ARMOR

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ARMOR

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Features

Departments

"From My Position..."

"Courage is rightly esteemed the first of human qualities, because . . . it is the quality that guarantees all others."

Sir Winston S. Churchill,
Great Contemporaries, 1937

Saint George is often depicted as a medieval knight in shining armor mounted on horseback in the process of slaying a dragon. Saint George's origins, however, are much older and extend to the latter days of the Roman Empire. With that idea in mind, *ARMOR* set out nearly 2 years ago, to render an image of the patron saint of mounted soldiers more consistent with that time period. The result is the cover of this month's issue of *ARMOR*. I think you will agree that our artist, Jody Harmon, has once again managed to create an unmistakable image to which many Soldiers can relate.

Rather than portraying Saint George locked in combat with the legendary dragon, we chose instead to depict the point just before the action takes place — the point at which the mounted Soldier, confronted with the clear and present danger before him, must make a choice between engaging the enemy at risk of death or injury, or self-preservation. We all know how the story ends, whether we are familiar with Saint George's confrontation with the Roman Emperor Diocletian, or the more fanciful encounter with an Italian dragon; good, fortified with soldierly courage, ultimately triumphs over evil. As we know, many of our mounted Soldiers and Marines, as well as their comrades in the other services, are routinely faced with the same choice depicted in this scene. To their credit, they consistently make the right choice with honor and uncommon valor.

To paraphrase Sir Winston Churchill, courage is the guarantor of all other virtues. Outstanding leadership requires both physical courage, such as that depicted on our cover in "Point of Decision," and the moral courage to make the right decision, regardless of the circumstances or the cost. Leadership built on a firm foundation of courage is an essential component of mission command, a subject covered extensively in courses taught here at Fort Knox. To succeed on the widely dispersed battlefields of today, leaders must consistently demonstrate the moral courage necessary to allow their subordinates to freely develop the unique situations in their battlespace within the boundaries of their commander's intent. Lieutenant Colonel Klaus-Peter Lohmann, the German army's liaison officer to the Armor School, addresses this very subject in his article, "Führen mit Auftrag — Mission Command." Accompanying Lieutenant Colonel Lohmann's article is Captain Ulrich Humpert's piece, "A German Officer's Perspective on the U.S. Army's MDMP." Both of these authors are graduates of our Captain's Career Course, so they are very familiar with the similarities and differences between our two armies' concepts of mission command as practiced through the military decisionmaking process. Although our readers may not agree completely with their conclusions, these officers nevertheless offer an insightful view of our version of mission command as seen through allied eyes.

While these articles provide a view of mission command in theory, Captain Paulo Shakarian provides his view of mission command as practiced in theater with his article, "Stand and Fight: Lessons for the Transition Mission in Iraq." Soldiers serving on military transition teams conduct their operations with minimal guidance and resources while translating as many of our Army's best tactics, techniques, and procedures as possible into concepts easily understood by host-nation soldiers. Anyone due for an assignment to a MiTT will find this article useful.

Finally, consistent with our practice over the past several years, the Office of the Chief of Armor, Office of the Special Assistant to the Commanding General – ARNG, U.S. Marine Corps Detachment – Fort Knox, and the 98th Division (IET) have provided us with our annual armor and cavalry unit directory. As many of you know, this document is an accurate, if not entirely precise, rendering of the force as it now stands. By all means, please notify us if you identify any glaring errors and we will make every effort to correct them. Until we hear from you again in our "Letters" section, or through your outstanding articles, keep writing and Forge the Thunderbolt!

S.E. LEE

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

0723604

Points of Contact

ARMOR Editorial Offices

Editor in Chief
LTC Shane E. Lee   4087
E-mail: shane.lee@us.army.mil

Managing Editor
Christy Bourgeois   4582
E-mail: charlotte.bourgeois@us.army.mil

Editor
Vivian Oertle   2610
E-mail: vivian.oertle@us.army.mil

Art Director
Mr. Jody Harmon   3923
E-mail: jody.harmon@us.army.mil

Editorial Assistant
Kathy A. Johnson   2249
E-mail: kathy.johnson5@us.army.mil

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U.S. Army Armor Center

Commanding General   (ATZK-CG)
MG Robert M. Williams   2121
E-mail: robert.m.williams@us.army.mil

Deputy Commander   (ATZK-DCG)
COL Peter Bayer Jr.   7555
E-mail: peter.bayer@us.army.mil

Chief of Staff   (ATZK-CS)
COL Peter D. Utley   1101
E-mail: peter.utley@us.army.mil

Command Sergeant Major   (ATZK-CSM)
CSM Otis Smith   4952
E-mail: otis.smith@us.army.mil

Command Sergeant Major to DCG   (ATZK-DCG-CSM)
CSM Raymond Chandler   7091
E-mail: ray.chandler@us.army.mil

Special Assistant to the CG (ARNG)   (ATZK-SA)
COL Marlin Levendoski   1315
E-mail: marlin.levendoski@us.army.mil

Directorate of Training, Doctrine, and Combat Development
COL Robert Valdivia   (ATZK-TD)
E-mail: robert.valdivia@us.army.mil   8247

TRADOC Capability Manager for Heavy Brigade Combat Team
COL Jeff B. Swisher   (ATZK-TS)
E-mail: jeff.swisher@us.army.mil   7955

**TRADOC Capability Manager, Platform Battle
Command/Combat Identification**   (ATZK-PBC-CID)
COL Alan Mosher   4009
E-mail: alan-mosher@us.army.mil

Office, Chief of Armor   (ATZK-AR)
Aubrey Henley   5155
E-mail: aubrey.henley@us.army.mil   FAX 7585

**Assistant TRADOC Capability Manager
Soldier - Mounted Warrior**   (ATZK-ATS)
Larry Hasty   3662
E-mail: larry.hasty@us.army.mil

U.S. Army Armor School

Director of the Armor School   (ATZK-DAS)
LTC Shane E. Lee   1050
E-mail: shane.lee@us.army.mil

194th Armored Brigade   (ATZK-BAZ)
COL David Hubner   8736
E-mail: david.hubner@us.army.mil

16th Cavalry Regiment   (ATZK-SBZ)
COL Robert R. Naething   7848
E-mail: robert.naething@us.army.mil

NCO Academy   (ATZK-NC)
CSM Samuel Wilson   5150
E-mail: samuel.coleman.wilson@us.army.mil

Writing for *ARMOR*

We appreciate your interest in writing for *ARMOR*, the oldest of the Army's professional journals, with a history that began with the frontier horse cavalry in 1888. Today, *ARMOR* is the professional journal of the Armor and Cavalry force, published bimonthly by the Chief of Armor at Fort Knox, Ky.

The journal's focus is the Armor and Cavalry soldier up to the battalion and brigade levels. Our articles discuss the training, equipping, employment, and leadership of mounted soldiers, and the historical background of mounted warfare.

ARMOR articles seldom reflect the Army's official position, nor is the journal's purpose dissemination of doctrine or command information. As the chief proponent for Armor and Cavalry units in the Army, the Chief of Armor is charged with sensing feedback from the soldiers under his proponency, and *ARMOR* is a forum that meets this requirement.

Your Submission

Articles can be submitted in a number of ways:

- Most articles are sent as e-mail attachments to:

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- Articles can also be submitted on CD or floppy disk with a double-spaced hard copy to ensure that the complete file is included. Mail to *ARMOR* Magazine, ATTN: ATZK-DAS-A, Building 1109A, 201 6th Avenue, Suite 373, Fort Knox, KY 40121-5721.

Artwork

Photos and useful graphics greatly increase the number of readers attracted to an article. Even simple snapshots are adequate to help readers understand a situation, and can also be used as a basis for drawings by *ARMOR's* artist.

Do not write on the back of photos. Write caption material on paper and tape to the back of the photos. This will eliminate ink transferring to the surface of the photos, making them unusable. Let us know if you want the photos back.

When using PowerPoint to produce maps or illustrations, please try to minimize shading. (We seldom use the illustrations full size and shading becomes blotchy when reduced. Keep graphics as simple as possible. It is easier for us to add any shading desired during the publication process than to modify your efforts.) We can accept electronic photo files in most formats, but prefer 300 dpi TIF or JPG files.

If you have any questions concerning electronic art submissions, call Vivian Oertle at DSN 464-2610 or COM (502) 624-2610.

Article Length

We do not set an upper limit on length; however, an ideal length is 13 manuscript (double-spaced) pages or less. We have made exceptions; we will probably make others. But that's a good rule of thumb. We try to avoid multipart articles because of the two-month interval between issues.

Electronic Formats

Our standard word processing format is Microsoft Word, but conversion programs allow us to accommodate most popular formats. Please indicate word processing format on CD, disk, or cover letter.

"Shotgunning"

Due to TRADOC publication guidelines, and the limited space per issue, we will not print articles that have been submitted to, and accepted for publication by, other Army journals. Please submit your article to only one Army journal at a time.

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Deadlines

Within two or three weeks of submission, you will either receive a notice of acceptance or rejection. If accepted, we will send a "permission to publish" form and a "biographical worksheet" for your signature.

ARMOR is due at the printer about three weeks before it is mailed to units, and work on each issue usually begins about seven weeks prior to mailing.

Please refer to the table below for submissions:

Issue Date	Submission Deadline
Jan-Feb 2008	1 November 2007
Mar-Apr 2008	1 January 2008
May-Jun 2008	1 March 2008
July-Aug 2008	1 May 2008
Sept-Oct 2008	1 July 2008
Nov-Dec 2008	1 September 2008

Rewards

We are not budgeted to pay contributors for their articles, but authors receive extra copies of the issue in which their article appears, a certificate from the Chief of Armor expressing his appreciation, and a free one-year subscription to *ARMOR* from the U.S. Armor Association, an unrelated, non-profit organization that reprints each *ARMOR* issue for its members.

Saint George Epitomizes Today's Mounted Combat Arms Leader

by Major General Robert M. Williams, Commanding General, U.S. Army Armor Center

The image of Saint George, the patron saint of Armor and Cavalry, is a powerful image that evokes a feeling of strength, courage, and honor. It was no accident that the Armor Association chose this icon to represent its Order of Saint George; nor is an accident that we chose a similar image for the cover of this issue of *ARMOR*. You see, the principles embodied in the image of our patron saint represent many of the qualities we expect in our mounted leaders and Soldiers. Just recently, in the May-June issue of *ARMOR*, Chaplain Steven Rindahl wrote a very concise and thought-provoking letter to the editor. His letter extrapolated a code of conduct from the legend of Saint George that outlines a pattern of behavior we should all strive to demonstrate. It is these same qualities that we reinforce through our Army values, adherence to rules of engagement, and professional ethic.

People need heroes. Every society, every culture finds ways to bring forth their valued qualities through heroic examples. Statues, displays, and even temples have been built over the centuries to celebrate ideal figures and motivate people to embody idealism. Military posts are no different; nearly every military post has its court of honor where fields, buildings, monuments, and housing areas have been dedicated in memory of those in our ranks who have sacrificed so others could be free. As I visit each of these memorials, I silently wonder: "What sets this hero apart from others? What gives one man more strength, more courage, or more dedication than another?" I too have read the inscriptions on combat decorations that describe the ultimate feats of sacrifice from our Nation's heroic servicemen. At what point does the spirit of Saint George, protector of the innocent, slayer of dragons, inspire us to do the seemingly impossible? More importantly, for those of us in leadership positions, how do we harness those characteristics; how do we train ourselves and our Soldiers to always operate within the bounds of the Army values and go one step further when necessary?

Training soldiers is a tough business. Here, at the Armor School's share of the Maneuver Center, we train Soldiers in courses at every rank from private to colonel. Here, we focus on building individual skills within each Soldier; however, out in the operational force, the focus must be on building team and organizational competence. There have been many studies performed and papers written over the past few years describing the attributes essential to future leaders.

Most recently, studies have been focused on adaptive leaders — leaders capable of reacting to the frequently changing circumstances on the modern complex battlefield, leaders who are culturally aware and can operate with joint, multinational, and interagency task forces. Recent studies have also highlighted the need for leaders who know how to think; not what to think. This means that our Soldiers and leaders are not simply choosing the "right" answers to tactical problems out of a manual, but solving problems through careful analysis, leveraging technology, and appropriately using previous experiences — their own or someone else's. Of course, none of these revelations about the qualities required of our leaders are particularly startling. No one should be surprised by the need for intelligent, creative, thinking leaders. The real power behind these studies is the part that is usually omitted — how to get there from here.

The list of training initiatives ongoing across TRADOC and the Armor Center are too many to list in one publication, so I will highlight just a few. In our non-commissioned officer (NCO) courses, our testing has been revised to focus on a performance-based assessment. For example, grading a terrain board exercise is clearly more subjective than grading a written test, and its results are more beneficial to the student. In addition, we are currently conducting pilot courses in officer and NCO courses using innovative gaming technology as practical exercises to reinforce tactical lessons.

While many tactics have not changed significantly in several decades, the face of war has seen an increased shift into the information domain. Leaders of terrorist networks have been cited referring to the media battlefield, and extremist websites are readily accessible. Clearly, the enemy has identified the role that information and information technology plays on today's battlefield. We cannot cede that ground to the enemy; modern leaders must stay "plugged-into" technological advances and the impact that information, media, the internet, and blogs have on friendly, neutral, and enemy audiences.

So, allow me now to repaint the image of Saint George with a modern brush. His mission has not changed; he will defeat the enemy, protect the innocent, and provide stability. He is prepared for contingencies, ready to parry and thrust as necessary. He is also ready to share the good news with all who listen — he is a warrior, protector, but also a communicator. He knows that good news will spread and help his efforts, and he is not afraid to tell his story. He is fit, mentally and emotionally, as well as physically. He is the adaptive leader, capable of using his catalog of experiences and the knowledge of others to make quick decisions. He is the mounted combat arms leader, and he was trained at the Maneuver Center of Excellence.

Forge the Thunderbolt!

DRIVER'S SEAT

CSM Otis Smith
Command Sergeant Major
U.S. Army Armor Center
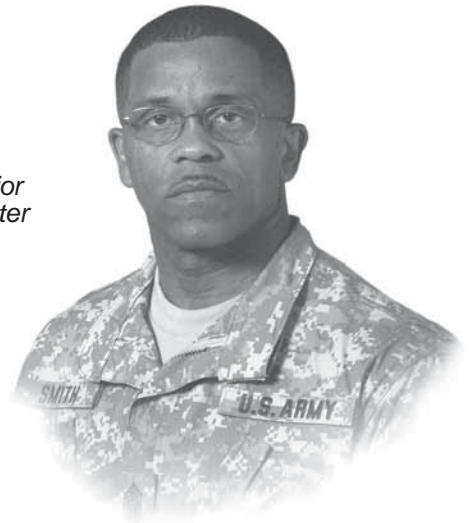
New Order of Saint George Medallion for Junior Soldiers

In 1986, the Order of Saint George award program was developed to recognize outstanding armor leaders. Since the award's inception, only a limited number of Bronze Medallions have been awarded, in comparison to the thousands of eligible Armor soldiers who have served since 1986. This fact drives home the point that our leaders have nominated only the best for this award and the Armor Association has been unrelenting to not compromise the awards program by diligently upholding the criteria for each level of award. Those who have earned the award can wear it knowing they are among the best in armor.

Over the years, many have requested the Armor Association change the criteria to allow junior armor/cavalry soldiers to be eligible for the award, or develop an Order of Saint George medallion for junior soldiers. For many reasons, and rightfully so, the Armor Association's executive council rebutted all requests to change the Bronze Medallion's criteria, but remained receptive to establishing a junior armor soldier medallion. The war in Iraq and the Army's "Army Strong" campaign brings to the forefront the strength of our Army and our branch — the junior noncommissioned officer and soldier.

The three-block war has highlighted our soldier's strengths and their adaptive ability to make life and death decisions under difficult conditions while maintaining the Army Values. Armor and cavalry soldiers are executing our counterinsurgency doctrine superbly within the three blocks. They are simultaneously conducting civic affairs operations by building relations with tribal leaders on one block, evaluating and repairing infrastructure that has been inoperable or nonexistent on a second block, and conducting high-intensity combat operations on a third block.

This is not new news; our soldiers have been executing their missions superbly and with precision over the past 4 years. They are executing this war at the squad level, with minimal supervision. We see this in the revitalization of Anbar Province where the tankers of the 1st Battalion, 77th Armor, the Steel Tigers, hit the ground daily in a true partnership with Iraqi Security Forces and the local populace to stabilize area of operations (AO) Tiger and forge economic and government prosperity. They will leave that area in a better state due largely to the herculean efforts of the unit's junior noncommissioned officers and soldiers. They are the key to winning in Iraq.

As the result of the efforts of our junior tankers and cavalrymen, the Armor Association decided to move forward in establishing an Order of Saint George medallion for staff sergeants and below. This award is the United States Armor Association's recognition of the very best tankers and armored cavalrymen. It is the award for which most members of the Active and Reserve Components are eligible. Specific award criteria are as follows:

a. Must be a member of the United States Armor Association at the time of award approval.

b. CMF 19 soldiers who are EIA/EIC in the rank of staff sergeant and below, must demonstrate outstanding leadership and exceptional teamwork as part of an armor or cavalry unit.

c. For all nominees, must demonstrate tactical and technical competence as a crewman, vehicle commander, or section or squad leader.

d. Must be nominated for the award by an officer or noncommissioned officer who is a recipient of the Order of Saint George and an active member of the U.S. Armor Association.

e. For all nominees, no record of UCMJ action within the past 2 years at the time of nomination.

f. Must be approved for the award by the first armor lieutenant colonel (O-5) in the nominees' chain of command.

This medallion will allow the armor community to recognize outstanding young tankers, scouts, and cavalrymen for their selfless contributions to the legacy of those soldiers who have followed before them. This award will be available no later than January 2008.

The integrity of the Order of Saint George is challenged daily due to the Army's ever-evolving modularity and transformation process, particularly in the combined arms battalions. The Armor Association remains determined to maintain the intent and spirit of the Order of Saint George by only awarding it to members of the Armor Branch. Every nomination must meet the established criteria for each award; there are no exceptions. Thank you all for your continuous support to the Armor Association and its award program.

"Teach our young Soldiers and leaders how to think; not what to think."

Saint George: The Patron Saint of Armor

by Christy Bourgeois

"Liberator of captives, and defender of the poor, physician of the sick, and champion of kings, O trophy-bearer, and Great Martyr George, intercede with Christ our God that our souls be saved."

— Hymn of Saint George

SAINT GEORGE

Not much is known of the life of Saint George. He was a Roman soldier, born around 280 A.D. in Cappodocia (Greece) to a rich and noble family. He was martyred for his Christian faith in the late 3d or early 4th century. He was also a member of Emperor Diocletian's personal bodyguard, and accompanied him at all times. In February 303 A.D., while staying in Nicodemia, Diocletian and his general, Galerius, issued an edict ordering the destruction of all Christian churches, the surrender and public burning of sacred writings and service books, and the outlawry of all Christians who would not conform, at least outwardly, to paganism. This edict was to result in the last and bloodiest of the Roman persecutions of Christians; though its original intent was for no bloodshed to occur. One of the first to die was Saint George. Upon seeing the edict, he ripped it down and destroyed it before a mob in the same city where the Emperor resided. For his act of defiance, he was arrested and tortured.

He resisted his captors' attempt to force him to recant his faith and was subsequently executed. Though Eusebius, a historian in Nicodemia at the time, gave no name for this man, a document discovered later corroborated the story, and named him as Nestor of Cappodocia. In this account, Nestor was a Turkish soldier and friend to Saint Demetrius. Eastern Christian versions also identified this man as Nestor the Victor. Later, the early Christians changed his name to George. A tomb reputed to be that of Saint George is located at Lydda, now called Lod, Israel. The Canon of Pope Saint Gelasius in 495 A.D. lists Saint George among those saints "whose names are justly revered among men, but whose deeds are known only to God."

SAINT GEORGE, THE KNIGHT

In the military sense, chivalry was the heavy cavalry of the Middle Ages, which constituted the chief and most effective warlike force. The knight, or chevalier, was the professional soldier of the time; in Medieval Latin, the ordinary word "miles" (soldier) was equivalent to "knight." This pre-eminence of cavalry was correlative with the decline of infantry on the battlefield. Four peculiarities distinguished the professional warrior: his weapons; his horse; his attendants, and his flag.

In time, a legend grew from the original accounts of Saint George's sacrifice, and particularly in the East, he was an extremely popular saint. Around 367 A.D., a cult grew in the East, dedicated to his memory. Saint George was venerated in the East as one of the "Fourteen Helpers," who were models of knighthood, avengers of the weak and innocent, and the patron saints of soldiers. Time obscured his real history and it was gradually replaced by legends. By the 7th century, his fame had spread to England, where churches were dedicated to his memory and spirit. During the Crusades, Saint George's legend and popularity grew immensely. In 1098, Frankish Crusaders were trapped in Antioch, between the Saracens, the mountains, and the sea. One of the Crusaders, Peter Bartholomew, dreamed that Saint Andrew revealed to him the location of the tip of the lance used to stab Christ on the cross. A lance tip was found buried at that location. The find was considered as a sign of

"On 28 June 1098, The Crusaders attacked. As they began the attack, some of the crusaders believed they saw an angelic host in the distance coming to their aid waving white banners and riding white horses. At the head of the host rode Saint George, Saint Mercurius, and either Saint Demetrius or Saint Theodore, all warrior saints. The attack succeeded, and the victory was attributed to the help of the saints and the lance tip."

victory and rallied the Crusaders into attacking the Saracens.

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Later, many Crusaders reported seeing Saint George in a blaze of light upon the walls of Jerusalem during their assault on the city. During the Third Crusade in 1119, the army of Richard I was marching along a coast road near Acre. Suddenly, his rear guard was overwhelmed and surrounded by Saracens. In serious jeopardy of being wiped out, one of the Crusaders appealed to Saint George for help, rallying the Crusaders and enabling them to drive off the enemy.

As a result of the Crusades, Saint George became regarded as a patron saint of fighting men in Western Europe, as well as in the East, and his legend spread with the return of the Crusaders. In England, a church, built in his honor during the reign of Alfred the Great, was rebuilt with a new wall sculpture of Saint George on horseback attacking his enemies with a lance, driving them back or forcing them into submission. In 1284, his flag was unfurled and bore a red

cross on a white field. In the 14th century, one of the oldest, and perhaps the greatest of all, European knightly orders was founded in England in honor of Saint George — the Order of the Garter. The king chose its members, and each of them had to be of gentle birth, courageous, and free from all reproach. This knightly order still exists today and annual ceremonies are conducted at Saint George's Chapel on Saint George's Day, 23 April.

During the Hundred Years War, "Saint George" was the English battle cry. Later in 1347, Edward III required all of his soldiers and sailors to wear Saint George's sign on their backs and chests while they participated in the Scottish campaigns. Wearing this emblem resulted in tales of miraculous rescues, all of which were attributed to Saint George. At the Battle of Agincourt in 1415, Saint George's banner was carried and his name used by the English as the signal to attack. His cross is now a permanent part of the British Union Jack. The ideals embodied by Saint George include protecting the innocent and confronting evil. He is portrayed as a mounted warrior saint prepared to die for his Christian faith; even today, when a person is knighted, it is "by the Grace of God and Saint George."

SAINT GEORGE and THE DRAGON

And having cast all his strength into it, he dealt the dragon a deadly thrust; but the spear glanced aside, for the scales of the beast were like steel plates, and withstood the blow. Then the dragon, infuriated by the thrust, lashed itself against the knight and his horse, and threw out a vapor deadlier than before, and cast lightning upon him from its eyes. And it writhed, an evil thing, about him, so that one would have said he must have been crushed; and wherever he thrust at it, that part was as if it had been clad in mail.

The Dragon was added to Saint George's legend in the 12th century by the Italians. Stories of heroes slaying dragons had been popular throughout the ages, but due to Saint George's popularity, he inherited the tale. His legend also replaced the popular Baltic god Klavis, the heavenly smith and dragon slayer. In some of the early versions, Saint George defeats the dragon merely by showing the dragon his sign. Later, the story was embellished to this now popular version:

In the lifetime of Saint George, a frightful dragon took up its abode in a marshy swamp near the city of Silene, in the province of Libya. It devastated the countryside, and all attempts to drive it away failed because its breath poisoned everyone who approached it.

To protect themselves from its depredations, the citizens provided the dragon with two sheep daily, but soon, the time came when the sheep were gone and human victims had to be offered. These victims were chosen by lottery, and eventually, the lottery fell upon the King's daughter. The unhappy girl, dressed as a bride, was led to the swamp and left alone to await the monster's arrival. There, Saint George found her, and at once, prepared to defend her. He attacked the dragon as soon as it appeared, and after a fierce fight, defeated it, transfixing it with his lance. He did not kill it, however; instead, he asked the Princess for her girdle, tied it round the creature's neck, and placed the other end in her hand. By this slender bond, the dreaded monster was led back in triumph to Silene, following her, we are told, "as if it had been a meek beast and debonair."

When the inhabitants of the city saw their mortal enemy approaching, still alive and bound only by a fragile cord, they were horrified, but Saint George reassured them, promising to slay the monster if they would embrace the Christian faith. To this they agreed, and when the dragon was safely dead and its venomous carcass had been removed in four oxcarts, more than fifteen thousand people were baptized. The grateful King offered gold and treasures to the victor, but Saint George refused to accept any reward and directed it be given to the poor instead. Then, after adjuring the King to worship the Lord diligently, honor all clergy, maintain their churches, and show mercy to the poor, Saint George rode away.

In this legend, the dragon represented the embodiment of evil and hatred ultimately overcome by the force of good.

The Patron Saint

Crusaders, upon their return from battle, told everyone about Saint George and his help in fighting the

"And having cast all his strength into it, he dealt the dragon a deadly thrust; but the spear glanced aside, for the scales of the beast were like steel plates, and withstood the blow. Then the dragon, infuriated by the thrust, lashed itself against the knight and his horse, and threw out a vapor deadlier than before, and cast lightning upon him from its eyes. And it writhed, an evil thing, about him, so that one would have said he must have been crushed; and wherever he thrust at it, that part was as if it had been clad in mail."

Saracens. The Slovenes identified Saint George with Kresnik, who was associated with springtime renewal, bountiful crops, and cattle. Saint George was also associated in other cultures with "Green George" (the spirit of spring). Green George events began on Saint George's Day with a ceremony honoring nature and ended on May Day. These types of nature ceremonies took place in England, Germany, Russia, Rumania, and Slovakia.

"In 1528, the Saint George Chapel was finished in Berkshire as part of Windsor Castle, which is still used by the Knights of the Order of the Garter, whose members hold an annual ceremony on Saint George's Day. In the chapel, various insignia, helmets, swords, and other accoutrements are displayed."

In 1222, the Council of Oxford decided that 23 April, Saint George's Day, should be kept as an English national festival. Later in 1415, it was designated as a double festival, which meant only necessary work could be performed. In the 14th century, Pope Benedict XIV officially approved Saint George as the Protector of England. Guilds formed in England to honor Saint George and many towns held plays or other events to further honor his deeds. Some of these plays went so far as to state that Saint George was English and had killed the dragon near Berkshire. Saint George's Day, called Drac Tag, is celebrated with various plays and events in many parts of southern Germany.

In 1528, the Saint George Chapel was finished in Berkshire as part of Windsor Castle, which is still used by the Knights of the Order of the Garter, whose members hold an annual ceremony on Saint George's Day. In the chapel, various insignia, helmets, swords, and other accoutrements are displayed. The chapel is also used as a Royal Mausoleum, second only to Westminster Abbey.

With the Reformation, honoring Saint George was considered pagan, and his popularity declined. In 1778, English Catholics no longer maintained Saint George's Day as a day of holy obligation, and in other countries, Saint George's popularity waned. However, Saint George's name was linked with all mounted warriors and on 11 August 1937, Pope Pius XI declared Saint George the protector of the Italian cavalry. Today, the Italian armor force celebrates Saint George's Day with battalion ceremonies. The ceremony usually involves a Mass, wreaths placed on the tomb of the unknown soldier, and a testimonial to the deeds of Saint George. Later, a similar ceremony is held within the officer's mess. To the Italians, who feel that armor and cavalry is a way of life and not just a branch, Saint George best epitomizes this calling. Sometime during the 15th century, Saint George was also adopted by the French armor force as its patron saint. Ceremonies on Saint George's Day include a morning parade, a lunch with a common mess, an afternoon of equipment displays and sports competitions, and an evening sound and light show

that recalls the history of Saint George, cavalry, and the unit. Saint George is also recognized as the patron saint of Canada, Georgia, Germany, Greece, Lithuania, Malta, Moldova, Portugal, Russia, Serbia, Montenegro, Ethiopia, Aragon, Catalonia, and Moscow. He is also known as a patron saint of occupation and activities, which include agricultural workers, archers, armorers, boy scouts, butchers, cavalry, crusaders, equestrians, farmhands, farmers, field hands, field workers, horsemen, husbandry, husbandmen, knights, riders, saddle makers, saddlers, scouts, shepherds, soldiers, and Teutonic knights.

The Order of Saint George

In keeping with the heroic order, the United States Army's Armor Branch adopted Saint George as its patron saint. In 1986, the United States Armor Association began an awards program to honor the very best of America's tankers and cavalry troopers. The Saint George award program provides the mounted force a way to recognize outstanding soldiers, their spouses (Order of Saint Joan D' Arc), and armor force supporters (Noble Patron of Armor).

The heroic and legendary images of Saint George defeating the dragon exemplify the mounted gallantry and righteous bravery that we have come to associate with the horse-mounted knights of old. Saint George is the only saint portrayed as fighting mounted and whose personification should be the goal of every modern mounted warrior.

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Stand and Fight:
Lessons for the Transition Mission in Iraq

by Captain Paulo A. Shakarian

In October 2006, sectarian violence in the northern Iraqi city of Balad escalated to new heights. Sunni farmers outside the city attempted, through a series of attacks, to block Shiite urbanites from Highway 1, the major route. During the latest incident of violence, eleven Shiite construction workers were found dead with holes drilled through their skulls. The Iraqi government reacted to the problem by sending more troops to the area. Hours later, the National Police Quick Reaction Force (NPQRF) Battalion, accompanied by its U.S. advisors, the Spartans, was summoned from Baghdad. No mission, no intent — just go to Balad and make things better.

Initial Engagements and Impressions

On day two in Balad, the NPQRF commander discussed the situation with the local police and Balad-based Iraqi army leadership. Simultaneously, the Spartans met with the local transition teams, Special Forces Operational Detachment Alpha (SFOD-A), and the U.S. battlespace owner. During the meeting, the Iraqis decided they would conduct a joint reconnaissance and show-of-force in the area with the NPQRF, the local police special weapons and tactics (SWAT) personnel, and the Spartans.

While stopped at a checkpoint on Highway 1, the patrol received mortar and small-arms fire. The element had an idea from where the mortar fire was originating. The U.S. team chief, Spartan 6, asked the NPQRF commander if he wanted to pursue the mortarmen with his two NPQRF companies. The NPQRF commander refused, so the Spartans, with U.S. aviation support, went after the mortarmen without any assistance from the Iraqis. The patrol made a second enemy contact later that day, but this time, the enemy was armed with PKC machine guns and rocket-propelled grenades (RPGs). The NPQRF gave a similar reaction to the situation. The Spartans confirmed five enemy combatants killed, while the NPQRF bottled up, refusing to engage the enemy.

Low-level intelligence sources painted a grim picture of how the local populace viewed the NPQRF. One report portrayed the NPQRF as a militia, stating that Jaysh Al-Mahdi (a popular Shiite militia) was in the area, sent from Baghdad to Balad. Another report told of two "Iranian battalions" wearing digital uniforms that traveled up Highway 1 to kill all of the Sunnis in Balad. The enemy, who was domi-

nated by al Qaeda friendly tribes, was winning the propaganda war.

The Spartans found themselves in an open-ended mission; their counterparts — the NPQRF — had no mission and did not want to fight. Further, segments of the local populace believed that the NPQRF were the Iranian army, an idea that would, no doubt, lead to an escalation of the sectarian violence.

Peeling Back the Onion by Rapport Building

Spartan 6, the team chief, was a Special Forces officer who spent multiple tours in Afghanistan working with indigenous forces. Most of the advisors on his team had already spent 6 months in country working with another Iraqi battalion. Spartan 6 reiterated what most of them already knew: don't get confrontational with the Iraqi leaders about what happened during the patrol. Directly confronting an Iraqi was something they had heard other teams practiced, which led to further problems as it alienated Iraqi leaders and caused friction. Spartan 6 was emphatic about treating the Iraqi leaders with respect; the team followed his lead.

The Spartans had one advantage as a basis for rapport building — they proved themselves to the NPQRF during the first patrol in Balad. There was a noticeable difference in how the Spartans were treated by the Iraqi NPQRF after their performance that day. NPQRF leaders opened up more to the Spartans during normal meetings. Even the NPQRF policemen showed a marked change; no longer did young NPQRF policemen mob the Spartans to beg for candy and uniform items, and after the patrol incident, as the Spartan's HMMWVs approached a NPQRF checkpoint, the NPQRF policemen began cheering. Therefore, rather than confront their counterparts, the advisors tried a different approach — building on the rapport won during the recent combat, while learning as much as possible about the local area and the unit; specifically, problems that led to the NPQRF's inaction.

Before rapport building with the NPQRF could begin, the Spartans had to build a rapport with their interpreters. Many teams would treat their interpreters as a nuisance — a piece of equipment requiring food and bed space. The interpreters were key to the mission. The Spartans had worked on rapport building with their interpreters several months before the Balad mission, which took a variety of forms. Without violating security requirements, interpreters were included in nearly every team function. Nearly every training event, including medical and crew drills, involved interpreters. When team meetings were held, the interpreters were included. The Spartans treated their interpreters as team members as much as possible, which greatly benefited the team. Not only did the interpreters have an improved working relationship with the NPQRF, but also performed better under fire.

Proper rapport building with the NPQRF was an involved process that required a lot of time and effort. The best way to build rapport is to engage the enemy in combat alongside your counterparts — combat builds an inseparable bond between men. However, if the Spartans had ignored their counterparts after the engagement at the checkpoint, a lot of good rapport would have been lost. Countless meetings with Iraqi leaders occurred during the Balad mission; we drank tea, we ate lamb, we talked of wives and children, God, Saddam, America, and how Iraq used to be. Every so often, the advisors would learn something from their counterparts relating to the mission, or get them to make a good decision in between meals and talks of family. With the Iraqis, there are no "meetings" with friends; everything should be enjoyable — work will get done intermittently throughout long discourses about other topics, which can often last for hours. The Spartans wanted their counterparts to view them as friends; it is easier to go to combat with your "friends" as opposed to your "advisors."

Logistics Support and Rapport Building with the Locals

As the Spartans talked to the Iraqis and local U.S. forces, they began painting a picture of the area surrounding Balad, and tribalism was the underlying theme. Everything occurring in the area could be distilled in terms of tribalism: where were the borders between tribal areas; who were the tribal leaders; and what were their motivations? The answers to these questions would help the Spartans understand their situation.

Rapport building with the NPQRF allowed the advisors to better understand the unit and its internal problems. The main problem was logistics support. Although the Spartans could provide basic needs through the local U.S. unit (water and fuel), food and shelter were problematic — particularly as it became apparent that this short mission would become an extended operation. The local Iraqi army unit cut off all support within a week of the operation. The NPQRF was planning to rotate troops to Baghdad about every 2 weeks; their headquarters in Baghdad could then provide funds. In the meantime, the Iraqi NPQRF leaders used its tribal relationships with the locals in Balad to provide food for its soldiers. They also arranged to use a local fire station as a patrol base. Other Iraqi units refused to support the NPQRF, which was an eye-opener for the Spartans; without close over-

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sight, the NPQRF could have easily been forced into a relationship with a local militia. Again, establishing rapport and spending a good deal of time with the Iraqi leaders were essential — this enabled the Spartans to monitor NPQRF activities.

Armor was another issue for the NPQRF; most vehicles in the entire Iraqi National Police (as of late 2006) were unarmored civilian-type pickup trucks. To get the vehicles armored was a difficult task, at best. The NPQRF in Balad had some South African REVAs, mine-protected armored personnel carriers; however, maintenance was an issue as this vehicle was not used by Iraqi army units in the area. Luckily, the Spartans arranged maintenance support of the vehicles through the local U.S. unit. Once this was arranged, Iraqi leaders became more receptive to deploying the REVAs. A few weeks later, one of the NPQRF REVAs was destroyed by a pressure-plate improvised explosive device (IED). However, the squad-sized element inside the vehicle survived the incident with only very minor wounds; such an IED would have caused catastrophic damage if it had detonated on a pickup truck.

Support, such as REVA maintenance, that the Spartans provided their counterparts, also helped greatly in the rapport-building process — it gave the NPQRF commanders less to worry about and drew them closer to the Spartans. The simple provisions of water, fuel, the occasional terrain product, and access to recovery assets went a long way toward establishing a lasting relationship. These items were relatively simple to resource once a relationship was established with the U.S. battlespace owner. These relationships paid dividends throughout the Balad mission.

Combat Operations

The Spartans conducted daily missions with their NPQRF counterparts. In addition to offensive operations, the NPQRF maintained three checkpoints on major roads. The Spartans observed their NPQRF leaders in action, they stopped younger policemen from playing Muktadah Sadr's (a national militia leader) propaganda music at checkpoints, they settled a fuel dispute between the NPQRF and the local SWAT, and they ordered subordinates to camouflage the REVAs, which were painted police colors of blue and white, with the local mud. If they needed guidance, the Iraqi leaders would discuss an issue with the Spartans quietly in the trucks. Also, standing back and observing

how their various NPQRF field-grade officers settled issues was instrumental in monitoring the leadership attributes of various officers in the battalion.

The Spartans did not call these operations "checkpoint assessments," they used the term "armed reconnaissance;" the name change elevated the seriousness of the mission. The Spartans conducted other armed reconnaissance missions with the NPQRF, particularly during the first few weeks. The goal of these missions was to examine trafficability of routes and identify blocked roads, as well as observe the reactions of the local populace. The Spartans and the NPQRF also purposely planned armed reconnaissance missions that crossed tribal boundaries. Doing so would allow the element to gauge the reaction of the locals to the NPQRF, become familiar with neighborhoods that may contain future targets, and conduct reconnaissance in areas susceptible to a large-scale sectarian attack.

Perhaps the most dangerous part of the Balad contingency was the biweekly rotation of NPQRF troops. A convoy of more than 20 vehicles, most of which were pickup trucks, telegraphed the movement to the enemy. The Spartans accompanied their counterparts on all of these missions and received enemy contact on more than half. On one occasion, another NPQRF unit traveled the same route, heading even further north to Samarra, but received no enemy contact. The NPQRF commander told Spartan 6 that the unit traveled without their advisors. He claimed that this absence caused the unit commander to make deals en route with local insurgents. During one relaxed conversation, the NPQRF battalion commander stated, "Traveling with you allows me to remain honest. I know you will fight with us and bring in the helicopters."

Although the NPQRF was extremely grateful for their advisors, who would accompany them on these trips to and from Baghdad, there were still problems. The long patrol had three major enemy contacts during movement from Baghdad to Balad on 11 November 2006. During contact, the NPQRF would stop their vehicles in the kill zone and dismount, which exposed clusters of dismounted NPQRF policemen in open terrain to heavy enemy gunfire. To avoid mass amounts of NPQRF casualties, the U.S. translators started yelling "Yala!" (move) over the loudspeaker to the NPQRF. These actions became so problematic, that following an IED explosion, Spartan 6 threw a Gatorade bottle at the NPQRF trucks to get them to remount their vehicles and con-

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tinue the mission. Similar issues arose during later missions.

Progress

After over 2 months of endless conversations, numerous enemy engagements, endless cups of Chai (Iraqi tea), armed reconnaissance missions, and lamb with enough fat on it to give a man heart disease just looking at it, the Spartans began to see progress with both the NPQRF and the situation in Balad.

The first, and perhaps most comforting, phenomenon observed was the treatment of the local populace by the NPQRF. The Baghdad-based NPQRF, despite being mostly Shiite, actually helped stop the mistreatment of Sunni detainees, which probably stemmed from the fact that the NPQRF, as outsiders, had little, if any, tribal connections to the local Balad Shiites. For example, several Sunni civilians were illegally detained by the local (Shiite dominated) Iraqi police at a joint (NPQRF/Iraqi police) checkpoint. The NPQRF policemen at the checkpoint attempted to stop the illegitimate detainment. When the NPQRF personnel at the checkpoint could not stop the detention, they reported the incident to the acting battalion commander (a major). The NPQRF major then went to the local chief of police and demanded the illegal detainees be freed or suffer the consequence of losing NPQRF checkpoint support. The Iraqi police relented and the illegally detained Sunni civilians were released.

Another unsuspected outcome resulted from joint armed reconnaissance missions to certain tribal areas. The Spartans and the NPQRF often conducted armed reconnaissance missions into the tribal areas of a Sunni tribe known to harbor foreign fighters; however, they never experienced enemy contact on these missions. Interestingly, the propaganda stating that their battalion consisted of Iranian soldiers also originated from this area. The armed reconnaissance missions, coupled with their own propaganda, had an interesting effect: the tribesmen became fearful of an "Iranian invasion" during which "everyone would be killed." When the panic of the tribe reached its pinnacle, tribal leaders approached the local U.S. unit commander asking for negotiations. In this case, the armed reconnaissance, meant to collect low-level intelligence and situational awareness of the terrain, had a nonkinetic psychological effect on the enemy.

The NPQRF battalion command built a successful rapport with local tribal leaders, which also paid off — out of his con-

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tacts sprang a budding human-intelligence network that created targets. On the final target actioned during the Balad mission, the NPQRF demonstrated their targeting abilities very well. They developed a target from multiple human intelligence sources, planned and executed reconnaissance, executed the target, and conducted a professional successful interrogation of the detainee. All of this was done with minimal assistance from the Spartans.

Redeployment of Troops

The NPQRF's normal responsibility was targeting high-value targets in Baghdad for the National Police headquarters, so they left a vacuum when the Balad contingency began. By mid-December, the list of targets at large in Baghdad was beyond the capabilities of Baghdad National Police units, so the National Police headquarters sent a replacement battalion to relieve the NPQRF.

Through poor operational security, or simply leaks in the Iraqi Police (who shared some of the NPQRF checkpoints), one of the major, anti-government Sunni tribes in the area found out about the impending replacement of troops. The timeline for the relief-in-place was broadcast on an insurgent-friendly satellite television station, which caused the relief-in-place to be delayed, as well as some concerns while preparing for the trip to Baghdad on Highway 1.

After both the Spartan team and the Iraqis conducted a successful relief-in-place, they redeployed to Baghdad on 11 December. Because they expected enemy contact, the Spartans planned and coordinated close-air support from an F-16 flying low over the most dangerous portion of Highway 1 in a show of force. However, the air support was diverted to other troops in contact. The Spartans and their counterparts faced a complex attack with multiple kill zones over a 10km stretch of Highway 1 that lasted for more than an hour. The attack consisted of multiple machine gun positions, numerous IED attacks, and indirect and small-arms fire. Although their counterparts sustained several casualties, and one of the Spartan HMMWVs was seriously damaged, the NPQRF showed a great improvement under fire.

Compared to previous engagements, the NPQRF stayed in their vehicles and moved through the kill zone while the advisors used their crew-served weapons to suppress the enemy, and they also responded to contact with massive volleys of small-arms fire. The Balad operation was considered a success for the NPQRF. Their presence directly led to reducing sectarian events in the area and took Balad out of the news. The battalion commander also received an order reducing his time-in-service requirement by 2 years for promotion to general officer.

Several weeks after the Balad mission, a small contingent of NPQRF vehicles assisted another National Police unit on a raid and received enemy contact. The NPQRF vehicles moved to suppress enemy fire as the rest of the patrol bypassed.

Following the mission, the commander of the element said, "After Balad, it was too easy." He then smiled as he went on, "We just did what you guys do, engage the enemy while everyone else pushes through."

The Balad operations that the NPQRF undertook, with the help of the Spartans, gave a condensed glimpse into the progress of Iraqi units. Fast-paced operations, as well as deploying the NPQRF outside their home station, resulted in a significant increase in productivity. The initial engagements, logistics problems, and initial public impressions of the NPQRF exposed several weaknesses at the beginning of the operation in October that had significantly improved by December. By investing a great deal of time in rapport building, encouraging Iraqi interaction with local tribes, and conducting progressively more advanced combat operations, the Spartans saw a marked improvement in the NPQRF by the time it redeployed from Balad. Finally, the NPQRF's performance in subsequent operations illustrates that the changes from Balad made a lasting impression.

Although this account details specific events at a specific time, the lessons have a great applicability to the transition team mission in Iraq. The lessons of rapport building, tribalism, joint combat operations, and problems of the Iraqi logistics system are lasting issues for all transition teams, or any unit dealing with transition teams or Iraqi units.

So, in the end, the mission was not only a success for the people of Balad, but for the NPQRF as well. In the NPQRF, leaders became more confident and took charge, soldiers became seasoned, and the transition team became more knowledgeable in the culture of their counterparts. The NPQRF took significant steps forward during the operation due to a combination of factors: the Spartans' close relationship with the NPQRF provided leaders access to U.S. assets when needed so they could avoid illegitimate coordination with militia groups; the great amount of time spent rapport building, both on the battlefield and while drinking tea, created binding ties between Iraqi and U.S. soldiers; and the NPQRF (which was not from Balad) could act more judiciously because they had virtually no tribal ties in the area.

Success with Iraqi units is possible; however, it requires a large time investment and a willingness to go along on their missions, as well as a consideration of the unit's tribal, religious, and ethnic makeup when positioning them on the battlefield. Despite early hardships, all of these factors led to the NPQRF battalion's ability to "stand and fight" in Balad.

Captain Paulo A. Shakarian is currently serving as S2, Division Support Command, 1st Armored Division (1AD), Wiesbaden, Germany. He received a B.S. from the U.S. Military Academy. His military education includes the Military Intelligence Officer Basic Course. He has served in various command and staff positions, to include military advisor, National Police Quick Reaction Force Transition Team, Baghdad, Iraq; XO, Headquarters and Headquarters Company, 1AD, Wiesbaden; platoon leader, 2d Platoon, B Company, 501st Military Intelligence, Wackernheim, Germany, and Baghdad; and assistant S2, 1st Battalion, 6th Infantry Regiment, 1AD, Baumholder, Germany, and Baghdad.

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Führen mit Auftrag – Mission Command

by Lieutenant Colonel Klaus-Peter Lohmann, German Army

Engaging in professional discussions with U.S. officers in due course inevitably leads to questions about mission command, "Führen mit Auftrag" or "Auftragstaktik," as we Germans once referred to it.[1] The common understanding is that there should not be too many differences between the German way of developing, issuing, and executing orders and the way the U.S. Army goes about that same business. But very soon during these conversations it becomes clear that although we use the same terms and very similar systematic approaches for our military decisionmaking processes (MDMP), there are many differences in how the details are handled and especially how orders developed using the MDMP are written.

It is also impossible to separate troop leading procedures from leadership styles. The style of leadership depends on cultural and historical factors, educational systems, and traditions. Acknowledging these differences, this article intends to achieve two different goals: explain the term "Auftragstaktik" and highlight the differences in understanding mission command and Auftragstaktik in both armies. In doing so, this article does not intend to glorify the German army's system at the expense of the U.S. Army's MDMP.

Lastly, there are different levels of command and control, and there are significant differences in the requirements at the operational and strategic levels, therefore, this article concentrates on command and control at the tactical level.

The Roots of Auftragstaktik

Auftragstaktik was not a sudden idea or the invention of a genius, and it certainly was not introduced into German military thinking by an order. The adoption of this concept has been a long and protracted process. Its beginnings can be traced back to 1806 when the defeats of the Prussian army at Jena and Auerstedt by Napoleon made the necessity for reform and modernization of the old system more than obvious.

In the following years, Generals von Scharnhorst and Gneisenau designed a new military system for Prussia, which included the belief that "each citizen of a state is a born defender of the same." Even today, this belief remains the philosophical hub for Germany's conscription system. The new concept tried to find a balance between the necessity of control and the recognition of the impossibility of complete control of large armies in the field, a discrepancy that grew bigger and bigger with the development of modern mass armies. Knowing that a subordinate would act correctly, if he only knew what to do, led to the adoption of reforms that included banning corporal punishment, "Freiheit der Rücken" (Freedom of the Backs); the acceptance that a soldier is a
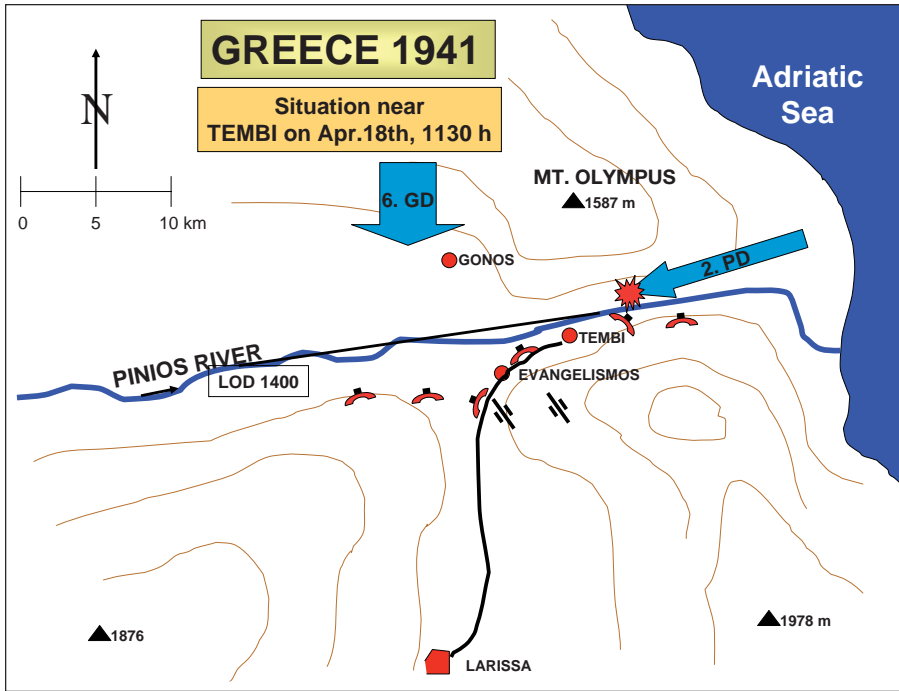
Figure 1

knowledgeable, as well as a thinking, individual; and finally, conscription.[2] But this was only the start of a long transformation process that had several other great German officers as its proponents, which included Field Marshal Helmuth von Moltke, the Chief of the General Staff of the Prussian army between 1857 and 1888, considered by many in Germany to be the creator of operational level command and control and the "spiritus rector" of operational principles. On the tactical level, he believed that situations under which an officer is required to act on his own view of the situation are manifold, and that it was wrong for an officer to wait for orders at times when no order could be given. Further, he concluded that "most productive are his actions when he acts in the framework of his senior commander's intent."[3] He also said that commanders should issue only the most essential orders, providing only general instructions outlining the principal objective and specific missions — tactical details were left to subordinates.[4]

In the following years, two factions of opposite beliefs struggled with the new concept. One side believed in issuing specified orders down to the last detail and that maintaining tight control was the only way to overcome the dispersal effect brought about by modern weapons systems. The other side had confidence in the independence of small units, enjoying and utilizing freedom of action within the spirit of their commander's intent. They believed the only way to operate successfully in the confusion of modern combat was to provide clearly defined tactical tasks.

These visionaries finally succeeded with their view, and thus from about 1914 onward, Auftragstaktik has had a firm place in the German armed forces' command and control philosophy.[5]

Historical Vignette

In April 1941, the Wehrmacht attacked allied forces in Greece, in the vicinity of Evangelismos, in an attempt to push through to the town of Larissa, which was a major command and control node and thus important for future operations. The 2d Tank Division was advancing along the Pinios River toward the town of Tembi, but could not develop its combat power due to the rugged terrain that only allowed a single column formation to advance on the road along the river. For this reason its advance was stopped in front of the allies well fortified defensive positions.

The plan to overcome this deadlock was to attack these positions with units of the 6th Mountain Division, which had to cross Mount Olympus and cross the line of departure along the Pinios River by 1400 hours on 18 April. (See Figure 1)

The allies, however, had expected exactly that course of action and had occupied positions that effectively covered the down slope of Mount Olympus with indirect and heavy machine gun fire, with unobstructed overwatch of the river. The allies effectively delayed the advance of the leading unit, Gebirgsjägerregiment 143. The regiment had sent out its first battalion as lead, which, in turn, had sent out a squad under the command of an Oberjäger to reconnoiter a ford over the Pinios River, mark it, return, and report back.[6]
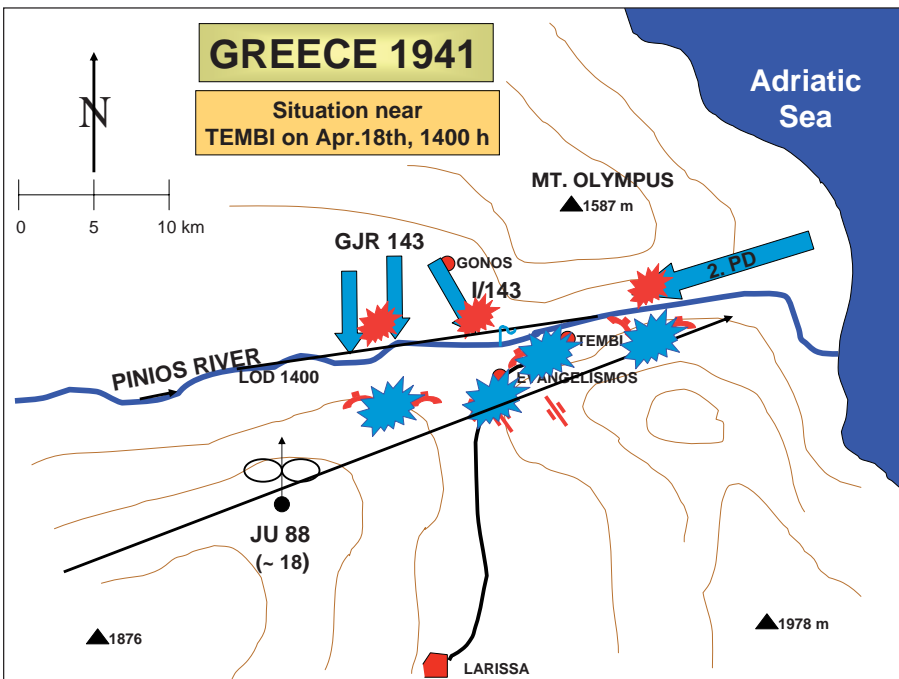

Figure 2

By 1400 hours, the squad had made it to the river and had completed its task; however, the remaining units of the regiment were inching their way down to the line of departure under allied forces' heavy fire. At exactly 1400 hours, a close air support mission, which had been coordinated to support the river crossing at the beginning of the attack, was carried out on allied positions by a flight of 18 JU 88 bombers. (See Figure 2)

During the air strike, allied defenders were temporarily suppressed until the dust and dense smoke obscuring their vision cleared. The squad leader, realizing this was a unique opportunity, without orders or rather against his original order to reconnoiter and report back, left one soldier behind, crossed the river with his squad, and attacked and destroyed two temporarily blinded positions. This enabled his battalion, and subsequently the whole regiment, to cross the river and overrun the well-organized defense, despite the desperate allied resistance. The next day, the allies withdrew south to Larissa and were subsequently forced to surrender the town.

The young Oberjäger acted against a direct order when he decided to cross the river and attack enemy positions. In a deliberate estimate of the situation, his actions might have been judged as hazardous due to the gross imbalance of forces involved; however, he was there, had a direct view on the effects of the bombing, and saw a small window of opportunity. Going back to seek approval for his actions would have certainly closed that window of opportunity. Knowing his commander's intent, he acted independently and took initiative, trusting that his superiors would approve, even had he not been successful. This is Auftragstaktik in its prime!

The Concept

Auftragstaktik as defined by German Field Manual 100/100 has a basic set of principles that comprise leadership attitudes, training principles, and troop leading procedures; together, they form the framework in which Auftragstaktik functions:

● The basic principles of Auftragstaktik are based on mutual trust and understanding, as well as a conscientious fulfillment of duties and a dedicated will to achieve given tasks. The concept requires every soldier to possess the ability to take responsibility, cooperate, and take independent creative action in the framework of the mission.

● The military leader briefs his intent, sets clear and achievable goals, and provides the necessary assets. He grants freedom of action for execution to subordinate commanders, which is the prerequisite for fast, determined action and serves to strengthen their self-responsibility. Military leaders must be educated to have this level of latitude; and the style of leadership and supervision also must be considered.

● Auftragstaktik requires the readiness of the commander to accept mistakes in execution of orders. This tolerance, however, finds its limitation where the accomplishment of the mission is threatened or the life and health of soldiers are exposed to unnecessary risks.

● A high level of uniform thinking and action provides the basis for Auftragstaktik and is a prerequisite to success. This presupposes common values, a common understanding of a soldier's rights and duties, and obeying the law, even in extraordinary situations. In addition, it requires uniform objectives of command, control, education, and training.

● The responsibility of the military leader is indivisible. He is responsible for his own actions and those of his subordinates. Undivided command responsibility requires an appropriate degree of toughness and perseverance, which will enable leaders to lead troops so that common objectives and successes can be achieved. Order and obedience are absolutely essential in this context.

● Despite sophisticated technical innovations, soldiers remain a key factor for the success of operations. The objective of leadership must therefore be to win the trust of the troops, to employ them according to their capabilities, and to preserve their efficiency using all means available. The efficiency of troops will be determined by a soldier's courage and discipline, his ability to act independently, his will to take the initiative, his psychological and physical capabilities, and his morale. The promotion of individual capabilities by training and education and successful preparation for operational requirements are key to success.

● He is assured of trust who leads from the heart and the mind. A leader who knows his profession; accepts responsibility; sets obtainable objectives; exercis-

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es self-discipline; leads his soldiers with fairness, understanding, and patience; shows the necessary appreciation for their efficiency; cares for them; respects their dignity; provides them with the right information; practices two-way communication; and accepts his soldiers as advisors and comrades will win the hearts and minds of the men committed to his care.

● Nothing is more detrimental to confidence than the feeling of being poorly and improperly led, and of avoidable losses being accepted. Loss of confidence cannot be compensated for through technical skills alone.[7]

Auftragstaktik is based on decentralization of authority for the execution of military operations. This is based on historical experience, as seen in the example above, that in all the chaos and friction, decisions can best be made at the level directly involved in the engagement. This decentralization provides subordinates with a sense of involvement.

The fundamental basis of mission command is creating trust and mutual understanding between superiors and subordinates. This is more than just control: commanders must establish a command climate of trust and mutual understanding that encourages subordinates to exercise initiative. Mission command applies to all operations across the spectrum of conflict.

Another advantage of Auftragstaktik is that only a limited amount of essential information has to be passed along the chain of command, which encourages the development of short orders. Moreover, it ensures that local commanders make decisions on the basis of the most current information. A general rule should be that the more variable the circumstances, the lower the level of decisionmaking. Therefore, the German process of an estimate of the situation (MDMP) embraces the Clausewitzian factor of the "fog of war." It is less dependent on the amount of analytical details, relying on the belief that an experienced commander can better adjust his plans on the basis of a good, but short, analysis with a clear and concise mission given to his subordinates, rather than a commander who knows every detail and attempts to regulate and give precise orders for each coincidence in advance.

U.S. Army Field Manual (FM) 6-0, *Mission Command: Command and Control of Army Forces*, defines mission command in the following way: "Mission command concentrates on the objective of an operation, not on how to achieve it. It emphasizes timely decisionmaking, understanding of the higher commander's intent, and the clear responsibility of subordinates to act within that intent to achieve the desired end state. With the commander's intent to provide unity of effort, mission command relies on decentralized execution and subordinates' initiative. Mission command requires a common understanding of Army doctrine, as well as of the situation and commander's intent.

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Mission command counters the uncertainty of war by reducing the amount of certainty needed to act. Commanders guide unity of effort through the commander's intent, mission orders, and commander's critical information requirements (CCIR). Commanders hold a 'loose rein,' allowing
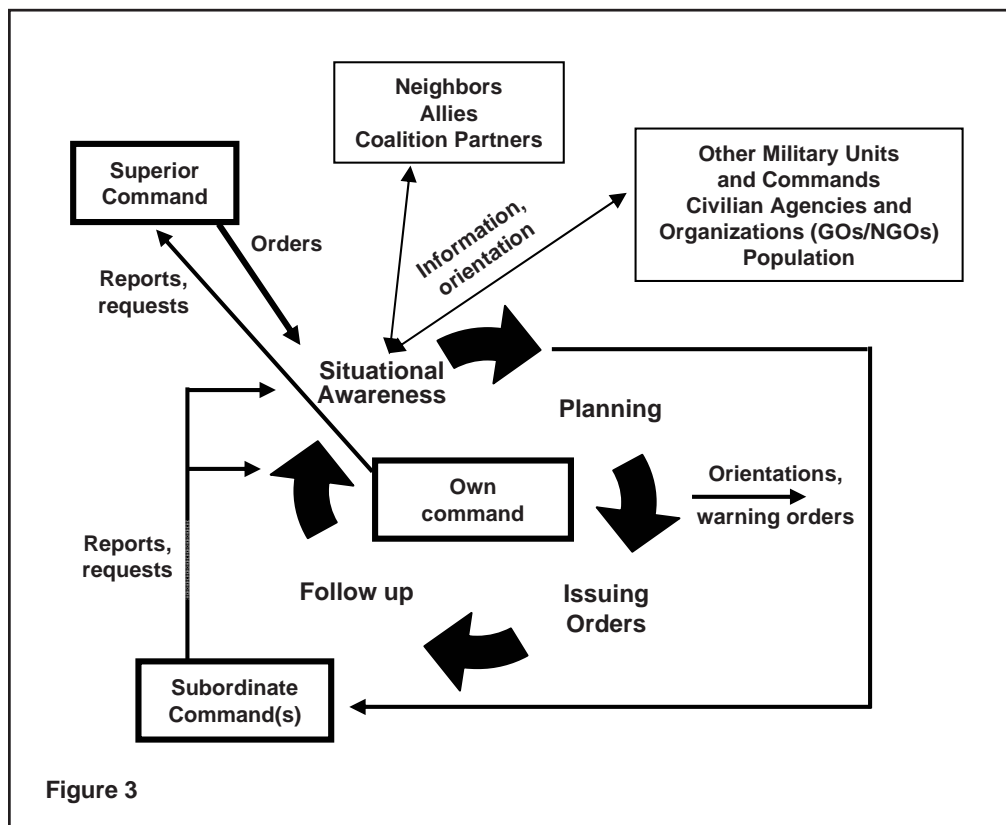
Figure 3

their subordinates freedom of action and requiring them to exercise initiative. Commanders make fewer decisions, allowing them to focus on the most important ones. The command operates more on self-discipline, rather than imposed discipline. Because mission command decentralizes decisionmaking authority and grants subordinates significant freedom of action, it demands more of commanders at all levels and requires rigorous training and education."[8]

When comparing the German army's HDv 100/100 and U.S. Army FM 6-0, it is clear that the idea behind their troop leading procedures is nearly identical. Nevertheless, the respective results, such as orders, are very different, not only in appearance, but also in content. But why is this so? To answer this question, we have to look a little bit deeper into the way orders are generated and written. Therefore, the following paragraphs will comprise a description of the German army's MDMP and compare it to the U.S. Army's MDMP, where appropriate.

The German Decisionmaking Process[9]

In a systematic approach to troop leading procedures, one may subdivide the process into several steps, which very often are depicted in a circle, indicating the continuousness of that process. The German decisionmaking process comprises the four steps of situational awareness, planning, issuing orders, and following up. Influenced by, and linked to, this process are different players, such as the superior and subordinate headquarters, neighboring units, and other external agencies. (See Figure 3) This is certainly very similar to the U.S. Army's system of command and control as described in FM 6-0.[10]

For the purposes of this article, we will look at the planning phase, which is subdivided into three steps: estimate of the situation, commander's decision, and operations plan. The estimate is based on orders and information received. With this as a foundation, the factors for planning are elucidated. What is known for sure is separated from what is assumed; conclusions are drawn, then the comparison of combat

power and effectiveness in relation to time and space is made. This results in the commander's concept of operations — his basic plan.

The development of the concept of operations mainly considers the conduct of combat operations and the use of resources. The detailed considerations made earlier now lead to a plan, which assigns tasks, the basis for orders, and a long-term prognosis for the units. The concept of operations and tasks form the battle plan, which is usually documented.

The Estimate of the Situation and its Results[11]

Full planning (as shown in Figure 4) is mainly executed in preparation for combat actions or in the event a new task is received. During combat situations, following an initial full planning cycle, the

process might be abbreviated by only addressing those elements that have changed.

The starting point, step 2, in the U.S. Army's MDMP, is mission analysis (MA). There are several differences between how the U.S. Army and the German army conducts this part of the analysis. The German process comprises merely five parts, of which the last one, "is there a fundamental change to the situation," mostly applies to combat situations such as the one described in the historical vignette. The question the analyst asks himself is: "Knowing this development of the situation, would my commander have given the same order as the one I received, or would he have given a different one?"

The next difference is the way the mission paragraph is developed. In the German MA, we consider the superior com-
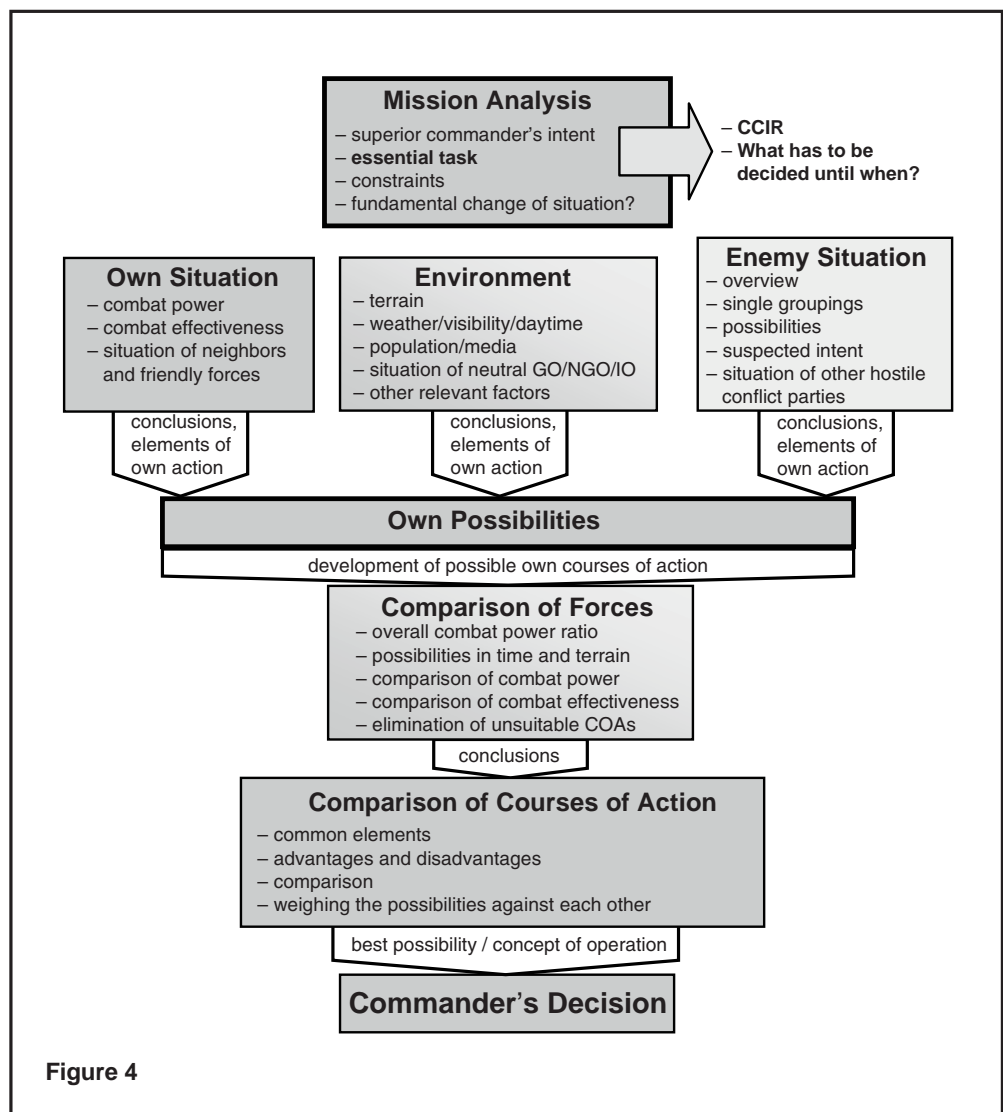

Figure 4

A German Officer's Perspective on the U.S. Army's MDMP

by Captain Ulrich Humpert, German Army

The key to doctrinal understanding of an army is its military decisionmaking process (MDMP); this process leads to decisions and tactics applied on the battlefield and discloses how an army and its leaders are thinking and acting. Having attended the Armor Officers Captains' Career Course at the U.S. Army Armor School, Fort Knox, Kentucky, I gained deep insight into the U.S. Army's MDMP. Naturally, during the course, I frequently compared the German and U.S. Army systems.

It may be interesting for *ARMOR* readers to have a German perspective on the U.S. Army MDMP; after all, the origin of the U.S. Army's MDMP is German. U.S. Army Major Eben Swift created the MDMP in 1897 based on a French interpretation of a book on tactical decision games by Prussian officer Verdy du Vernois. The irony is that the French, and consequently Swift, *misinterpreted* the German system, searching for methods and means, rather than ends, as the Prussians emphasized.[1]

At first glance, and very unusual for a German officer, is the lengthy and detailed U.S. Army process; the German MDMP emphasizes *speedy* decisionmaking, focusing on the essentials of making a decision and not getting wrapped up in details. The key to the German system is faithfully adhering to, and understanding, a commander's intent; the details — the *how* — of the execution is (ideally) left to subordinate units or commands that have (ideally) maximum freedom of action and maneuver. This is the core of Auftragstaktik.

The mission analysis, step 2 of the U.S. Army MDMP, consists of 17 steps, while the Germans are content with merely 5 steps. Significantly, the Germans exclude discussing specified and implied tasks, risk assessment, intelligence, surveillance, and reconnaissance, as well as warning orders, stressing in their mission analysis higher command's intent, essential task (only and exclusively *one* essential task is accepted, which is the essential task to fulfill higher command's intent), and conclusions for further analysis in the process.

Generally, there are many and lengthy briefings involved in the U.S. Army's

system, which include a mission analysis briefing, courses of action (COA) briefing, and a decision briefing. Not surprisingly, the U.S. Army's mission analysis briefing is highly detailed, sometimes consisting of more than 100 slides, and taking frequently up to 2 hours to complete. A higher German commander would hardly accept such a lengthy and detailed briefing, and certainly not in a combat environment. Instead, German staffs are drilled to brief shortly, concisely, and to the point. At battalion level, a situational or decision briefing normally takes no more than 15 to 20 minutes.

The U.S. Army's intelligence preparation of the battlefield (IPB) is very thorough and detailed. German officers do not produce modified combined obstacle overlays, enemy situation templates, or high-value target lists. Instead, they focus their analysis on quickly determining possible COA by addressing, evaluating, and concluding enemy dispositions and compositions. For friendly forces, the most disadvantageous enemy COA is mainly taken into consideration — the U.S. Army's system produces a most dangerous COA (MDCOA) and a most probable COA (MPCOA), with primary focus on MPCOA. The enemy COA is formulated as "decision" during the German MDMP, and is so concise that it can be included in paragraph 1a of the operations order. Most importantly, evaluating the enemy's situation produces conclusions for friendly actions. Terrain and other environmental conditions are analyzed in the same manner as the enemy's situation — addressing, evaluating from enemy and friendly forces' point of view, and eventually concluding for friendly forces' action.

The key to step 3, COA development, in the U.S. Army's MDMP is the COA sketch and statement. Again, the sketch is highly detailed; in fact, doctrinally speaking, the sketch is more detailed than the operations overlay, which is one of the *final* products of the MDMP. At a minimum, the COA sketch includes the array of generic forces and control measures, such as unit boundaries, unit movement formations, forward edge of the battle area (FEBA), line of departure, phase lines, reconnaissance and security graphics, axes of advance, assembly

mander's intent to identify what he wants to achieve with combat, forces, time, and space. But his intent is not interpreted into a restated mission. The intent, as stated in No. 3a (commander's intent), of the higher headquarters' operations order (OPORD), is quoted, not interpreted, in No. 1b (own situation), of the order. This gives subordinate headquarters unchanged knowledge of the commander's intent two levels up, thus enabling them to better react to unforeseen developments.

The mission, paragraph 2 of the OPORD, is quoted from number 3b (unit tasks), or the respective paragraph 3 number that refers to the unit, on the higher headquarters order. (See Figure 5.) In addition to the effect of transparency, this leads to very careful language in the respective paragraphs of higher headquarters orders. Most of the differences described in this article are linked to how orders are written because many of the estimate "products" are used in the operation plan (OP) and in the order that accompanies the OP.

This process is particularly true for developing the essential task. The MA of the German system does not require developing a list comprising all specified and implied tasks, it concentrates on "what does my commander want me to achieve; what is my essential task?" Thus, it focuses analysis and is instrumental in keeping the process as short and concise as possible.

The next big difference between U.S. and German army doctrines are the analysis of terrain and own and enemy situations. The German process does not have an intelligence preparation of the battlefield (IPB). The rationale is that terrain details are best handled by those at the lowest level, such as company and platoon leaders, who set foot on the terrain. Therefore, the analysis of these factors concentrates on developing possibilities for own and enemy actions, and identifying the single worst-case scenario for enemy courses of action (COA), and looking at possibilities to counter enemy COA. The amount of detail in conducting such an analysis is limited; no decision support matrices are developed, and as a rule, you are not looking further than two levels down. This means that at brigade level, you are only looking down to company level. You will not find a more detailed picture on a brigade operations map. Again, this is reflected in the OPORD

where the detail in the situation paragraph (1) is limited as well.

A final difference occurs in the COA analysis and comparison; there is no wargaming in the German army process. This certainly can be regarded as a shortfall, as valuable insights might be produced during this event. The German army estimate leaves this to its staff, which compares the enemy COA to various developed friendly COA and develops a conclusion. This, on the one hand, keeps the process short and focused, but on the other hand, might fail to include valuable outside views.

At the end of the process, the commander makes his decision based on the results of the estimate; however, he always keeps in mind that after the first shots have been exchanged, the plans might be obsolete. This decision is his intent and follows the questions: "Who does what, how, when, where, and why? Thus, the commander concentrates on portraying a clear and deductible intent, formulated as the concept of operations, which becomes paragraph 3a of the OPORD. In doing so, he is giving his subordinates enough freedom of action to enable them to react to the unforeseen or to exploit opportunities. This keeps orders short, easy to read, and easy to understand, which in my opinion, is of predominant importance in the high-speed environment in which we are operating.[12]

Mission command — Auftragstaktik — requires more than just providing subordinates with an elaborated description of what you want to achieve. Therefore, the MDMP and the writing of orders are closely linked in the German system. The commander's intent, as a result of the estimate of the situation, is portrayed in paragraph 3a, it is short and concise and, in its essence, concentrates on the key points of who does what, how, when, where, and why. The tasks to the subunits are given in the subsequent parts of paragraph 3.

The fact that paragraph 2 is a quote from the higher headquarters' task paragraph (3b, etc.) leads to the necessity that this paragraph be written very carefully while focusing on the essential task, which is accompanied by very few other important tasks. Implied tasks are not mentioned at all, as they are regarded as what they are — implied. They are part of standard operating procedure, or as routine, and are handled as such. All of the above-mentioned techniques serve one purpose, which is to keep the order short, concise and comprising only necessary detail, as was requested by Field Marshal von Moltke.

Scheme of a German OPORD

No	Title	Source	Destination	Remark
1	Situation			
1a	Enemy Situation	Result of the enemy estimate		
1b	Own Situation	Partly from higher 3a		
1c	Task Organization			Often given as an annex
2	Mission	From higher 3b		
3	Execution			
3a	Commander's Intent	Result of the estimate process	Becomes part of subordinate's 1b	
3b	Unit Tasks	Results of the analysis of the terrain and the own and enemy situation	Subordinate's 2	
3c	Special Tasks			
3d	Coordinating Instructions			
4	Logistics			
5	Command and Control			

Figure 5

areas, battle positions, strong points, engagement areas, objectives, obstacle control measures, fire support/coordinating measures, decisive operations, shaping operations, command post locations, and known or templated enemy locations. The German model sketches are very rough, merely depicting terrain very generally, and only visualizing own and enemy forces in their respective COA. Whereas, the U.S. Army's COA statement is a lengthy description, which includes mission, intent, decisive operations, shaping operations, sustaining operations, and tactical risk, and is usually one page in length. On the other hand, the German COA statement is formulated as a decision — merely one phrase for each COA respectively.

The wargame, *Kriegsspiel,* a Prussian invention introduced into the Prussian army in the early 19th century, is not, ironically enough, conducted in the German system.[2] The wargame allows the staff to synchronize battlefield operating systems (BOS) for each COA, identifying the COA that best accomplishes the mission. The upcoming operation is 'played' in detail and thoroughly. Whereas, in the German system, only advantages and disadvantages of possible COAs are compared, weighed, and evaluated. Essentially, the decisive advantage of a COA — the COA to be selected — is reasoned by its highest probability to accomplish the essential task, thus fulfilling the higher command's intent.

Another actual German concept is the U.S. Army's nested concept, which is the means to achieve unity of purpose whereby each succeeding echelon's concept is included in the other. This concept is usually visualized during the planning process by using the nesting diagram in which task and purposes of higher command(s) and neighbors are described. Again, the U.S. Army is more Prussian than the Prussians. It connects very formally, strictly, and explicitly tasks and purposes not only of higher commands, but also of neighbors. Moreover, the purpose stated in the concept of operations (as part of the commander's intent — the extended purpose) is *not* the same as stated in the decisive operation. In the German system, there is only *one* purpose of the operation as part of the higher command's intent, which guides MDMP throughout the process to the decision.

There is no commander's guidance in the German system; however, the commander's guidance is crucial to the U.S. Army's MDMP. Usually, with determining employment of forces in area

and time, the commander's guidance is virtually the actual decision in a directed COA scenario. Therefore, in this case the U.S. Army's MDMP is meant to prepare and execute, rather than make a decision. Consequently, only one COA is involved in COA development.

In comparison, the demands of the two armies' MDMP differ significantly. The German system, which is based on Auftragstaktik, requires well-trained and experienced subordinates with initiative, as they are expected to make independent decisions according to the higher command's intent. The commander must have a well-developed sense of subordinates' capabilities, trusting his subordinates to fulfill missions independently and without detailed interference by the higher command. The U.S. Army system requires much more time, demanding detailed and thorough staff work (its not surprising that U.S. Army staffs are larger than German army staffs). In my experience, the U.S. Army's MDMP takes roughly more than 3 times longer than the German army's system to accomplish. This is mainly due to the U.S. Army's strong adherence to details and thorough preparation by wargaming. Subordinate units and commands are relieved to a great extent from making decisions; they are rather 'pushed' by command (command push).

In the end, though, both systems are merely *means* or *methods*. The practical application and outcome of decisionmaking depends mainly and eventually on the human factor. Tactics is a question of character. The commander's leadership quality, his experience, and his common sense determine the quality and success of the decision.

Notes

[1]Donald E. Vandergriff, "We are Stuck in the Past, *Military Education*, January 2005, online at *www.military.com/Opinions/0,,Vandergriff_011305-P1,00.html*. For the historical background and evaluation of U.S. MDMP as a 'French misinterpretation,' see "FORSCOM Commander's Conference at National Training Center," online at *www.d-n-i-net/fcs/pdf/348_forcecom_brief.pdf*, p. 3.

[2]Bill Leeson, "Origins of the Kriegsspiel," a very informative article on the historical background of the wargame, online at *www.kriegsspiel.org.uk*.

Captain Ulrich Hans Humpert, German Army, is currently an armor/cavalry instructor at the German Army Battle Training Center, Letzlingen, Germany. He received a M.A. from the University of the German Armed Forces, Munich, Germany. His military education includes Panzertruppenschule (German Armor School), Offizierschule des Heeres (German Army Officer School), and Führungsakademie der Bundeswehr (Staff College of the German Armed Forces).

Finally, in an environment where computers and data links are ubiquitous and information on the tiniest details is available at the highest levels, another danger arises — the "5,000 mile long screwdriver" or the commander who wants to influence each and every detail from afar, always having the omnipresence of the press and the effects of the decisions of his "strategic corporals" in mind.

Availability of information works both ways; not only does a commander have access to information, but many, if not all, of his superiors do as well. So information management, not interference, is the reaction required to enable subordinates to act in the right way, at the right time, and at the right place, knowing their commander's intent. The following quote puts it all in a nutshell:

"When information is concentrated at the top, leadership or management is more directive; you will do this or that. The issue is getting people to do what you want them to do. Whereas, if people have the ability to contribute to the decision, leadership changes. That leads to the creation of the mission-type warrior who works most effectively not when he's told what to do, but when he's given a goal. In other words, "don't tell me what to do — tell me what you want accomplished."[13]

Auftragstaktik, as it is currently used in the Bundeswehr, does not stand alone, it is paired with the concept of "Innere Führung," which requires a certain style of leadership, and the acceptance that in combat, the human factor, in all its aspects, is the most decisive one.

Notes

[1]There are different English and German terms, such as Auftragstaktik, Führen mit Auftrag, mission command, mission-oriented command, and mission-type tactics, that have been used in the same context. As Auftragstaktik in its use of the term "taktik" (tactics) falls short of the contemporary understanding of military leadership on all levels, recent German field manuals use the term, "Führen mit Auftrag." In this article, the author uses the traditional word, "Auftragstaktik," as this is the term most U.S. soldiers are familiar with when discussing German troop leading procedures. Furthermore, this is the term used in U.S. Army Field Manual (FM) 6-0, *Mission Command: Command and Control of Army Forces*.

[2]The Freedom of the Backs has been the origin for the current concept of "Innere Führung" of the Bundeswehr, which is inseparably linked to Auftragstaktik. The term cannot be translated, but it means the soldier is regarded as a free person. His individual dignity is respected, as well as his basic rights. This image is translated inside the Bundeswehr into a concept of leadership and civic education called "Innere Führung." This is our corporate culture and integrates the Bundeswehr into society.

[3]Moltke's tactical-strategic essays from 1867 to 1871, on the occasion of the 100th anniversary of the birth of Field Marshal Graf von Moltke, the Great General Staff, Department of the History of War, ed., Berlin, Germany 1900, as published in *Verordnungen für die höheren Truppenführer*, (Guidelines for Higher Commanders), as quoted by Major General Millotat, "Auftragstaktik, the Paramount Principle in the Army of the German Armed Forces — its Development and Representation in German Military Publications," lecture delivered during German Armed Forces Command Commander's Conference, 29 November 2000.

[4]Headquarters, Department of the Army, U.S. Army Field Manual (FM) 6-0, *Mission Command: Command and Control of Army Forces*, Government Printing Office (GPO), Washington, D.C., August 2003, Chapter 1, pp. 1-15 and 1-16.

[5]For additional information and a brief and concise analysis of the origins of Auftragstaktik see Lieutenant Colonel John L. Silva, "Auftragstaktik, Its Origin and Development," *Infantry*, September-October 1989, p. 6.

[6]Oberjäger is a rank equivalent to sergeant (E-5). The term was used by the mountain infantry and the paratroopers of the Wehrmacht.

[7]German Field Manual HDv 100/100 VS-NfD, *Truppenführung*, December 2000, Chapter 3, 301 to 306, translated by author.

[8]FM 6-0, pp.1-18 (Figures 1-72 to 1-74).

[9]German Field Manual HDv 100/200 VS-NfD, *Führungsunterstützung im Heer*, Bonn 15, October 1998, 602 and Annex 11, translated by author.

[10]FM 6-0, Chapter 1, p. 1-2 (Figure 1-1) and p. 1-8 (Figure 1-2).

[11]German Field Manual HDv 100/200 VS-NfD, *Führungsunterstützung im Heer*, 630 to 640 and Annex 14, translated by author.

[12]Captain Brian Hayes, "Simplifying the Heavy Brigade/Task Force Operations Order," *ARMOR*, November-December 2003, pp. 18-21.

[13]Irving Lachow, senior research professor, Information Resources Management College, NDU, as quoted in Barry Rosenberg, "Technology and Leadership," *Armed Forces Journal*, July 2007, p. 20.

Lieutenant Colonel Klaus-Peter Lohmann is currently serving as the German Army Liaison Officer, U.S. Army Armor School, Fort Knox, KY. His education includes NATO Staff Officer Course, Führungsakademie der Bundeswehr, Hamburg, Germany; Army Advanced Leadership Course, Führungsakademie der Bundeswehr, Hamburg; Staff Officer Advanced Course, Führungsakademie der Bundeswehr, Hamburg; Staff Officer Basic Course, Führungsakademie der Bundeswehr, Hamburg, and U.S. Army Armor Officer Advanced Course, Fort Knox. He has served in various command and staff positions to include tutor and lecturer for land force tactics, Command and General Staff College of the Bundeswehr (Führungsakademie), Hamburg, Germany; military advisor to the Ministry of Defence of the Republic of Estonia, and head of department and tutor for land force tactics, Baltic Defence College in Tartu, Estonia; G4, Armoured Infantry Brigade 1, Hildesheim, Lower Saxony, Germany; XO and deputy commander, Tank Battalion 24, Braunschweig, Lower Saxony; headquarters commandant and commander, Headquarters Company, Activation Staff of the Multinational Division Central (airmobile), Brunssum, Netherlands, and later in Rheindahlen, Germany; and aide de camp to commander, German Army Armor School, Munster, Germany.

Jump Start Rear Detachment

by Captain J. Clinton Tisserand

As the war on terror continues to progress, more and more Army units are deploying to fight for our Nation's interests, which means additional rear detachment organizations will be created to support the operations of our fighting forces. This article intends to provide newly appointed rear detachment command teams with useful information for establishing a battalion-level rear detachment prior to a unit's deployment. The discussion is separated into five parts: the S1, S2, S3, S4, and family readiness group (FRG). Key tasks are presented in each section and are preceded by an explanation of the task significance.

The S1

The S1 serves as the unit's personnel and administration office, overseeing the unit's personnel and administration systems. The S1 section functions as the essential administrative liaison between the subordinate units and the headquarters, handling personnel actions for all ranks. The S1 officer is also entrusted with the traditional role of being the commander's adjutant. As a member of the rear detachment command team, the S1 is responsible for safeguarding personal information on each deployed soldier, as well as military personnel actions. Below are a couple of helpful suggestions to help S1s establish a secure and effective process:

Obtain a locking file cabinet and hanging folders. Obtain a locking file cabinet with enough drawers to accommodate each deployed company, as well as enough hanging folders for each deploying soldier. The file cabinet is used to store personnel information, such as the DD Form 93, the serviceman's group life insurance election form, enlisted record brief, and unit readiness packet, for each deployed soldier. Organize early; this information will be needed should anyone be wounded or killed in action. It is important that this cabinet have a locking mechanism because it will contain sensitive information.

Obtain copies of all legal actions and counseling. Obtain copies of all legal actions and counseling statements that have been prepared on soldiers in the rear detachment, as well as absent without leave (AWOL) soldiers. These documents will be helpful in the event Uniform Code of Military Justice actions are required for poor performers, or it is necessary to prepare a soldier for elimination from the Army.

Personnel actions center (PAC) clerk. Assign a competent and motivated soldier to serve as the PAC clerk. This soldier will likely independently operate the unit's PAC and will have significant responsibilities. The rear detachment should ensure this soldier receives on-the-job training with the battalion S1 shop prior to deployment. The PAC clerk will be responsible for financial issues of family members, keeping higher headquarters informed of manning strength, assisting with admin paperwork, and checking unit distribution boxes around post.

The S2

The S2 serves as the unit's security office and manages all security clearance issues for personnel assigned to the unit.

"Assign a competent and motivated soldier to serve as the PAC clerk. This soldier will likely independently operate the unit's PAC and will have a significant responsibility. The rear detachment should ensure this soldier receives on-the-job training with the battalion S1 shop prior to deployment."

When the unit is preparing to deploy, the S2 section should:

Establish secret internet protocol router network (SIPRNET) accounts. SIPRNET accounts for the rear detachment commander and first sergeant (1SG) will be a necessary means of communications for the rear detachment and the deployed unit. It provides a medium for the deployed element to pass sensitive information to the rear and vice versa. This is particularly useful when discussing casualty information.

Obtain copies of isolation preparation (ISOPREP) photos. The rear detachment should have copies of ISOPREP photos for every soldier in the unit. These photos will assist the rear detachment in identifying remains when a soldier is killed in action. If the photos are taken tastefully, they may also be useful for memorial operations.

Assign a key control noncommissioned officer (NCO). Assign a key control NCO and ensure he is trained prior to unit deployment. The rear detachment will likely assume responsibility for numerous buildings once the unit departs. The key control NCO should develop a plan to receive the unit's keys in an organized manner.

Assign a privately owned vehicle (POV) storage NCOIC. The battalion rear detachment POV NCOIC should coordinate with each company-level POV NCOIC for issuance of vehicle storage packets and pre-inspections. Company-level POV NCOICs should be present when soldiers turn in POVs, this will assist the battalion-level NCOIC in ensuring proper documentation and procedures are in place. To alleviate confusion, the rear detachment should obtain file-sized envelopes for each vehicle stored in the POV lot. Use the envelopes to organize keys and car information. Also, obtain a locking storage file cabinet or field safe,

"The deploying unit should conduct a pre-deployment briefing with its soldiers and FRG. This briefing is the perfect opportunity to prepare spouses for a long separation."

which can be used by the POV storage NCOIC to safely secure the POV packets that contain keys and soldier personal information.

The S3

The S3 is the unit's operations office, which includes plans and training. The S3 plans and coordinates all things necessary to enable the unit to operate and accomplish its mission. All aspects of sustaining the unit's operations, planning further operations, and executing all training fall under the responsibility of the S3. While preparing for the unit to deploy, the S3 should:

Appoint a rear detachment cadre. At a minimum, a rear detachment should consist of a commander, 1SG, S1 clerk, and supply sergeant. These personnel should be permanently assigned to the rear detachment, and should be strong, motivated performers. Other helpful positions include training NCO, mail clerk, and maintenance NCO. The rear detachment should send one person to be mail handler certified.

Organize rear detachment platoons. Battalion-sized rear detachments should organize platoons according to the needs of soldiers and the deployed unit. Figure 1 depicts a battalion structure for organizing a rear detachment.

Request no less than four computers and a printer. Although the battalion rear detachment commander may not be successful in his endeavor, at a minimum, he should request that the battalion leave no less than four computers and a printer with the rear detachment. Four computers enable smooth operations, and rear detachment operations are similar to company-level garrison operations. The 1SG, commander, S1, and S4 all need computers, and they do not necessarily need to be laptops.

Obtain a least route calling (LCR) card. The rear detachment commander and 1SG will make numerous long distance phone calls during the unit's deployment; as such, a LCR card will greatly assist with the expense.

Obtain government travel cards. The rear detachment commander should require all eligible rear de-

tachment NCOs to obtain government travel cards. These cards are useful when the unit sustains casualties and the rear detachment sends soldiers to conduct escort duties for fallen comrades.

Be prepared for memorial services. The rear detachment should be prepared to execute memorial services for deceased soldiers. To do this, the rear detachment 1SG should have any secondary squadron/battalion colors, likely stored at the brigade. The rear detachment should have at least one pair of new boots and a new helmet cover to be used only for memorial displays. The rear detachment should have a sufficient supply of unit coins to present to the families of deceased soldiers.

Obtain range certification and hazardous materials (HAZMAT) driver's certification. The rear detachment commander should ensure rear detachment NCOs are both range certified and HAZMAT driver certified. Training late deploying and newly arrived soldiers should begin immediately once the main body departs. During this training, the rear detachment will likely have to run ranges, and will therefore need qualified range officers in charge, range supervisors, drivers to transport soldiers, and ammunition.

The S4

The S4 is the unit's logistics officer, responsible for managing the unit's supply and logistics support by providing all manner of supplies and services, to include ammunition, fuel, water, maintenance materials, and transportation services. To aid in the unit's preparation for deployment, the S4 should:

Organize inventories and property accountability. To avoid an accountability nightmare, the rear detachment should seek influence from its battalion chain of command to require company-sized units, which are leaving stay-behind equipment (SBE), to have an organized layout of all SBE. In this layout, a basic issue item (BII) listing for each piece of stay-behind equipment should be included, along with a shortage annex for each piece.

Obtain locks. The rear detachment should obtain numerous locks to secure SBE.

Purchase office supplies. Set the rear detachment up for success by purchasing office supplies prior to the unit's deployment. Once the unit deploys, the rear detachment will likely encounter difficulties making purchases due to limited funds and lack of credit card holders.
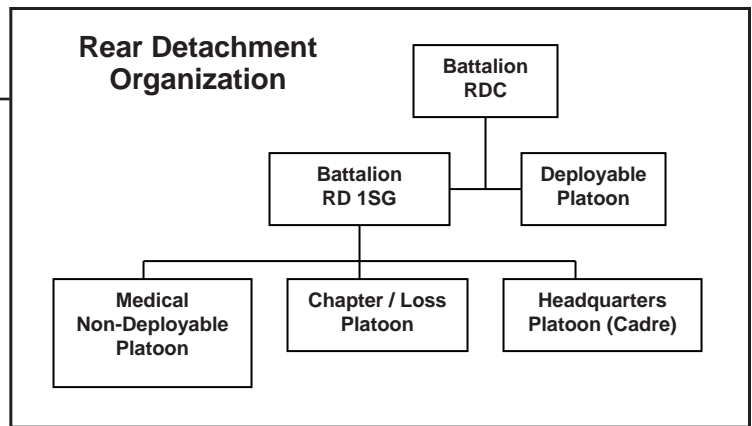

Rear Detachment Organization

Figure 1

Purchase supplies for Class A uniforms. In the event a soldier from the unit is killed in action, the unit provides unit patches, unit crests, and special unit awards to mortuary affairs so they can prepare the soldier's Class A uniform. As such, it is important for the rear detachment to purchase a supply of these items prior to the unit's deployment.

The Family Readiness Group

The family readiness group (FRG) is an organization of family members, volunteers, soldiers, and civilian employees who together provide an avenue of mutual support and assistance and a network of communication among the members, the chain of command, and community resources. These Army families band together during war or overseas tours to provide information, moral support, and social outlets to spouses and family members. Based on its function, the FRG should prepare families for separation by ensuring the following items are available:

A unit deployment handbook for the FRG. The rear detachment should have a deployment handbook for the family members of the FRG. This book should, at a minimum, contain rear detachment contact information, as well as organization contact information, such as legal, post housing, finance, American Red Cross, Army Emergency Relief, Army Community Services, and suicide prevention, that spouses may need while soldiers are deployed. Presenting this information in a play book fashion has been successful for many units.

A casualty notification briefing. As part of the deployment process, the unit should conduct a briefing on casualty notification procedures for the FRG. This briefing assists spouses two-fold: it lets them know what to expect should something happen to their spouse and makes them aware of possible deployment scams — con artists may attempt to gain sensitive personal information from family members of deployed soldiers by con-

ducting a false casualty notification. Informing the FRG of proper notification procedures assists them in identifying possible scams. The unit may request a local representative from the Casualty Assistance Center to assist with this briefing.

Pre-deployment briefing. The deploying unit should conduct a pre-deployment briefing with its soldiers and FRG. This briefing is the perfect opportunity to prepare spouses for a long separation. Useful topics of discussion include an introduction; contact information for the rear detachment; situation/area of operation overview; deployment pay; emergency leave policy; operations security; sources of official information; financial assistance agencies; counseling agencies; morale, welfare, and recreation opportunities; and child care facilities.

The tasks listed in this article were developed with the assistance of the outstanding noncommissioned officers of Rear Detachment, 1st Squadron, 14th Cavalry Regiment.

While this article does not provide all of the answers, it does provide a good start. Depending on assigned rear detachment missions and requirements, more or less may be needed to set up a rear detachment for success.

Captain J. Clinton Tisserand is currently the rear detachment commander, 1st Squadron, 14th (1-14) Cavalry, Fort Lewis, WA. He received a B.S. from the United States Military Academy and is currently completing an M.A. from Chapman University. His military education includes Air Assault School, Armor Officer Basic Course, Ranger School, Scout Leaders Course, and Rear Detachment Leaders Course. He has served in various command and staff positions, including platoon leader, 1st Platoon, B Troop, 1-14 Cavalry (RSTA), Tall A'far, Iraq; platoon leader and assistant S1, 1-14 Cavalry, Mosul, Iraq; XO, C Troop, 1-14 Cavalry (RSTA), Fort Lewis. Special thanks to Sergeant First Class Kenneth Poturica, first sergeant, rear detachment, 1-14 Cavalry, for his assistance in writing this article.

The Roots of Insurgent

by Captain Christopher L. Center

Insurgencies have existed as a means of change in political and social situations since the beginning of time. Instructional and intellectual methods have allowed for these vehicles of change to evolve in their asymmetric concepts of warfare for the state and the insurgent. This article discusses the "roots of an insurgency" and how the military of the state has countered insurgent warfare through intellectual and instructional methods.

Evolution takes analysis and relies on the military historian to provide the analysis and research in any conflict. Conflicts or war can be grouped or categorized in various ways. My instructional education has taught me the difference between "total war" and "limited war." "Total war," as described by Dennis Showalter in Lecture 9 of Introduction to Military History, is "generally understood as war in which resources, human and materiel, of the combatants are committed to a conflict, admitting neither rules nor restraints in military operations, and the outcome of which places the defeated entirely at the mercy of the victor."[1] In this short definition of total war, we see two sides committed to a particular conflict who will stop at nothing to accomplish their aims. There is no operational, logistical, or human expense that will be spared to accomplish either participant's desired end state. An example of this particular type of warfare is World War II. Conflicts, such as Vietnam and the Revolutionary War, take on many traits of "total war," but in many ways, it is a contest of "David vs. Goliath."

Insurgent warfare is a limited war, a contest of the weak versus the strong. The struggle is seen as an internal conflict, which involves a conflict between a government and an opponent who wants to bring about change in the current political setting through political or violent means. As Robert Tabor discusses in *War of the Flea: The Classic Study of Guerrilla Warfare*, there are four political aspects that insurgents attempt to challenge during any particular insurgency: integrity of the borders and composition of the nation state; the political system; authorities in power; and the policies that determine who gets what in society.[2] The insurgency is asymmetrical in nature and the tactics used to bring about change need to be understood — both sides in this type of warfare have differing capabilities. Dennis Showalter, in Lecture 10 of Introduction to Military History, describes it as one opponent trailing the other because it cannot match its enemy in the areas of technology or instructional learning.[3] This gap must be bridged; therefore, insurgents must use asymmetric tactics of terrorism and guerrilla warfare.

More often than not, insurgencies are confused with the tactics used to further their objectives. Terrorism and guerrilla warfare tactics are commonly used; insurgents may use both or neither of these tactics, however, they are not the overarching principle of the conflict. Terrorism is described as "the threat or use of physical coercion against noncombatants to create fear to achieve political objectives;" guerrilla warfare uses hit-and-run tactics against police, military, and physical infrastructures that support the legitimate government.[4] The tactical success of an insurgency depends on the strategic plan of the insurgent, which depends on five key factors for success. Robert Tabor defines these factors as the "will to maintain the revolt; the mindset to avoid the state's strengths and attack its weaknesses; the metamorphosis of the protracted armed struggle from the strategic defensive, to the strategic stalemate, to the strategic offensive; the role the political organization plays in gaining and maintaining support for the insurgency; and the government's counteraction against the insurgency. Does the government use discriminate force or indiscriminate force when dealing with the enemy? The center of gravity, or the civilian populace, that is on the fence could decide to support the insurgency if the government uses violent means against them."[5]

The five strategic aspects of this particular struggle show that the typical insurgent needs to be endeared to the general public to proliferate. The internal conflict needs to be balanced between guerrilla, terrorism, and political tactics to be successful. The ordinary civilian caught in the middle between government and insurgent forces should be the main objective of insurgent or counterinsurgent operations. Civilians are the center of gravity and the aspect of this particular struggle that can tip the favor from one side to another, thus enabling insurgents to recruit local citizens to join the insurgency, and encouraging the local populace to support the insurgency by providing a base of operations or hospitality to the insurgent, as well as financial and other means of support.

Support is vital to any insurgency, as proven during the Vietnam War when South Vietnamese villagers provided support to the Viet Cong. This insurgent army blended in with the population, which allowed them to recruit from within villages and maintain power, even when they were decisively engaged by government forces. Weapons and supplies were easily cached in villages and stored in intricate cave systems. In turn, this meant that logistics and medical support came from these villages, thereby fueling the insurgency. The fact that the Viet Cong and North Vietnamese army won over the center of gravity led South Vietnamese and U.S. forces to begin a campaign of clearing villages known to harbor such insurgents. This campaign effectively denied the insurgency its center of gravity.

The center of gravity, or people, support insurgencies because they see the government failing them in two key areas: security and basic services. These two key fac-

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tors become prevalent when human beings identify their most important needs. Abraham Maslow's "Hierarchy of Needs," clearly identifies these two factors as the base of the triangle.[6] The two key factors are integral to human existence and can cause alliances to waiver if they are not met by the government, but are provided by the insurgent.

Hezbollah, an insurgent group from South Lebanon that has menaced the Israeli Defense Force, has established themselves not only as an insurgent group, but also a political party. Under the leadership of Sayyed Hassan Nasrallah, Hezbollah has been one of the major political parties in Lebanon since 1992. They provide education, security, medicine, food, and other basic necessities to the Shia people of Lebanon.[7] These basic needs are provided to the people in exchange for their popular support to help undermine the government's counterinsurgency operations. The only way for a western power to defeat an insurgency is through a detailed study of intellectual and instructional methods during peacetime.

During peacetime, a western military reverts to training periods that incorporate lessons learned from past conflicts. Western military instructional and intellectual lessons in history typically revolve around high-intensity conflicts, using fire, maneuver, and air power against an enemy of near equal size and tactical ability, which tends to be the focus of study whether it is instructional or intellectual. An insurgency is a low-intensity conflict that pairs government forces against an internal enemy that cannot replicate the force structure or logistics capabilities of its opponent. In western militaries, insurgency is usually considered an afterthought or an additional consideration and seldom considered the main conflict, thus classified as low-intensity conflict; however, government forces will typically commit maximum resources to chase down a nearly invisible enemy. The only means for a western power to tackle low-intensity conflict is through professional military education that encompasses all aspects of war and includes nonwestern thought.

Insurgency can only be defeated by a professional military and government that understands, through instructional and intellectual means, how to counter such a subversive group. The military must have an appreciation for cultures other than its own. Dr. Antulio J. Echevarria in his article, "The Trouble with History," supports such professional development within a professional military environment. Echevarria discusses "historical consciousness" and "historical mindedness," which educate the politician that votes to send armies to war or provides the professional soldier with the knowledge and appreciation of nonwestern thought that typically goes into fighting an insurgency. Echevarria further discusses the consciousness and open-mindedness to incorporate the subfactors of social, political, and economic conditions that contribute to a conflict.[8]

Social, political, and economic conditions are three major factors that contribute to an insurgency. These factors are typically not the exciting or heroic parts that the military professional pays much attention to, unless they sit inside some type of strategic planning cell. The fact is these factors allow the military profes-

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sional to understand the intricate details that drive a countryman to turn away from his government for ideological purposes.

Social reasons could involve anything from religion to race, which create deep divisions among all parties involved in the conflict and become sectarian in nature. If it were an internal conflict involving a government force against a sectarian group, then we would possibly find insurgents and government forces crossing lines to support the sectarian group with whom they have a religious or ethnic alliance. This was very common during the Balkan wars in the 1990s, after the former communist state of Yugoslavia divided into six independent states.

Political friction also tends to spark an insurgency. These political causes range anywhere from a particular group wanting to live under the rule of a monarch, or in the case of Fidel Castro and Cuba in 1959, a socialist movement that ended up ejecting the corrupt Batista government from power. In the case of Castro, this is very similar to the earlier discussion of the Islamic political organization of Hezbollah. The Castro movement sought to discredit the Batista government through propaganda or information operations, which was used to target the center of gravity or local populace. The main objective of this campaign was to inform the center of gravity that the Batista government was not providing basic needs to the local populace. Sustenance, medical needs, education, and basic social services would be given in return for support of the revolutionaries. This propaganda led to materiel, manpower, and sanctuary support to the revolutionaries.[9]

Economic reasons tend to coincide with political reasons. Poor economic conditions can cause people to give up on their government, or as a member of the bourgeoisie, can significantly impair a state's economy. In an industrial society, the bourgeoisie (middle class) would cripple a state's economy through refusing to work or consume the goods that an industrial nation produces. The Russian Revolution is an example of a bourgeoisie insurgency — the government and economy fell to the wrath of communism because the bourgeoisie was not represented and not treated fairly in the industrial complex.[10] The economy causes a nation to appear viable or broken. If other nations cease to have faith in the market of a certain country, this might spur a revolution. The disgruntled worker has every opportunity to become an ideologue, social or political insurgent.

Dr. Echevarria believes that the military professional should understand the more intricate political and social situation in a country. This allows the military professional to understand a potential enemy and grasp all aspects of warfare, not just high-intensity conflict. The problem is this type of warfare does not appeal to the military professional because it is not just instructional; it requires an intellectual mind to figure out what is causing the internal strife — the tougher issue is developing an exit strategy from such a conflict.

During high-intensity conflicts, the combatants can always sign peace accords and return to their countries. They can also cede control of the terrain they have occupied, if it no longer appeals to their strategic interests. The insurgency does not allow for such a retreat or peace accord; the fight is personal because it usually involves countryman against countryman. These feuds normally reignite century after century, and potentially can only be prevented through the use of peacekeepers.

Serious intellectual thought, coupled with instructional methods, are the only way to fight these small-scale wars. Most western countries and militaries have taken part in trying to extinguish the flames of insurgent conflict, but why have they failed more times than not?

The United States, Russia, Great Britain, and France have, at one time or another, been faced with an insurgency. The problem is that armies do not plan for this phase of combat operations, and tend not to be focused on a civilian enemy that rejects their occupation of the country they have no right to occupy. The key term is "occupy" because it highlights the fact that occupying forces are not welcome and are forced to occupy a country through the means of invasion, whether sanctioned, or not, by the world community.

The western world has typically had difficulty containing or eliminating insurgencies. Jeffrey Record in *Beating Goliath, Why Insurgencies Win*, presents 12 characteristics the United States and other western countries exhibit. These characteristics, which equate to 12 "tragic flaws," continuously cause western countries to struggle when dealing with insurgencies. These countries tend to be: apolitical; astrategic; ahistorical; problem-solving, optimistic; culturally ignorant; technologically dependent; firepower focused; large scale; profoundly regular; impatient; logistically excellent; and sensitive to casualties.[11]

To facilitate a successful counterinsurgency, one must understand the usefulness of Record's 12 characteristics, for starters: *apoliticalness* describes how a country ventures into war without considering the political outcome of the country occupied; and *astrategic* is the bridge between the war and post-war rebuilding operations, which requires developing a plan of how to get from combat operations to stability operations. Record agrees with Dr. Echevarria's assertion that military professionals need to study all aspects of military history (*ahistorical*) during peacetime. He also believes that western countries do a poor

job of studying all aspects of war, especially small-scale wars such as insurgencies. *Problemsolving* takes an approach of attempting to find a quick fix or engineering strategy to solve the problem (*optimistic*). Western countries do not understand that in a culture where there have traditionally been conflicts that involved groups with different ideologies, such as in the former Yugoslavia, there is no "quick fix." Likewise, being *culturally ignorant* does not allow the western country to gain an appreciation of its nonwestern enemy. These characteristics are social in nature.

The characteristics of *technologically dependent*, *firepower focused*, *large scale*, and *logistically excellent* are examples of how western countries use their technological and materiel-based strengths to preserve their dominance over nonwestern countries. Western countries are technologically dependent on weapons that engage an enemy at long range. This presents a dilemma during an insurgency because the enemy is not easily distinguished in a crowd of civilians. Soldiers should be able to engage this same crowd nonlethally; firepower amplifies the problem of being technologically dependent. As discussed before, we tend to focus on our lethal means of engaging the enemy while ignoring nonlethal means to win the hearts and minds of the center of gravity. Western countries fight wars that are large scale and logistically dependent. This presents the problem of fighting an enemy that is not as logistically strong, but free of the operational demands that come with securing a "logistics snowball."[12]

Finally, the final two of Record's 12 characteristics remind us that the United States and other western countries are impatient societies that demand results; they want a quick solution to a problem. Insurgencies are conditions based and take dedication to a strategy and final objective before initiating planning for an exit strategy. Western countries are *impatient* and *sensitive to casualties*. Impatience is an "Achille's heel" to most western countries; their citizens demand results and decisive victory. Record uses the example of Vietnam and the lack of counterinsurgency techniques used because the political objectives would not be met within the timetable prescribed by U.S. strategy.[13] The other characteristic that drives impatience is the western world's sensitivity to casualties. In *Beating Goliath*, Record compares western militaries to their predecessor, the Roman Legions. These armies are small (compared to their strategic responsibilities), volunteer based, and expensive to train, and their soldiers are not easy to replace. The news media, which operates 24 hours a day, has brought the reality of casualties into our living rooms. The insurgent understands this and uses it to project his strategic objectives on an unwilling public. The price of human life can force withdrawal from a conflict.

After reviewing these characteristics, one must consider the words of General Douglas MacArthur's address to the U.S. Congress in 1951. "When war has been forced upon us, there is no other alternative than to apply every available means to bring the war to a swift end. War's very object is victory, not prolonged indecision. In war, there is no substitute for victory."[14] This very quote highlights the western attitude, which exemplifies the above-mentioned characteristics.

Conversely, another western general cautioned against this attitude: Carl von Clausewitz asserted that "War is simply a continuation of political intercourse, with the addition of other means."[15] The rejection of swift victory is evident in this quote and it needs to be understood that politics and war intertwine. One must make political concessions to end war and when con-

cessions are not readily available, war might be the extension of politics. Political strategy must be part of the planning process in war. Instructional and intellectual thought on the part of officers, such as MacArthur, would prompt realistic strategies and objectives, post-invasion or occupation.

These characteristics provide the reader with a sense that western countries, especially the United States, do not always consider the political implications of post-invasion strategy. This strategy requires coordinated input from any country's state and defense departments. This is the period when the invaded and occupied country is politically weak and needs some type of strategy to prevent a "grab for power" by various groups within the country that have a stake in its political future.

Insurgents, on the other hand, must also continue to be educated through instructional and intellectual means in order to succeed. However, their studies must be asymmetrical because they are not funded by a state that has an interest in making them a trained and professionally educated army. Therefore, their instruction must come through other means such as other popular insurgent leaders and conflicts. They must learn how David successfully beat Goliath, and the way to do that is to follow the nonwestern teachings of famous military strategists such as Sun Tzu, Mao Tse Tung, or Ho Chi Minh.

John Keegan, in *A History of Warfare*, supports the difference in instructional and intellectual thought concerning war between western and eastern cultures. Nonwestern armies have been taught to fight using tactics such as evasion and delay. They were taught to wear an enemy down and fight from distance.[16] Sun Tzu describes this type of warfare in *The Art of War*. The Chou kings fought the Shang dynasty because the dynasty failed to lead the people in a fair and just way. Sun Tzu describes the Chou tactics as evasion and delay, which is how they were forced to fight because the Shang dynasty was superior in both resources and manpower. Sun Tzu also stresses that the logistics support from other people and states also helped the Chou.[17]

The Art of War has transcended generations and has been used by nonwestern warriors to learn how to fight and be successful in an insurgency. Post-World War II set the conditions for this type of warfare to proliferate from 1945 to 1972 in East Asia, leaving the colonies there in a power vacuum. Colonies, such as Burma, Indochina, and Malaya, followed the example of Mao Tse Tung and his insurgent army's defeat and overthrow of the legitimate Chinese government of Chiang Kai-shek during the civil war of 1948-50. Mao learned how, through traditional nonwestern means, to defeat a superior enemy. Mao titled his method of making war as "protracted war." This concept was based on ambush, piecemeal offensives, and rapid disengagement.[18]

The Viet Minh and their leader, Ho Chi Minh, learned instructionally and intellectually from the example of the Chinese communists. Through the study of history and instruction, the Vietnamese were well versed on how to defeat the western Goliath, France. The terrain of Indochina supported ambush, piecemeal offensives, and rapid disengagement.[19] The war raged on for nearly 10 years. The French eventually fell victim to the insurgency because they had just fought a conventional war; this elusive enemy's tactics were directly opposite of those with which they were most familiar. The Viet Minh defeated the French because they controlled the center of gravity. The will of the common people was behind them; the will of the French people did not support continued counterinsurgency operations in Indochina.

Our insurgent enemies are not funded directly by a government; they do receive instruction or intellectual thought to fight a war from a central government. They have plenty of examples on how to defeat a western enemy and they continue to master the techniques that make them successful. Western countries have participated in their own insurgencies such as the American Revolution.

Instructional and intellectual study teaches students that the American Revolution is an example of an insurgency. The colonists of the original 13 colonies rejected British rule because of issues such as "intolerable acts" and notions such as "taxation without representation." Do we consult these lessons when studying insurgent methods? Yes, we do. Professional U.S. Army journals solicit articles from the Army community on issues that affect the branch or the study of military art. These topics cover everything from emerging doctrine and new weapons systems to the study of previous conflicts.

The American Colonies established militias to fight against the French and the Indians in the frontier areas of the new British Colony. During wars, such as the French and Indian, which occurred in the middle of the 1760s, American Colonists learned tactics such as ambush, piecemeal offensives, and rapid disengagement.[20] These practices were learned through fighting with and against Native Americans. This nonwestern style of fighting is not typically the standard for western armies or people, but is it western or nonwestern in nature? I believe it is simply a means to an end. The smaller army, with minimal logistics support, that fights a conventional army must practice these techniques to survive the larger army's constant and unrelenting offensives. The insurgent army must put the conventional army on the defense and force a political decision. This is what American Colonists did against the British army.

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The word "insurgent" leads to negative connotations within our western culture, but we need to understand that this is how we attained our independence from Britain. Leaders, such as George Washington and Francis Marion (the swamp fox), fought the British by using the tactics mentioned above. The term "swamp fox" in itself alludes to the fact that he was a rebel leader who used his home-grown knowledge of South Carolina's countryside to continuously ambush and wear down British forces by preventing his forces from being decisively engaged.

Johann Von Ewald describes the American insurgency in *Diary of the American War: A Hessian Journal*. The Hessian officer was trained in the traditional western style of war. The tactics he observed of the colonists were very non-western and he could not understand how such a force could beat one of the best armies in the world. After the war ended, he paid visits to the American garrisons that lined the Hudson River Valley. Upon his visit to the garrison at West Point, he witnessed an American force that was shoeless and not well supplied. This was the force that had defeated the British army. He was amazed and knew that this insurgent army would instruct other people across the globe on how to create similar conditions to gain their own independence.[21]

The American Revolution would become an instructional and intellectual lesson to other western insurgents. The colonists of South America and the bourgeoisie of France would execute their own revolutions.[22] Western countries have experienced insurgencies internally and externally; many have served as examples for nonwestern insurgencies. Instructional and intellectual study must consider these examples when studying this aspect of war.

Technology has a devastating effect on war: it may allow one force to subdue another, or it may hinder that same force if it is overly reliant on its benefits. The only thing that technology can assure in war is "mutually assured destruction." The creation of the nuclear weapon after World War II delivered this world into a new era of fighting wars. In some ways, we have entered a second age of military revolution with the presence of nuclear weapons.

The insurgencies that erupted in Malaya, Algeria, Vietnam, and South and Central America after World War II put the ultimate military weapon, which assured immediate victory, on the shelf. Technology can be used as a force multiplier in counterinsurgency, but the conflict must be fought by winning a political advantage over the insurgent. As mentioned before in this article, government forces must have the support of the local populace to succeed. The use of weapons of mass destruction or even basic indirect fire weapons does not guarantee that innocent civilians will not be killed. The military terms this as "collateral damage," but it needs to be seen as creating favorable conditions for the insurgent. Collateral damage results in government forces committing to long-term counterinsurgencies.[23]

The center of gravity, or the average person, caught in the middle of an insurgency does not understand that laser-guided bombs are more precise than the firebombing that occurred in Dresden,

"We need to understand the intricate parts of an insurgency and counterinsurgency. Goliath needs to understand what effects technology and outside interference by other nation states have on this type of conflict. Western countries need not go far to study these conflicts because many of these countries have, at one time or another, participated in one. They are not glorious or even highly intensive conflicts, but they have shaped our world today."

Germany, during World War II. The only thing they see is a western power using its technology to kill fellow countrymen, friends, or even family members. This causes people to join an insurgency out of shear revenge for the intolerable acts committed. Be reminded of the Boston massacre and the nationalistic fever that spread due to this type of action. This situation is no different — when a government force committed to fighting an insurgency creates collateral damage, in the eyes of the populace, they have failed to provide security, which creates an even stronger demand for change.

Technology will never be the absolute answer to fighting wars. Soldiers on the ground are the main weapons against an insurgency; if they act as ambassadors to the local populace and understand cultural norms, they will win the center of gravity. The insurgent's main objective is a drawn-out conflict in an attempt to prevent a technically superior government from having any impact on their purpose. The insurgent must hold out and win small victories, which give credit to an insurgency in the eyes of foreign states. In this case, the foreign state will provide logistics support to assist the insurgent fight against a common enemy.

Machiavelli said, "the prince who has more to fear from the people than from the foreigners ought to build fortresses, but… the best possible fortress is — not to be hated by the people, because although you may hold the fortresses, yet they will not save you if the people hate you, for there will never be wanting foreigners to assist a people who have taken up arms against you."[24] This quote highlights the importance of outside assistance in an insurgency. Examples of foreign interference include the American War of Independence, the Chinese Communist defeat of the Nationalist Government, the French-Indochina War, the Vietnam War, and the Soviet-Afghan War. The insurgent must have outside help because guaranteed materiel fuels an insurgency. Political will and overall strategy do not guarantee that the conflict will continue.

Insurgencies are complex struggles that require significant amounts of intellectual thought and instructional methods to

study and conquer. Comparing the western and nonwestern worlds is an unfair distinction between civilizations. The fact is: historical analysis and proof show that whether the insurgency occurs in the west or the far east they use similar methods to fight and defeat a stronger enemy.

We need to understand the intricate parts of an insurgency and counterinsurgency. Goliath needs to understand what effects technology and outside interference by other nation states have on this type of conflict. Western countries need not go far to study these conflicts because many of these countries have, at one time or another, participated in one. They are not glorious or even highly intensive conflicts, but they have shaped our world today.

The current insurgent warfare in Iraq and Afghanistan exemplify all characteristics of insurgent intellectual and instructional thought. These two current insurgencies were not specifically mentioned in this article because military history provides many examples of these conflicts. The west's refusal to grasp this type of conflict intellectually or instructionally, prior to the conflict occurring or even during strategic planning, has led to the situation we find ourselves in today.

Notes

[1]Professor Dennis Showalter, "Total War," Introduction to Military History, Lecture, Week 9, Colorado College.

[2]Robert Tabor, *War of the Flea*, Potomac Books, Washington, D.C., 2002, p. VIII.

[3]Dennis Showalter, "State of the Discipline," Introduction to Military History, Lecture, Week 10, Colorado College.

[4]Tabor, *War of the Flea*, p. IX.

[5]Ibid., p. X.

[6]Abraham Maslow, "The Hierarchy of Needs," *Thinkers*, Chartered Management Institute, 28 July 2005, available online at *http://en.wikipedia.org/wiki/Maslow's_hierarchy_of_needs*.

[7]Wikipedia Internet Encyclopedia, available online at *http://en.wikipedia.org/wiki/Hezbollah*.

[8]Dr. Antulio J. Echevarria, "The Trouble with History," *Parameters*, U.S. Army War College, Summer 2005, pp. 84-85.

[9]Tabor, *War of the Flea*, pp. 29-32.

[10]Ibid., pp. 14-15.

[11]Jeffrey Record, *Beating Goliath, Why Insurgencies Win*, Potomac Books, Washington, D.C., 2007, pp. 104-107.

[12]Ibid.

[13]Ibid., p. 106.

[14]Ibid., p. 108.

[15]Ibid., p. 107.

[16]Professor Dennis Showalter, "Alternate Perspectives," Introduction to Military History, Lecture, Week 8, Colorado College.

[17]Sun Tzu, *The Art of War*, Translated by Ralph D. Sawyer, Westview Press, Boulder, CO, January 1994, pp. 38-39.

[18]John Keegan, *A History of Warfare*, Vintage Books, New York, 1993, p. 380.

[19]Ibid., pp. 379-381.

[20]Ibid., p. 347.

[21]Johann von Ewald, *Diary of the American War. A Hessian Journal, Volume I: First and Second Campaigns, 1776 and 1777*, translated and edited by Joseph P. Tustin, Yale University Press, New Haven, CT, Chapter 1: From the departure from Hesse to the expedition in Chesapeake Bay, Parts Six, Seven, and Eight; and Supplement: From the beginning of the year 1782 up to the arrival in Hesse in 1784," pp. 17-45 and 347-361.

[22]Keegan, *A History of Warfare*, pp. 348-349.

[23]Professor Dennis Showalter, "Industrialization and Military Historiography," Introduction to Military History, Lecture, Week 7, Colorado College.

[24]Record, *Beating Goliath*, pp. 24-25.

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Captain Christopher L. Center is currently an observer controller, Operations Group (Tarantula Team), National Training Center, Fort Irwin, CA. He received a B.A. from Norwich University. His military education includes Armor Captains Career Course, Armor Officer Basic Course, and Infantry Mortar Leader Course. He has served in various command and staff positions, including adjutant, 1st Squadron, 71st Cavalry, 1st Brigade, 10th Mountain Division, Fort Drum, NY; squadron maintenance officer, Headquarters and Headquarters Troop (HHT), 1st Squadron, 11th Armored Cavalry Regiment (ACR), Fort Irwin, CA; XO, D Company, 1/11th ACR, Fort Irwin; tank platoon leader, A Troop, 1/11th ACR, Fort Irwin; and mortar platoon leader, HHT, 1/11th ACR, Fort Irwin.

Transferring and Cultivating 'Deep Smarts' — A Force Multiplier in Modern Warfare

by Major Emlyn Thariyan

The current military paradigm requires commanders to embrace full spectrum operations, high tempo operational execution, rapidly developing technologies, and confront an evolving new generation of warfare.[1] To embrace this reality and address the increasing knowledge gaps among units and commanders, the U.S. Army needs a robust plan to cultivate and transfer essential military wisdom.[2] In distilling an actionable message to business managers, Dorothy Leonard and Walter Swap, in their book *Deep Smarts*, present a model on building, recreating, and cultivating "deep smarts" within an organization.[3] The term describes "a special form of experience-based expertise that is critical for managers to understand and appreciate."[4] Leonard and Swap note that "throughout an organization are people whose intuition, judgment, and knowledge, both explicit and tacit, are stored in their heads."[5] With the rapidly evolving nature of warfare and increased demands for proficiency of operations throughout the spectrum, we cannot leave the accumulation of deep smarts to chance and random experience.

This presents the need for developing deep smarts, the benefits of understanding how it applies to current military conflicts, and the deliberate process of cultivating it as a force multiplier for the Army.

Recognizing the Need for Deep Smarts

Leonard and Swap define "deep smarts" as "a form of expertise based on firsthand life experiences, providing insights drawn from tacit knowledge. Deep smarts are as close as we get to wisdom. They are based on know-how more than know-what — the ability to comprehend complex, interactive relationships and make swift, expert decisions based on that system level comprehension, as well as the ability, when necessary, to dive into component parts of that system and understand the details."[6] Clearly, these nodes of wisdom are apparent in the Army by commanders embroiled in a variety of current and past operations. However, current management practices, as espoused by Leonard and Swap in transferring these deep smarts, are ineffective as we "fail to differentiate between the kinds of knowledge that can be transmitted as brain food and those that need marinating and slow cooking."[7]

People learn, create, and recreate knowledge through experience. In making decisions, many commanders rely on intuition of the battlefield situation. However, what we think of as intuition is really swift-pattern recognition, based on experiences. The ability to see patterns in a sea of information is a hallmark of deep smarts. Leonard and Swap note that "deep smarts like these not only enable those who possess them to act with conviction, but are also better able to convince others to follow their lead."[8]

Why then are the current learning apparatuses within the Army not sufficient to address this? For a commander to capture complex experience-based knowledge, the person's brain has to contain receptors.[9] Information does not become knowledge until it connects with something we already know. The Army builds these receptors in commanders through simulations and other direct methods of learning, largely passive reception. However, there is a limit to these methods. In 2003, Lieutenant General William Wallace noted that "the enemy we're fighting is a bit different than the one we wargamed against, because of these paramilitary forces. We knew they were here, but we did not know how they would fight."[10] In bridging the knowledge gap, the Army

has also used mentorship as a tool. However, mentors are not expected, with some competency, to transfer skills or know-how.

In February 2006, General George Casey Jr. started a counterinsurgency (COIN) academy to stress the need for U.S. forces to shift from a conventional warfare mindset to one that understands how to win in a guerrilla-style conflict, and made its attendance mandatory for all commanders serving in Iraq. The purpose of the school, which was located north of Baghdad, was to prevent the same outcome that occurred in 2003-04 when Army commanders committed mistakes typical of a conventional military facing an insurgency. However, as a direct method of knowledge transfer, its advantages might be limited because of the large amounts of tacit elements involved. Much of the experience in counterinsurgency cannot be readily articulated. The knowledge might also be too primitive to be well structured. Leonard and Swap note that "PowerPoint presentations, the publishing of best practices, checklists, and guidelines can create receptors where none existed, but none of these methods, useful as they are, will suffice to create deep smarts."[11] In winning the next battle decisively as an organization, we would want to deliberately transfer the experience-based knowledge of today's battles to the commanders and junior leaders who will determine tomorrow's outcome.

Understanding the Context for Deep Smarts

As noted by Leonard and Swap, "deep smarts are based on firsthand life experiences, providing insights drawn from the tacit knowledge that has built up over time."[12] A good example would be lessons learned from the 3d Armored Cavalry Regiment's (ACR) involvement in Tal Afar, Iraq, from 2004-2005. There were several techniques and methods that the regimental commander employed during counterinsurgency operations. For example, following the suggestion of his Iraqi allies, he ringed the city with dirt berms 9 feet high and 12 miles long, leaving checkpoints from which all movement could be observed. This was effective and allowed U.S. forces to control and follow the movement of the population.

The regimental commander and his staff, with input from U.S. intelligence sources, also traced the kinship lines of different tribes, enabling the unit to track fighters traveling to likely destinations just outside the city. About 120 fighters were then rounded up from among those fleeing the impending attack. Before launching an attack into the city, the unit pressed civilians to leave the city for a camp prepared for them just to the south.

In September, after 4 months of preparatory moves, the regiment launched its attack. By that point, there were remarkably few insurgents left in the city. Many had fled or been caught. U.S. forces and their Iraqi allies then moved slowly, clearing each block of the city and calling in artillery strikes as they spotted enemy fighters or explosives.

When establishing security, the first step was to establish 29 patrol bases across the city. That, along with steady patrolling, gave the U.S. military and its Iraqi allies a view of every major stretch of road in the compact city. This level of observation made it extremely difficult for insurgents to plant bombs. During an interview with the *Washington Post*, Colonel H.R. McMaster, commander, 3d ACR, noted that the success was "fragile."[13] The city's mayor however was unhappy that the unit was leaving. He said other American units had been there before, but they did not coordinate with Iraqi forces like McMaster. "When you leave, I will leave, too," the mayor threatened.[14]

Much of the lessons learned and processes for implementation will remain largely tacit knowledge within Colonel McMaster and his staff. Leonard and Swap observes that to calibrate such a gap in knowledge within the organization "the usual approach is to arrange a series of workshops that cover topics assumed to be important and fielding questions. This kind of exercise is valuable, of course, but is unlikely to cover more than the most common events, situations and technical problems. Moreover, the tacit dimensions of knowledge are not elicited."[15] As a learning organization, the Army would need to facilitate the development and transfer of these deep smarts in aspects of counterinsurgency from the "expert" to the novice or protégé preparing for an impending counterinsurgency mission.[16]

Transferring and Cultivating Deep Smarts Within the Army

As military operations become more complex and encompass the full spectrum of missions, the cultivation of deep smarts becomes increasingly necessary. How then can we transfer deep smarts within the Army? Leonard and Swap propose that deep smarts within an organization can be best transferred through "guided experience" of knowledge coaches to protégé.[17] This involves guided observation, observing expertise in practice; guided problemsolving, working on a problem jointly; and guided experimentation, the mindset of thinking in terms of hypotheses and tests.[18]

"Deep smarts are as close as we get to wisdom. They are based on know-how more than know-what — the ability to comprehend complex, interactive relationships and make swift, expert decisions based on that system level comprehension, as well as the ability, when necessary, to dive into component parts of that system and understand the details." Clearly, these nodes of wisdom are apparent in the Army by commanders embroiled in a variety of current and past operations."

"For a commander to capture complex experience-based knowledge, the person's brain has to contain receptors. Information does not become knowledge until it connects with something we already know. The Army builds these receptors in commanders through simulations and other direct methods of learning, largely passive reception."

Guided observation is a powerful way of initiating novices into the practices of someone with deep smarts. Leonard and Swap note that "guided observation can be a more effective way of developing deep smarts than observation alone, if the knowledge coach selects the subjects for observation and focuses the protégé's attention on salient behavior."[19] This has much application to unit commanders executing relief in place (RIP) missions in Iraq and Afghanistan. Guided observation would allow for deliberate reflection, and paired with brainstorming would improve observation and questioning.

Lieutenant Colonel John Nagl, in *Learning to Eat Soup with a Knife*, describes the many lessons that Task Force (TF) 1st Battalion, 34th (1-34) Armor, learned during its deployment in Iraq. One such example reflects the new paradigm faced by the unit's staff during counterinsurgency operations. Nagl notes that "the enemy we faced could only be defeated if we knew his name and address — and, often, the addresses of his extended family. Understanding tribal loyalties, political motivations, and family relationships were essential to defeating the enemy we faced, a task more akin to breaking up a Mafia crime ring than dismantling a conventional enemy battalion or brigade. 'Link diagrams' depicting who talked with who became a daily chore for a small intelligence staff more used to analyzing the ranges of enemy artillery systems."[20] Such

innovative tools, when presented, mask many of the tacit elements of reorganizing unit staffs to be employed in new tasks, and how many revisions were made to the link diagrams to make the process optimally effective for the unit. In transferring this knowledge to subsequent follow-on units and units in training (protégés), knowledge coaches, through guided observation, can transfer the tacit elements of such innovation.

Guided problemsolving allows the protégé to work on a problem jointly, and by doing so, learn how to approach the problem. During counterinsurgency and peace support operations, incoming commanders would be able to learn much from an in-country knowledge coach when solving problems jointly.[21] This could also apply to inexperienced military advisors. Guided problemsolving allows the learner to actively develop his deep smarts and contribute to an experience repertoire.

As an example, Nagl again notes that based on his experiences with TF 1-34 Armor, native local forces have inherent advantages over outsiders in a counterinsurgency campaign: "They can gain intelligence through the public support that naturally adheres to a nation's own armed forces. They don't need to allocate translators to combat patrols. They understand the tribal loyalties and family relationships that play such an important role in the politics and economies of many developing nations. They have an innate

understanding of local patterns of behavior that is simply unattainable by foreigners. All these advantages make local forces enormously effective counterinsurgents."[22]

Task Force 1-34 Armor worked diligently to mentor the local police force and two battalions of the Iraqi National Guard during its year in Khalidiyah, Iraq. Nagl also adds that "recruiting, organizing, training, equipping, and employing these forces often appeared to be an uphill fight, as the Iraqi leadership both wanted and resented American leadership and logistical and financial support. Building trust through joint operations and shared risks ultimately resulted in some intelligence sharing, but the task of creating reliable forces that could independently guarantee local security was incomplete when the task force passed responsibility for these units to its follow-on force, Task Force 1st Battalion, 506th Infantry."[23] Much of the development of the cooperation and working procedures between TF 1-34 Armor and local forces were inherently tacit to the commander and staff. Guided problemsolving allows the incoming commander or units in training (protégé) to understand the tacit elements, or deep smarts, from the knowledge coach, such as the basis for established working procedures and historical context of the cooperation.

Guided experimentation is needed when there is a lack of information. David Gar-

vin, *Learning in Action: A Guide to Putting the Learning Organization to Work*, notes that two types of experiments can occur: hypothesis testing and exploration.[24] Hypothesis testing is used to determine the superior, while exploration is more open-minded with a goal to generate options. In both cases, coaches can add value by helping identify the types of experiments and their extent. Leonard and Swap note that this extreme form of planned "learning by doing" creates receptors and promotes the development of deep smarts.[25]

An example of guided experimentation can be seen in the use of "eagle check-

ward, away from their vehicles with their hands on their heads, and were searched when they reached the checkpoint. The eagle checkpoints were launched to avoid fixed, ground-based checkpoints, which had attracted suicide attacks on British troops.

This technique was successful for the battle group because of its uncertainty — the local populace had no idea where the Royal Marines would establish checkpoints — and effectively denied insurgents freedom of movement. In understanding the basis for such a technique, it was noted that the use of the eagle checkpoint had been frequently used during

ard and Swap rightly observe that in training and development "we want to believe that we can make leaders out of managers (or commanders) if we send them to a course on leadership. We want to believe that smart people taking over new positions can learn what they need to know with little or no overlapping service with their predecessors. We spend millions of dollars on reports, analyses, and databases so people who need to learn can plow through them and become knowledgeable. And we no longer have time for apprenticeships. The practice of having a novice shadow an expert for an extended period is prevalent only in some isolated parts of our society, such as medical training."[27]

To address the full spectrum of operations that commanders would be expected to plan for and execute with a high degree of proficiency at both tactical and operational levels, we need to design guided experience for our organizational practices. All commanders should think of themselves as knowledge coaches. These commanders have a responsibility to identify junior leaders who have deep smarts and are indispensable to current and future operations, and plan programs of knowledge transfer. The Army, as a learning organization, needs to raise the general organizational level of sophistication about how deep smarts are developed.

One of the perceived limitations of creating deep smarts is that of the lengthy timeframe needed to create guided experience. Simple and profound receptors can be built through lectures and simulations, but the transfer of deep smarts, "grown organically, through experience, and like any organic process takes time."[28] Technology through various applications can aid in the transfer; however, in delivering complex, experience-based knowledge in simple form, we need to "appreciate the limits of oversimplification and fast delivery."[29]

In confronting tomorrow's battles, the Army would greatly benefit from knowledge coaches. As Leonard and Swap put it, "knowledge coaches help their protégés recreate through guided experience — the deep smarts, including tacit knowledge. Why recreate rather than just transfer knowledge? Because today is not exactly like yesterday, and the current situation is inevitably a bit different from the one the coach experienced. Some of the coach's deep smarts apply directly; some need to be adapted. In the act of recreation, protégés sift through these options and figure out for themselves what ap-

"In February 2006, General George Casey Jr. started a counterinsurgency (COIN) academy to stress the need for U.S. forces to shift from a conventional warfare mindset to one that understands how to win in a guerrilla-style conflict, and made its attendance mandatory for all commanders serving in Iraq. The purpose of the school, which was located north of Baghdad, was to prevent the same outcome that occurred in 2003-04 when Army commanders committed mistakes typical of a conventional military facing an insurgency."

points," employed by the British army's Black Watch battle group during its deployment to Camp Dogwood, Iraq, located 20 miles south of Baghdad, in November 2004. The method involved surprise air raids to search for suspects on desert roads around the base. Arriving in helicopters, Royal Marines attached to the battle group were on the ground, stopping and searching vehicles, no longer than 20 minutes. As soon as they reached the ground, the Royal Marines took position along the route. Approaching vehicles were ordered to stop 100 yards out and the occupants were ordered to walk for-

the British troubles in Northern Ireland. Hence, the deep smarts of the experiences in Northern Ireland allowed for the hypothesis testing by knowledge coaches in Iraq.[26] Thus, guided experience, observation, problemsolving, and experimentation under the guidance of a knowledge coach, facilitates the development and transfer of deep smarts from the expert to the protégé.

In cultivating deep smarts as part of the management and learning culture within the Army, we need to identify and include a key role for knowledge coaches. Leon-

plies."[30] The continually evolving future of military warfare, with the absence of a relatively fixed strategic environment, will demand versatile and adaptive commanders leading missions at both ends of the spectrum of operations. Successfully institutionalizing the experience-based knowledge will serve as a significant force multiplier for the Army.

Notes

[1]Thomas Hammes, "Insurgency: Modern Warfare Evolves into a Fourth Generation," *Strategic Forum*, National Defense University Press, January 2005, alludes that current military conflicts have entered a new generation of warfare.

[2]Dorothy Leonard and Walter Swap, *Deep Smarts — How to Cultivate and Transfer Enduring Business Wisdom*, Harvard Business School Press, 17 January 2005, define a knowledge gap as the difference between what someone knows and what the person needs to know in order to accomplish the task with competence, if not expertise.

[3]Ibid.

[4]Ibid.

[5]Ibid.

[6]Ibid.

[7]Ibid.

[8]Ibid.

[9]Ibid., Leonard and Swap describe receptors as neural structures that are the physical representations of frameworks, domain knowledge, or prior experiences, to which current inputs can be connected.

[10]Jim Dwyer, "A Nation at War: In the Field — V Corps Commander; A Gulf Commander Sees a Longer Road," *The New York Times*, 28 March 2003.

[11]Leonard and Swap, *Deep Smarts — How to Cultivate and Transfer Enduring Business Wisdom*.

[12]Ibid.

[13]Thomas E. Ricks, "The Lessons of Counterinsurgency: U.S. Unit Praised for tactics Against Iraqi Fighters, Treatment of Detainees," *Washington Post*, 16 February 2006.

[14]Ibid.

[15]Leonard and Swap, *Deep Smarts — How to Cultivate and Transfer Enduring Business Wisdom*.

[16]The novice or protégé contextualized could be an incoming task force commander to an area of operations or a junior commander in the army learning the tacit elements of decisions made.

[17]Leonard and Swap, *Deep Smarts — How to Cultivate and Transfer Enduring Business Wisdom*.

[18]Ibid.

[19]Ibid.

[20]John A. Nagl, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam*, University of Chicago Press, 2005.

[21]The commander of a particular area of operations could serve as a knowledge coach to an incoming commander who has not served in the area of operations.

[22]Nagl, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam*.

[23]Ibid.

[24]David Garvin, *Learning in Action: A Guide to Putting the Learning Organization to Work*, Harvard Business School Press, 2000, notes that experimentation is a form of exploration: "the pursuit of new knowledge, of things that might come to be known."

[25]Leonard and Swap, *Deep Smarts — How to Cultivate and Transfer Enduring Business Wisdom*.

[26]British military analysts were, in this example, the "knowledge coaches" involved in the implementation of eagle checkpoints.

[27]Leonard and Swap, *Deep Smarts — How to Cultivate and Transfer Enduring Business Wisdom*.

[28]Leonard and Swap, *Deep Smarts — How to Cultivate and Transfer Enduring Business Wisdom*, discuss this with reference to the notion in western societies that efficiency is king, but conclude that in the name of efficiency, organizations could forsake effectiveness.

[29]Leonard and Swap, *Deep Smarts — How to Cultivate and Transfer Enduring Business Wisdom*, use e-learning as a form of technology in aiding transfer, but note the limits in the transfer of complex experience-based knowledge.

[30]Leonard and Swap, *Deep Smarts — How to Cultivate and Transfer Enduring Business Wisdom*.

Major Emlyn Thariyan, Singapore Army, is currently the chief trainer, Armor Battle Group Training Center, Armor Training Institute, Singapore. He received a B.A. from the National University of Singapore. His military education includes Officer Cadet School, Singapore; Armor Officer Cadet School, Singapore; Company Tactics Course, Singapore; Armor Officer Advanced Course, Singapore; and Armor Captains Career Course, Fort Knox. He has served in various command and staff positions, to include wing commander, Armor Specialists (NCO) Training Wing, Armor Training Institute, Singapore; commander, tank officer course, Armor Training Institute; battalion intelligence officer, 46th Battalion, Singapore Armor Regiment; and company commander, 46th Battalion, Singapore Armor Regiment.

Stress Fracture Implications within the IET Environment

by Major Alex Brenner

Stress fractures, also known as march or fatigue fractures, have been a recognized hazard of military training since their initial description by a Prussian military physician in 1855.[1] These fractures can be serious and life-altering injuries and significantly impair the efficiency of initial entry training (IET) centers throughout the Army. The high-incident rate among military recruits stifles military medical facilities and imposes a substantial increase in medical costs.

Problems associated with stress fractures within the U.S. Army Training and Doctrine Command (TRADOC) were identified as early as 1974, when a medical survey of all TRADOC basic training centers revealed that 4.8 percent of all trainees sought medical care for stress injuries of bones.[2] Similar data was recently collected from the 194th Armored Brigade (then the 1st Armor Training Brigade), at Fort Knox, Kentucky, in February 2007. Interestingly, this data also revealed a 4.8 percent incident rate for stress fractures.

Although very prevalent in military populations, stress fractures occur much less frequently among civilian populations of athletes and are often misdiagnosed due to their infrequency.

Basic Science of Stress Fractures

To understand the etiology of stress fractures, one must understand the concept of mechanical stress. Stress is actually an engineering term that describes the internal force per unit area which a part of a body on one side of a plane exerts on that part of the body on the other side of the plane.[3] Simply defined, stress is the force per unit area of a load-bearing structure. Relating this to bone, stress is produced in a bone whenever the bone is subjected to a loading force such as running, walking, or even standing.[4] As a result of stress, bone will strain or change dimensions. When this stress reaches a critical level, the bone will be damaged. This most often occurs when soldiers go from a period of less physical activity, such as a sedentary lifestyle at home, to the physically demanding environment of IET. If the rate of damage exceeds the body's ability to heal the bone, then it will eventually

"Extrinsic risk factors for stress fractures are extraneous and are imposed by the rigors of the IET environment; however, unlike intrinsic risk factors many of these can be modified. Extrinsic risk factors include standing for long periods of time, inadequate amounts of rest, running too much and too soon, and wearing boots for an extended time."

fracture. This can happen as quickly as a few days, but it is very important to note that stress fractures most often occur during weeks 1 and 2 of IET.

Common Sites of Stress Fractures

The long bones of the feet (metatarsals) are the most commonly reported location of incidence in scientific literature, followed by the shin bone (tibial shaft), the heel bone (calcaneous), the knee (tibial plateaus), and the hip (femoral neck). In the 194th Armored Brigade, based on unpublished data collected from the 46th Adjutant General (Reception) Battalion, the knee (medial tibial plateau) appears to be the most common site for stress fractures. It is currently unclear why the knee is the most common site among recruits in the 194th Armored Brigade.

Diagnosing Stress Fractures

When a soldier is first seen at sick call and has a physical exam consistent with stress fracture pathology, medical providers will most commonly order an x-ray. An x-ray is quick and relatively inexpensive; however, stress fractures appear on x-rays only 15 percent of the time, due to low sensitivity of the test to pick up this type of pathology in its early stages. If the

x-ray reads "normal," but the medical provider still has a high suspicion of possible stress fracture, they will order a bone scan. Bone scans are considered the "gold standard" for evaluating stress fractures, based on the equipment's ability to demonstrate subtle changes in bone breakdown long before they are visible on plain radiography. The bone scan is performed in the nuclear medicine department and is conducted by injecting the patient with a radiopharmaceutical (technetium-99m). This substance circulates through the body and is absorbed at sites where there is bone trauma such as a stress fracture. The degree of absorption is determined by how badly the bone is damaged and can be measured by using the bone scan machine. Very focal uptakes of the radiopharmaceutical indicate a stress fracture, which is a more serious injury, where less intense uptake represents a "pre-fracture" or stress reaction. Areas of stress reaction have been shown to heal more quickly than stress fractures.

Common Misconceptions about Stress Fractures

There are several prevalent misconceptions concerning stress fractures. One misconception is that stress fractures are

not serious injuries, but in fact, if they occur within the tibial plateau of the knee, or in the femoral neck of the femur, they can cause devastating injuries requiring surgery and long rehabilitation. Another misconception is that stress fractures are the same as shin splints. In actuality, these are two different injuries. Shin splints are irritation to the outer coating of the bone, called the periostium, where various muscles of the lower extremity attach along the shaft of the tibia or shin bone. Stress fractures are actual breaks in the bone caused by overloading or overusing the bone.

Intrinsic and Extrinsic Risk Factors for Developing Stress Fractures

Based on studies at Fort Jackson, South Carolina, conducted by the Center of Health Promotion and Preventive Medicine (CHPPM), there are several intrinsic risk factors in developing stress fractures.[5] Intrinsic factors are those factors that we have very little influence on because they are of the very nature of the soldiers coming to us. These include very low body mass index, poor previous level of physical fitness, smoking, and poor flexibility. Based on unpublished data gathered from the 46th Adjutant General

Figure 1. Hip arterial supply. The susceptible artery (medial femoral circumflex artery) is indicated.

Physical Training and Rehabilitation Program (PTRP) where they are placed into a more conducive healing environment. Here, they perform injury rehabilitation and have a more flexible schedule to see physical therapists and other health care providers. Currently, the average length of stay in the PTRP for a stress fracture is 137 days. It is also important to note that only 30 percent of soldiers with stress fractures return to duty from the PTRP, which is a reflection on the extensive amount of time and difficulty in the rehabilitation and treatment of these injuries.

Femoral Neck Stress Fractures

Stress fractures that involve the anatomical neck of the femur bone, near the hip, are serious and potentially devastating injuries that can have life-altering consequences. The incident rate among soldiers in IET environments is unknown; however, over the past year there have been six soldiers identified with this injury. This injury, if not detected early in the disease process, is considered a medical emergency and usually requires the femur bone to be pinned at the hip. The injury is very significant because of the vascular anatomy. Anatomically, there is only one artery (see in Figure 1) that feeds the femoral head, which becomes easily compromised when there is a stress fracture through this region. Once the arterial supply has been compromised, the bone is highly susceptible to vascular necrosis, or bone death.

Treating a femoral neck stress fracture consists of surgically pinning the femoral neck with surgical hardware by an orthopedic surgeon (See Figure 2). Recovery and rehabilitation for this injury is very long and arduous and can result in permanent disability for the soldier. Symptoms for a femoral neck stress fracture usually consist of a deep dull ache in the groin, usually not palpable, that can refer pain down the anterior portion of the thigh to the knee. A soldier with a femoral neck stress fracture will usually have a noticeable limp and is aware that the injury worsens with prolonged standing or marching. A soldier with these symptoms should be immediately referred to the troop medical clinic for further examination by a medical provider.

Battalion, it was found that soldiers who score poorly on push ups, coupled with a poor run time during the initial modified Army Physical Fitness Test, were also most susceptible to developing stress fractures during IET.[6]

Extrinsic risk factors for stress fractures are extraneous and are imposed by the rigors of the IET environment; however, unlike intrinsic risk factors many of these can be modified. Extrinsic risk factors include standing for long periods of time, inadequate amounts of rest, running too much and too soon, and wearing boots for an extended time.

Healing Time for Stress Fractures

Healing time for stress fractures depend on several factors, including the soldier's age and the severity and location of the stress fracture. A stress fracture involving the long bones of the feet (metatarsals) typically take 4 to 6 weeks to heal. Stress fractures involving the long bones of the thigh (femur) or shin (tibia) take 8 to 12 weeks to heal. Fractures involving the tibial plateau and femoral neck are more devastating and take 4 months or longer to heal.

Effect of Stress Fractures on Training
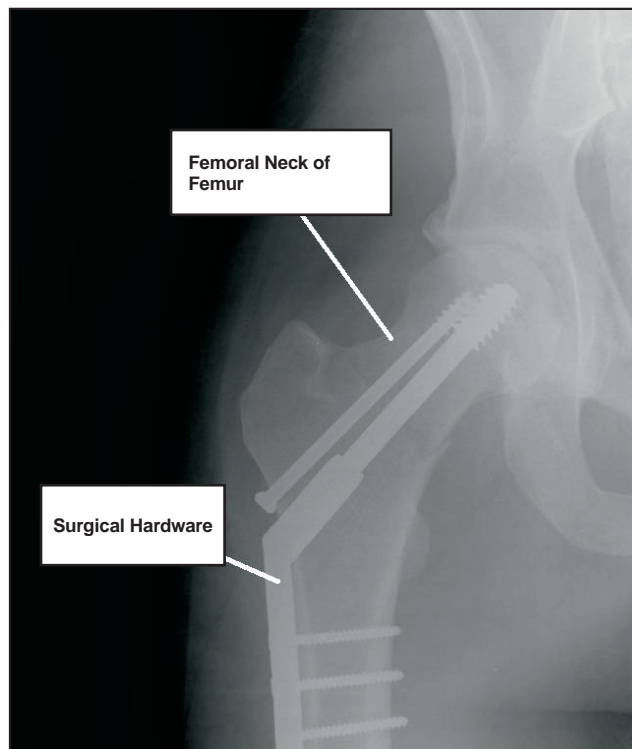
Soldiers who are diagnosed with stress fractures and are experiencing pain too severe to continue training are sent to the

Figure 2. Radiographs of soldier with a femoral neck stress fracture after surgical procedure by orthopedic surgeon.

Preventing Stress Fractures

It is important for leaders, drill sergeants, and cadre members in IET environments to understand and recognize that stress fractures are a result of a cumulative overuse effect of standing, marching, and running in the early phases of IET. They are not typically caused by one specific training event. Overuse, coupled with the inherent intrinsic risk factors that soldiers have, make stress factors the most common injury in training environments.

It is imperative that we all look for ways to improve how we train, especially during weeks 1 and 2, so we can help lower the incident rate of stress fractures. Detecting the injury early, before it develops into a full-blown fracture, improves chances for a full recovery. It is recommended that leaders monitor each company during the first few weeks of IET to ensure extrinsic risk factors are controlled, but at the same time, not compromise tough, challenging training.

Stress fractures are the most common orthopedic injury seen among IET soldiers. They are significant and serious injuries that require long healing times and extensive rehabilitation, and based on recent studies, are the number one reason soldiers are medically discharged from the 194th Armored Brigade. Prevention and mitigation are possible through an understanding and knowledge of what encompasses these injuries. Action is needed to help identify and reduce extrinsic risk factors that are occurring during weeks 1 and 2 of IET training.

Notes

[1]T.J. Scully and G. Besterman, "Stress fracture—a Preventable Injury," *Military Medicine*, *147*, 1982, pp. 285-287; and J. Breithaupt, "Zur Pathologies des Menschilichen Fusses," *Med Zeitun*, *24*, 1855, pp. 169-171.

[2]Unpublished data report at Annual Meeting, Society of Military Orthopedic Surgeons, El Paso, TX, 1973.

[3]Scully and Besterman.

[4]G. Lease and F. Evans, "Strength of Human Metatarsal Bones under Repetitive Loading," *Journal of Applied Physiology*, *14*, 1959, pp. 49-51.

[5]B.H. Jones, Body Composition and Physical Performance, National Academy Press, 1992, pp. 141-173; B.H. Jones, USARIEM Army Technical Report T19-88, Natick, MA, 1988; and B.H. Jones, et al, "Epidemiology of Injuries Associated with Physical Training among Young Men in the Army," *Medicine and Science in Sports and Exercise*, *25(2)*, 1993, pp. 197-203.

[6]A.K Brenner, Unpublished data report at the 10th Annual Armed Forces Health Protection Conference, Louisville, KY, 2007.

Major Alex Brenner is currently serving as commander, B Company, Physical Training and Rehabilitation Program (PTRP), 46th Adjutant General (Reception), Fort Knox, KY. He received a B.S. from the University of Tampa, and an M.S. from Baylor University. He has served in various command and staff positions, to include chief, Physical Therapy, U.S. Army Health Clinic, Vicenza, Italy; assistant chief, Physical Therapy, Ireland Army Hospital, Fort Knox, KY; platoon leader, 50th Medical Air Ambulance Company, Fort Campbell, KY; and platoon leader, C Company, 426th Forward Support Battalion, Fort Campbell.

"It is important for leaders, drill sergeants, and cadre members in IET environments to understand and recognize that stress fractures are a result of a cumulative overuse effect of standing, marching, and running in the early phases of IET. They are not typically caused by one specific training event. Overuse, coupled with the inherent intrinsic risk factors that soldiers have, make stress factors the most common injury in training environments."

Active Component Armor/Cavalry Home Station Locations

CONUS FY08

1ST ARMORED DIV
FT RILEY, KS
FT BLISS, TX

1ST INFANTRY DIV
FT RILEY, KS

10TH MOUNTAIN DIV
FT DRUM, NY
FT POLK, LA

2D INFANTRY DIV
FT LEWIS, WA

FT MCCOY, WI
181st Infantry Brigade

USAARMC
FT KNOX, KY

FT CARSON, CO
5th Armored Brigade

FT KNOX, KY
4th Cavalry Brigade

11TH ACR
FT IRWIN, CA

101ST AIR ASSAULT DIV
FT CAMPBELL, KY

82D AIRBORNE DIV
FT BRAGG, NC

1ST CAVALRY DIV
FT HOOD, TX
FT BLISS, TX

CAMP SHELBY, MS
177th Armored Brigade

3D INFANTRY DIV
FT STEWART, GA
FT BENNING, GA

3D ACR
FT HOOD, TX

4TH INFANTRY DIV
FT HOOD, TX
FT CARSON, CO

Note: Gray boxes indicate Active Component support to Reserve Component units (AC/RC Commands).

OCONUS FY08

2D INFANTRY DIV
CAMP HOVEY
CAMP CASEY

ALASKA

1ST ARMORED DIV
BAUMHOLDER

GERMANY

KOREA

25TH INFANTRY DIV
FT WAINWRIGHT
SCHOFIELD BARRACKS

1ST INFANTRY DIV
SCHWEINFURT

HAWAII

2D CAVALRY REGIMENT
VILSECK

ITALY

173D IBCT
VICENZA
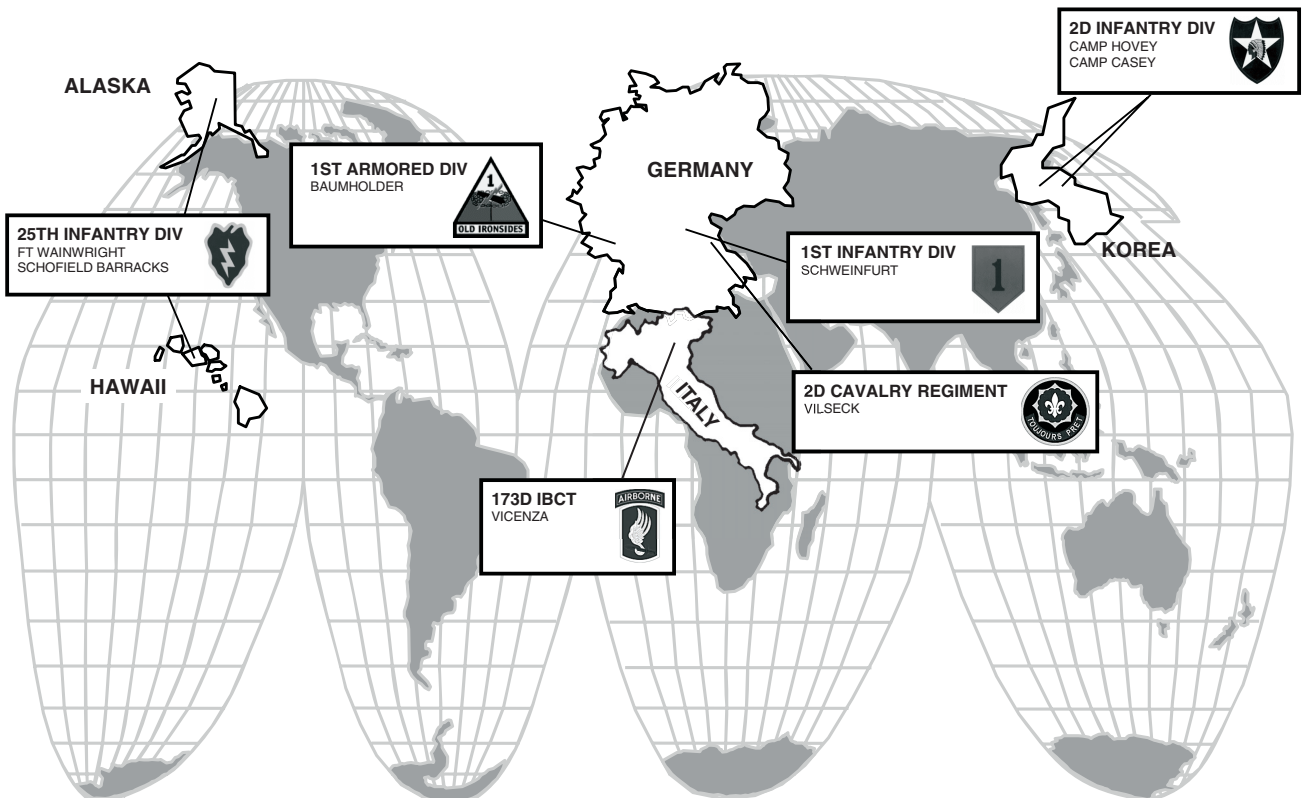
Active Component Units
Source: Office Chief of Armor

Unit		Location/APO/ZIP	Phone/DSN	CDR/CSM
1st Armored Division (Friedberg, FRG)	2d Brigade	Baumholder, FRG 09034	485-7290	COL Robert P. White CSM Michael Eyer
	1-35 Armor	Baumholder, FRG 09034	485-6368	LTC Ricardo O. Morales CSM Ramon Delgado
	1-1 Cavalry	Buedingen, FRG 09076	321-4884	LTC Matthew F. McKenna
	3d Brigade	Ft. Riley, KS 66442	856-5014	COL Norbert B. Jocz CSM James Savitski
	2-70 Armor	Ft. Riley, KS 66442	856-5820/1036	LTC Joel Tyler CSM Michael R. Matthews Sr.
	5th Brigade (AETF)	Ft. Bliss, TX 79906	568-5962	CSM David S. Davenport
	1st Combined Arms Battalion (CAB)	Ft. Bliss, TX 79906	569-8468	LTC Elmer Speights CSM Mark A. Kiefer
1st Infantry Division (Wuerzburg, FRG)	1st Brigade	Ft. Riley, KS 66442	856-4014	COL Jeffrey D. Ingram CSM Peter Burrowes
	1-34 Armor	Ft. Riley, KS 66442	856-1703	LTC John A. Nagl CSM Billy Brauer
	2-34 Armor	Ft. Riley, KS 66442	856-8003	LTC David T. Seigal CSM Douglas Falkner
	4-4 Cavalry	Ft. Riley, KS 66442	856-1790	
	2d Brigade	Schweinfurt, FRG 09224	353-8648	CSM John W. Fortune
	1-77 Armor	Schweinfurt, FRG 09224	353-8648/8646	LTC Miciotto O. Johnson CSM Ernest Edwards
	4th Brigade	Ft. Riley, KS 66442	856-4666	CSM James Champagne
	1-4 Cavalry	Ft. Riley, KS 66442	856-1790	LTC James Crider CSM John Jones
2d Infantry Division (Korea)	1st Brigade	Camp Casey, Korea 96224	730-2834	COL Christopher E. Queen CSM Joseph Santos
	1-72 Armor	Camp Casey, Korea 96224	730-4991	LTC Thomas H. Isom
	4-7 Cavalry	Camp Hovey, Korea 96224	730-5937	LTC Douglas A. Boltuc CSM Stephen L. Gray
	2d Brigade	Ft. Carson, CO 80911	526-4845	CSM William Johnson
	3-61st Cavalry	Ft. Carson, CO 80911	(719) 440-3939	LTC Robert B. Brown CSM Javier Brisenco
	3d Brigade	Ft. Lewis, WA 98433	347-3565	
	1-14 Cavalry	Ft. Lewis, WA 98433	347-4939	CSM Brian Shover
	4th Brigade	Ft. Lewis, WA 98433	347-7473	
	2-1 Cavalry	Ft. Lewis, WA 98433	347-7035	LTC Marshall K. Doughtery CSM Phillip Pandy
3d Infantry Division (Ft. Stewart, GA)	1st Brigade	Ft. Stewart, GA 31314	870-1644	COL John Charlton CSM Timothy L. Stanley
	3-69 Armor	Ft. Stewart, GA 31314	870-4951	LTC Michael S. Silverman CSM Randel Sumner
	5-7 Cavalry	Ft. Stewart, GA 31314	870-4167	LTC Clifford E. Wheeler CSM William Transue
	2d Brigade	Ft. Stewart, GA 31314	870-2250	COL Terry R. Ferrel CSM Gabriel Berhane
	1-64 Armor	Ft. Stewart, GA 31314	870-7728	LTC Edward J. Chesney CSM Valmond Martin
	3-7 Cavalry	Ft. Stewart, GA 31314	870-7420	LTC Jeffrey D. Broadwater CSM Wilfrado Merecado
	3d Brigade	Ft. Benning, GA 31905	784-4111	CSM Clarence Stanley
	2-69 Armor	Ft. Benning, GA 31905	784-2211	LTC Troy D. Perry CSM Gregory Proft
	3-1 Cavalry	Ft. Benning, GA 31905	784-1222	LTC John S. Kolasheski CSM Dan Huell
	4th Brigade	Ft. Stewart, GA 31314	870-8300	COL Thomas S. James Jr. CSM Louis Torres
	4-64 Armor	Ft. Stewart, GA 31314	870-7690	LTC Johnnie L. Johnson Jr.
	6-8 Cavalry	Ft. Stewart, GA 31314	870-6885	LTC Mark W. Solomon CSM Tydious D. McCray
4th Infantry Division (Ft. Hood, TX)	1st Brigade	Ft. Hood, TX 76544	737-4887	COL Theodore D. Martin CSM Michael Bobb
	1-66 Armor	Ft. Hood, TX 76544	737-7882/8028	LTC Dennis S. McKean CSM Edward W. Mitchell
	7-10 Cavalry	Ft. Hood, TX 76544	737-3464	LTC Troy A. Smith CSM Willie Keeler

Unit		Location/APO/ZIP	Phone/DSN	CDR/CSM
4th Infantry Division (Continued)	2d Brigade	Ft. Carson, CO 80913	691-4720	COL Henry A. Kievenaar III CSM Elijah King
	1-67 Armor	Ft. Carson, CO 80913	691-0919	LTC Kenneth R. Casey CSM David L. Pierce
	1-10 Cavalry	Ft. Hood, TX 76544	663-0673	LTC William E. Benson
	3d Brigade	Ft. Carson, CO 80913	691-2346	CSM David List
	1-68 Armor	Ft. Carson, CO 80913	691-5570/9563/9571	LTC Michael F. Pappel CSM Gary Rimpley
	4-10 Cavalry	Ft. Carson, CO 80913	691-0707	LTC Monty L. Willoughby CSM Miles Wilson
	4th Brigade	Ft. Hood, TX 76544	533-0045	CSM Edwin Rodriguez
	3-67 Armor	Ft. Hood, TX 76544	737-3435	LTC Scott T. Kendrick
	8-10 Cavalry	Ft. Hood, TX 76544	533-0769	LTC Daryle J. Hernandez CSM Rafael Rodriguez
1st Cavalry Division (Ft. Hood, TX)	1st Brigade	Ft. Hood, TX 76544	737-0831	COL Paul E. Funk II CSM Stanley D. Small
	1-7 Cavalry	Ft. Hood, TX 76544	737-0823	LTC Kevin S. MacWatters CSM David Clemons
	2-8 Cavalry	Ft. Hood, TX 76544	737-3516	LTC Scott L. Efflandt CSM Pablo H. Squiabro
	2d Brigade	Ft. Hood, TX 76544	737-6560	COL Bryan T. Roberts CSM James F. Lee
	1-8 Cavalry	Ft. Hood, TX 76544	737-0431	LTC Jeffrey T. Sauer CSM Horace Gilbert
	4-9 Cavalry	Ft. Hood, TX 76544	737-0683	LTC Patrick E. Matlock CSM James P. Daniels
	3d Brigade	Ft. Hood, TX 76544	738-6701	CSM Donald R. Felt
	3-8 Cavalry	Ft. Hood, TX 76544	738-1968/1552/7404	LTC Kevin R. Dunlop CSM James P. Norman
	6-9 Cavalry	Ft. Hood, TX 76544	738-2711	LTC Keith Gogas CSM Paul E. Thompson
	4th Brigade	Ft. Bliss, TX 79916	979-6689	LTC Stephen M. Twitty CSM Stephan Frennier
	1-9 Cavalry	Ft. Bliss, TX 79916	621-1339	LTC Keitron A. Todd CSM William Beever
	2-12 Cavalry	Ft. Bliss, TX 79916	621-1402	LTC James D. Nickolas CSM Charlie L. Payne
2d Cavalry Regiment (Vilseck, FRG)	2d Cavalry	Vilseck, FRG 09112	347-7473	CSM John W. Troxell
	1/2 Cavalry	Vilseck, FRG 09112	347-5588	
	2/2 Cavalry	Vilseck, FRG 09112		
	3/2 Cavalry	Vilseck, FRG 09112		CSM William Tickle
	4/2 Cavalry	Vilseck, FRG 09112	347-2492/4241	LTC Anthony A. Aguto CSM Gregory Rathjen
3d Armored Cavalry Regiment (Ft. Hood, TX)	3d ACR	Ft. Hood, TX 76544	259-8740	COL Michael A. Bills CSM William Burns
	1/3 Cavalry	Ft. Hood, TX 76544	738-6729	LTC Thomas T. Dorame CSM Jonathan Hunt
	2/3 Cavalry	Ft. Hood, TX 76544	663-0131	LTC Paul T. Calvert CSM Mark A. Horsley
	3/3 Cavalry	Ft. Hood, TX 76544	663-7487	LTC Keith A. Barclay CSM Guitad Leandre
11th Armored Cavalry Regiment (Ft. Irwin, CA)	11th ACR	Ft. Irwin, CA 92310	470-3499	COL Mark E. Calvert CSM Ricky Pring
	1/11 ACR	Ft. Irwin, CA 92310	470-3706	LTC Timothy W. Renshaw CSM Edd Watson
	2/11 ACR	Ft. Irwin, CA 92310	470-4670	LTC Michael J. Hester CSM Martin Walker
82d Airborne Divison (Ft. Bragg, NC)	1st Brigade	Ft. Bragg, NC 28310	239-5994	
	3-73 Cavalry	Ft. Bragg, NC 28310	239-6442	
	2d Brigade	Ft. Bragg, NC 28310	239-6303	CSM Tim Davis
	1-73 Cavalry	Ft. Bragg, NC 28310	236-5269	CSM Brian G. Krabbe
	3d Brigade	Ft. Bragg, NC 28310	239-0925	
	5-73 Cavalry	Ft. Bragg, NC 28310	239-9309	CSM Ray Edgar
	4th Brigade	Ft. Bragg, NC 28310	239-6534	
	4-73 Cavalry	Ft. Bragg, NC 28310	337-2662	CSM Michael J. Greene

Unit		Location/APO/ZIP	Phone/DSN	CDR/CSM
10th Mountain Division (Ft. Drum, NY)	1-71 Cavalry, 1st Brigade	Ft. Drum, NY 13602	772-3612	CSM William Dove
	1-89 Cavalry, 2d Brigade	Ft. Drum, NY 13602	774-2109	CSM Fred Morris
	3-71 Cavalry, 3d Brigade	Ft. Drum, NY 13602	774-3696	CSM Ralph Delarosa
	3-89 Cavalry, 4th Brigade	Ft. Polk, LA 71459	863-0577	CSM Paul Wilkinson
101st Air Assault Division (Ft. Campbell, KY)	1-32 Cavalry, 1st Brigade	Ft. Campbell, KY 42223	798-7545	CSM Felipe Paul
	1-75 Cavalry, 2d Brigade	Ft. Campbell, KY 42223	798-2210	CSM Anthony Waller
	1-33 Cavalry, 3d Brigade	Ft. Campbell, KY 42223	798-3187	CSM Richard McCord
	4th Brigade	Ft. Campbell, KY 42223	954-4883	CSM Timothy D. Coop
	1-61 Cavalry, 4th Brigade	Ft. Campbell, KY 42223	956-6178	CSM Thomas G. Kimball
25th Infantry Division (Ft. Shafter, HI)	5-1 Cavalry, 1st Brigade	Ft. Wainwright, AK 99703		LTC Michael C. Kasales CSM Charles H. Greene
	2d Brigade	Schofield Barracks, HI 96857		CSM Jerry L. Taylor
	2-14 Cavalry, 2d Brigade	Schofield Barracks, HI 96857	455-0151	CSM Charles S. Cook
	3-4 Cavalry, 3d Brigade	Schofield Barracks, HI 96857	(315) 455-8042/8091	CSM Brian Briggs
	1-40 Cavalry, 4th Brigade	Ft. Wainwright, AK 99703		CSM Norman G. Corbett
173d IBCT (Vicenza, Italy)	173d IBCT	Vicenza, Italy 09630	(314) 634-6005	CSM Isaid Vimoto
	1-91 Cavalry	Schweinfurt, FRG 09224	353-8602	LTC Christopher D. Kolenda

U.S. Army Armor Center

Unit		Location/APO/ZIP	Phone/DSN	CDR/CSM
16th Cavalry Regiment (Ft. Knox, KY)	16th Cavalry	Ft. Knox, KY 40121	464-7848	COL Robert R. Naething CSM Adrien N. Poppert
	1st Squadron	Ft. Knox, KY 40121	464-7965/4072	LTC Christopher Delarosa CSM Michael F. Fite
	2d Squadron	Ft. Knox, KY 40121	464-6654/7481	LTC John L. Ward CSM Randy E. Zinger
	3d Squadron	Ft. Knox, KY 40121	464-5855	LTC Scott D. King CSM Walter E. Jenks
194th Armored Brigade (Ft. Knox, KY)	194th Armored Brigade	Ft. Knox, KY 40121	464-7234	COL David S. Hubner CSM Ricky L. Young
	1-81 Armor	Ft. Knox, KY 40121	464-6345/7910	LTC William B. Maddox CSM William S. Blackwell
	2-81 Armor	Ft. Knox, KY 40121	464-2645	LTC Thomas V. Olszowy CSM Gary L. Williams
	3-81 Armor	Ft. Knox, KY 40121	464-1313	LTC Steven R. Schwaiger CSM Charles F. Davidson
	5-15 Cavalry	Ft. Knox, KY 40121	464-8286/8226	LTC Eric R. Wick CSM Glenn Dailey

Training Support Brigade Commands

Unit	Location/APO/ZIP	Phone/DSN	CDR/CSM
4th Cavalry Brigade	Ft. Knox, KY 40121	464-2119/2106	COL Jeffrey R. Sanderson CSM Johnny Covington
5th Armored Brigade	Ft. Carson, CO 80913	691-5725	COL Francis V. Sherman Jr. CSM Conrad Bilodeau
157th Infantry Brigade	Ft. Jackson, SC 29207	(803) 751-4616	COL Randall C. Lane
158th Infantry Brigade	Patrick AFB, FL 32925	854-2420/6631	CSM Joel Cochrane
177th Armored Brigade	Camp Shelby, MS 39407	921-3000/3036	COL J. Kevin Chesney CSM Clarence M. Keithley
181st Infantry Brigade	Ft. McCoy, WI 54656	280-2235/2234	COL Jeffrey J. Kulp
188th Infantry Brigade	Ft. Stewart, GA 31314	(912) 767-0606	CSM Jonathan Garrett

(Note: Please e-mail changes/corrections to Office, Chief of Armor, at *ocoa.director@knox.army.mil* or *ocoa.sgm@knox.army.mil,* or phone DSN 464-5155.)

Marine Corps Tank Battalions
Source: U.S. Marine Corps Detachment – Fort Knox

Unit	Parent Unit	Location	Phone/DSN	CDR
1st Tank Battalion	1st Marine Div	MCAGCC, Box 788270, 29 Palms, CA 92278	230-6653	LtCol Stopa
2d Tank Battalion	2d Marine Div	PSC Box 20091, Camp Lejeune, NC 28542	751-1851	LtCol Fultz
4th Tank Battalion	4th Marine Div	9955 Pomerabo Rd., San Diego, CA 92145-5295	577-8000	LtCol Winter
I & I 4th Tank Battalion	4th Marine Div	9955 Pomerabo Rd., San Diego, CA 92145-5295	577-8109	LtCol Frantz
Marine Detachment Fort Knox	TECOM	2372 Garry Owen Regt. Ave., Fort Knox, KY 40121-5239	464-2906	LtCol Angel

Army National Guard Divisions and Brigade Combat Teams

FY08

Source: Office of the Special Assistant to the Commanding General (ARNG), Fort Knox

2D IBCT
IOWA
MINNESOTA

32D IBCT
WISCONSIN

33D IBCT
ILLINOIS

37TH IBCT
OHIO
MICHIGAN

56TH SBCT
PENNSYLVANIA

81ST HBCT
WASHINGTON
CALIFORNIA

1ST HBCT
MINNESOTA

76TH IBCT
INDIANA

2D IBCT
PENNSYLVANIA
OHIO

55TH HBCT
PENNSYLVANIA

86TH IBCT
VERMONT
CONNECTICUT

41ST IBCT
OREGON

27TH IBCT
NEW YORK

116TH HBCT
IDAHO
MONTANA
OREGON

50TH IBCT *
NEW JERSEY

40TH IBCT *
CALIFORNIA

116TH IBCT
VIRGINIA

45TH IBCT
OKLAHOMA

278TH HBCT
TENNESSEE

29TH IBCT
HAWAII
ARIZONA

30TH HBCT
NORTH CAROLINA
WEST VIRGINIA

72D IBCT
TEXAS

56TH IBCT
TEXAS

256TH IBCT
LOUISIANA

39TH IBCT
ARKANSAS

155TH HBCT
MISSISSIPPI

53D IBCT
FLORIDA

48TH IBCT
GEORGIA

* Unit patches provided by the National Guard Bureau; pending approval of the Institute of Heraldry.

Note: FY08 information regarding ARNG units with CMF 19 soldiers is based on the best available information at the time of printing. Force structure information provided by National Guard Bureau-Army Force Management Division (NGB-ARF). Unit leadership information provided through direct unit contact. Transformation and rebalance of the ARNG and its combat formations will continue into the foreseeable future depending on ARNG authorized end strength and the changing operational requirements of the Army. Please direct comments or corrections to the Special Assistant to the Commanding General – ARNG (SACG) by e-mail to *marlin.levendoski@us.army.mil* or phone (502) 624-1315.

Divisions

Unit	Address	Phone	CDR / CSM
28th Infantry Division	14th & Calder Streets Harrisburg, PA 17103	(717) 787-5113	BG Jerry Beck CSM Brian Todero
29th Infantry Division	9810 Flagler Road Fort Belvoir, VA 22060	(703) 805-2064	BG Grant Hayden CSM Anthony Price
34th Infantry Division	13865 S. Robert Trail Rosemount, MN 55068	(651) 282-4901	MG Richard C. Nash CSM Ronald D. Kness
35th Infantry Division	2 Sherman Avenue Fort Leavenworth, KS 66027	(913) 758-5022	MG Wayne Pierson CSM Dennis Taylor
36th Infantry Division	P.O. Box 5128 Austin, TX 78763	(512) 782-5049	MG John T. Furlow CSM Jimmy Broyles
38th Infantry Division	3912 W. Minnesota Street Indianapolis, IN 46241	(317) 247-3442	MG Richard Moorhead CSM Michael L. Lucas
40th Infantry Division	4480 Yorktown Avenue Los Alamitos, CA 90720	(562) 794-1484	BG John Harrel CSM George Pena
42d Infantry Division	137 Glenmore Road Troy, NY 12181	(518) 285-5812	BG Paul C. Genereux CSM Richard F. Fearnside

Heavy Brigade Combat Teams

Unit		Address	Phone/Fax	CDR / CSM
1st HBCT, 34th ID	1 BCT	3300 W. 98th Street Bloomington, MN 55431	(651) 268-8773	COL Kevin Gutknecht CSM Douglas Julin
	2/194 Cavalry	4015 Airpark Boulevard Duluth, MN 55811	(218) 723-4756	LTC Michael Wickman CSM Harold Sommerfeldt
	1-194 Armor	1115 Wright Street Brainerd, MN 56401	(218) 828-2572 (651) 268-8111	MAJ (P) Robert Intress CSM Paul Herr
	2-136 Infantry	1002 15th Avenue North Moorhead, MN 56560	(218) 236-2175 (651) 268-8502	LTC Gregg L. Parks CSM Terry Koenig
30th HBCT	30 BCT	101 Armory Road Clinton, NC 28328	(800) 621-4136	COL Gregory A. Lusk CSM William E. Spencer
	1/150 Cavalry	2915 Old Bramwell Road Bluefield, WV 24701	(304) 201-3160 (304) 201-3179	LTC Robby R. Scarberry CSM James L. Allen
	1-120 Infantry	101 Armory Road Clinton, NC 28328	(910) 299-5428	LTC Jack Mellott CSM John Swart
	1-252 Armor	110 Franklin Boulevard Greensboro, NC 27401	(336) 691-7728	LTC Lawrence Powell CSM Donald Shawb
55th HBCT, 28th ID	55 BCT	900 Adams Drive Scranton, PA 18510	(570) 963-4558 (570) 963-3139	COL Wilbur Wolf CSM Wade Heilman
	1/104 Cavalry	5350 Ogontz Avenue Philadelphia, PA 19141	(215) 329-2622 (215) 967-5474	LTC Robert Langol CSM Timothy Zaengle
	1-109 Infantry	900 Adams Drive Scranton, PA 18510	(570) 963-4643	LTC Stephen Zarnowski CSM Michael Urban
	4-103 Armor	4700 Westbranch Highway Lewisburg, PA 17837	(570) 523-3464	MAJ Stephen Radulski SGM Matthew Minnier
81st HBCT	81 BCT	1601 W. Armory Way Seattle, WA 98119	(253) 512-7933 (253) 512-8451	COL Michael P. McCaffree CSM Robert J. Barr
	1-303 Cavalry	24410 Military Road S. Kent, WA 98032	(253) 945-1832 (253) 945-1800	LTC William E. Palmer SGM Jay E. Raymond
	1-161 Infantry	1626 North Rebecca Spokane, WA 99217	(509) 532-2782 (509) 532-2758	LTC Gregory J. Allen CSM David A. Windom
	1-185 Armor (CAB)	266 E. 3d Street San Bernadino, CA 92410	(909) 383-4534 (909) 884-7753	LTC Seth M. Goldberg CSM Charles A. Jolicoeur
116th HBCT	116 BCT	4650 W. Ellsworth Street Boise, ID 83705	(208) 422-4927 (208) 422-4652	COL John Goodale CSM Joseph Brooks
	2/116th Cavalry	1200 S. Kimball Caldwell, ID 83605	(208) 272-7310 (208) 272-7290	LTC Don Blunk CSM William Stewart
	3-116th Armor	404 12th Street La Grande, OR 97850	(541) 963-4221 (541) 963-7865	LTC William Cole CSM William Wylie
	1-163 Infantry	350 Airport Road Belgrade, MT 59714	(406) 388-3500 (406) 388-3510	LTC T.J. Hull CSM James Irvine
155th HBCT	155 BCT	P.O. Box 2057 Tupelo, MS 38803	(662) 891-9712	COL William Glasgow CSM Glen Davis
	1/198 Cavalry	P.O. Box 158 Amory, MS 38821	(662) 562-3741 (662) 256-1028	LTC Jason Marlar CSM Ronald Coleman
	2-198 Armor (CAB)	P.O. Box 278 Senatobia, MS 38668	(662) 562-0145	LTC John Brown CSM Perry T. Campbell
	1-155 Infantry (CAB)	319 West Avenue N. McComb, MS 39648	(601) 684-7133 (601) 684-7139	LTC Jeffrey Van CSM Johnny Marlow
278th HBCT	278 ACR	3330 Sutherland Avenue Knoxville, TN 37939	(856) 582-3231 (865) 582-3208	COL Jeffrey H. Holmes CSM Daniel L. Jennings
	1/278 Cavalry	759 East Main Street Henderson, TN 38340	(731) 989-7321 (731) 989-3651	LTC Jeffrey L. Gaylord CSM David W. Knight
	2/278 Cavalry	P.O. Box 2189 505 Gould Drive Cookeville, TN 38502	(931) 432-4117 (931) 432-6252	LTC Miles Smith CSM Vincent S. Roach
	3/278 Cavalry	4401 West Stone Drive Kingsport, TN 37660	(423) 467-2740 (423) 247-2399	LTC Charles E. Tipton CSM John F. Cartwright

Stryker Brigade Combat Teams

Unit		Address	Phone/Fax	CDR / CSM
56th Stryker Brigade Combat Team (SBCT), 28th ID	56 SBCT	2700 Southampton Road Philadelphia, PA 19154	(215) 560-6010 (215) 560-6036	COL Marc Ferraro CSM John E. Jones
	2/104 Cavalry	2601 River Road Reading, PA 19605	(610) 929-8130 (610) 378-4515	LTC Shawn Reiger CSM David W. White

Separate Cavalry Squadrons

Unit		Address	Phone/Fax	CDR / CSM
1/221 Cavalry *	1/221 Cavalry	6400 Range Road Las Vegas, NV 89115	(702) 632-0521 (702) 632-0540	LTC Scott Cunningham CSM Glenn Guy

* Assigned to the 11th Armored Cavalry Regiment as the armored reconnaissance squadron (ARS)

Infantry Brigade Combat Teams

Unit		Address	Phone/Fax	CDR / CSM
2d IBCT, 28th ID	2 BCT	125 Goodridge Lane Washington, PA 15301	(724) 223-4570 (724) 223-4426	COL Regis Cardiff CSM Horace C. Pysher
	2/107 Cavalry	3000 Symmes Road Hamilton, OH 45015	(614) 336-6694 (614) 336-6767	LTC Todd Mayer CSM William Belding
2d IBCT, 34th ID	2 BCT	700 Snedden Drive Boone, IA 50036	(515) 727-3800 (515) 727-3805	COL Ronald L. Albrecht CSM Donald A. Shroyer
	1-113 Cavalry	3200 Second Mech Drive Sioux City, IA 51111	(712) 255-4347 (712) 258-0332	LTC Damian Donahoe CSM Stephen Wayman
27th IBCT	27 BCT	6900 Thompson Road Syracuse, NY 13211	(315) 438-3090	COL Brian Balfe CSM David Piwowarski
	2/101 Cavalry	27 Masten Avenue Buffalo, NY 14204	(716) 888-5675 (716) 888-5680	LTC David C. Dunkle CSM Donald J. Cooper
29th IBCT	29 BCT	91-1227 Enterprise Avenue Kapolei, HI 96707	(808) 844-6005	COL Bruce Oliveira CSM John Yakushiji
	1/299 Cavalry	1046 Leilani Street Hilo, HI 96720	(808) 933-0926 (808) 933-0888	LTC Rudolph Ligsay SGM Craig Ynigues
32d IBCT	32 BCT	8 Madison Boulevard Camp Douglas, WI 54618	(608) 427-7300 (608) 427-7207	COL Mark Anderson CSM Edgar Hanson
	1/105 Cavalry	1420 Wright Street Madison, WI 53704	(608) 242-3092 (608) 242-3175	LTC Michael George CSM Jeffrey Marks
33d IBCT	33 BCT	600 E. University Avenue Urbana, IL 61802	(217) 328-4214 (217) 761-2880	COL Douglas Matakas CSM Mark Bowman
	2/106 Cavalry	111 N. East Street Kewanee, IL 61443	(309) 852-0810 (217) 761-2685	LTC Paul Hastings CSM Timothy Beck
37th IBCT	37 BCT	85 N. Yearling Road Columbus, OH 43213	(614) 356-7903 (614) 356-7925	COL Richard T. Curry CSM Albert Whatmough
	1/126 Cavalry	1200 44th Street SW Wyoming, MI 49509	(616) 249-2759 (616) 249-2751	LTC Clark Barrett CSM Michael White
39th IBCT	39 BCT	4700 West 8th Street Little Rock, AR 72205	(501) 212-6701	COL Kendall Penn CSM Steven Veasey
	1/151 Cavalry	101 Industrial Park Warren, AR 71671	(870) 226-2020 (501) 212-7519	LTC Darrell W. Daniels CSM Thomas L. Parks
40th IBCT	40 BCT	7401 Mesa College Drive San Diego, CA 92111	(858) 573-7043/02 (858) 573-7019	COL David Baldwin CSM Robert Whittle
	1/18 Cavalry	1351 W. Sierra Madria Azusa, CA 91702	(626) 633-8144 (626) 633-8120	LTC Kurt Schlichter CSM Patrick Flannery
41st IBCT	41 BCT	6700 SW Oak Street Portland, OR 97233	(503) 557-6024 (503) 557-6098	BG David B. Enyeart CSM Brunk W. Conley
	1-82 Cavalry	875 SW Simpson Avenue Bend, OR 97702	(541) 383-0971 (541) 389-1946	LTC William Prendergast IV CSM Michael J. Storm

Infantry Brigade Combat Teams (continued)

Unit		Address	Phone/Fax	CDR / CSM
45th IBCT	45 BCT	200 NE 23d Street Oklahoma City, OK 73105	(405) 962-4500	BG Myles Deering CSM James D. Bridges
	1/279 Cavalry	7520 W. 41st Street Tulsa, OK 74107	(918) 447-8210	LTC Doug Stall CSM Kelvin McHenry
48th IBCT	48 BCT	475 Shurling Drive Macon, GA 30703	(478) 803-3106/3131	COL Lee Durham CSM David L. Harper
	1/108 Cavalry	P.O. Box 36 Calhoun, GA 30703	(706) 879-2900 (706) 879-2913	LTC Chris Voso CSM Joe Shubert
50th IBCT	50 BCT	151 Eggerts Crossing Road Lawrenceville, NJ 08648	(609) 671-6600 (609) 671-6635	COL Jorge Martinez CSM William Kryscnski
	102 Cavalry	500 Rahway Avenue Westfield, NJ 07090	(732) 499-5666	LTC Dean Spenzos CSM Timothy Marvian
53d IBCT	53 BCT	2801 Grand Avenue Pinellas Park, FL 33782	(727) 568-5300 (727) 568-5365	BG Mitch Perryman CSM John Adams
	1/153 Cavalry	3131 N. Lisenby Avenue Panama City, FL 32406	(850) 872-4120 (850) 872-4563	LTC Mike Canzoneri CSM Virgil Robinson
56th IBCT	56 BCT	5104 Sandage Avenue Fort Worth, TX 76115	(512) 782-7445	COL Samuel Henry CSM Eddie Chambliss
	1/124 Cavalry	2120 N. New Road Waco, TX 76707	(254) 776-1402	LTC Robert Gaudsmith CSM Alfred Cordova
72d IBCT	72 BCT	15150 Westheimer Parkway Houston, TX 77082	(517) 750-2798	COL Firmin Lepori CSM Kenneth Boyer
	3/112 Cavalry	5601 FM 45 Brownwood, TX 76801	(979) 822-9059	LTC Daniel Quick CSM Larry Dyess
76th IBCT	76 BCT	711 N. Pennsylvania Indianapolis, IN 46204	(317) 390-2602 (317) 390-2614	COL Cory Carr CSM Michael Stafford
	1-152 Cavalry	2909 Grant Line Road New Albany, IN 47150	(812) 949-3965 (812) 949-3968	LTC Robert D. Burke CSM James H. Martin
86th IBCT	86 BCT	Readiness & Regional Technology Center, 161 University Drive Northfield, VT 05663	(806) 485-1805 (806) 485-1850	COL William Roy CSM Forest Glodgett
	1/172 Cavalry	18 Fairfield Street St. Albans, VT 04478	(802) 524-4101 (802) 524-7906	LTC John Boyd CSM Mark Larose
116th IBCT	116 BCT	500 Thornrose Avenue Staunton, VA 24401	(540) 332-7739 (540) 332-8943	COL James M. Harris CSM Michael D. McGhee
	2/183 Cavalry	3200 Elmhurst Lane Portsmouth, VA 23701	(757) 465-6870 (757) 465-6866	LTC Walter L. Mercer VACANT
256th IBCT	256 BCT	1086 Surrey Street Lafayette, LA 70508	(337) 593-1422 (337) 262-1422	COL Johnathan Ball TBD
	2/108 Cavalry	400 E. Stoner Avenue Shreveport, LA 71101	(318) 676-7614 (318) 676-7616	LTC Scott Adams CSM Everett Craig

Maneuver Enhancement Brigades

Unit		Address	Phone/Fax	CDR / CSM
26th MEB	26 MEB	9 Charlestown Street, Bldg 693 Devens, MA 01434	(508) 233-7907 (508) 233-7963	COL Bernard Flynn Jr. CSM John F. Helbert
	1-182 Cavalry	120 Main Street Melrose, MA 02176	(781) 979-0670 (781) 979-5675	LTC Eric T. Furey CSM Kevin S. Fleming

Maneuver Enhancement Brigades (continued)

| Unit		Address	Phone/Fax	CDR / CSM
58th MEB	58 MEB	610 Reisertown Road Pikesville, MD 21208	(410) 653-6701 (410) 653-6709	LTC Jeffrey Soellner CSM Brian S. Sann
	1-158 Cavalry	18 Willow Street Annapolis, MD 21401	(410) 974-7400/7301 (410) 974-7304	LTC James Gehring CSM Leroy C. Hill
92d MEB	92 MEB	P.O. Box 9023786 San Juan, PR 00902	(787) 289-1600 (787) 289-1405	LTC Victor J. Torres CSM Jose Cruz
	1/192 Cavalry	P.O. Box 583 #19 Jose Villarez Ave. Caguas, PR 00725	(787) 743-2182 (787) 745-6205	LTC Saul A. Ferrer-Sanchez CSM Nelson Bigas
149th MEB	149 MEB	2729 Crittenden Drive Louisville, KY 40209	(502) 607-2621 (502) 607-2616	COL Charles T. Jones CSM Eric Schumacher
	1/131 Cavalry	P.O. Box 100 Daleville, AL 36322	(334) 598-1616 (334) 598-8889	LTC Stephen Fowell CSM Kevin Stallings
207th MEB	207 MEB	P.O. Box 5800 Ft. Richardson, AK 99505	(907) 428-6500	COL Julio R. Banez CSM Robert Averett
	1/167 Cavalry	2400 NW 24th Street Lincoln, NE 68524	(402) 309-1776 (402) 309-1783	LTC Martin Apprich CSM Lawrence Hall
218th MEB	218 MEB	275 General Henderson Road Newberry, SC 29108	(803) 806-2040 (803) 806-2018	COL Robert E. Livingston Jr. CSM John Harrelson
	1-263 Cavalry	1018 Gilchrist Road Mullin, SC 29574	(803) 806-1078	LTC Steve Wright CSM Bobby Joe Albert

TASS Armor Battalions

Unit	Address	Phone	CDR / Senior NCO
1st Armor Battalion, 204th Regiment	Building 810, 5050 S. Junker Street Boise, ID 83705	(208) 272-4858 DSN 422-4858	MAJ(P) D. Jenkins MSG G. Laubhan
1st Combined Arms Battalion, 136th Regiment	1705 Hwy 95 North Bastrop, TX 78602	(512) 321-1031 Ext. 15	LTC J. Gordy SFC J. Sullivan
4th Armor Training Battalion	Building 3575 Avenue C Camp Shelby, MS 39407	(601) 558-2308 DSN 286-2308	LTC K.B. Gilmore MSG J. Benefield
2d Armor Battalion, 117th Regiment	Building 638, TN ARNG Smyrna, TN 37167	(615) 267-6242 DSN 683-6242	LTC J. Hollister MSG R. Knight
1st Armor Battalion, 166th Regiment	Fort Indiantown Gap, Building 8-80 Annville, PA 17003	(717) 861-2809 DSN 491-2809	MAJ(P) S. Malone SFC R. Nauyokas

Army Reserve Units
98th Division (IET)

Unit	Parent Unit	Address	Phone	CDR / CSM
3d Brigade	98th Division	1051 Russell Cave Pike Lexington, KY 40505-3494	(859) 281-2208	COL Dennis Ostrowski CSM R.M. Clark
2-397 Basic Combat Training	3d Brigade	1051 Russell Cave Pike Lexington, KY 40505-3494	(859) 281-2211	LTC Rhonda Wright CSM S. Alley
3d Squadron, 397th Cavalry	3d Brigade	1840 Cumberlandfalls Highway Corbin, KY 40701-2729	(606) 528-5765	LTC Donald Nalls CSM C.T. Knox
2d Battalion, 398th Armor	3d Brigade	2215 South Main Street Madisonville, KY 42431-3307	(270) 824-9125	LTC Keith Donahue CSM B. Carter
3-398 Basic Combat Training	3d Brigade	2956 Park Avenue Paducah, KY 42001	(270) 442-8284	LTC Terry Dodson CSM R. DeRezza

ARMOR Bustle Rack
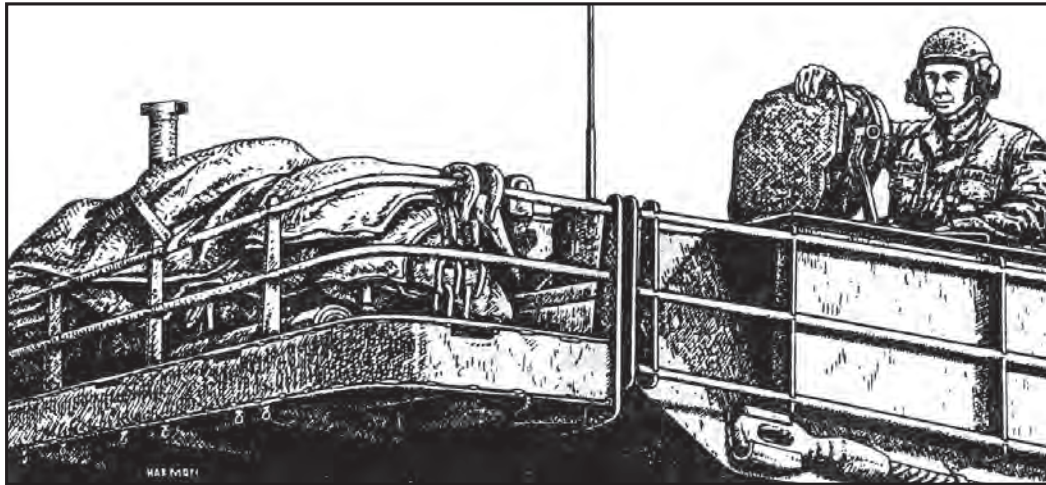
Directorate of Training, Doctrine, and Combat Development Adds Mounted Maneuver Battle Lab

The Directorate of Training, Doctrine, and Combat Development (DTDCD) has recently expanded to include the Mounted Maneuver Battle Lab (MMBL). This asset will greatly expand the capabilities of DTDCD by enabling the directorate to conduct experimentation on future doctrine, combat systems, and organizations. The first experiment conducted by the MMBL was testing future organizations and equipment of the HBCT reconnaissance squadron. Results will be presented at the Reconnaissance Summit, which will be held at Fort Knox, Kentucky on 13 and 14 December 2007.

Doctrine

During October and November 2007, the 3d Brigade Combat Team of 1st Armored Division is validating U.S. Army Field Manual (FM) 3-20.21, *HBCT Gunnery,* which is the new gunnery manual. Fort Knox's validation team has deployed to Fort Riley, Kansas, where they will provide 24-hour subject-matter expert oversight of validation gunnery. Following the validation gunnery, DTDCD will review all data to determine if adjustments are necessary prior to completing FM 3-20.21.

Work is also being completed on FM 3-90.5, *the Combined Arms Battalion,* and FM 3-20.971, *Reconnaissance Troop.* Final drafts are scheduled to be completed during the 1st quarter FY08 and published during the 2d quarter.

Training Development

DTDCD will be hosting a task selection board (TSB) for 19K soldiers during October. Participants include representatives from 1st Infantry Division (ID), 2d ID, 4th ID, 25th ID, 3d Armored Cavalry Regiment (ACR), 11th ACR, 1st Armored Division (AD), 1st Cavalry Division, and Fort Knox. The purpose of the TSB is to update current tasks and identify any new or additional tasks that need to be added to the 19K task inventory. Within 6 months, a new soldier training publication will be released for 19K soldiers.

The U.S. Army Noncommissioned Officer (NCO) Academy Offers Mobile Training Team Support

The U.S. Army Armor School's NCO Academy at Fort Knox is doing its part to support the war on terror. As units return from deployments, they often find that they have a large number of personnel who require NCO education system (NCOES) courses. Returning from a deployment is a busy and stressful time; families are reuniting and units are resetting. It can be difficult, to say the least, to get every eligible soldier enrolled in the proper NCOES course. The NCO Academy, under the direction of the commandant, Command Sergeant Major Samuel C. Wilson, has found a way to support these returning heroes — mobile training teams (MTT) are traveling from Fort Knox to units all over the United States and overseas to provide NCOES. For almost 3 years, 19D and 19K Basic Noncommissioned Officers Course (BNCOC) teams have been traveling to resetting brigades to provide training to BNCOC eligible soldiers. This keeps soldiers at home station and allows them to be with their families.

Resetting brigades are encouraged to work through U.S. Army Forces Command (FORSCOM) and U.S. Army Europe (USAEUR) to request an MTT. Currently, the Armor School's NCO Academy provides 19D and 19K BNCOC MTTs, but is working on a possible Advanced NCO Course (ANCOC) MTT and BNCOC Phase I MTT. Requesting units play a huge role in meeting requirements and providing resources for the teams. For questions or more information, please contact the chief of training, Sergeant First Class Ryan Tozier at DSN 464-5283 or commercial (502) 624-8753.

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