision making. It is clear that this should be learned through application to scenarios in a team setting. Furthermore, there is a pronounced requirement to shift away from both memorization and tightly controlled, centralized instruction. Research suggests that students should be encouraged to take charge of their own learning as opposed to being given everything they need to know by their instructors. Again, much of our training is already conducted in a way that is in line with these suggestions. The difficulty will come in changing the training that is not.



*Captain French is a Canadian Army Exchange Instructor assigned to the 554th Engineer Battalion, Directorate of Training and Leader Development, United States Army Engineer School, Fort Leonard Wood, Missouri. He is the primary instructor for Basic Officer Leader Course (BOLC) Task Force Engineer training and was recently involved in an extensive restructuring of the module that teaches the subject.*

### Endnotes

<sup>1</sup>Sonja Steptoe and Claudia Wallis, “How to Bring Our Schools out of the 20th Century,” *TIME*, 18 December 2006, pp. 50-56.

<sup>2</sup>Michael Duncan Wyly, “Teaching Maneuver Warfare,” in Richard D. Hooker, Jr. (ed.), *Maneuver Warfare: An Anthology*, Presidio Press, Novato, California, 1993, pp. 248-264.

<sup>3</sup>Christine Edmunds, Kip Lowe, Morna Murray, and Anne Seymour, “The Ultimate Adult Educator: Achieving Maximum Adult Learning Through Training and Instruction,” June 2002, <<http://www.ojp.usdoj.gov/ovc/assist/educator/welcome.html>>, accessed on 9 January 2007.

# Historic Quad Buildings Renovated

By Ms. Aiko Brum

**D**uring a three-year renovation project beginning in 2004, contractors restored historic C Quad at Schofield Barracks, Hawaii, to its original architectural design at the turn of the century, complete with period colors and double-cased windows. Due to being included on the National Register of Historic Places, the exterior of the buildings in C Quad remains unchanged, while the interiors were renovated to meet the current Army standards. C Quad—now home to a full-size gym and basketball court, a company-level conference room, and the latest amenities for Soldiers living in the barracks—awaits the return of 2d Battalion, 35th Infantry Regiment, 3rd Infantry Brigade Combat Team, from Operation Iraqi Freedom.

Built during the 1915 to 1918 timeframe, C Quad was part of a large building campaign that focused on infantry regiments. The configuration of four buildings surrounding a central courtyard forms the concept of the “quad.” Two of the buildings were barracks and the other two housed administrative offices. Like its contemporaries, C Quad consists of some of the earliest concrete-paneled buildings constructed in Hawaii. The buildings look much as they did on 7 December 1941, when the Japanese attacked Wheeler Army Airfield, or in 1953, when they were the filming site for the movie version of “From Here to Eternity.” Because of the renovations, the history of this quad will live on.

The quad concept required preparing the design and construction of the four, three-story concrete buildings to include living quarters, community activities, company operations, battalion headquarters, and dining facilities. Demolition and renovation of these historical buildings had to comply with the National Historic Preservation Act.

In addition, the Army’s Whole Barracks Renewal Program requires transformation of facilities to comply with 21st century building codes and antiterrorism and force protection standards. The mandate greatly challenges installation commanders, because it requires that barracks designed for high-volume occupancy be converted into suites. For example, the two C Quad barracks once housed 1,500 Soldiers. Now,



**Original C Quad interior**

36 single-occupant and 132 one-plus-one rooms (2 private bedrooms with shared living areas) will house junior enlisted Soldiers and noncommissioned officers for a total of 300 Soldiers.

The suites feature separate bedrooms and a common bathroom with a sink, toilet, and tub-shower and a kitchen with a full-size refrigerator, range, and microwave oven. Each barracks floor also contains a dayroom, which is a common entertainment or recreational area.

In total, C Quad required renovation of 288,000 square feet of facilities. The two barracks were gutted down to their slabs, and then recreated by contractors. All exterior utilities and pavement were replaced, and the center courtyard was restored.

In spite of modifications, the project was able to maintain its heritage and historical features and stay true to historic designs. The quad provides facilities for five company




**Original C Quad barracks**



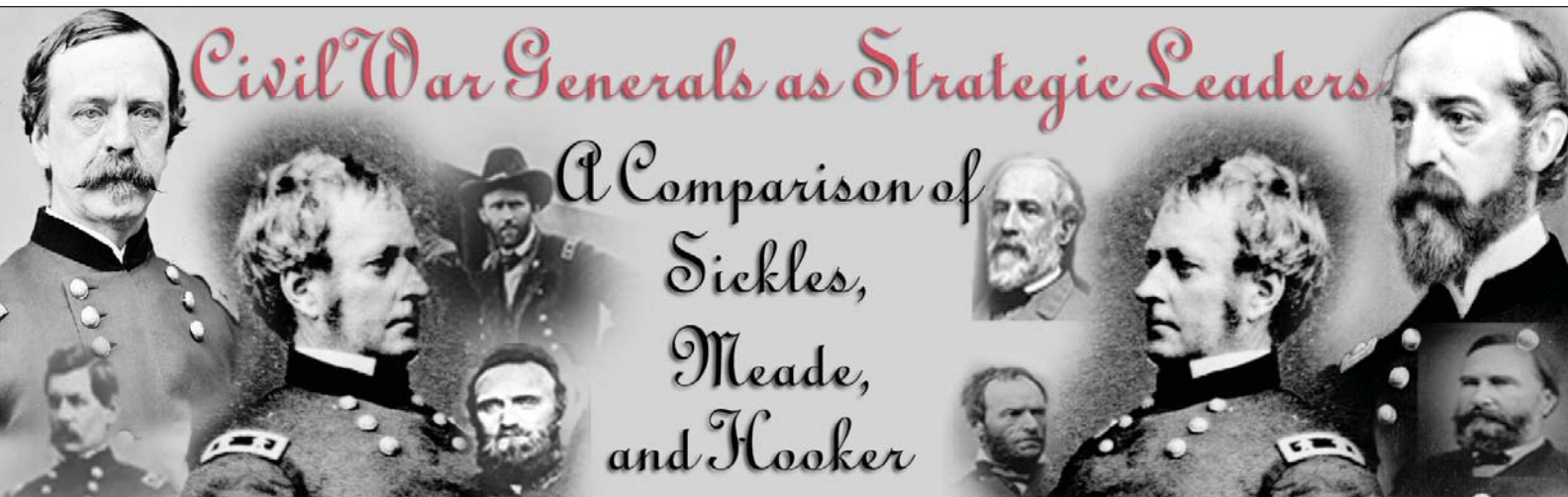
**Newly renovated C Quad and courtyard**

headquarters, to include a supply area, arms rooms, and company offices, as well as the battalion headquarters building with a state-of-the-art dining facility, battalion administrative and headquarters offices, and a consolidated Soldiers' lounge. The facilities have the most up-to-date communications, safety, and security systems.

A \$58 million, 400,000 man-hour project, C Quad is one of a series in barracks renewal projects that will provide Soldiers stationed in Hawaii with "a quality of life commensurate with

the quality of service" they provide. Three out of five historical quads at Schofield Barracks are now available for occupancy or are in progress. Next year, four more will begin renovations: two at Schofield Barracks, one at Fort Shafter, and one at Wheeler Army Airfield. 

*Ms. Brum is the Chief, Command Information, and managing editor of the Hawaii Army Weekly, Schofield Barracks, Hawaii.*



By Dr. Richard Swain

A longer version of this article was submitted toward the requirements of a Master of Strategic Studies degree at the United States Army War College in April 2005. The views expressed in the article are those of the author and do not necessarily reflect the official policy or positions of the Army, the Department of Defense, or the U.S. government.

The strategic leadership tasks listed in Field Manual (FM) 22-100, *Army Leadership*, are really broad concepts. (The same concepts also are in FM 6-22, *Army Leadership*, which replaced FM 22-100 in October 2006.)<sup>1</sup> This article will consider the following broad strategic leadership tasks:

- Provide vision
- Shape the culture
- Manage joint, combined, and interagency relationships
- Manage national-level relationships
- Represent the organization
- Lead
- Manage change

Do these concepts apply to the past as well as the future? A valid concept is defined as “an abstract or symbolic tag that attempts to capture the essence of reality. The ‘concept’ is later converted into variables to be measured.”<sup>2</sup> These strategic leadership tasks can be used to analyze the leadership of past Army leaders. They enable students of strategy to “capture the essence of reality,” to look back and compare leaders, and thus gain insights into our own strategic leadership. This article compares the performance of three Union Army generals as strategic leaders in the Civil War: Major Generals Daniel E. Sickles, George G. Meade, and Joseph Hooker.

These strategic leadership tasks are doctrinally relevant to contemporary warfare, especially the strategic challenge of managing joint, combined, and interagency relationships. For

the Army of the Potomac, interagency relationships were different, but no less important. The connection between current doctrine and historical situations may be tenuous, but it can also yield worthwhile insights into issues of strategic leadership.

### Provide Vision

“The strategic leader’s vision provides the ultimate sense of purpose, direction, and motivation for everyone in the organization. It is at once the starting point for developing specific goals and plans, a yardstick for measuring what the organization accomplishes, and a check on organizational values. Ordinarily, a strategic leader’s vision for the organization may have a time horizon of years, or even decades. In combat, the horizon is much closer, but strategic leaders still focus far beyond the immediate actions.”<sup>3</sup>

The time horizon for Sickles, Meade, and Hooker extended over weeks and months, not years. During the Civil War, general officers were wounded and killed at a rate 50 percent greater than that of ordinary Soldiers. Therefore, the ability to provide vision over the long term was limited. Even so, each leader provided some vision to his command. Sickles was in command of the 3d Corps of the Army of the Potomac from February to July 1863; Meade had command of the Army of the Potomac from 28 June 1863 until 27 June 1865; and Hooker had from January to June 1863 to provide the Army of the Potomac his vision.

Sickles’ pragmatic approach and political acumen far outmatched those of others in the Army. The clique of West Point officers considered him a “political general,” given

command despite his lack of experience. This determination of amateur and professional Soldier was quite flimsy, since corps and army command was unknown to the senior leaders in the Civil War. The only officer with experience in corps or army command was Major General Winfield Scott; however, Scott had commanded fewer than 12,000 men in Mexico. Sickles' 3d Corps fielded 11,924 Soldiers on 2 July 1863, down from the 39,000 at the beginning of the war. An example of Sickles' vision can be seen in his first meeting with President Abraham Lincoln. Sickles was frustrated in his efforts to raise his regiment in 1861, since the Republican governor of New York refused to muster in Sickles' Democratic volunteers. Sickles then went to Washington and presented his argument to President Lincoln and Secretary of War Simon Cameron, who agreed to a new category of Soldiers—United States Volunteers. Sickles outmaneuvered the governor of New York and was given a commission. He was also the only amateur who stayed in the Army at the close of hostilities, serving as the ambassador to Spain during President Ulysses S. Grant's administration.

Meade's vision for the Army could be seen in his trust in a subordinate. Meade gave command of one wing of the Army to Major General John Reynolds, who had been captured at the same Battle of Glendale, Virginia, in which Meade was severely wounded. Reynolds returned to the Army after his parole, and Meade entrusted him (a fellow Pennsylvanian) with half of the Army of the Potomac. With only three days in command before Gettysburg, Meade was Lincoln's second choice to command the Army. Reynolds had been Lincoln's first choice, but he turned Lincoln down because of the untenable command relationship between the Army and the White House. In the preceding three years, the Army of the Potomac had four commanders—Brigadier General Irvin McDowell and Major Generals George McClellan, Ambrose Burnside, and Joseph Hooker. The level of trust between the commander in chief and his generals was low.

Meade was thrust into a command that he felt obligated to assume. The order to take command reached him at 0300 as the Army of the Potomac was on the move, tracking the second invasion of the North by the Army of Northern Virginia. Meade's decision to entrust a subordinate changed the direction of senior leader relationships in the Army of the Potomac. This provided a sense of direction, purpose, and motivation for the Army.

Meade's strategic vision was simply to eject the invaders from his home state. The victory message he sent to the Army of the Potomac after Gettysburg included a phrase about removing the invaders from "our soil." But Lincoln was absolutely aghast at the phrase and reprimanded Meade; Lincoln believed that "our soil" should refer to all the soil, both Confederate and Union. Meade's oversight revealed his lack of

strategic vision regarding national objectives and goals. He was misrepresented in the press because of his treatment of journalists in his headquarters. He regarded them as a hindrance to his goals, rather than a means of reinforcing the national goals of the war.

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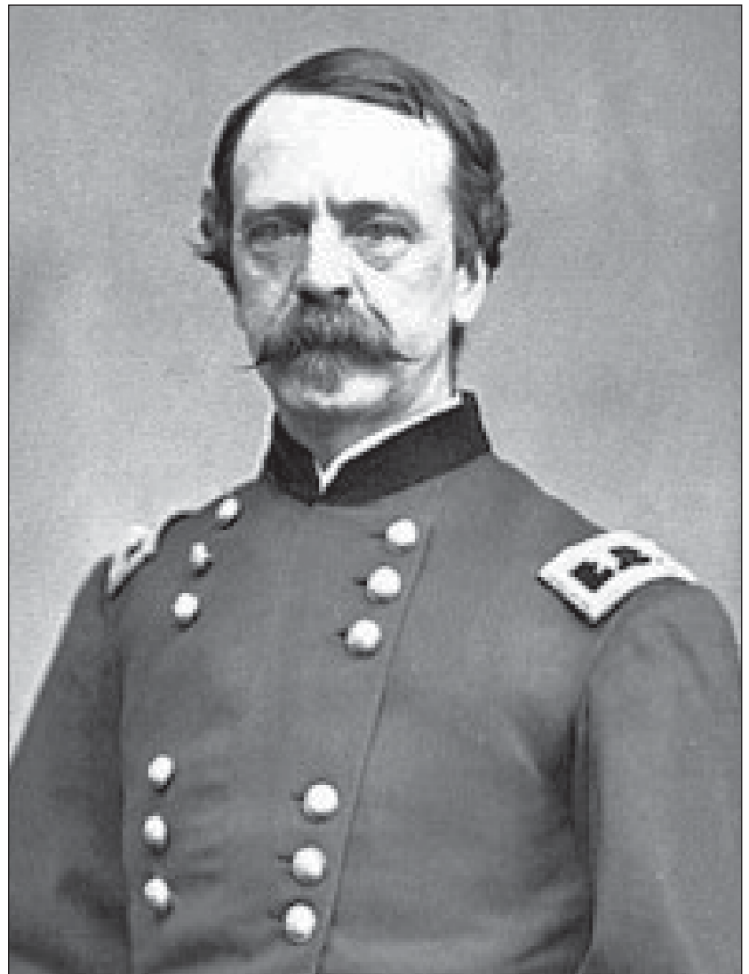
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**“Sickles’ pragmatic approach and political acumen far outmatched those of others in the Army.”**

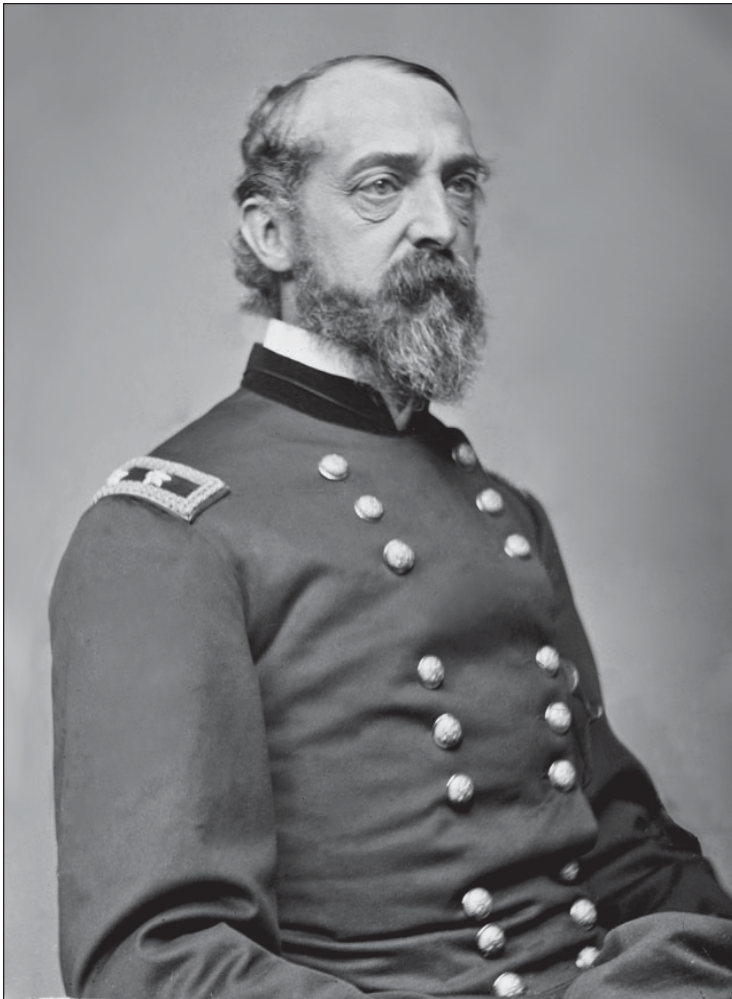
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Hooker is described in biographies as a braggart, a drinker, and a womanizer who rewarded his friends with high command. One of his initial moves was to place Sickles in command of the 3d Corps, an appointment that overlooked the more senior Major General Oliver Howard. But why would Hooker promote Sickles over Howard? The character of the two men could not have been more different. Howard was a devout Christian who prayed over his men and passed out religious tracts in the hospital. Sickles was a pragmatic, hard-drinking womanizer who fit into Hooker's command climate and vision. Hooker



**Major General Daniel E. Sickles**



**Major General George G. Meade**

gave Howard command of the 11th Corps after the resignation of Major General Franz Sigel, who was upset at Hooker's promotion over him. The 11th Corps was made up of mostly hard-drinking German immigrants who had escaped religious oppression back home. Hooker may have intended to put the priggish Howard in a no-win situation by making him the leader of such a rowdy corps. Certainly morale in the corps suffered, which could explain the 11th Corps debacle at Chancellorsville. Hooker seemed to lack vision in placing senior leaders in these commands.

### **Shape the Culture**

*“Strategic leaders inspire great effort. To mold morale and motivate the entire Army, strategic leaders cultivate a challenging, supportive, and respectful environment for Soldiers and [Department of the Army] civilians to operate in. An institution with a history has a mature, well-established culture—a shared set of values and assumptions that members hold about it. At the same time, large and complex institutions like the Army are diverse; they have many subcultures, such as those that exist in the civilian and reserve components, heavy and light forces, and special operations forces. Gender, ethnic, religious, occupational, and regional differences also*

*define groups within the force.”<sup>4</sup> Sickles, Meade, and Hooker were all challenged to shape strong cultures in their commands.*

Sickles was well respected by his men. Decisive and brave, he could shape and motivate his portion of the Army. However, he was quick to blame others for failure. He believed his actions on the second day at Gettysburg won the battle. He was evacuated to the rear after his leg was amputated by an artillery round in the vicinity of the Peach Orchard, and he quickly gave the press his account of his corps's action. He then preempted critics and used his influence in Congress and in the press to undercut Meade. Sickles' account to the Joint Committee on the Conduct of the War directly countered Meade's account of the Battle of Gettysburg. The West Point clique regarded Sickles as a loose cannon. Major General Henry Halleck's statement sums up the opinion of the West Point clique that political generals were “simply murder” and responsible for Union failures in the beginning of the war. Congress was critical of the West Pointers' efforts to blame nonprofessional Soldiers for the Army's poor performance. Instead, Congress and the newspapers placed the blame on the incompetence of the West Pointers. The ensuing culture of animosity between the militia officer corps and the Regular Army officer corps is still evident to this day. After the war, the dominance of either the militia system or the professional army would shape Army culture. Sickles was a charismatic, pragmatic political operator, but an amateur Soldier in the eyes of the West Point officers. His apparent success made the argument more difficult. Could a political figure lead a corps or division

just as readily as a trained professional officer? Sickles proved that a charismatic political leader could.

Meade shaped the culture of the Army of Potomac by his victory at Gettysburg. He had gained a reputation for being short-tempered and obstinate with junior officers and superiors alike, and he especially disdained civilians and newspapermen.<sup>5</sup> He believed that militia officers were incapable of leading corps and armies, and the testimony he gave to the Joint Committee on the Conduct of the War undercut Sickles' assertions and

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**“Meade shaped the culture of the Army of Potomac by his victory at Gettysburg.”**

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corrected misrepresentations of the facts of the Battle of Gettysburg. Meade's reputation was sullied by his testimony, but he retained the confidence of the commander, Lieutenant General Ulysses S. Grant. Grant's confidence in Meade and in the culture that he had created was probably one reason that Grant left him in command of the Army of the Potomac.

Hooker shaped a culture of political backstabbing. He undercut each of his commanders, yet he was able to create a positive relationship with Congress and the media. He supplied the media with information that would damage senior officers. The charges of insubordination that Burnside brought against Hooker after the Battle of Fredericksburg were most likely true. However, Lincoln

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“Hooker was confident in his ability to do a better job than those assigned to the command before him...”

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relieved Burnside and placed Hooker in command of the Army of the Potomac, due in part to Hooker’s political ability. Hooker believed in cronyism, and the system gave him loyal subordinates; however, it overlooked the professional skills and abilities of men who were not cronies. Hooker also shaped a culture of mistrust between himself and headquarters. Lincoln placed Halleck over Hooker, which probably led to Hooker’s resignation. The message traffic between Hooker, Halleck, Secretary of War Edwin Stanton, and Lincoln—leading up to Hooker’s resignation—offers an example of individuals talking past each other. Hooker could have shaped a culture that supported the administration if he had accepted Lincoln’s invitation to meet on 13 June 1863. The meeting might have strengthened Hooker’s relationship with the commander in chief before Lee’s invasion. The rejection of Lincoln’s request to meet seems to have sealed Hooker’s fate.

### **Manage Joint, Combined, and Interagency Relationships**

*“Strategic leaders oversee the relationship between their organizations, as part of the nation’s total defense force, and the national policy apparatus. They use their knowledge of how things work at the national and international levels to influence opinion and build consensus for the organization’s missions, gathering support of diverse players to achieve their vision.”*<sup>6</sup> These Civil War leaders did not effectively establish the relationship between their organizations and the rest of the nation’s total defense force.

Sickles did not build consensus within his corps. He ignored the advice of subordinates, peers, and superiors on the second day of Gettysburg, when he moved his corps into an exposed position—contrary to Meade’s orders—and put the entire Army of the Potomac at risk. Sickles had no knowledge of how his action affected the total defense force, and his actions at Gettysburg exemplify poor strategic leadership. However, his actions after the war to make Gettysburg a national battlefield memorial offer a positive example of strategic leadership. His



**Major General Joseph Hooker**

quest for battlefield preservation left a legacy that supports our nation’s defense to this day.

Meade did build consensus among his senior officers around midnight of the first day of Gettysburg in the decision to stay and fight. However, he did not manage joint, combined, and interagency relationships very well. He failed to recognize the strategic objective of pursuing and destroying the Army of Northern Virginia after the battle and did not understand the strategic significance of trapping Lee’s army north of the Potomac River. He did not recognize the relationship between his organization and the nation’s total defense.

Hooker did not understand his comprehensive role as the commanding general of the Army of the Potomac and used the historical precedents of Burnside and McClellan to determine his role. He viewed his position as we now see a combatant commander—such as the commander of the United States

European Command or the United States Central Command—with a direct reporting responsibility to the Secretary of Defense and the President. After the Battle of Chancellorsville, Hooker was subordinate to Halleck. The following message specified his subordinate position:

WASHINGTON, June 16, 1863—10 p.m.

Major General Hooker:

*To remove all misunderstanding, I now place you in the strict military relation to General Halleck of a commander of one of the armies to the general-in-chief of all the armies. I have not intended differently, but as it seems to be differently understood, I shall direct him to give you orders and you to obey them.*

A. Lincoln

Hooker found this command relationship unacceptable, which resulted in his request for resignation.

### **Manage National-Level Relationships**

*“Strategic leaders identify military conditions necessary to satisfy political ends desired by America’s civilian leadership. They must synchronize the efforts of the Army with those of the other services and government agencies to attain those conditions and achieve the end state envisioned by America’s political leaders. To operate on the world stage, often in conjunction with allies, strategic leaders call on their international perspective and relationships with policy makers in other countries.”*<sup>7</sup> These Civil War leaders had little need to act on the world stage. However, they did have an obligation to meet the end state envisioned by America’s political leaders.

Sickles was committed to the cause of suppressing the rebellion. His motivation may be seen as consistent with his self-aggrandizement. He needed a way to restart his political career after his murder of Barton Key, which resulted from Key’s affair with Sickles’ young wife. The temporary insanity defense so adeptly presented by his lawyer, future Secretary of War Edwin Stanton, saved Sickles from the gallows. But his forgiveness of his unfaithful wife outraged his political base. He needed to resurrect his political fortunes, and the war thrust him back into the limelight. He was able to operate on the national and international levels. His relationship with Lincoln, Stanton, Grant, and the Congress served him well through the war and beyond. He may have been a scoundrel acting only for his own benefit, but that does not necessarily detract from the service he performed for his nation.

Meade was a professional Soldier who placed Pennsylvania first and had difficulty pursuing the political ends desired by civilian leadership. Although he was obstinate with seniors, he accomplished difficult missions. His units were the only ones that broke the Confederate line at Fredericksburg, and

he was the trusted second in command to Hooker at Antietam. Meade commanded the corps after Hooker was wounded at Antietam; however, Meade—the professional, no-nonsense Soldier—had a difficult time understanding the strategic intent of President Lincoln after the Battle of Gettysburg and failed to pursue and destroy the Army of Northern Virginia as Lincoln desperately desired.

Hooker was confident in his ability to do a better job than those assigned to the command before him, and he bragged that he could do it better than anyone else. This overconfidence spelled disaster for him at Chancellorsville, where he was unable to accomplish the ends designated by the political leadership. He did not seem to have a political affiliation, and Lincoln saw his nonpartisanship as an advantage when placing him in command. Perhaps after the debacles of McClellan and Burnside, Lincoln saw in this braggart someone who could bring about a victory. Some would say that Lincoln had few other choices in January 1863. McClellan had “the slows,” and Burnside orchestrated the disaster at Fredericksburg. Hooker had bragged that he could whip “Bobby” Lee, but he was unable to carry out his boasts and achieve the end state envisioned by America’s political leaders.

### **Represent the Organization**

*“Whether by nuance or overt presentation, strategic leaders vigorously and constantly represent who the Army is, what it’s doing, and where it’s going. The audience is the Army itself, as well as the rest of the world. There’s an especially powerful responsibility to explain things to the American people, who support their Army with money and lives. Whether working with other branches of government, federal agencies, the media, other militaries, the other services, or their own organizations, strategic leaders rely increasingly on writing and public speaking (conferences and press briefings) to reinforce the Army’s central messages. Because so much of this communication is directed at outside agencies, strategic leaders avoid parochial language and remain sensitive to the Army’s image.”*<sup>8</sup> These Civil War leaders provide a message about the Army in the past. They present an image of a professional force being created in a republic that distrusted a standing military. These officers vigorously represented the Army to the nation.

Sickles exemplifies the long-term representation of the sacrifices that Union Soldiers made. He headed up the monument commission that preserved and honored the sacrifices of those who died in the conflict and was instrumental in preserving the Gettysburg battlefield. When Sickles was asked about a monument to himself, he replied that the entire battlefield was a monument to him. In many ways, that is an accurate statement. Sickles did provide a strategic representation of the Army to us and to our posterity.

Meade represented the Army well as the hero of Gettysburg. He continued to command the Army of the Potomac until the end of the war. He reinforced the Army’s central message that



a professional Army was needed by the nation and was promoted to the Regular Army rank of major general. Actions taken by Grant assured control of the Army to the professional Soldiers after the war, but Meade did not explain the Army story to civilians or newspapers since he had no patience with them.

Hooker is known to have structured the Army into separate corps with recognizable insignias, enabling it to join units from different states into cohesive, recognizable corps. His efforts were communicated within the Army and helped enhance its morale. His boasting and bravado provided the Army with confidence in its ability to defeat the Army of Northern Virginia. Even if the bravado was false, it communicated the confidence that the commanding general had in the Army he commanded. Hooker instilled considerable pride in the Army.

### Lead and Manage Change

*“Strategic leaders deal with change by being proactive, not reactive. They anticipate change even as they shield their organizations from unimportant and bothersome influences; they use the ‘change-drivers’ of technology, education, doctrine, equipment, and organization to control the direction and pace of change. Many agencies and corporations have ‘futures’ groups charged with thinking about tomorrow; strategic leaders and their advisory teams are the Army’s ‘futures people.’”*<sup>9</sup> These Civil War strategic leaders were caught by changing technology—especially the introduction of the rifled musket—that was not accompanied by the requisite change in doctrine and organization. The rifled musket provided a technology that challenged all the paradigms that these leaders believed, yet they remained wedded to the Napoleonic doctrine of warfare. Rather than dealing with the change by being proactive, they were reactive, and by the end of the war the era of trench warfare had begun. It was a solution forced on the strategic leaders in response to the withering lethality of a new weapon.

### Conclusion

Sickles, Meade, and Hooker successfully carried out some of the strategic leadership tasks. It may be unfair to judge these 19th century leaders by a modern standard of strategic leadership tasks, because the atmosphere and environment in which they served were much different. During the Civil War, the Army was a small regular force filled out with militia. The professional West Pointers were both the heroes and heels of the war. In the beginning, Congress blamed the state of readiness on the nearest target—the professional Army. However, the Congress, whose responsibility is to provide for the common defense, was a major reason for those failures. Sickles, Meade, and Hooker offer interesting contrasts among strategic leaders. A pragmatic politician, an obstinate professional Soldier, and a backstabbing braggart all had an impact on what our Army became. We can learn from both the

positive and negative examples of past strategic leaders such as these. Above all, we learn that strategic leadership is a difficult and complex enterprise.



*Dr. Swain is the Director of Quality Assurance for Training at the United States Army Maneuver Support Center, Fort Leonard Wood, Missouri. He holds a graduate certificate in instructional design for online learning from Capella University; a master’s in educational administration from the University of North Carolina–Charlotte; a master’s in military science from the Army War College at Carlisle, Pennsylvania, and a doctorate of philosophy in education.*

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### Endnotes

<sup>1</sup> Field Manual 22-100, *Army Leadership*, 31 August 1999, p. 7-8; accessed 23 April 2005.

<sup>2</sup> U.S. Environmental Protection Agency, “Program Evaluation Glossary,” 2004; available from <<http://www.epa.gov/evaluate/glossary/c-esd.htm>>; accessed 23 April 2005.

<sup>3</sup> FM 22-100, p. 7-8.

<sup>4</sup> Ibid. p. 7-17

<sup>5</sup> John Heiser “Voices of Battle: Gettysburg,” 1998; available from <<http://www.nps.gov/gett/getttour/sidebar/meadebio.htm>>; accessed 23 April 2005.

<sup>6</sup> FM 22-100, p. 7-19.

<sup>7</sup> Ibid. p. 7-17.

<sup>8</sup> Ibid. p. 7-15.

<sup>9</sup> Ibid. p. 7-24.

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# The Green Battalion

By Mr. Michael T. Wolford

**T**he 58th Transportation Battalion at Fort Leonard Wood, Missouri, received official notification in April that it had won the Army Award for Maintenance Excellence for its category. Not only does the unit have a great maintenance program, it also embraces environmentally friendly technology that has saved thousands of dollars. The battalion uses several technologies to reduce operational costs while helping the environment: fuel-motor oil blending and battery and air filter reclamation.

The battalion uses a fuel-motor oil blending process to save on fuel and operating costs for handling and disposing of waste motor oil. The blending process, which mixes fuel with used motor oil that would otherwise be discarded, is simple



**A maintenance worker for the 58th Transportation Battalion demonstrates the fuel-motor oil blending process.**

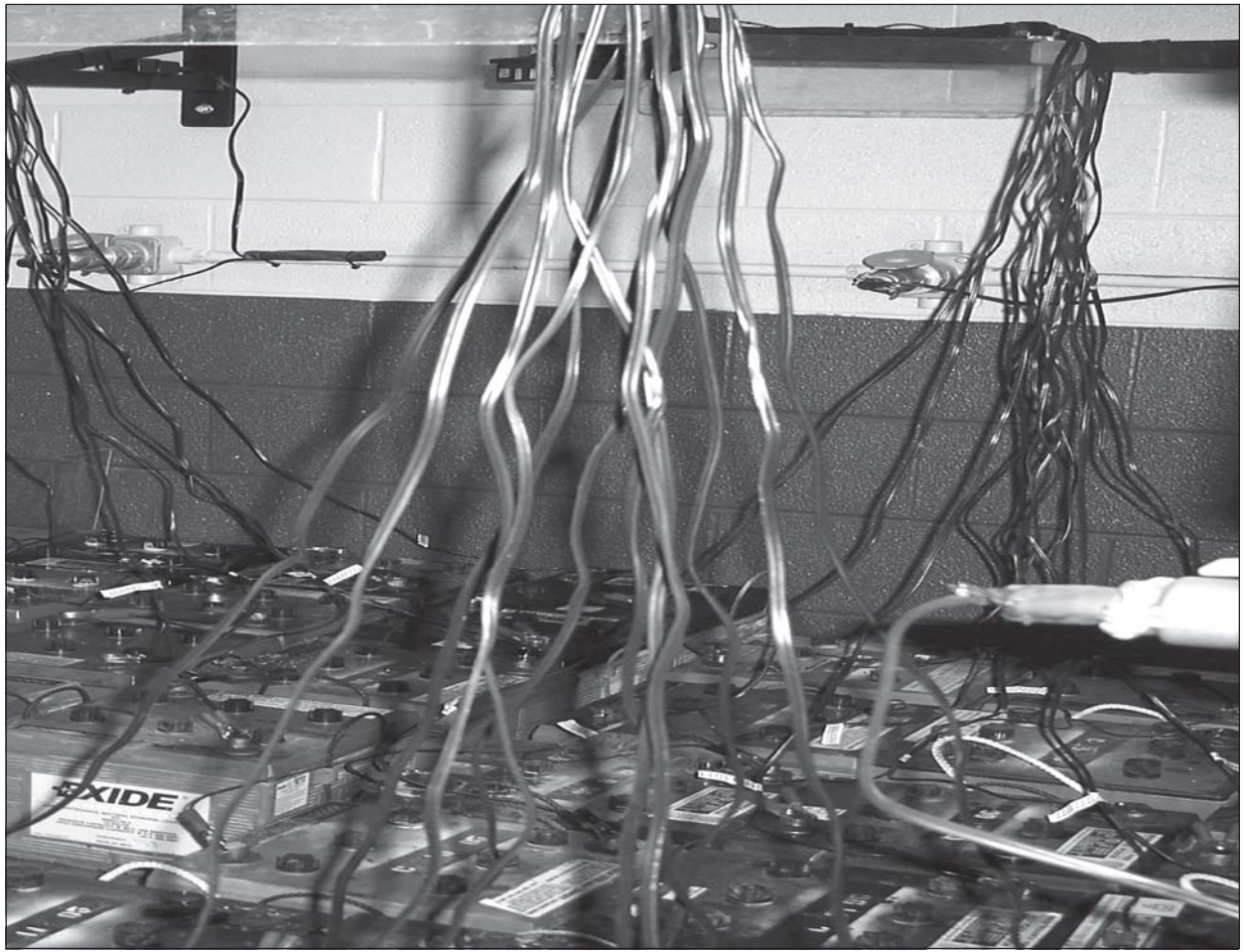


**Fuel-motor oil blending system machine recycles waste motor oil.**

and only occurs while a vehicle is being serviced. The blending system consists of the blending machine with filters, two fuel tank hoses, and an oil pan and hose. The mechanic uses the following steps to blend the fuel with the motor oil:

- Insert two hoses into the vehicle fuel tank. One hose delivers fuel to the blender, and the other delivers blended fuel back to the fuel tank.
- Place the oil pan under the vehicle's drain plug, and connect the hose to the blending machine.
- Drain motor oil into the oil pan.
- Turn the timer to the appropriate time, and turn on the machine.
- Continue with services while the machine blends the fuel and the used motor oil automatically.

In 2005, the first year the battalion mechanics blended fuel, they reused 771 gallons of motor oil. In 2006, they reused more than 2,500 gallons of motor oil. The unit realized a savings of over \$7,200 in the first two years. This savings is mainly from the fuel the battalion did not have to buy, since each gallon of used motor oil blended equals a gallon of fuel. From an environmental point of view, this technology significantly reduces a waste stream.




**Environmentally friendly technology, such as the vehicle battery recovery system, helps save resources.**

The battalion has also increased operational efficiency by recovering its dead vehicle batteries. Most of the dead batteries are unusable because the battery plates collect a lead sulfate buildup that prevents the battery from accepting a charge. The battalion has acquired a recharging system that recovers dead batteries by removing the lead sulfate deposits and then recharging the batteries. Each system costs about \$250, recovers 12 batteries at a time, and takes approximately 48 hours to charge the batteries. The battalion turned in 373 batteries to the Directorate of Logistics (DOL) from July to November 2006. DOL considered 142 of those batteries to be “bad,” meaning they would not accept a charge. The remaining 231 batteries were charged by DOL and returned to the battalion. Once the battalion’s recharging system was in place, the number of batteries turned in to DOL dropped by more than two thirds to 103. Of those 103 batteries, 90 were coded as bad. The battalion’s recharging technology has saved the unit over \$9,000 in replacement costs and inventory reduction in just five months. The unit has promoted sustainable systems and helped the environment by keeping more than 270 batteries in use.

Finally, the battalion recycles its air filters by sending them to a private firm in nearby Rolla, Missouri, to be cleaned and

reused. The filters are cheaper to clean than to replace, and the private firm can clean most air filters up to five times. Since January 2006, the battalion has saved over \$2,500 by using this system.

The 58th Transportation Battalion has realized savings of over \$18,000 in the past two years from three technologies that also promote sustainability and protect the environment. Fuel-motor oil blending and the battery recovery systems are technologies that can be used in deployed situations to divert waste streams to usable products. These technologies are reasonably priced, and the fuel-motor oil blender has a General Services Administration catalog number: GS-07F-0187M.

For more information concerning these technologies, e-mail <[michael.wolford1@us.army.mil](mailto:michael.wolford1@us.army.mil)> or call 573-329-1927. 

*Mr. Wolford is an environmental training specialist for the Directorate of Environmental Integration at the United States Army Engineer School, Fort Leonard Wood, Missouri. He recently retired from the Army after more than 24 years of service. He holds a bachelor’s in environmental science from Drury University, Springfield, Missouri, and is currently working on a master’s in environmental management from Webster University, St. Louis, Missouri.*

Photo by Sergeant Jessica L. Sheldon




# Engineer Training Benefits School

By Specialist Ruth McClary

**S**oldiers from the 875th Engineer Company, 505th Engineer Battalion, North Carolina Army National Guard, have been clearing topsoil for a future construction project at the University of North Carolina –

Charlotte (UNCC) as training this year. A member of the unit who is an employee of UNCC helped organize the project. This was the unit's first engineering project since its return from Iraq in September 2006. The project is one example of how the North Carolina Army National Guard supports the community, no matter what the need.

The engineers were tasked to transport 5,000 cubic yards of topsoil two miles to a dump site on the UNCC campus beginning in late April. They used six 20-ton dump trucks that rotated between two loading points to transport loads to the designated dump site. A D7 bulldozer whirled through the mound, loosening the soil for a hydraulic excavator operator to scoop up and drop into the dump trucks. Two of the trucks developed minor maintenance problems that were taken care of on the spot by the Soldiers of the maintenance section, who were armed with a portable toolbox and their trusty multitools. They categorize themselves as the "backbone of the unit," ready and willing to repair with care.

The 16 Soldiers on the site agreed that this project was good training, good for retention, and good for readiness redeployment. Honking the horn of a dump truck as UNCC students passed by waving and shouting support, one Soldier said that he is up for reenlistment and ready for another 6-year term. Serving in Iraq gave him a sense of overwhelming pride in his country, a feeling that is different from accomplishing tasks in the civilian sector. He felt he made a difference in the lives of the Iraqi people and is proud of the work his unit accomplishes on the home front, whether it's removing debris after a hurricane or moving soil at a state university. 

*Specialist McClary is assigned to the Public Affairs Office of the North Carolina Army National Guard.*



Photo by Sergeant Jessica L. Sheldon

**A hydraulic excavator fills one of the six 20-ton dump trucks on the project.**

# ENGINEERS PAVE THE WAY FOR VICTORY

By Specialist Jon H. Arguello

Shortly before Soldiers from 3d Brigade Combat Team (BCT), 10th Mountain Division, handed over control of their area of operations to the unit due to replace them, engineers from 3d Platoon, Alpha Company, 3d Brigade Special Troops Battalion, 3d BCT, 10th Mountain Division, worked hard to ensure that the incoming Soldiers had decent accommodations and facilities.

Even though 3d Platoon had been at the forward operating base (FOB) for more than a year, there was still a lot of work for the sappers to do, inside and outside the base. Since defeating the Taliban is the most important job for the new unit, the engineers wanted to make a stable base so the new arrivals could do their job of clearing the way for a secure Afghanistan without worrying about facilities.

Facilitating the fight is a concept the commander of Alpha Company stands behind. The FOB is supporting many more Soldiers than it was set up for, so it has been expanded to house more people, and that includes changes in infrastructure.



Photo by Specialist Jon H. Arguello

**A combat engineer moves concertina wire to make room for an expanded air resupply area.**

The expansion has also benefited the local population. Construction and base development brought an influx of jobs and business to the area, improving the local economy. The more legitimate money infused into the economy, the easier it is to move the local population away from the trade in illegal narcotics.

The dedication of the engineers to the mission—right up to their redeployment—was impressive. The purpose of the improvements and expansion was to ensure that the replacement Soldiers were set up for success, allowing them to start combat operations immediately instead of worrying about base camp construction. The members of 3d Platoon got their gratification from knowing that the Soldiers replacing them would be able to concentrate on the fight.



*Specialist Arguello is a journalist with the 22d Mobile Public Affairs Detachment, Combined Joint Task Force-82.*

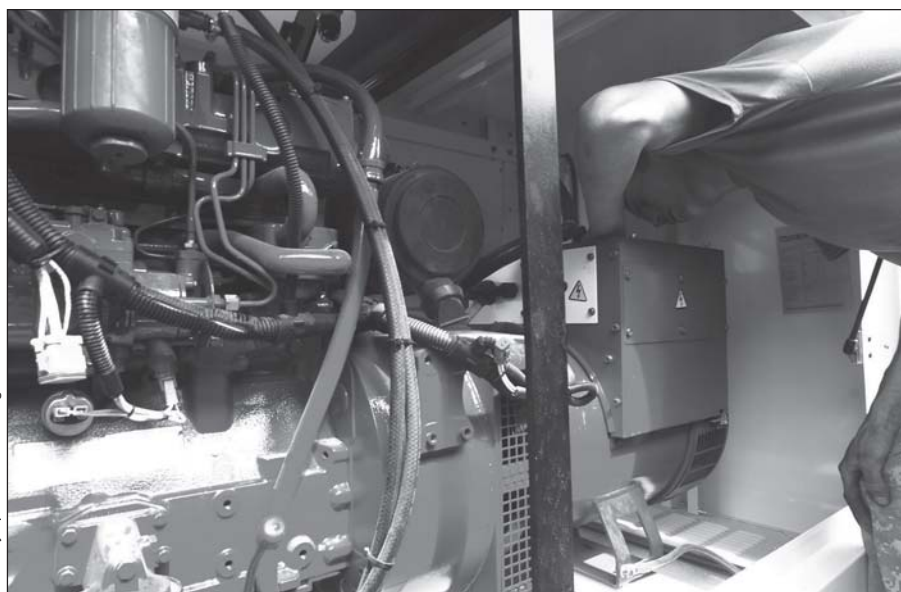


Photo by Specialist Jon H. Arguello

**A Soldier fixes a generator during a power outage.**



# 18th Engineer Brigade Joins V Corps

By Specialist Sean C. Finch

**W**hile many United States Army Europe (USAREUR) units are drawing down in size or preparing to move back to the United States as the Army transforms its forces, USAREUR's 18th Engineer Brigade will spend the next year building its numbers in support of its new mission as a major subordinate unit of V Corps. The brigade was activated as part of USAREUR in 1942. It later relocated to Fort Leonard Wood, Missouri, but rejoined the USAREUR ranks when it moved to Karlsruhe, Germany, in early 1977. The 18th officially became a V Corps organization on 16 February 2007.

The Heidelberg-headquartered brigade is moving in to pick up the mission that has long rested on the shoulders of the 130th Engineer Brigade and its subordinate units. The 130th—based in Hanau, Germany—has served as the V Corps premier deployable engineer organization since 1969. While some of its units, such as the 54th Engineer Battalion and the 535th Engineer Battalion, will merge with the 18th, most of the 130th will return to the United States. That transition is scheduled to take place over the next year.

Because the 18th is the only engineer brigade left in theater, it will be responsible not only for V Corps but also for any mission that USAREUR needs it for. In addition to routine engineer tasks such as reconstruction of standing structures, the unit will also become capable of undertaking heavy combat engineer missions in peacetime environments, such as building roads, and during deployments, such as clearing thoroughfares of deadly improvised explosive devices (IEDs). (In April 2006, the 18th completed a tour in Afghanistan in support of Operation Enduring Freedom, where it undertook missions in Bagram, Kandahar, Sarana, and other locations.)

The unit may get involved in troop construction, because it has that capability. As an example, during the past few months it accomplished road work at the Hohenfels (Germany)



**A HMMWV carrying Soldiers from Headquarters and Headquarters Company, 18th Engineer Brigade, makes its way through the town of Mokren, Bulgaria, during an exercise in summer 2004.**

Training Area. Other troop construction projects could include billeting and forward operating bases.

The Soldiers of the 18th will also tackle vertical construction missions such as buildings, bridges, and other structures that enhance unit training exercises. Construction during exercises is a valuable tool for continuing to train and retrain engineer Soldiers in a peacetime setting, for keeping those Soldiers up to date on new building technologies, and for assessing the capabilities of new engineers.

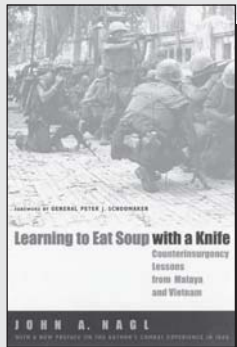


*Specialist Finch is a member of the V Corps Public Affairs Office staff.*



# Book Reviews

*Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam*, by John A. Nagl. The University of Chicago Press: Chicago, Ill., 2002; rpt. 2005, 249 pages, ISBN 0-226-56770-2, \$17.00 (paper).



“What does Nagl propose that is any different than Galula, Trinquier, or any of the other classic authors of counterinsurgency warfare?” was the question a recent graduate of the Command and General Staff College posed to me after I had spent an evening reading this book whose title, quoted from T.E. Lawrence, describes the slow and messy nature of counterinsurgency operations.

That was a fair question because as many students of counterinsurgency are aware, these works often present overarching concepts (such as legitimacy, commitment, intelligence) and then leave the reader struggling to draw his own conclusions on how they may be applied to a given contemporary military operation.

However, I found an answer to the question in Nagl’s premise that it is in the processes, not the concepts, where one finds the key to defeating insurgencies. Nagl supports this premise by offering the reader a process used throughout the book to examine the decisions and actions taken or not taken by militaries in their effort to become counterinsurgency learning organizations.

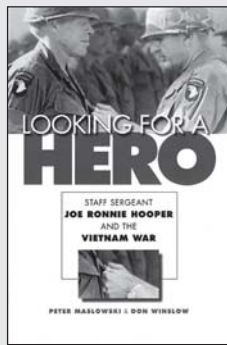
If the use of a systemic, iterative, organizational learning process like the one Nagl employs sounds familiar, it should. Two recent Combined Arms Center and Fort Leavenworth commanding generals have forwarded a similar construct called “The Engine of Change” that is being put to use throughout our Army to support coalition counterinsurgency operations in Afghanistan and Iraq.

Specifically, military engineers may find Nagl’s work particularly familiar because it allows for structured thought while examining emerging counterinsurgency doctrine. After introducing the reader with his methodology in the early chapters, Nagl demonstrates how it can be applied to analyze the development of counterinsurgency doctrine and practice during the British Malayan Emergency from 1948 to 1960 and again with the doctrine the United States developed in the Vietnam War from 1950 to 1975.

At the conclusion of the Malayan Emergency and Vietnam War analyses, Nagl leaves the reader well positioned to personalize and apply this approach for immediate use in military transition teams, provincial reconstruction teams, and full-spectrum operations.

*Reviewed by Lieutenant Colonel Paul B. Olsen, P.E., Speechwriter to the Commanding General, Combined Arms Center and Fort Leavenworth, Fort Leavenworth, Kansas.*

*Looking for a Hero: Staff Sergeant Joe Ronnie Hooper and the Vietnam War*, by Peter Maslowski and Don Winslow, University of Nebraska Press: Lincoln, 2004, 618 pages, ISBN 0-8032-3244-6, \$29.95 (hardcover).



This book covers the tragic life of Staff Sergeant Joe Ronnie Hooper, arguably the most decorated soldier of the Vietnam War. In addition to two Silver Stars, six Bronze Stars, and eight Purple Hearts, he was presented the Medal of Honor for actions near Hue in February 1968. At the time, he was assigned to Delta Company, 2d Battalion, 501st Infantry, 101st Airborne Division.

*Looking for a Hero* takes you through Hooper’s life and military career, as well as discusses the Vietnam War itself. Although this book contains detailed and valuable information about the war, it does have a biased tone and does not lend itself to being an objective source for learning about the Vietnam War. But Maslowski and Winslow’s extreme thoroughness in telling Hooper’s story offsets their antimilitary bias and makes their work a more than respectable contribution to the Vietnam War literature. At times, the book seems to be more about the war than about Hooper. But in many ways, Hooper serves as a symbol for that conflict; his life had so many highs and lows, paralleling the upheavals in American society during the war.

*Looking for a Hero* gives you the objective truth about Joe Hooper’s life and leaves you either respecting him or disliking him. Every Medal of Honor recipient is a hero; but some, like Hooper, are not saints. What this book does is show you that all heroes are human, and the events that made them heroes become quite a heavy load to carry.

The sad part of Hooper’s life, as with many veterans of the Vietnam War, was the post-traumatic stress disorder that he suffered from. Neither Hooper nor American society knew how to handle the problems that grew out of this. The combination of drugs and/or alcohol added to the disorder for many veterans and often destroyed not only them but their families as well.

Hopefully, America has learned from the war in Vietnam and is preparing itself and facilities to help the veterans of the War on Terrorism deal with the horrors of war and the injuries they have sustained.

*Reviewed by Mr. Jeffrey L. Rosemann, an instructional systems specialist with the Officers Training Development Division, Directorate of Training and Leader Development, United States Army Engineer School, Fort Leonard Wood, Missouri. A retired infantry Soldier, he also served as the 2d Infantry Division historian.*

# United States Army Engineer Regimental Colors



*Scenes from ENFORCE 2007*