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DEPARTMENT

1 CROSSED CANNONS ON YOUR COLLAR

Front Cover: Soldiers undergo warrior training at the Field Artillery Training Center (FATC), Fort Sill, Oklahoma. (Photo by Fred W. Baker III, Fort Sill Cannoneer)
We’ve made a decision about the caliber for the non-line-of-sight cannon (NLOS-C) anticipated to be the cannon we field in support of future combat system (FCS)-equipped units of action (UAs) and, possibly, in the Stryker brigades. The goal was to improve precision and reduce our logistical tail.

Based on our analysis, the clear choice for the NLOS-C is the 38-caliber 155-mm howitzer. The 155-mm was 58 percent more effective against personnel targets than the 105-mm and 82 percent more effective against materiel targets than the 105. The 38-caliber was selected over the longer 39-caliber tube, trading four kilometers of range (using the M549 rocket-assisted projectile) to save 1,367 pounds. This will make the NLOS-C C-130 deployable with about 25 percent of its basic load of ammunition.

The study assessed the impact of caliber on the ability to meet the NLOS-C mission module priorities (see Figure 1). These priorities are NLOS-C Operational Requirements Document (ORD) objectives that specify the system’s performance and force effectiveness for transportability, lethality, survivability and sustainability. In making the caliber decision, we also assessed challenges in terms of risk, cost and developmental scheduling.

We are completely convinced that this is the right future cannon, and combat arms leaders at both Forts Benning and Knox are equally convinced. At the end of the day, our future gunners will have a cannon that will be fully capable of providing close supporting fires from a chassis that, from the turret down, nearly mirrors the other FCS-manned ground variants.

Additionally, our analysis confirmed the overwhelming benefit of fielding a course-correcting fuze (CCF) that will vastly improve accuracy and drive down our logistical tail. With the support of the Training and Doctrine Command (TRADOC) Commander, we are working aggressively with the acquisition and technology communities to provide our 155-mm and 105-mm Cannoneers this CCF capability as quickly as possible.

Modularity and Our Artillery Force Structure. Modularity is not about a future 2008 capability but rather a 2004 capability. This must be clearly understood.

As the Army creates one additional maneuver brigade combat team (BCT) in each of the 3d Infantry Division (Mechanized) (3d ID) at Fort Stewart, Georgia; the 10th Mountain Division (Light Infantry) at Fort Drum, New York; and the 101st, Airborne Division (Air Assault) at Fort Campbell, Kentucky; each brigade will require an additional cannon battalion. Paladin 155-mm self-propelled howitzers will support the 3d Division’s new battalion, and M119 105-mm towed howitzers will support the 10th and 101st Divisions’ new battalions.

Commanders from both these light divisions, as well as the XVIII Airborne Corps, have provided operational needs statements (ONS) for the development of a new enhanced forcible-entry cannon (EFEC) that we have taken for action. We recognize this cannon must be capable of 6400-mil operations and transportable by Black Hawk helicopter and the high-mobility multipurpose wheeled-vehicle (HMMWV) to meet the mission needs of the Soldiers in these divisions. Most likely, it will con-

Figure 1: Mission Module Priorities for the Non-Line-of-Sight Cannon (NLOS-C)

- Range must be at least 30 kilometers for high-explosive (HE) rounds.
- Accuracy must not exceed 0.55 percent of the range at low-angle at 30 kilometers or less—165-meter circular error probable (CEP).
- Rate-of-fire must be at least six rounds per minute (RPM).
- Have automatic loading (no personnel).
- Rearm the system in 12 minutes.
- Store at least 24 rounds of ammunition on board.
- Have survivability through crew-served weapons and active protection.
continue to be a 105-mm howitzer, based on several operational considerations, particularly ammunition weight.

In the new modular concept, the fires battalions are organic to their BCTs. The BCTs formerly known as “light” (i.e., in the 10th and 101st Divisions) are now called “infantry” BCTs.

Although numbers are not final, the proposed organization and structure for the infantry fires battalion will consist of about 406 Soldiers as shown in Figure 2. The organization of the heavy BCT fires battalion is nearly identical (Figure 3)—the heavy fires battalion has a Q-37 Firefinder radar (Version 8). These battalions are designed to provide close support while fires brigade systems provide shaping and counter-strike (counterfire) operations.

The proposed fires brigade resembles a combination of the division artillery (Div Arty) and an FA brigade. Figure 4 shows its current proposed organization. What readers should take from this concept are the improved targeting, logistical and communications support in this brigade. The three multiple-launch rocket system (MLRS) and two cannon battalions in the fires brigade provide the additional fires normally expected from the Div Arty and a reinforcing FA brigade.

As currently planned, the brigade would have one organic rocket battalion, either MLRS or the high-mobility artillery rocket system (HIMARS). The remaining four battalions will be assigned from the force pool.

It is likely that the active component (AC) fires brigade will be multi-component—have some number of battalions (cannon and MLRS) that are Army National Guard (ARNG). All the AC and ARNG MLRS battalions will have either the M270MLRS launchers or HIMARS, depending on the type of maneuver formation they will support.

We are pushing the development of the guided MLRS (GMLRS) unitary to provide lethal effects in areas of collateral damage concern. The recent test firing of the GMLRS unitary was exceptionally accurate at a range of nearly 38 kilometers (70 kilometers is the objective range).

Counterfire in Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). There remains an active counterfire fight in Iraq. Traditional methods of destroying enemy indirect fires are often challenged in the urban fight against low volume and often remotely fired rockets and mortars. Brigadier General Dick Formica, Commander of III Corps Artillery, and his team are working counterfire issues in Iraq, developing adaptive proactive and reactive counterfire tactics, techniques and procedures (TTPs).

The fires community recognizes these counterfire challenges and is doing everything possible to expedite the fielding of more lightweight countermortar radars (LCMRs) in theater to provide
additional 6400-mil coverage. The LCMRs will complement Firefinder radars that have considerably more range. We are working with the LCMR Program Manager to improve the radar’s range, accuracy and processing time to achieve a lethality in total radar coverage that allows the enemy one chance to fire before he and his systems are destroyed.

**Professional Development and “Building the Bench.”** Recently, we conducted a “Board of Directors” (BOD) session at Fort Sill with approximately 70 FA officer, warrant officer and NCO Army AC and ARNG leaders and Marine artillerymen. The BOD’s purpose was to share our vision for the FA way ahead and solicit from field leaders recommendations for adjustments to the vision and advise for the branch’s strategic investments.

The number one “take away” from this session was that Fort Sill needed to do a better job of communicating strategically with the branch—from our most junior NCOs, warrants and lieutenants up to the most senior leaders in the branch, to include the retired “Gray Beard” community. We are committed to communicating better with the entire branch and our Gray Beards.

Also, I encourage commanders to maximize their participation in the quarterly Fires and Effects Video Teleconference (VTC) sponsored by the 30th Regiment, part of the FA School at Fort Sill. Our most recent VTC included Lieutenant Colonels Steve Sliwa, Brad Becker and Scott Wuestner, who are our FA battalion commanders in the Stryker brigades.

This is an excellent forum to “get your head in the huddle” with others who are both fighting as artillerymen as well as commanding task forces and leading other non-traditional artillery missions. I find these VTCs of tremendous value and encourage those who can to make them officer and senior NCO professional development (OPD) sessions.

**Sound Bytes and Future Discussions.** We have several joint initiatives ongoing at Fort Sill. For example, the 212th FA Brigade, III Corps Artillery, and the XVIII Corps recently completed an incredibly successful joint live-fire training exercise (LFTX) that featured the airdrop of M198s into Fort Sill in conjunction with artillery fires and close air support (CAS) from Navy, Marine and Air Force aircraft.

Colonel Dave Halverston and his new Joint and Combined Integration (JACI) Directorate at the FA School are working to resolve several critical joint issues with the Strategy, Plans and Policy Division of the G3, Army Staff, at the Pentagon. JACI is working on a Joint Terminal Attack Controller (JTAC) Memorandum of Agreement (MOA) signed by all services to support each other’s exercises and train JTACs in air-ground operations; re-installing an USAF detachment at Fort Sill; improving the Army presence at the Air-Ground Operations School (AGOS) at Nellis AFB, Nevada; and, most significantly, qualifying 13F Fire Support Specialists as joint tactical air controllers (JTACs).

Six 3d ID 13Fs just graduated from training at AGOS, the first phase of JTAC qualification. Our JACI also is working a two-week Joint Fires and Effects Course (JFEC) to start at the end of this FY.

Many of our OIF and OEF units have developed some excellent TTPs for coordinating nonlethal effects, to include information operations (IO). Although Fort Leavenworth, Kansas, remains the proponent for the IO Functional Area 30, we have signed up as the Army lead to develop TTP and provide training for IO at the brigade level and below. IO is large and complex as much of its success depends on interagency and even coalition contributions. Understanding that, we must embrace and implement proponency for IO at the tactical level.

There are other hot issues that I will address in the September-October edition and in strategic communications messages or during the VTCs. These issues include the latest on assigning company fire support teams (FISTs) to maneuver companies; the relationships between the organic fires battalions and the fires brigade; who the fire support coordinator (FSCOORD) is, the effects coordinator or the senior FA commander; changes to the NCO education system (NCOES) and officer education system (OES) courses; and what the FA School will teach in the two additional weeks of the FA Captain’s Career Course (FACCC) now that the Combined Arms and Services Staff School (CAS3) at Fort Leavenworth has ended.

In my first column in the March-June edition, I invited your questions or comments on any and all issues; a few of you came “up on the net” and each was answered. I repeat the offer; send your comments to redleg@sill.army.mil.

Again, I encourage you all to be steady in the harness and keep up the “chatter in the field.” There is much misinformation we need to correct.

Proudly tell the real story of how America’s artillery Soldiers are agile and adaptable, get the toughest missions and accomplish them to incredible standards. Continue to press along the ascending trajectory.

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**Figure 4: Fires Brigade.** This proposed organization resembles a combined division artillery and FA brigade.
Basic combat training (BCT) skills essentially have remained unchanged for the past 40 years, focusing on common Soldier tasks and discipline. These tasks were for Soldiers who fought on a linear battlefield and knew who and where the enemy was.

The philosophy was to give the Soldier enough information during BCT, advanced individual training (AIT), or one-station unit training (OSUT) to survive upon arrival at his first duty station. The Soldier’s first unit would provide additional training in his specific military occupational specialty (MOS) and in how to fight and survive during combat.

This is not true today. Some graduates of BCT/AIT/OSUT are arriving at their first duty assignments in combat zones, fighting terrorists and insurgents in Iraq or Afghanistan. Some others deploy to Operation Iraqi Freedom (OIF) or Operation Enduring Freedom (OEF) within a few weeks of graduating from AIT or OSUT.

Taking into account these new variables and the challenges of the contemporary operating environment (COE), the Army is changing the way we conduct basic and advanced individual training. The Field Artillery Training Center (FATC), Fort Sill, Oklahoma, is one of the first training centers to implement many of these changes—leading the way.

This article provides an overview of the changes in the FATC’s initial entry warrior training and gives the details of two extended field training exercises (FTXs) for BCT and OSUT Soldiers: the forward operating base (FOB) FTX and military operations in urban terrain (MOUT) in the “Strikerville” FTX.

By Captains Joel J. Canon, Eric Hartunian and Glen D. Renfree, First Sergeant Michael T. Richards and Drill Sergeant Lloyd K. Smith, IN

Photos by Fred W. Baker, Cannoneer

Soldiers on patrol during the Strikerville FTX.
Overview of Initial Entry Training (IET) Warrior Training. The Training and Doctrine Command (TRADOC) is focusing on what combat skills are required to prepare all Soldiers for the Army’s various combat zones. In January 2004, TRADOC assigned an IET Task Force at Fort Knox, Kentucky, to analyze every aspect of IET. The task force examined lessons learned from OEF and OIF and developed recommendations to change the way the Army conducts IET. The FATC is implementing many of the changes to meet the needs of our Army in the COE. Some of the changes in the FATC IET are—

- Soldiers go to the field in their first week of BCT. This experience introduces basic field craft to Soldiers from the beginning. This two-day field problem establishes a tactical mindset in the new Soldiers by introducing them to what “right” looks like in a tactical setting.
- There are no “administrative” moves in IET. Training focuses more on patrols than foot marches. The last two patrols (10 and 15 kilometers, respectively) are embedded in exercises with privates continually reacting to contact. Contact may be with conventional ambushes and snipers, improvised explosive devices (IEDs) and civilians on the battlefield. Training in this manner contributes to the mentality that every soldier is a rifleman and sensor.
- Many administrative classes previously taught indoors are now taught in a field environment with more hands-on, rigorous training. In addition, the classes have decreased from battery- to platoon-sized classes.
- Soldiers recite the “Soldier’s Creed” before each physical training (PT) session. This reminds them of their purpose and reinforces the “Warrior Ethos” embedded in the creed.
- The Army has a new PT standardization program designed to prevent injuries and includes total-body exercises that make Soldiers more combat effective. Although the Army is not planning to implement these changes into table of organization and equipment (TOE) units for another year, FATC Soldiers began this program 1 January 2004.
- Weapons “clearing barrels” are now used in each battery area and range complex. This is what Soldiers do in FOBs while deployed. Clearing procedures training in BCT helps reduce the likelihood of Soldiers accidentally discharging their weapons and causing needless injuries.
- M16A2 qualification is in simulated combat conditions in an extended field exercise. Soldiers now qualify in the flak vests they have to wear when deployed. They also conduct “reflexive firing” while moving.
- FATC BCT/OSUT Soldiers now receive familiarization training on the M2 and MK19. Before 1 January 2004, only MOS 13Bs Cannon Crewmembers received training on these weapons. The M2 and MK19 are the same Soldiers will use on mounted combat patrols when deployed. The first time Soldiers see these weapons should not be in a hostile environment.
- First aid training has expanded to a two-day event, culminating in situational training exercise (STX) lanes in the field. The STX provides more rigor and realism to this critical training.
- Each battery slowly transitions from bivouac sites to tactical patrol bases during IET. During Fill Week, batteries use GP-medium tents for the first FTX. During the following weeks, the batteries go to shelter halves and select more tactical sites. By the last field problem, Soldiers use ponchos to construct improvised sleep shelters. At this point in their training, IET Soldiers are more “comfortable” with being uncomfortable.
- IET Soldiers train on MOUT in Strikerville. In this urban scenario, Soldiers must operate in a volatile, uncertain, complex and ambiguous environment with civilians and media on the battlefield. They face urban security requirements and multiple STX opportunities.
- Combined-MOS OSUT units conduct a realistic live-fire FTX. The training unit consists of the gunnery team of 13Bs, 13Ds FA Tactical Data Systems Specialists and 13Fs Fire Support Specialists conducting a 72-hour scenario-driven FTX that includes live fire—called the “Redleg Challenge.” The FTX is more like TOE battery training and combines BCT and AIT tasks to culminate in one exercise.

In the exercise, live fire is integrated with STX lanes, ambushes and several opposing force (OPFOR) attacks. Our newest Cannoneers live fire in Redleg Challenge, including out-of-traverse missions and Paladin hip shoots.
- IET Soldiers go through a rigorous, realistic Hand Grenade Assault Course. Soldiers go through 10 stations, one after another, using individual tactical techniques and hand grenade skills in conditions that simulate the battlefield.
- Within the first few weeks of training, IET Soldiers receive a briefing from a recent OIF/OEF veteran who gradu-
ated from the FATC within the past year. The veteran is someone the Soldiers can relate to and helps establish the warrior mindset. The veteran gives advice to the IET Soldiers—the Soldiers’ responses to this initiative have been very positive.

The inculcation of Warrior Ethos training events and the emphasis on incorporating lessons learned from the COE have contributed to a much improved training experience for IET Soldiers. On Day-One, these Soldiers are ready to contribute in their units deployed in harm’s way.

**FOB FTX.** The FATC executes a two-week FTX (weeks four and five), coinciding with basic rifle marksmanship (BRM) qualification. The FOB is close to the range complex and rifle ranges.

The Soldiers’ initial priorities of work include security, tent setup and continual position improvement. Soldiers deploy daily from the FOB to rifle ranges to conduct BRM training and then return to resume FOB operations. In the past, Soldiers returned to the barracks after BRM training.

During this extended FTX, Soldiers are introduced to many tasks never taught in BCT: clearing a building, conducting convoy operations, operating the precision lightweight global positioning system receiver (PLGR), searching vehicles at a traffic control point (TCP), conducting a 9-line medical evacuation (MEDEVAC) briefing, operating under rules of engagement (ROE), reacting to the OPFOR, identifying and reacting to mines and IEDs, and more. After classroom instruction, lane training reinforces the lessons.

During the FTX, Soldiers establish a perimeter around the FOB with concertina wire and a tactical command post (CP) with bunkers. They man the CP and maintain two teams of roving guards. Soldiers search all vehicles entering the FOB, and personnel in the vehicles have to show identification before entering. The Soldiers are very motivated in this training environment.

But the Soldiers conduct more than just tactical training in this exercise. They take showers in a tent equipped with hanging shower bags and wash their clothes in buckets. Soldiers eat meals ready to eat (MREs) with one hot meal per day. They also continue their PT program each morning in the FOB.

This extended FTX in the FOB challenges Soldiers to operate in a tactical environment while becoming proficient on their individual weapons. The training is realistic, challenging and motivating plus introduces Soldiers to tasks they will perform on real-world deployments—perhaps just after graduating from IET.

**Strikerville FTX.** The BCT program of instruction (POI) requires Soldiers complete an FTX in their eighth week of training. In the past, this event included various STX lanes, four hours of mission-oriented protective posture level four (MOPP-IV) training and a 25-kilometer road march over a period of four days. This FTX was the only overnights BCT Soldiers spent in the field.

In January 2004, BCT batteries began conducting “the same” FTX in week eight—but after the Soldier had already spent 15 nights in the field and under extremely different conditions. Spurring the change to the situational lanes-driven FTX was the need to expose Soldiers to MOUT in a COE environment.

Strikerville consists of five roads, 25 small buildings (shops, schools, government facilities, etc.), minefields, and a religious gravesite. The training battery operates much like a deployed unit with the battery commander acting as the liaison to the town mayor.

Drill sergeants act as squad leaders, (instead of observer/controllers) and react to different scenarios. This concept of “pulling” and not “pushing” as a leadership method allows the IET Soldiers to react to the directives of their NCOs—just as they would in “down-town Fallujah.”

The training battalion coordinates the scenarios with the well rehearsed (seasoned NCOs) OPFOR. This two-day FTX is near the end of the nine-week basic training cycle and serves as a culminating exercise.

Depending on the battery, the exercise can start with a 15-kilometer combat patrol. The Soldiers then reconnoiter and secure Strikerville’s perimeter and, with the mayor’s permission, occupy the town and establish TCPs and observation posts (OPs). The training

“We should have learned some infantry tactics in basic [BCT] because everyone who goes ‘down range’ does a lot of both infantry and MP [military police] work...everyday we had to search between 50 to 75 Iraqis.”

PFC Nathan LeBlanc
B/3-18 FA, 17th FA Brigade
Captain Joel J. Canon, until recently, was the Commander of C Battery, 1st Battalion, 40th Field Artillery (One-Station Unit Training), or C/1-40 FA (OSUT), in the Field Artillery Training Center (FATC), Fort Sill, Oklahoma. Currently, he commands Headquarters and Headquarters Battery of 1-78 FA, also in the FATC.

Captain Eric Hartunian is the Commander of B/1-22 FA (OSUT) at the FATC. His previous assignments include serving as a Battery Executive Officer (XO), Battalion and Brigade Targeting Officer and Battalion Fire Direction Officer (FDO), all with the 4-11 FA, 172d Infantry Brigade (Separate), in Alaska.

Captain Glen D. Renfree is the Commander of A/1-79 FA (Basic Combat Training, or BCT) in the FATC. His previous assignments include serving as a Battery XO, FDO and S3, all in 1-78 FA.

First Sergeant Michael T. Richards serves in B/1-22 FA. In his previous assignments, he was the First Sergeant, Master Gunner, Platoon Sergeant and Gunnery Sergeant, all in 2-3 FA, 1st armored Division, in Germany and a Paladin Section Chief in 1-15 FA, 2d Infantry Division, Korea.

Senior Drill Sergeant (Sergeant First Class) Lloyd K. Smith, Infantry (IN), is in A/1-79 FA. Among other assignments, he was a Range Instructor in the 5th Ranger Training Battalion, Dahlonega, Georgia; Squad Leader in the 2d Ranger Battalion, Fort Lewis, Washington; and Platoon Sergeant in 6-101 AV, 101st Airborne Division (Air Assault), Fort Campbell, Kentucky.

The things I wish I learned while at basic training were how to conduct vehicle searches and patrols and how to run checkpoints...things that we really do. Another is guarding prisoners and building bunkers.”

PFC Andrew Schneider
B/1-17 FA, 75th FA Brigade

“An IET Soldier conducts a vehicle search at the entry control point to Strikerville.”
Information Operations (IO) are growing in importance, playing a critical role in national security. Uniquely, IO effects often transcend the traditional battlefield, extending beyond the intended military target and breaching the bounds of the commander’s kinetic battlespace. Occasionally decisive, more often a force multiplier, IO can shape the battlefield, creating the conditions for the commander to employ his chosen defeat mechanism.

Increasingly, fire supporters are responsible for integrating IO into theater and operational campaigns as well as tactical plans. Therefore, as fire supporters—Field Artillerymen—assume responsibility for coordinating IO, and given the distinctive characteristics of IO, we must become professionals in the field of information operations.

To begin the process of becoming an IO professional, one must understand why IO is important and where it fits into Department of Defense (DoD) and interagency operations, what functions and tools comprise IO, and how IO has contributed to recent DoD operations. While not exhaustive, this article discusses these points.

**IO Importance.** In June of 2000, DoD published “Joint Vision 2020,” a document that narrowed the scope of future military doctrine. JV 2020 described IO as one of two essential elements for success in military actions (with the other intellectual and technical innovation).

The “National Security Strategy,” published in September of 2001, began the call for the transformation of the military. Concurrently, DoD published the “2001 Quadrennial Defense Review” and named IO as one of six transformational goals.

The “Transformational Planning Guidance” of April 2003 called for a force transformation strategy that would shift us from an industrial age to an information age. In the process of implementing the transformation of DoD, the “Defense Planning Guidance” directed the development of an “Information Operations Roadmap” to bring IO to a level of maturity that would enable IO to be supported as well as supporting. (See the figure.) In the fall of 2003, Secretary of Defense Donald Rumsfeld codified his desire to make IO a core military competency by signing the “Information Operations Roadmap.”

**IO Organizations.** Responsibility for IO resides in many organizations across DoD and the interagency, including the...
Joint Staff. The Joint Staff Director for Operations (D-J3) coordinates IO through the Assistant Deputy Director for IO (ADDIO). The Assistant Director reports to the Deputy Director for Global Operations. This construct reflects a recent change (March) that combines the previously separate Deputy Directorates for Global Operations and IO.

The ADDIO has approximately 74 personnel, 44 of whom are military, augmented by 30 liaison officers (LNOs), civil servants and contractors. Currently, ADDIO’s top three priorities are to fight the Global War on Terrorism, advance IO as a core military competency and provide information operations/special technical operations support to combatant commanders and services.

Within DoD, the Commander of the US Strategic Command (STRATCOM) is first among those military leaders responsible for planning and coordinating IO, having that responsibility assigned in the most recent “Unified Command Plan.” Other organizations involved in planning, coordinating and executing IO include the Defense Intelligence Agency (DIA), Central Intelligence Agency (CIA), National Security Agency (NSA), Office of the Secretary of Defense (OSD), and Combatant Commanders, to name a few.

Clearly, DoD and other US Government agencies recognize the growing influence and importance that IO plays in the successful execution of the US Government’s National Security Strategy and military operations.

**IO Functions and Tools.** Information operations existed well before the publication of the previously mentioned documents. In fact, the current *Joint Publication 3-13 Information Operations* came off the presses in 1998. As an emerging concept, this 1998 Joint Pub reflects an immature doctrine, often at odds with itself.

This lack of maturity spawned some interesting myths and urban legends about IO. For example, one myth is that IO equates to computer attacks; the reality is that computer network operations (CNO) is just one of the five IO core capabilities. Another myth is that IO is strategic communications; the reality is that military IO enhances and is informed by the US Government’s strategic communications, but strategic communications encompasses much more, as does IO. A third myth is that IO is anything that influences enemy decisions; the reality is that this definition is too broad—all aspects of war influence the enemy. Another myth is that IO equates to deceit, lies and misinformation; in fact, military deception that is focused on the enemy is only one aspect of IO.

Dispelling those myths and ending the spread of IO urban legends starts with those who would be IO professionals—Field Artillerymen—gaining a clear understanding of information operations. The IO roadmap defines IO as shown in the figure. An exhaustive study preceded the publication of the roadmap. Fortuitously, Operation Iraqi Freedom (OIF) ran concurrently with the IO study, providing valuable insights for the roadmap, including some measurable and groundbreaking IO successes.

**IO Successes in OIF.** In their turn, occasionally in isolation, more often coordinated, each of the IO core capabilities contributed to the successful completion of major combat in OIF. Electronic warfare (EW) denied and degraded Iraqi command and control, suppressed enemy air defenses, supported special operations objectives and located emitting targets.

CNO defended computer networks, including protecting against threats from within Iraq and other sources, such as “anti-war hackers.” CNO developed responses to these hackers, such as blocking Internet protocol (IP) addresses and closing network ports hackers likely would use, to mention just a few of the unclassified actions.

Deception operations contributed by protecting the timing of the beginning of the ground war while Marine Corps diversionary operations supported prisoner-of-war rescues, including the widely reported rescue of Private Jessica Lynch.

US Central Command actively implemented operations security (OPSEC) methodology throughout the operation, recognizing risks and actively applying countermeasures, limiting and protecting friendly information that could have been exploited by the enemy. Further, OPSEC awareness training occurred at every level of command, resulting in a significant reduction of open-source material that may have revealed troop movements, telephone numbers and email addresses.

As the most mature IO capability, psychological operations (PSYOP) has produced and broadcast more than 5,800 hours of AM, FM and SW radio programs via the special operations media system, series B (SOMS-B); produced themes, messages and leaflets, delivering more than 64 million; conducted TV broadcasts; and provided tactical loudspeaker support for units.

A quote from an Iraqi missile defense commander in Baghdad provides an example of PSYOP’s effectiveness: “I would talk to my missile crews, and suddenly, the Americans would come on the same frequency…they [the Americans] would talk in Arabic. It was the psychological war that did the worst damage to us….The Americans knew all our frequencies. We had no radio news broadcasts, just the Americans talking to us on our radio net.” (Quote taken from “Central Command Observations and Lessons Learned from OIF.”)

While not always as visible or dramatic as kinetic operations, IO have demonstrated utility, effectiveness and a clear ability to create conditions that make it easier to achieve decisive results. In some cases, IO achieved these results without Coalition Forces having to fire a shot or place a Soldier in harm’s way. IO successes in OIF are due to the dedication, detailed planning and diligent execution of professional IO warriors, officers and Soldiers alike.
While not always as visible or dramatic as kinetic operations, IO have demonstrated utility, effectiveness and a clear ability to create conditions that make it easier to achieve decisive results. In some cases, IO achieved these results without Coalition Forces having to fire a shot or place a Soldier in harm’s way.

Fire Supporters as IO Coordinators (IOCOORDs). Like any specialty, developing individual technical and tactical expertise takes dedication and time. Fire supporters, charged with integrating IO into plans and supervising their execution, must gain a working understanding and appreciation for IO capabilities, vulnerabilities and shortcomings. The charter is clear, the responsibility is ours—fire supporters must seek opportunities to learn the fundamentals of IO through education and training, individual and collective. Fire supporters should—

• Become familiar with joint and Army IO doctrine, educating themselves and their Soldiers. The “Information Operations Roadmap” is a good place to start. The roadmap represents 18 months of effort to determine IO issues and makes 57 recommendations for implementation. Execution of these 57 recommendations has begun. Setting the course for IO’s future as a DoD core competency, the roadmap provides a common framework and definition for understanding IO, empowers combatant commanders with the authority to plan and integrate IO, and improves education and training opportunities designed to strengthen IO efforts.

The new keystone publication JP 3-13 is informed by the roadmap, on “fast-track” development and due out in September. Additionally, fire supporters should develop an understanding of the Army’s maturing IO doctrine, beginning with FM 3-0 Operations and FM 3-13.

• Must become familiar with the Army’s IO organizational structure. This includes S7s/G7s IOCOORDs and two premier IO organizations: the 1st Information Operations Command-Land, or 1st IOC, headquartered at Fort Belvoir, Virginia, and the 4th Psychological Operations Group (4th POG) at Fort Bragg, North Carolina.

• Must become familiar with the Army’s Information Operations Career Field, FA 30, and develop an appreciation for the knowledge and skills FA 30 officers bring to the fight. These uniquely qualified officers are experts in planning, integrating and executing IO.

• Seek out and attend Army IO training offered by 1st IOC and via Army Knowledge Online. Fire supporters also should take advantage of 1st IOC’s field support teams and the 4th POG’s military information support teams (MIST) and psychological support elements (PSEs), integrating them into training and exercises and demanding their support on deployments. Fire supporters can gain a thorough knowledge of IO by learning about the robust IO organizations and training opportunities extant under the joint and Army constructs.

• Follow closely STRATCOM’s lead on joint IO issues and take joint IO training courses. STRATCOM has extensive resources available at its lead IO organization, the Joint Information Operations Center (JIOC) in San Antonio, Texas. The JIOC is a well established and robust unit manned by IO professionals who provide support to IO planning and execution around the world. Additionally, the JIOC offers courses ranging from IO orientations to developing qualified IO planners.

The Joint Forces Staff College’s Joint Command, Control and Information Warfare School in Norfolk, Virginia, also offers a wide variety of courses dealing with IO.

Finally, fire supporters can contact the Joint Staff, DJ3 Operations Directorate, Assistant Deputy Directorate for Information Operations to learn about limited and selective training opportunities available for planning and executing deception operations and special technical operations.

The education and training opportunities outlined in this article are only a small sample of those available to the Soldier wanting to expand individual or unit IO knowledge and skills. Obviously, DoD, the joint and interagency community, and the Army believe in the future utility of IO. As fire supporters—Field Artillerymen—assume the lead role in integrating IO into plans and operations, the requirement exists to become technical and tactical IO professionals.

Proven on the battlefield, IO tools are increasingly effective combat multipliers. In terms well understood by fire supporters, IO can produce desired effects, shaping the battlefield for decisive action, but only when employed by professionals who know what they’re doing.

Colonel Allen W. Batschelet took command of the 4th Infantry Division (Mechanized) Artillery, Fort Hood, Texas, in July. In his previous assignment, he was an Action Officer in the Deputy Directorate for Information Operations, J3 Operations Directorate, Joint Staff at the Pentagon. He served as Commander of the 3d Battalion, 82d Field Artillery (3-82 FA), 1st Cavalry Division, Fort Hood. In 1996, he deployed as the S3 and then Executive Officer for 1-7 FA, 1st Infantry Division (Mechanized) out of Germany to Bosnia-Herzegovina in support of Operations Joint Endeavor and Joint Guard.

In the Persian Gulf during Operations Desert Shield and Storm, he commanded A Battery, 3-82 FA and, afterward, A Battery, 21st Field Artillery, also with the 1st Cav. He holds a Master of Military Arts and Science from the Command and General Staff College and an MMAS from the School of Advanced Military Studies, both at Fort Leavenworth, Kansas, and a Master of Strategic Arts from the War College, Carlisle Barracks, Pennsylvania.
Information operations (IO) is what drives the mission in stability operations and support operations (SOSO) and, as such, comprises an all-encompassing concept. The key to IO, similar to artillery, then, is to identify and articulate “targets” and calculate how to move them in the direction or assume the attitude desired. IO is all about gaining and retaining the initiative and in focusing the maneuver element’s efforts in achieving the desired end state.

Information or shaping operations is a command function at all levels. At the battalion level, IO assets include the commander all the way down to the squad leaders.

As the new IO coordinator (IOCOORD) S7 section for a battalion task force in Bosnia, we had no clue what information operations was, especially how it manifested itself at the battalion/task force level in SOSO. We read *FM 100-6 Information Operations* and FM 3-13. And although they gave some good general information, “hands-on” training products were lacking.

"Focused IO—when synchronized with effective information management and intelligence, surveillance and reconnaissance—enables commanders to gain information superiority."

*FM 3-13 Information Operations: Doctrine and TTP*  
November 2003

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**IO in SOSO at the Tactical Level**

Converting Brigade IO Objectives into Battalion IO Tasks

By Captain Gary J. Schreckengost, USAR, and Captain Gary A. Smith, PAARNG

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*Photo by SSG Charles B. Johnson, 82d Airborne Division, Fallujah, Iraq*
This article is intended to help battalion-level FA officers better facilitate IO at their level. We describe the S7 IO staff section’s organization and responsibilities; how the battalion’s IO plan nests within its mission and the brigade’s plan; and the process by which IO is planned, coordinated and executed.

**Battalion S7 Section.** With today’s geometric proliferation of assets, lethal and nonlethal, the Field Artilleryman is an effects manager or planner. He is critical to IO throughout the commander’s scheme of maneuver.

IO at the battalion level manifests itself in many different ways. In short, IO in SOSO is planning and executing interactions with the indigenous population to achieve the stated mission or reach an end state by synchronizing multiple nonlethal assets.

Therefore, our S7 staff not only provided talking points or TV and radio scripts to Soldiers, but also calculated the effects of a patrol’s force protection posture as it delivered a specific message. What Soldiers or squad leaders said while on patrol sent certain messages to the civilian population, and the effects of those messages had to be calculated in advance.

The battalion IO section helps the commander facilitate information or shaping operations within his area of responsibility (AOR) with nonlethal assets and acts as a conduit with higher headquarters. In our task force, the IO was a distinct entity, the S7 that was connected with the S2 and S3. At the least, the IO should be organized as a subset of the S3.

It was the S7’s task to train the commander’s staff in implementing IO and diffusing it throughout the command.

The S7 also developed a task force nonlethal targeting system and a plan to convert brigade-level IO objectives into battalion-level IO tasks (IOTs) with measures of effectiveness (MOE). (See Figure 1 for the S7’s key IO responsibilities.)

The S7 section had one artillery captain and one senior fire support NCO (13F), both experienced fire support officers. The closely related public affairs officer (PAO) was a lieutenant and had a junior NCO. One artillery lieutenant and one mid-level fire support NCO implemented the IOTs in each maneuver company. Company commanders often were overwhelmed in planning and implementing IO tasks, as we had no dedicated support staff at those levels.

As in fire planning, IO revolves around top-down planning and bottom-up refinement. At the battalion level, the S7 is given IO focus areas or objectives from higher headquarters that, ultimately, are tied to strategic or operational goals, or end states. Our IO goals were developed at the joint level and drove the IO missions down through the chain, ultimately determining the battalion’s mission statement.

An example of a battalion mission statement, especially in the later-phases of SOSO, is the one in Figure 2. Each word is chosen to focus the battalion’s effects. For example, “contributes” denotes a partnership with the host country and that the battalion is not solely responsible for the host country’s safety and security. And the last statement, “eliminating the need for peacekeepers,” is included in every mission statement as all effects are calculated to achieve that ultimate goal established by higher headquarters.

At the weekly brigade- or division-level IO working group (IOWG) meeting, the S7 received revisions to the IO plan. The S7 nested operations at the battalion level with higher by convert-

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**Figure 1: Battalion S7’s Key Information Operations (IO) Responsibilities**

- **Plan, coordinate and direct the IO effort.**
  - Develop the IO plan to achieve the desired end state, based on the commander’s intent and concept of the operation.
  - Develop and recommend the IO-related commander’s critical information requirements (CCIRs).
  - Develop IO objectives and tasks that have measurable effects against the designated targets, determining the required resources and their availability.
  - Synchronize, coordinate and deconflict the planning and execution of the IO tasks.

- **Synchronize IO with overall operations.**
  - Coordinate IO with higher and lower echelons.
  - Nominate IO targets and help develop methods of engagement.
  - Facilitate the battalion’s targeting meeting and (or) the IO working group.
  - Prepare IO products, including IO Annex P to the operations order (OPORD), talking points and target synchronization matrices (TSMs).
  - Assess the effectiveness of the IO plan and modify it, as required.
  - Conduct IO training for the battalion.

- **Conduct SOSO in the area of responsibility (AOR) to deter hostilities.**
- **Cooperate with the international community to develop self-sufficient institutions.**
- **Contribute to a safe and secure environment, eliminating the need for peacekeepers.**

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**Figure 2: Example of a Battalion Mission Statement During the Later Phases of Stability Operations and Support Operation (SOSO)**

- *Contributes* to the community to develop self-sufficient institutions.
- *Cooperates* with the international community.
- *Contributes* to a safe and secure environment, eliminating the need for peacekeepers.
ing the brigade IO objectives into more specific IOTs for the battalion—a process similar to the way the FA converts essential fires and effects tasks (EFETs) into essential FA tasks (EFATs) for FA battalion operations.

For example, based on the sample battalion’s mission statement in Figure 2, higher headquarters could give the battalion the focus areas or IO objectives as outlined in Figure 3.

It was the S7’s job to help the commander develop IOTs to implement the brigade objectives. We used the decide, detect, deliver and assess (D3A) targeting methodology.

For example, to support the brigade objectives listed in Figure 3, the battalion determined which specific targets (people or institutions) should be engaged in the AOR using D3A and the assets, or combination of assets, to engage the targets. The IO assets are squad leaders, company commanders, the battalion commander, psychological operations (PSYOP) team, civil affairs (CA) team, radio/TV show hosts, etc.

The assets would use the talking points from the brigade PAO and other battalion tools in Annex P (IO) of the battalion’s operations order (OPORD). This coordination, planning and brain storming was done at the battalion targeting meeting held once a week several days after the IOWG.

Battalion Targeting Meeting—The Conversion Process. The targeting meeting was chaired by the task force commander, facilitated by the S7 and attended by company commanders, S2, S3, S5; PAO, PSYOP team NCO; chaplain and our judge advocate (JA), when available. The principle function at the targeting meeting was to ensure that our efforts were synergized to achieve the desired end states and convert the brigade IO objectives into battalion IOTs.

The meeting started by assessing the previous week’s targets (Week-Minus-One). Were the effects achieved? Was retargeting required? The S2 then gave his intelligence brief to ensure the IO campaign at the battalion level was still relevant.

The commander restated the mission, gave his intent for Week-Zero (coming week) and refined the targets. Were the targets still valid? Was everything ready?

Next the meeting planned Week-Plus-One. In this phase, the commander gave his intent and the S7 reinforced the IOTs based on the IOWG or introduced new ones.

**Figure 3: Brigade IO Objectives. Based on the mission statement in Figure 2, the brigade might give a battalion these IO objectives or focus areas.**

Again, the key to the meeting was to nest the plans with higher and calculate all effects to ensure they led the targets toward the desired end state as articulated in the mission statement. The S7’s primary responsibility, then, whether at the S, G or J level, is to help the commander articulate and calculate effects and help focus all his efforts to achieve the desired end state.

Once the meeting was over, the S7 completed the target synchronization matrix (TSM) for official publication and created an Annex P that included the appendixes (e.g., talking points, radio scripts, etc.). He then sent this information to higher headquarters to ensure that all Week-Plus-One targets were cleared and that the effects of Week-Minus-One were accurately recorded and analyzed.

After the TSM was published, the S7 again attended the brigade IOWG and the process started all over again. As such, the S7 had an IOWG and a targeting meeting once a week. The brigade compiled all the task forces’ Week-Minus-One assessments, made a collective conclusion and adjusted its published IO objectives. The battalions then shared their plans for Week-Zero and Week-Plus-One and brigade ensured efforts reinforced the main effort and were not being duplicated.

This IO D3A was a continuous, weekly process. When a new month started, the brigade published new IO objectives, etc.

The most challenging part about IO at the battalion level is implementation. The bottom line is the battalion conducts SOSO. It must train commanders, staffs, platoon leaders and squad leaders in negotiation, the use of talking points, IO as a concept, etc., early and often as IO or nonlethal engagements will be the battalion’s primary means of accomplishing its SOSO mission.

Our battalion developed and trained squad leaders and above on negotiation skills. By the time the battalion arrived in theater, the men were confident in building relationships with the local leaders and gauging effects, further capitalizing on the gains of the stabilization force (SFOR) rotation that preceded us.

**Implementing MOEs.** Determining measurable IO effects was difficult. The S7 converted traditional IO tasks, such as influence, encourage, promote, divert, warn or isolate, into measurable effects by using educational objectives, such as compare and contrast, explain or identify, as measures of effectiveness.

[Photo by SSgt Jeffrey A. Wolfe, USAF]
The use of psychology and not mathematics was the best way to measure non-lethal engagements. For example, a battalion task could be to co-opt local leaders to help facilitate a weapons harvest (a program to encourage the population to turn in weapons and ordnance left over from the war). The battalion would want the official to provide police support and offer guidance as to where to go for weapons, what techniques would work best in harvesting them, etc. A possible effect, or measure of effectiveness, would be that the official agreed to at least some police support and was able to explain why it was important to get involved in the harvest, etc.

If the desired effects were accomplished, then the S7 coded the target “Green” and no further targeting was required. If not all of the effects were accomplished, then the S7 coded the target “Red” for retargeting. If none were met, then the S7 coded the target “Amber” for another asset or chose another target to achieve the IOT.

Example—Project Weapons Harvest. Like most SOSO operations, the SFOR in Bosnia conducted a weapons harvests to ensure a safe and secure environment. Figure 4 lists the brigade IO objectives for a weapon’s harvest.

The S7 then converted these objectives into measurable IOTs at the targeting meeting and began the military decision-making process (MDMP) by determining high-payoff targets (HPTs), such as mayor A, police station B, institution C, township D, etc. The staff completed its initial estimate and continued through the MDMP until the commander was briefed.

Once the commander approved the general concept, the company commanders and the battalion staff began selecting specific targets.

The battalion invited local leaders on the base to co-opt their support and get guidance, giving them ownership of the process. (See Figure 5 for the Appendix P tools used; this IOT supported Brigade IO Objectives 2 through 4 in Figure 4.) The S7 also invited the local press to announce the program and show the partnership with the local institutions. The effects of such meetings were wargamed at the targeting meeting.

Once the local leaders were co-opted, the squads began to distribute PSYOP products to business owners, the police, local leaders and the targeted populace.

Figure 4: Brigade IO Objectives for Project Weapons Harvest

<table>
<thead>
<tr>
<th>Task</th>
<th>Conduct a bilateral meeting with mayors, police chiefs, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>Gather information to better plan for Project Harvest and encourage local governing agencies to take an active and positive role in this well regarded program, building confidence in local institutions and enhancing a safe and secure environment.</td>
</tr>
<tr>
<td>Method</td>
<td>Appendix 3 (Questions for the Meeting):</td>
</tr>
<tr>
<td>1.</td>
<td>What are the areas in which we need to concentrate our collection efforts?</td>
</tr>
<tr>
<td>2.</td>
<td>Can you give the peacekeepers a list of possible towns or villages in your area that you think we’d be most productive in collecting weapons and unexploded ordnance?</td>
</tr>
<tr>
<td>3.</td>
<td>Would you like to appear on the radio show in that area?</td>
</tr>
<tr>
<td>4.</td>
<td>Do you know anyone in your area who would like to appear on the radio show that has had an incident with unexploded ordnance or military-type weapons?</td>
</tr>
<tr>
<td>5.</td>
<td>What media products do you think would best reach the people in your area or community?</td>
</tr>
<tr>
<td>6.</td>
<td>Do you have any suggestions as to where to put our signs about Project Harvest so as many people as possible would be informed?</td>
</tr>
<tr>
<td>7.</td>
<td>How do you think we should collect the weapons and unexploded ordnance?</td>
</tr>
<tr>
<td>8.</td>
<td>Do you have any facilities you can suggest to temporarily hold collected unexploded ordnance and weapons until the peacekeepers can pick them up and dispose of them?</td>
</tr>
<tr>
<td>9.</td>
<td>Who do you want to go with us into that area?</td>
</tr>
<tr>
<td>10.</td>
<td>What type of assets can your agencies provide to assist in this effort?</td>
</tr>
<tr>
<td>11.</td>
<td>What type of assets would you like the peacekeepers to provide?</td>
</tr>
<tr>
<td>12.</td>
<td>Are there any alleged weapons caches the peacekeepers should search for?</td>
</tr>
<tr>
<td>13.</td>
<td>Do you know the whereabouts of any paramilitary groups or terrorist training camps?</td>
</tr>
<tr>
<td>14.</td>
<td>How can we put locals at ease and not scare them?</td>
</tr>
<tr>
<td>15.</td>
<td>How many people can you dedicate to help with Project Harvest?</td>
</tr>
<tr>
<td>16.</td>
<td>What are the areas in your municipality that were highly contentious during the war?</td>
</tr>
<tr>
<td>17.</td>
<td>What are the highly contentious areas in your municipality now?</td>
</tr>
<tr>
<td>18.</td>
<td>What are the key areas in your municipality to promote Project Harvest?</td>
</tr>
<tr>
<td>19.</td>
<td>What kind of promotion will be effective for isolated towns or locals with anti-peacekeepers sentiments?</td>
</tr>
<tr>
<td>20.</td>
<td>What time should peacekeepers knock on doors throughout your municipality?</td>
</tr>
<tr>
<td>21.</td>
<td>What time will your staff be available for last-minute assistance, if required by peacekeepers?</td>
</tr>
<tr>
<td>22.</td>
<td>Where are the areas that didn’t participate during the last weapons harvest?</td>
</tr>
<tr>
<td>23.</td>
<td>Where is the best place to park our vehicles while we go door-to-door?</td>
</tr>
<tr>
<td>24.</td>
<td>Do you know of any locals who would be willing to accompany peacekeepers in isolated areas?</td>
</tr>
<tr>
<td>25.</td>
<td>Would you provide each patrol with a local police team for unfriendly areas or for areas with locals who might fear the peacekeepers?</td>
</tr>
<tr>
<td>26.</td>
<td>For locals who might not be available during the day, what is the best way to leave a message or have them participate in Project Harvest?</td>
</tr>
<tr>
<td>27.</td>
<td>What are the intersections or locations that would be suitable for a collection point for people that do not want peacekeepers visiting their homes?</td>
</tr>
<tr>
<td>28.</td>
<td>We believe your cooperation will result in an effective weapons harvest and help you provide a safe and secure environment for your community—do you agree?</td>
</tr>
</tbody>
</table>

Effects: Leaders offer good suggestions, become integrated in the harvest plan, agree to appear on radio shows and distribute media products, and understand that this is an opportunity for them to better serve their community.

Intent: To ensure local leaders’ support and participate in Project Harvest, promoting community support for harvesting weapons and unexploded ordnance.

Figure 5: Battalion IO Task (IOT) Bilateral Meeting About Project Harvest (IO Annex P). This IOT supports Brigade IO Objectives 2 and 3 for Project Weapons Harvest (Figure 4).
The battalion even developed a partnership logo based on one of Ben Franklin’s 1747 Pennsylvania Militia motifs of two men shaking hands, one with the sleeves of a businessman (the local population) and the other with camouflage (the peacekeeper). PSYOP duplicated the logo and then affixed to each harvest vehicle.

The battalion Soldiers conducted radio shows with local leaders and worked closely with the police by using talking points provided in Annex P. This IOT supports the brigade Project Weapons Harvest IO Objective 3 in Figure 4. (See the radio show IOT appendix in Figure 6.)

The PAO escorted the local press to highlight and congratulate local leaders, and brigade assets announced where the battalion was harvesting weapons, etc. The battalion also had a local TV station create a commercial to reach the weapons population target for the harvest and take ownership of helping to create a safe and secure environment.

Throughout the month-long harvest, the S7 refined the target list on a weekly, if not daily, basis in concert with the squad and platoon leaders and the company commanders. The S7 also tasked the PSYOP team to study post-harvest contact areas to ensure the message had been delivered properly. If it wasn’t, the S7 adjusted the process for the next municipality.

In the near future, Field Artillerymen most likely will become more effects coordinators than fires providers. Commanders need FA S7 IOCOORDs, officers and NCOs, to help articulate IO end states and mission statements and develop plans and implement and refine those plans through steady effects management. The S7 must ensure that every task force, company-, platoon- or squad-level IO action is nested with higher’s desired end state—in our case in SOSO, “eliminating the need for peacekeepers.”

The professional artilleryman must become the facilitator of effects, including IO effects, across the spectrum of military operations. His skills are indispensable.

Captain Gary J. Schreckengost, US Army Reserve (USAR), is the S3 for the 3d Battalion, 7th Brigade, 80th Division (Institutional Training) in Lancaster, Pennsylvania. In the 28th Infantry Division (Mechanized), Pennsylvania Army National Guard (PAARNG), he deployed to Bosnia, Stabilization Force (SFOR) 12, as the S7 Information Operations Coordinator (IOCOORD) for Task Force 1st Battalion, 104th Cavalry (1-104 Cav). Among other assignments with the 28th Division, he has served as Commander of the Division Artillery’s Headquarters and Headquarters Battery, and Targeting Officer for the Division Artillery.

Captain Gary A. Smith, PAARNG, is the S1/S4 for the 1st Battalion, 108th Field Artillery, 56th (Stryker) Brigade, Carlisle, Pennsylvania. He served as the Public Affairs Officer (PAO) for TF 1-104 Cav, SFOR 12, based at Camp McGovern in Bosnia. He has served as a Fire Support Officer (FSO) for 1-104 AHB; Radar Platoon Leader in F Battery, 1-109 FA; Executive Officer and Fire Direction Officer for A Battery, 1-108 FA; Chemical Officer, also in 1-108 FA; and FSO for Headquarters and Headquarters Battery, 1-108 FA, all in the 28th Infantry Division.

**FA AC and RC Drill Sergeants Deemed Best in the Army**

The Training and Doctrine Command (TRADOC) announced that Staff Sergeants Jennifer R. Fowler and Jason W. Maynard have won as the Army’s Reserve Component (RC) and Active Component (AC) 2004 Drill Sergeants of the Year, respectively. Sergeant Fowler works as a drill sergeant leader at the 95th Division’s Drill Sergeant School based in Oklahoma City and Sergeant Maynard is a drill sergeant with 1st Battalion, 40th Field Artillery, FA Training Center, Fort Sill, Oklahoma.

The two won during a weeklong competition at Fort Monroe, Virginia, in mid-June. They competed against 22 other RC and AC outstanding drill sergeants in the categories of physical fitness, surprise topic essay, teaching Soldier common tasks in front of a board of five sergeants major and weapons checks. Fowler is from Wisconsin while Maynard hails from South Dakota.

**Figure 6: Radio Show IOT Promoting Project Weapons Harvest (IO Annex P). This IOT supports the brigade IO Objective 4 (Figure 4).**

Field Artillery July-August 2004
In 1991, the FA Warrant Officer Military Occupational Specialty (MOS) 131A Radar Technicians assumed the duty title of “Field Artillery Targeting Technician” in its first transformation. The career field increased from 134 to 202 positions in the active Army, reaching 216 positions last year.

This year MOS 131A is experiencing unprecedented growth, beginning its increase by 57 percent to 352 positions by FY07 (most probably more).

In the 131A’s first transformation, the Army took officers out of several positions and moved 131A warrant officers into them. These positions are targeting officers (TOs) at the battalion, brigade, division and corps levels; counterfire officers (CFOs) in the Field Artillery brigades and division artillery; and Field Artillery intelligence officers (FAIO) at the division and corps levels.

The Future of MOS 131As. As the Army transforms into Stryker brigade combat teams (SBCTs), units of action (UAs) and units of employment (UEs), 131As truly are becoming the Army’s targeting experts. The 131A radar and targeting positions from the previous transformation will remain with many positions being created in non-FA tables of organization and equipment (TOE) units that never have had FA 131As before. For example, radar section leaders will be in infantry UAs. Targeting officers will be in reconnaissance, surveillance and target acquisition (RSTA) UAs; maneuver enhancement UAs; and aviation UAs. 131As will be TOs and FAIOs in the “division level” UEs and Army service component commands (ASC Cs).

Doctrine and tactics, techniques and procedures (TTPs) do not exist for the positions in most of these new organizations. 131A warrant officers will be the architects of many of the TTPs and future doctrine for their positions and the organizations’ targeting processes.

Transformation of the Army is a juggernaut that seems to have a life and pace of its own. The 131A MOS conversion from Radar Technician to Targeting Technician took 36 months to accomplish. The “top-down” changes occurring now are happening so fast that the Army can’t grow all the new 131As it needs as fast as it needs them. The MOS’ growth is exceeding the Army’s ability to supply the Soldiers to fill all the positions.

During the next four years, the number of 131A positions increases to 352 (see the figure). The Army needs to access and train a minimum of 45 new warrant officers per year for FY05, FY06, FY07 and FY08 in order to meet the needs of the future force.

Because 352 represents the initial estimation of the 131As the Army will require for its future organizations, there is a probability of a greater increase as the transformation continues. In addition, the Army will have to access and train more than just the shortfall because of personnel turnover.

Opportunities Abound. The FA needs 131As to stay in the ranks. Warrant officers usually retire at around 22 to 24 years of active federal service (AFS), which includes enlisted service. Fifty-one 131As are eligible to retire this year.

Some will continue service until they reach mandatory retirement. A chief warrant officer four (CW4) only can stay for 30 years AFS or 24 years warrant officer service, whichever comes first. A warrant officer can stay 30 years AFS as a warrant officer (not including enlisted service) if he is in the grade of CW5 or is a CW4 on the promotion list to CW5.

MOS 131A has been short CW4s and CW5s since making the transition to Targeting Officers in 1991. So the increased potential for promotion to the next higher grade (and increase in pay) is an incentive to stay in if the warrant officer is willing to accept the increased responsibility.

In addition, the Department of the Army G1 is considering providing a “retention” bonus at the 22-year mark for shortage MOSs.

In order to fill the active force with quality Soldiers and maintain a viable senior Soldier base (CW3/ CW4 and CW5) for the future, we need to access younger Soldiers into 131A. While the NCO corps is called the “Backbone of the Army,” NCOs are also the lifeblood of the warrant officer corps. 131A accesses all new warrant officers from the FA NCO corps.

The expansion of the FA Targeting Technician into all levels of Army organizations from radar sections all the way to Army service component commands is a testament to the success of the FA Targeting Technician Program. The future holds many exciting changes that, while challenging, will make the 131A’s business more interesting and rewarding, both personally and professionally.

Commanders, command sergeants major and warrant officers of the Field Artillery have to work to help recruit new warrant officers to keep the MOS viable. For more information on Warrant officer recruiting, readers can go to www.usarec.army.mil and click on the “Warrant Officer Recruiting” link.

By working together to recruit new warrant officers, the FA can meet the needs of the branch and Army and ensure the continued success of the FA Targeting Technician Program for the future.

CW5 Rodger L. Padgett, CWO of the FA FA Proponenty Office, FA School Fort Sill, OK
On 6 October 2003, the 1st Brigade, 25th Infantry Division Stryker Brigade Combat Team (1/25 SBCT) deployed from Fort Lewis, Washington, to the National Training Center (NTC), Fort Irwin, California. The rotation was its first brigade-level training event on the path to its initial operational capability (IOC).

The focus of the training event was to conduct stability operations and support operations (SOSO) in a contemporary operational environment (COE) that reflected the current situation in Iraq. The training scenario combined the traditional characteristics of SOSO with elements of high-intensity conflict. This challenged the ability of the SBCT’s fires and effects coordination cell (FECC) to employ its robust array of collection and delivery assets effectively throughout the area of operations (AO).

This article describes tactics, techniques and procedures (TTP) developed by the SBCT to synchronize lethal and nonlethal effects at the brigade and battalion levels as well as major lessons learned from the rotation.

**Background Information.** The NTC’s notional country of Artesia that served as the AO included more than 1,000 multi-ethnic civilians. Individuals and entire towns were sensitive to the action or lack of action by the SBCT forces. A town that had been influenced positively would cooperate, offering information on known enemy locations, while a town that had been alienated would harbor terrorists, emplace im-
provised explosive devices (IEDs) or riot against SBCT forces.

Within the SBCT’s area of responsibility (AOR), enemy strength was estimated at a battalion-minus with 300 insurgents, terrorists and former military. The enemy rarely wore uniforms and traveled in civilian vehicles, presenting a challenge common in the COE.

Terrorists and insurgents were focused on disrupting US efforts to establish a new Artesian government and rebuild the country. Their objective was to promote anti-US sentiments and cause a level of casualties unacceptable to the American public to force the SBCT to withdraw. Enemy tactics included frequently conducting mortar raids on static locations, emplacing IEDs, directly attacking SBCT platoons and squads, and intimidating the local populace.

The brigade commander recognized the need to conduct effects-based operations and that force alone could not set the conditions for the eventual withdrawal of US forces. This was evident in the brigade mission statement and intent. (See Figure 1.)

To meet the commander’s intent, the brigade no longer could plan direct action and traditional nonlethal engagements as separate operations. Every mission—from a raid on a terrorist training camp to the reconstruction of local infrastructure—required the staff to synchronize lethal and nonlethal assets down to the company level to achieve success.

FECC and the Military Decision-Making Process (MDMP). The SBCT is uniquely equipped to meet the challenges of the COE. By doctrine, it can achieve the goal of “see first,” “understand first,” “develop the situation out of contact and finish decisively.” The challenge for the FECC at the NTC was to ensure that the brigade’s diverse detection, delivery and assessment assets were focused on the effects specified in the commander’s intent.

Unlike a conventional fire support element (FSE), the FECC is manned with lethal and nonlethal experts to conduct crisis effects planning in detail and exploit the SBCT’s unique capabilities. The SBCT’s area of responsibility (AOR), enemy strength was estimated at a battalion-minus with 300 insurgents, terrorists and former military. The enemy rarely wore uniforms and traveled in civilian vehicles, presenting a challenge common in the COE.

The brigade commander recognized the need to conduct effects-based operations and that force alone could not set the conditions for the eventual withdrawal of US forces. This was evident in the brigade mission statement and intent. (See Figure 1.)

To meet the commander’s intent, the brigade no longer could plan direct action and traditional nonlethal engagements as separate operations. Every mission—from a raid on a terrorist training camp to the reconstruction of local infrastructure—required the staff to synchronize lethal and nonlethal assets down to the company level to achieve success.

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The challenge for the FECC at the NTC was to ensure that the brigade’s diverse detection, delivery and assessment assets were focused on the effects specified in the commander’s intent.

Unlike a conventional fire support element (FSE), the FECC is manned with lethal and nonlethal experts to conduct crisis effects planning in detail and exploit the SBCT’s unique capabilities. The deputy effects coordinator (DECOORD) and information operations coordinator (IOCOORD) worked closely under the supervision of the effects coordinator (ECOORD) to synchronize lethal and nonlethal effects.

During the MDMP, the first critical synchronization step for the FECC was the intelligence, surveillance and reconnaissance (ISR) huddle. The ISR huddle was conducted immediately after the mission analysis briefing to maximize the robust capabilities of the reconnaissance, surveillance and target acquisition (RSTA) squadron.

The meeting focused the RSTA squadron’s collection assets, including tactical unmanned aerial vehicles (TUAVs), squad-level human intelligence (HUMINT) collectors, a ground surveillance radar (GSR), the long-range advanced scout sensor system (LRASS) and the remotely monitored battlefield sensor system (REMBASS), to help the brigade develop the situation out of contact with the enemy. The DECOORD and air liaison officer (ALO) ensured the RSTA squadron was resourced with artillery and close air support (CAS), if contact was made.

At the conclusion of the huddle, the FECC had completed the “decide” and “detect” portions of the target synchronization matrix (TSM), the draft of the essential effects tasks (EETs) and effects warning order two (WARN02). (See Figure 2.)

The organization of the SBCT staff allowed the FECC to produce a detailed effects plan in a compressed timeline. During course-of-action analysis, the FECC developed the method for accomplishing the lethal and nonlethal essential effects tasks.

After collaborating with the ISR analysis platoon during the production of the brigade’s collection plan, the target analyst worked with the terrain analysis team to produce accurate target grids using sub-meter imagery. He translated these targets into a brigade observation plan using the same analysis systems.

The counterfire officer also was integrated into the ISR platoon, collection platoon and terrain team, conducting pattern and terrain analyses to determine radar positioning and counterfire targeting. The assistant effects coordinator (AECOORD), with guidance from the DECOORD and input from the target analyst and counterfire officer, synchronized the details of the plan.

The information operations (IO) section and lethal effects section followed a similar format for EETs. Lethal EET methods followed the format developed by the Joint Readiness Training Center (JRTC), Fort Polk, Louisiana: target/attack criteria, trigger, location, observer, delivery system, attack guidance, communications and fire support coordination measures (FSCMs). Nonlethal EET methods were expressed as target, location, delivery system and message.

Nonlethal EETs also included measures of effectiveness (MOEs) in lieu of effects. The SBCT’s MOEs attempted to quantify success for nonlethal engagements, giving the brigade a substantive method to evaluate the effectiveness of the IO plan. This also helped the FECC decide when to disengage from a particular high-payoff target (HPT).

EETs often included both lethal and nonlethal assets for detection and delivery in the same method. The major problem encountered during the planning process was receiving timely bottom-up refinement from the battalion fire support officers (FSOs) who served as both the lethal and nonlethal coordinators at their level. This improved as FSOs became more comfortable with their role as the battalion IOCOORDs.

SBCT rehearsals confirmed the maneuver and lethal effects plans and incorporated nonlethal detection and delivery. Each battalion FSO briefed the
effects plan for his element, including the method for engaging key leaders, non-governmental organizations (NGOs) and the local populace. This allowed the brigade commander and ECOORD to confirm that the civil affairs (CA), psychological operations (PSYOP), public affairs and maneuver battalion nonlethal effects plans were integrated effectively into operations.

**Synchronization Meeting.** The synchronization meeting (formerly known as the targeting meeting) drove the brigade’s daily operations and ended with the production of the daily fragmentary order (FRAGO). The intent of the meeting was to conduct HPT-focused MDMP during daily operations. It allowed the FECC to continue to develop detailed, synchronized EET methods. The synch meeting provided the commander and staff a way to visualize the enemy’s intent and capabilities in advance, anticipate requirements and position resources for upcoming operations. (See Figure 3 on Page 20.)

Attendance at the synch meeting was not negotiable for all staff primaries. The meeting was chaired by the deputy commanding officer (DCO) or executive officer (XO). The brigade commander was present for several of the synch meetings, providing commander’s guidance for each time period or event.

At this meeting, the staff conducted an intelligence update, assessed previously engaged targets, reviewed current operations and then wargamed the 24-48 hour period. The staff also developed the course-of-action (COA) for the 48–72 hour time frame. This cycle ensured that each day’s events were fully developed and wargamed before execution.

The FECC facilitated the meeting by ensuring it remained HPT-focused as well as documented the targeting results for the next FRAGO. The tools used to facilitate the meeting were the effects synchronization matrix (ESM) produced by the brigade S3 and TSM produced by the FECC. Also referenced

![Figure 2: Sampling of the Target Synchronization Matrix (TSM)](image-url)
DCO or XO chairs the meeting. He states the purpose of the meeting, directs the process and keeps the members focused on the unit’s mission and commander’s intent, setting the conditions to achieve the commander’s decisive point(s).

DCO/XO conducts roll call—Commander (if available), ECOORD (if available), DCO, XO, DECOORD, IOCORD, S2, S2x, S3, S4, S6 (SIGO), ALO, EA, EN/terrain analysis, ADAM, AV, CHEMO, PSYOP, CA, SOCCE, MICO, SJA, TA, and TF LNOs.

DCO/XO states the purpose of meeting; directs its focus and time periods for meeting.

DECOORD reviews due-outs from previous synchronization meeting.

0 to 24 Hour Review (Set the Conditions 24 to 48 Hours Out)

DCO/XO Briefs: Commander’s guidance and Intent (End State, Friendly/Enemy and Terrain) for Key Events or During a Time Period

S2 Briefs Current:
- Population Assessment for (IO-CA-PSYOP and S2x), Including Intended/Unintended Outcomes and their Exploitation or Mitigation
- Enemy Disposition, Including HUMINT
- Enemy Capabilities (Adjusted by BDA to Date); Kill Board
- MPCOA and MDCOA, Including What to Expect During This Time Period
- PIRs/Proposed Changes and HVT Changes
- Enemy HPTs’ BDA in the Last 24 Hours (Kill Board)
- IO: Nonlethal HPTs (by Exception)
- Status of Collection and ISR Plans

S3 Briefs:
- Higher Mission and Intent, to Include SBCT Tasks
- SBCT Mission: Key Events/ Tasks and Review of Commander’s Decision Points
- Friendly Situation (Locations, Subordinate Unit Key Tasks)
- Convoy Operations (S4)
- Key Events (BOS Input by Exception: S2x, IO-CA-PSYOP and EN/terrain analysis)

DECOORD & IOCORD Brief: HPTL, EETs, TG Ts and ESM

0 to 24 Hours Review to Set the Conditions for 24 to 48 Hours Out: Review decisive, sustaining operations and shaping operations that influence 24 to 48 hours decisive operations; review conditions for the next time frame IAW the commander’s guidance (BOS input by exception).

S3 Briefs: Quick Review of Changes to the Time Period; Final Plan; and, if Necessary, a Verbal FRAGO for the Changes to the 0 to 24 Hour Period (Asset Availability Chart)

24 to 48 Hours Out

DCO/XO Brief: Commander’s Guidance and Intent (End State, Friendly/Enemy and Terrain) for Key Events or During a Time Period

S2 Briefs Projected:
- Population Assessment for (IO-CA-PSYOP and S2x), Including Intended/Unintended Outcomes and their Exploitation or Mitigation
- Enemy Disposition, Including HUMINT
- Enemy Capabilities (Adjusted by BDA to Date); Kill Board
- MPCOA and MDCOA, Including What to Expect During This Time Period
- PIRs/Proposed Changes and HVT Changes
- Enemy HPTs’ BDA in the Last 24 Hours (Kill Board)
- IO: Nonlethal HPTs (by Exception)
- Status of Collection and ISR Plans

S3 Briefs:
- Higher Mission and Intent, to Include SBCT Tasks
- SBCT Mission: Key Events/ Tasks and Review of Commander’s Decision Points
- Friendly Situation (Array of Forces, Key Tasks for Subordinate Units)
- Convoy Operations (S4)

DECOORD & IOCORD Brief: Proposed HPTL, EETs, TG Ts and ESM

48-72 Shaping Operations (Discuss Decisive and/or Shaping Operations for 48- to 72-Hour Period, by Exception)

DCO/XO Brief: Commander’s Guidance and Intent (End State, Friendly/Enemy and Terrain) for Key Events or During a Time Period

S2 Briefs Projected:
- Population Assessment for (IO-CA-PSYOP and S2x), Including Intended/Unintended Outcomes and their Exploitation or Mitigation
- Enemy Disposition, Including HUMINT
- Enemy Capabilities (Adjusted by BDA to Date); Kill Board
- MPCOA and MDCOA, Including What to Expect During This Time Period
- PIRs/Proposed Changes and HVT Changes
- Enemy HPTs’ BDA in the Last 24 Hours (Kill Board)
- IO: Nonlethal HPTs (by Exception)
- Status of Collection and ISR Plans

S3 Briefs:
- Higher Mission and Intent, to Include SBCT Tasks
- SBCT Mission: Key Events/ Tasks
- Friendly Situation (Array of Forces, Key Tasks for Subordinate Units)
- Convoy Operations (S4)

DECOORD & IOCORD Brief: Proposed HPTL, EETs, TG Ts and the Assessment/Update of TG Ts Engaged (ESM)

48 to 72 COA Development & Wargaming Processes
(Mission-Dependent COA Development & Wargaming for Specific Events, as Required)

1. Discuss decisive, sustaining operations for 48-72 period; shaping operations for 48-72 hours out that influence 72-96 hour decisive operations.
2. Analyze relative combat power.
3. Generalize options: develop COAs to defeat enemy MPCOA and, if not given, determine the decisive point (ME).

4. Array initial forces.

5a. Develop the Scheme of Maneuver (Input by each BOS):
   - State purpose of operation and tactical risks.
   - State critical friendly or/and enemy forces (decisive, shaping/exploiting and sustaining operations).
   - Designate ME along with task and purpose.
   - Designate SE along with task and purpose.
   - Designate reserves, to include location.
   - Outline movements of force composition, task and purpose.
   - Identify maneuver operations that may develop.
   - Integrate obstacle effects with maneuver and effects.
   - Assign AO responsibilities.
   - Locate engagement areas or attack objectives and counterattack objectives.
   - Consider enemy WME.

5b. Refine HPTs and determine attack guidance to ensure success of each critical event or phase (HPTs for each critical event or phase), to include command and control-attack priorities; determine ISR based on CCIRs and HPT attack; and define the concept of effects (lethal and nonlethal).

5c. Determine who, with what, how and when will attack HPTs identified during ISR (shaping operations), including prescribed formations or dispositions, when necessary, and priorities of CS and CSS.

6. Assign headquarters.

7. Prepare COA statements and sketches.

**Legend:**

- **ADAM** = Air Defense Airspace Management
- **AGM** = Attack Guidance Matrix
- **ALO** = Air Liaison Officer
- **AV** = Aviation
- **BDA** = Battle Damage Assessment
- **BOS** = Battlefield Operating Systems
- **CA** = Civil Affairs
- **CAS** = Close Air Support
- **CCIRs** = Commander’s Critical Information Requirements
- **CDR** = Commander
- **CHEMO** = Chemical Officer
- **COA** = Course-of-Action
- **CS** = Combat Support
- **CSS** = Combat Service Support
- **DCO** = Deputy Commanding Officer
- **DECOORD** = Deputy Effects Coordinator
- **DECOORD/DCO/XO** = Effects Coordinator/DCO/XO
- **EA** = Electronic Attack Officer
- **EAB** = Echelons Above Brigade
- **ECOORD** = Effects Coordinator
- **EM** = Engineer
- **EEM** = Essential Effects Matrix
- **EEFs** = Essential Effects Tasks
- **EN** = Engineer
- **ESM** = Effects Synchronization Matrix
- **FRAGO** = Fragmentary Order
- **FRAGTs** = High-Payoff Targets
- **HPTL** = HPT List
- **HUMINT** = Human Intelligence
- **IC** = Intelligence, Surveillance and Reconnaissance
- **ICOCOORD** = Information Operations Coordinator
- **ISPs** = Intelligence, Surveillance and Reconnaissance
- **MDCCOA** = Most Desired COA
- **ME** = Main Effect
- **MICO** = Military Intelligence Commanding Officer
- **MPCOA** = Most Probable COA
- **PIRs** = Priority Intelligence Requirements
- **PSYOP** = Psychological Operations
- **S2x** = HUMINT Section
- **SE** = Secondary Effect
- **SECOORD** = Special Operations Command and Control Element
- **SFO** = Staff Judge Advocate
- **SOCCE** = Special Operations Command and Control Element
- **TACSOP** = Tactical Standing Operating Procedures
- **TA** = Targeting Analyst
- **TF LNOs** = Task Force Liaison Officers
- **TGTs** = Targets
- **TSS** = Target Selection Standards
- **XO** = Executive Officer
- **WME** = Weapons of Mass Effects

**Figure 3:** Effects Synchronization Meeting Agenda. (Appendix I to Chapter 1 of the 1st Stryker Brigade Combat Team, 25th Infantry Division (Light) (1/25 SBCT) Tactical Standing Operating Procedures, or TACSOP.)

were the asset availability chart and the collection plan. The staff used overlays on the maneuver control system (MCS) to display graphics and the collection and fire support plans.

Battalion liaison officers (LNOs) attended each meeting to ensure their battalions could execute the tasks produced. In addition, their input contributed significantly to the staff’s accurate assessment of previous engagements.

Immediately after the meeting, the S3 and DECOORD issued verbal FRAGOS, as required, to make critical changes to the 0 to 24 hour period. The S3 and FECC planners codified the results of the 24 to 48 hour and 48 to 72 hour periods into the daily FRAGO, Annex D and DD 1972 Close Air Support Requests.

The synchronization meeting was the critical event in the brigade’s battle rhythm. With leadership involvement, it was the most productive meeting of the day.

The key to the synchronization of nonlethal effects in the synch meeting was the IO working group (IOWG), normally conducted the evening before the synchronization meeting. In the IOWG, the IOOCORD and IO cell staff, with participation from the DECOORD, S2 and S3, developed and refined the plan to accomplish each nonlethal EET for the time periods. See Figure 4 on Page 22 for a sample plan to accomplish several nonlethal EETs from the EET list in the TSM in Figure 2.

The IOWG followed a modified synch meeting agenda, assessing past events from the perspective of the tactical PSYOP detachment, CA Team B (CAT-B) and public affairs. The IOWG assessed the EETs by reviewing the MOE for each EET.

During an average day, the brigade conducted about 20 nonlethal engagements, requiring the IOWG be a consistent part of the brigade battle rhythm. This process ensured that the brigade employed its nonlethal assets effectively and focused the maneuver nonlethal engagements on the correct targets with the correct messages.
Task: Limit civilian interference with SBCT operations.

Purpose: Allow 1/25 freedom of maneuver to establish a safe and secure environment within the country of Artesia.

Methods:
- Red Pass Ranch: 3-21 will influence the local populace and Mayor Gabriel Mendoza to support US presence in Artesia. 3-21 will coordinate for water testing and conduct a medical visit and generator maintenance within the town of Artesia. CA will coordinate with Barnes and Rudy for building materials and a new bookstore. 3-21 Commander will conduct a BILAT with Gabriel Mendoza on 11 Oct. 3-21 also will coordinate for a combined sporting event.
- Tiefort City: 3-21 Cdr will meet with the religious leaders (see TSM) to influence their support for US goals. 3-21 will provide generator maintenance and medical assistance to the town. CA will coordinate with the UN for support for improving well water within the city.
- Throughout AOR: After successfully completing humanitarian assistance tasks, IO will publish a press release and radio spots exploiting US assistance. PSYOP will produce posters emphasizing cooperation between US and Artesian civilians and government.

Desired Effects: Civilians do not actively impede SBCT operations in towns or on main supply routes.

Figure 4: Examples of a Nonlethal Essential Effects Tasks (EETs)

The ability to conduct true concurrent planning is a key tenet of SBCT doctrine. Although the FECC struggled with information dissemination initially, as training on the systems improved, so did the ability of the FECC to pass information to facilitate concurrent battalion MDMP.

The FECC used the “Send Plan” function on the advanced FA tactical data system (AFATDS) to push overlays and orders to subordinate FSEs early in the process. The organic digital systems within the brigade allow the FECC to produce overlays on AFATDS and transfer them through MCS to individual and Force XXI battle command brigade and below (FBCB³) systems. These are organic systems, such as the near-term digital radio (NTDR), secure mobile anti-jam reliable tactical terminal (SMART-T) and FBCB³. This process ensures every observer on the battlefield can track the same FSCMs as his FSE.

Current Operations. The greatest challenge for lethal current operations during the rotation was clearance of fires. According to the “Organization and Operations of the SBCT” document, the RSTA squadron is intended to remain pure and conduct reconnaissance throughout the AO. This presented a challenge for the FECC: all missions had to be cleared through the RSTA and the infantry battalion that owned the terrain.

The FECC attempted to overcome this difficulty through the creative use of FSCMs. During the synchronization meeting, the FECC established zones of responsibility (ZORs), which translates into “on-call boundaries” for maneuver in specified time periods, and then input them into AFATDS. This allowed the FECC to clear fires for pre-planned operations rapidly.

However, more than two units shared a majority of the brigade’s battlespace. Clearance of fires in these areas was facilitated through the use of pre-cleared targets or areas. Based on the pattern analyses conducted by the target analyst, S2 and military intelligence commander (MICO), the FECC pre-cleared missions on certain targets and areas for a certain amount of time. Pre-Cleared areas and mission-specific ZORs also were input into MCS and transmitted to individual FBCB’s to ensure dissemination.

Counterfire in the COE was another challenge that the FECC confronted at the NTC. The opposing force (OPFOR) employed the same indirect fire TTPs as the current threat in Iraq. Insurgents typically picked up mortars and ammunition from a cache, drove to a firing point, fired a minimal number of rounds and egressed within minutes. The speed with which the enemy exfiltrated after firing made it difficult to accomplish the objective of “destroy.” The best effects we achieved on enemy mortars with lethal counterfire was suppression.

The brigade began to employ a mounted Stryker anti-tank variant quick-reaction force (QRF) at Ready Condition 1 (REDCON 1) during times identified by pattern analysis. The QRF monitored the fire support coordination net and responded immediately once a mission was sent by the radar. This technique resulted in the destruction of multiple enemy mortar teams caught in their vehicles driving away from the firing point.

Throughout the operation at the NTC, the SBCT had considerable difficulty receiving timely reports from nonlethal engagements. This made it difficult to ensure IO engagements were focused in accordance with the commander’s intent. The tactical PSYOP and CATs attached to the brigade for combat op-
erations are reservists and were not equipped with FBCB². Their reports were too lengthy for the brigade command net.

The battalion FSO, also serving as the battalion IOCOORD, became the conduit for IO reporting. At the end of each day, the battalion FSEs sent the FECC a consolidated IO situation report, including a detailed summary of all nonlethal engagements. These engagements varied from the delivery of humanitarian assistance (HA) to conducting bilateral meetings (BILAT) or media encounters. This consolidation allowed the FECC to assess the engagements accurately during the IOWG and refocus or retarget future engagements, as necessary, during the synchronization meeting.

Another problem common in SOSO that confronted the FECC is the confusion caused by multiple engagements of the same local official from different delivery assets, for example, a company commander, tactical HUMINT team (THT) and CAT-A. This sent mixed messages to local officials and, at times, resulted in promises that were not kept. In some instances, this failure to “clear effects” was responsible for turning neutral towns into hostile towns.

To correct this, the brigade designated that certain HPTs within the local populace would only be engaged by one asset. Other SBCT elements had to coordinate with that asset if they needed to meet with the target.

Refining the SOP. Since our NTC rotation and recent Warfighter in December 2003, the brigade effects planners further refined the effects standing operating procedures (SOPs). The first major change was to incorporate the development of an IO intelligence preparation of the battlefield (IPB) into the initial MDMP. The COE often dictates that maneuver boundaries be based on population centers rather than the more commonly used geographical boundaries, such as rivers or main supply routes (MSRs). Second, we further defined measures for improving the early information flow to the FSEs and bottom up refinement—to include correct reporting procedures for CATs and tactical PSYOP teams.

The FECC also switched from a paper map to a projection of the AFATDS effects management tool (EMT) for battle tracking and clearance of fires. The paper map remains as a backup. We will continue to look for ways to refine those systems and planning processes that proved invaluable to us at the NTC.

At the NTC, 1/25 SBCT’s FECC operated in the COE, the environment in which it was designed to operate. In this complex, asymmetrical battlespace, success required the coordinated employment of all the SBCT’s detection, delivery and analysis assets. The FECC was forced to rethink SBCT doctrine, revise roles and responsibilities, and maximize the capabilities of its systems.

Although the brigade never reached complete situational understanding as our doctrine dictates, the lessons learned will serve the brigade well as it continues to prepare to deploy into a combat theater.

Major David M. Hamilton, until recently, was the Deputy Effects Coordinator (DECOORD) for the 1st Stryker Brigade Combat Team (SBCT), 25th Infantry Division (Light), at Fort Lewis, Washington. Currently, he is a student at the Joint Forces Staff College, Norfolk, Virginia. He previously served as the Executive Officer and then S3 of 2d Battalion, 8th Field Artillery (2-8 FA) in the SBCT. He commanded two batteries in 1-6 FA, 1st Infantry Division (Mechanized), in support of the Stabilization Force (SFOR) during Operation Joint Guard in Bosnia. He also was a Platoon Leader in the 1-39 FA, part of the 18th FA Brigade, during Operations Desert Shield and Storm.

Captain Ryan C. Gist is the DECOORD for the 25th Division’s Stryker Brigade; he also served as the brigade’s Assistant Effects Coordinator (AECOORD) at Fort Lewis. Among other assignments, he was the Company Fire Support Officer for B/1-75 Rangers, including a deployment to Afghanistan in support of Operation Enduring Freedom (OEF). In the 3d Infantry Division (Mechanized), he was the Information Operations Coordinator for 3-15 IN during Operation Joint Forge in Bosnia, and Fire Direction Officer for 1-9 FA.
Where do the battlefield and the decisions you, as the battalion commander, start and end? How many decisions do you make on a battlefield? What are those decisions?

During Operation Iraqi Freedom (OIF), between 20 March 2003 (the start of the ground war) and 1 May 2003 (the day President George W. Bush declared major combat over), as the commander of 2d Battalion, 4th Field Artillery (Multiple-Launch Rocket System—2-4 FA (MLRS)—I made only four real decisions.

As a battalion commander, if you start early, you’ll make few decisions on the battlefield—your battalion will make them without hesitation and in the flow of military operations. Several factors contributed to that (see the figure).

We all have seen the war movies where the military leaders make decisions and give orders throughout the movies. The classic movie *Patton* comes to mind.

But, truly, how many command decisions did General George S. Patton, Jr., really make in that movie? Not many. Mostly he conveyed his presence, personality and passion to speak to his subordinates and allowed them to make decisions.

During a 1942 interview, General Patton said, “My theory is that a commander does what is necessary to accomplish his mission and that nearly 80 percent of his mission is to arouse morale in his men.” These words indicate General Patton believed he could influence the battlefield without making decisions on the battlefield itself.

We are not “General Pattons.” But some of you will command a battalion in a fight or conflict. And many others will be the command sergeant majors, executive officers, S3s and battery/company commanders or first sergeants of battalions in conflict.

So, where and when do the “battlefield” and the decisions start? Experience tells me that the battlefield starts before one ever assumes command. This is reiterated by the classic speech George C. Scott forcefully delivered as General Patton in the beginning of the movie. Consequently, the decisions also start before command.

What decision affecting a future battlefield can you possibly make before assuming command? The decision of what kind of a commander to be.

Colonel Charles R. De Witt (now retired) once talked to me about the tendency to have two kinds of military leaders: the ones who look down and into the units they command and the others who look up and out of the units. The focus of the down-and-in commander is strictly on the unit with no concern for what is going on around him. The danger is in not seeing the big picture and not understanding where the battalion fits into that picture.

The up-and-out commander’s focus is on the big picture and where the unit fits. The danger is in risking not understanding the personality and capabilities of his unit.

However, a third type of commander focuses down-and-in, and, every so often, peeks up to see what else is going on. How often the commander looks up depends on the situation. For example, once rumors of deployment surface, his peek-up times come more often.

This third commander has the advantage of understanding his unit and its capabilities yet still seeing the big picture. He can count on his experience and military education gained over many years to assess the situation and know where his unit fits.
Needless to say, senior commanders also will provide information about where the unit fits in, in the form of mission and intent, task organization and organization for combat. The situation, itself, will dictate where the unit fits: peacekeeping, peace enforcement or major combat operations.

But you can decide before the big day what kind of commander you want to be.

While in the PreCommand Course, at Fort Leavenworth, Kansas, many Army senior leaders will visit you. Each will talk about his individual style and (or) philosophy of leadership. Several members of my PreCommand Course believe former Chief of Staff of the Army General Eric K. Shinseki provided some of the best advice: “Continue to be who you are—that’s what got you here.”

This is another decision you make ahead that will set the stage for every decision you make during your command.

As a battalion commander, you are a leader. Former Chief of Staff of the Army General J. Lawton Collins said, “Leadership combines the necessary qualities of character, integrity and a willingness to work, which leads to a knowledge of their profession.”

Sun Tsu says, “Leadership is a matter of knowledge, trustworthiness, humanity, valor and strictness.”

These definitions and many more describe leadership without considering what action it generates. Consequently, I offer this definition as a basis for what follows: “Military leadership is the ability to motivate Soldiers and units to achieve beyond their own perceived capabilities.” Inherent in this definition are not only the characteristics we all believe make a good leader, but also the need to create an action with an end result—leaders are people of action.

Will the commander make other decisions having an impact on the battlefield before reaching the actual battlefield? Indeed. The biggest of those is believed to be the tone of the command. Will you exude “Warrior Ethos” and encourage your unit to do the same? Are there an unbelievable number of opportunities to inculcate Warrior Ethos in your battalion: talking to Soldiers at the command maintenance formation; walking through the battalion area and speaking with one or two Soldiers at a time in the motor pool and supply rooms; making remarks at events like promotions, reenlistments, hails and farewells; and NCO induction ceremonies; ensuring the unit conducts tough, realistic and meaningful training; looking for the training value inherent in routine taskings and capitalizing on them; volunteering for taskings with the greatest training value, such as live-fire demonstrations; ensuring Soldiers are fit and disciplined and more.

Of course, your actions indicate (or not) your Warrior Ethos. Do you attend training; are you seen doing tough physical training (PT); do you wear your seatbelt, Kevlar, and body armor; do you look like a Soldier and hold your subordinate leaders to the same standard; and more?

In order to be a credible leader, you can’t be an anomaly to the Soldiers you lead. They must know you are fair and consistent. Your personal involvement and effort in counseling individuals and mentoring the battalion’s junior leaders will have a positive impact. This means teaching your charges that they are American Soldiers requiring character, integrity, honesty and the willingness to demonstrate those traits at all times.

Soldiers who don’t understand the Warrior Ethos and don’t make them part of everyday life will fail to see and gain lessons from training that could keep them alive and healthy on the battlefield. Those lessons include everything from wearing a seatbelt while in the high-mobility multipurpose wheeled vehicle (HMMWV) and staying at nametag defilade while in the track to knowing everything about their weapons and how to employ them. Soldiers must move, shoot and communicate and do those tasks well—along with everything associated with them.

Factors Causing the Battalion Commander to Have to Make Few Decisions on the Battlefield

- Having intimate knowledge of the people in the unit and the personalities and capabilities of the subordinate leaders.
- Understanding the training and capabilities of the unit as a whole.
- Understanding the higher commander’s intent—several levels higher—and where the battalion fits into the intent.
- Knowing not to make decisions when the situation and orders from higher headquarters empower your Soldiers and leaders to act.
- Ensuring the battalion understands your expectations and standards.
- Ensuring that you, the battalion commander, are not an anomaly to your battalion.
- Establishing a working relationship with the brigade commander so you know what you can and cannot do.

All that exacting training is not easy. However, if you train Soldiers and teach them the Warrior Ethos, then you will eliminate the need for you to make decisions in the future. If you know the personalities and in and the capabilities of your well trained, confident unit, then you will be comfortable with your subordinates making most decisions.

The part about peeking up every so often and seeing what is up-and-out comes into play here. You must know your brigade commander—don’t let him be an anomaly to you. It is easier to get to know some brigade commanders than others, but it is your responsibility to get to know him, not his.

So, how many decisions does the battalion commander really need to make on the battlefield? I submit very few—your subordinates make them. Of course, as the battalion commander, you always have the prerogative of changing any decision made by your subordinates, if you have to. But long before they are making decisions in combat you have given them the flexibility and built their confidence in making those decisions, “calibrating” them when you had to. The subordinates and Army gain from good decision making at the lowest possible level.

This leads you to many actions. The fire plan will come, the restricted operation zone (ROZ) will be designated and your route-of-march to the new position will be given to you based on the locations of friendly units, the enemy situation and the availability of resupply and support assets. Standing operating procedures (SOPs) will be drafted for your approval and practiced during training, and the situation will fall neatly into the purview of those SOPs.

You will make some decisions based on the higher commander’s intent and your understanding of the battalion’s situation. For example, the situation at Wake Island on the morning of 8 December 1941 led Commander Winfield S. Cunningham, overall commander of forces on Wake Island that day, to his decision. He could not attack the Japanese; he did not have the resources to take the fight to the enemy. He could not retreat because he lacked the assets to move all the Soldiers, sailors, marines and civilian construction workers from the island. Consequently, only two courses-of-action remained: defend or surrender. Commander Cunningham...
mounted a successful defense, one still talked about with awe today, more than 60 years later.5

The orders from higher headquarters drive much of your decision-making process: to attack or defend, to displace or not based on the higher commander’s intent and the mission statement. These considerations and more will focus your battlefield actions.

In the Battle of Gettysburg, in July 1863, Colonel Joshua Chamberlain’s decision to execute a bayonet attack was a product of both the situation and orders from higher headquarters. His orders from Colonel Strong Vincent were to “hold ground at all cost.”

The reason Colonel Vincent issued this order was that Chamberlain’s 20th Maine occupied the extreme left of the Union Army’s line. Had the Confederates passed the 20th Maine, they could have flanked the Union forces and the battle may have been lost.

After repulsing several attacks by Confederate forces, Colonel Chamberlain realized his men’s ammunition was nearly gone, and they could not withstand another assault on the position. At this point, the situation, as he later remarked, was that “it was imperative to strike before we were struck by this overwhelming force into a hand-to-hand fight which we probably could not have withstood or survived. At that crisis, I ordered the bayonet. The word was enough.”6 As history has shown, Colonel Chamberlain’s forces charged the Confederates, took them by surprise and drove them back. By his own admission, Chamberlain’s orders and the deteriorating situation led him to his decision. Like Cunningham’s decision at Wake Island, we still talk about Chamberlain’s decision today.

So what’s left, what decisions does the battalion commander really have to make on the battlefield? In addition to those driven by higher headquarters or the combat situation, you make decisions when things seem out of the ordinary—are not covered in SOPs or training, go against previous guidance and orders, or require you to assume unusual risk.

In combat in Iraq, 2-4 FA only required four battalion commander-level decisions.

1. During the initial phase of major combat during Operation Iraqi Freedom, 2-4 FA had the task of crossing 200 kilometers of desert sand with fully loaded wheeled vehicles. The higher commander’s intent was for the battalion to “push combat power as far forward as possible as fast as possible.” The battalion was hindered by the most significant obstacle in Iraq: the desert sand.

I immediately changed the battalion’s task organization to ensure we would be in position to provide the maneuver forces lethal fires in support of their tactical objectives. I task organized the firing elements to consist of only 110 vehicles—predominately tracked vehicles, HMMWVs and a few ammunition resupply vehicles—and 276 personnel to travel for four days in the sand. This core of the battalion moved with limited logistical support. I put the remaining logistical and recovery elements, consisting of 90 vehicles and 210 personnel, under the command of the battalion executive officer and gave them a route on more solid surfaces for maneuverability. During much of the four days, the two elements did not have communications and risked never linking back up.

The payoff, however, was huge. The firing elements pushed forward with great speed and reached a future firing location within only hours of launching 42 Army tactical missile systems (ATACMS) in support of Coalition objectives, meeting the higher commander’s intent.

This situation calling for a decision clearly was under circumstances outside the purview of SOPs, assumed the risk of never reconstituting the battalion and was not covered in any guidance from any higher headquarters. The other option was to keep the unit together. Without the decision to task organize and accept some risk, the battalion would not have reached the firing area in time to support the maneuver forces. Success was possible for many of the considerations mentioned, not the least of which is knowing the personality and capabilities of the executive officer, who would ensure the logistics elements linked up with the battalion at the designated location, no matter what.

The up-and-out commander is unable to make this type of informed decision.

2. Every unit involved in OIF had to determine the value of equipment and ammunition versus the dangers to Soldiers left guarding non-functioning equipment. 2-4 FA was no exception.

Very soon after crossing into Iraq, an M88 recovery vehicle broke down. At 55 tons, nothing else in the battalion (except another M88) could recover the disabled vehicle. I decided to leave the non-mission capable M88 and conserve the three remaining for higher priority missions, specifically to recover our M270A1 launchers. No Soldiers remained to guard the downed M88; we abandoned it.

You would think that this was an easy decision, one that did not require the battalion commander’s attention. But Soldiers are taught strict property accountability, and battery commanders spend much time in garrison accounting for property. Taking care of and accounting for their equipment is engrained in them from the very beginning of their service.

So, I had to make the decision and set the tone for the remainder of the operation. As 2-4 FA moved toward Baghdad and beyond, the battalion faced similar situations on many occasions. Some circumstances involved enemy vehicles disabled as a result of unexploded ordnance or vehicle accidents. The battal-
ion abandoned non-mission capable HMMWVs, ammunition vehicles and trailers (still containing valuable ATACMS rounds), M577A3 command post vehicles and other trucks and trailers. We recorded the location of the vehicles for future recovery, if possible. But no Soldier remained behind to guard a vehicle.

This served to validate Soldiers as our most valued resource. It also was the right decision that had an unexpected positive impact. The valued Soldiers became more confident and more lethal. Soldier-accountability became an overt source of pride for the unit and the great senior NCOs of the battalion.

This same value of Soldiers is depicted dramatically in the 2002 film We Were Soldiers. In the movie, there is a scene where the brigade commander asks Lieutenant Colonel Moore, “Hal, how many men do you have battle ready, give or take?” Moore turns to his command sergeant major and then replies, “395 exactly.”

After returning to Kuwait, 2-4 FA sent teams to all the locations at which we had abandoned equipment and ammunition. Some were recovered. We returned to the US without 14 vehicles and trailers and several ATACMS. However, we came back with every Soldier.

3. The morning after crossing through the Karbala Gap, 2-4 FA was arrayed along the north side of a very narrow, east-west paved road just north of Karbala. The firing elements were spread along the length of the road, approximately 15 to 20 kilometers. I felt the need to make personal contact with each battery commander and set out to “circulate on the battlefield.” General Patton said, “The more senior the officer, the more time he has.”

4. Before crossing the Euphrates River into Baghdad, 2-4 FA’s mission changed from general support (GS) to V Corps to GS reinforcing (GSR) to the 3d Infantry Division (Mechanized) Artillery. This change required us to place one firing battery in a position area cleared for ATACMS fire while the other batteries moved forward to fire rockets for the close fight. This left the ATACMS battery many kilometers away from any friendly force.

In an effort to increase security, the battery commander aggressively patrolled an area several kilometers outside the battery perimeter. One of these patrols discovered a cache of 160 cases of rocket-propelled grenades (RPGs).

The battery sent an immediate request for emergency ordnance disposal (EOD) up the chain of command. The battery commander was concerned that, as night fell, it would be easy for one dissident to whisk away a couple of RPGs and fire them at the battery. This concern was further heightened by the deaths of three US Soldiers in an RPG attack the previous day. As the day progressed, it became apparent that EOD would not make it to the RPG cache.

I made the decision to have the battery destroy the RPGs using internal assets, specifically the emergency destruction (ED) kits in each launcher platoon. This decision clearly was outside the purview of any SOP—we had no SOP for the use of the ED kits, and no one could recall the last time we had trained on using the kits. This lack of training created the risk of injuring and/or killing unit Soldiers.

However, because of my intimate knowledge of the battery, I knew the first sergeant and one of the platoon sergeants had once been instructors for MLRS operations, including ED kits. Furthermore, higher headquarters had not issued guidance for this eventuality. The battery destroyed the cache using the ED kits successfully and safely.

Would the battery have come under RPG attack had we not used ED kits to destroy the RPGs? We will never know. The only thing that is certain is the battery did not come under RPG attack that night.

Again, many of the decisions made earlier impacted this decision, not the least of which is knowing the personalities of the battery first sergeant and trusting his advice and judgment.

Alright, so where and when do the battlefield and decision making really end? They end on the parade field on the day most don’t want to come when the brigade commander takes the battalion colors from you and hands them to another lieutenant colonel, the new battalion commander.

This is when the battlefield and your decisions for the battalion end.

 Lieutenant Colonel Billy F. Sprayberry commanded 2d Battalion, 4th Field Artillery (2-4 FA), 214th Field Artillery Brigade, from June 2001 until June 2003. During that time, he deployed the battalion to the Gulf for Operation Iraqi Freedom, firing 240 Army Tactical Missile Systems (ATACMS) and 168 rockets in support of Coalition Forces, including firing the first ATACMS Unitary and Block 1A missiles in combat. Currently, he is the Chief of Targeting for the NATO Rapid Deployable Corps in Italy. Among other assignments, he was the Fire Support Officer (FSO) for 1st Brigade, 6th Infantry Division (Light) in Alaska; FSO for the Opposing Force at the Joint Readiness Training Center, Fort Polk, Louisiana; and Division Target Analyst in the Fire Support Element of the 101st Airborne Division (Air Assault) in the Gulf during Operations Desert Shield and Storm. Also in the 101st Division, he commanded two batteries: C/2-31 FA and C/5-8 FA.

Endnotes:
3. Puryear, xi.
7. We Were Soldiers (Paramount Pictures, 2002).
From SOSO to High-Intensity Conflict

Training Challenges for FA Battalions

By Lieutenant Colonel Mark L. Waters

As Field Artillery battalions redeploy from Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF), they rapidly must move to a level of proficiency in the core tasks of delivering fires more typical of mid- to high-intensity conflict. Nowhere is this transition more challenging than in direct support (DS) and general support (GS) FA battalions. Whereas there is a significant overlap between the collective tasks required for mid- to high-intensity conflict and stability operations and support operations (SOSO) in infantry battalions, in FA battalions, the skill sets are radically different. Moreover, FA battalions normally deploy to OIF/OEF with a battery’s worth of combat power or less, so there’s little opportunity to train individually, collectively and consistently on the conventional delivery of fires tasks.

At Fort Irwin, California, the National Training Center’s (NTC’s) fire support observer/controller (O/C) team has trained a number of FA battalions for both mid- to high-intensity conflict and SOSO as well as a number of redeployed units in transition. Based on the units’ challenges observed at the NTC, the O/Cs developed a set of “high-payoff targets” (HPTs)—tasks that, if trained, will bring a battalion most rapidly from proficiency in SOSO tasks to entry-level proficiency in delivery of fires tasks characteristic of mid- to high-intensity conflict.

There are literally hundreds of subtasks for a cannon artillery battalion, and units cannot train them all at once. This article lists those tasks most recommended for redeployed units to train first during their transition, organized in the categories of delivery of fires, fire support, firing battery operations, FA command and control (C3) and FA combat service support (CSS).

**Biggest Overall Challenge—Battalion-Wide Section Certifications.** The most common and significant trend O/Cs have observed in transitioning units is that all sections need more practice in executing their fundamental individual and section-level/collective tasks—from the fire support team (FIST)/combat observation lasing team (COLT) to battery/platoon fire direction centers (FDCs) to commo and maintenance to howitzer sections. There is a direct correlation between Soldiers’ unfamiliarity with processes and equipment and the poor quality of home-station certification programs.

For example, FDCs that don’t have an established crew drill can’t troubleshoot a routine database error or process a digital fire mission to mission training plan (MTP) standards. More than likely, those FDCs did not have a thorough section certification evaluation at home station.

Another example: Some Bradley FIST (BFIST) sections arrive at the NTC without –10 manuals and are unfamiliar with the correct procedures for powering up and initializing their targeting station control panels (TSCPs). Those sections probably weren’t subjected to a rigorous FIST/COLT certification lane administered by experienced senior 13F Fire Support Specialists.

Tough, battalion-driven certification programs that require individuals and sections to demonstrate proficiency in the core tasks of operating their equipment to standard must be the initial block of a battalion’s “gate strategy” toward a capstone event, such as an NTC rotation or operational deployment. The evaluations should be objective and quantitative and the results should be documented.

**Delivery of Fires.** Of all the interdependent tasks that must come together correctly to put steel on target, fire mission processing is the most crucial. That is the process from the receipt of the call-for-fire at the battalion FDC to its transmission to the battery/platoon FDC and then to the Paladin automatic fire control system (AFCS) to the howitzer’s first round fired.

The Field Artillery can have the best optics, best-trained forward observers and most precise fire control systems available, but unless the right things are happening in the battery/platoon FDCs, fire missions grind to a halt.

Units returning from SOSO deployments face the challenge of finding the time to train the core fire mission processing tasks, which require “hands-on
keyboard” time. The competing demands of garrison routine, personnel turnovers and mandated training are distractions to executing fire mission processing training to standard. In addition, FDCs also must train on digital meteorological (Met) updates, dry-fire verification, database and files maintenance, troubleshooting procedures, battery operations center (BOC)-to-platoon operations center (POC) or POC-to-POC transfers, and more.

Battalions unpracticed in fire mission processing commonly have total processing times of 20 to 25 minutes. The good news is that achieving to-standard fire mission processing times is simply a function of good standing operating procedures (SOPs) and a digital fire support sustainment training program buttressed by an uncompromising command emphasis and scheduled repetition.

- **Fire Mission Processing.** There is not a lot of value to be gained by the static execution of every mission in the MTP when trying to rebuild skills during the transition. Units should focus on the fire missions that their maneuver commander most likely will expect them to execute. For a reinforcing battalion, this might be counterfire. For a light DS battalion, this might be priority targets or echelonnement of fires. For a heavy DS battalion, this might be suppression, obscuration, security and reduction (SOSR) fires. The unit must figure out what missions it most likely will fire and exercise them every chance it gets.

An established digital fire support sustainment training program is the first, best strategy for the unit to train the team in the fire mission processing and maintain skills in the “band of excellence.” When the battalion is not executing battery field training exercises (FTXs) or battalion/brigade combat team (BCT) gunnery, its FDCs should train eight to 12 hours a week in digital fire mission processing.

Battalions must incorporate digital fire support sustainment training into the battalion’s training guidance and develop a sequential, task-building block plan and enforce it as part of the battalion’s training meeting. The unit must start by training the FDCs’ basic procedures and then escalate to event-driven battle scenarios involving every part of the battalion gunnery team.

Inventive brigade fire support officers (FSOs), S3s and battalion fire direction officers (FDOs) can turn digital fire support sustainment training into an extraordinarily lucrative multi-echelon event. Commanders must resource it and be visible during the training.

- **Meteorological (Met) Dissemination Across the Brigade and Application at the Firing Batteries.** Nothing brings a cannon battalion “to its knees” faster than its inability to rapidly disseminate, apply and verify Met—particularly in Paladin battalions, but light battalions are not immune. Whether or not the unit is using handheld terminal units (HTUs), backup computer systems (BUCS) or manual backup, all means of computing firing data must “bump,” and that takes time and a lot of practice.

Met dissemination definitely is not the “sexiest” portion of any digital dry-fire or live-fire exercise. But not executing these routine tasks routinely will cripple a battalion, especially during the hours of transition from old to new Met data.

- **BOC/POC Handover.** The Paladin battalion’s FDCs are particularly vulnerable in combat, but any artillery battalion is only three to six vehicles away from being unable to fire. Next to the Firefinder radars, the FDC is the high-value target (HVT) and the enemy’s prime target in high- or low-intensity conflicts.

Battalions must be proficient at handing off firing control to an FDC in another platoon or another battery, tasks that many rotational units have not practiced. Most have the procedures in their SOPs but can’t tell the O/C when they last executed them.

Battalion FDCs frequently should hand off to the next platoon and battery to battery—should rehearse those procedures ruthlessly.

- **Calibration Procedures.** Calibration is a seemingly lost but essential art for achieving accurate, predicted fire. The problem is that units don’t practice calibration at home station. The issues are that the M93 chronograph is unreliable and calibration requires expending ammunition normally fenced for qualification tasks. Commanders are reluctant to spend time and energy on this basic, accuracy task. Nevertheless, it is an essential task in the accuracy equation.

It is highly unlikely that units will know the lots of ammunition they will draw before entering a theater for high-intensity operations. It is even less likely that they will have these lots available at home station for training. If a battalion doesn’t have a calibration baseline, it needs one now.

The battalion’s maneuver brigade may find it hard to accept expending about 180 rounds per propellant type-shell family combination to calibrate the lot.
But it is far better to expend rounds calibrating during training at home station than expend rounds calibrating during combat operations in theater.

Once in theater, units will have a brief “window” in time and space to calibrate. That means the battalion must have a baseline and be proficient in procedures for second-lot inference when enemy contact is constant. However, in its OIF after-action reviews (AARs), the 3rd Infantry Division (Mechanized) Artillery (Div Arty) attested to the value of conducting technical rehearsals, at a minimum, on those critical tasks and targets that time and the enemy situation allowed.

**Fire Support.** Fire support is another area that ensures a unit can deliver accurate, predicted fires—starting with the FISTers’ ability to locate targets accurately.

- **FIST Certification.** One of the first things the brigade FSO and fire support coordinator (FSCOORD) of the transitioning FA battalion should do is plan and resource a FIST certification program. A thorough certification program gives the FSCOORD and FSO confidence in their FISTs.

Figures 1 and 2 show examples of a BFIST and observation post (OP) certi-

<table>
<thead>
<tr>
<th>Manual</th>
<th>Task Number</th>
<th>Task</th>
<th>Points</th>
<th>Score</th>
</tr>
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<tbody>
<tr>
<td>Assorted Manuals</td>
<td>13F Skill Levels 1, 2 and 3 Written Test: Team Average</td>
<td>100</td>
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<tr>
<td>TM 9-2350-297-10-1</td>
<td>WP 0052 00</td>
<td>Perform PMCS IAW TMs on M7 BFIST.</td>
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<td>TM 9-2350-297-10-2</td>
<td>WP 0085 00</td>
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<td>TM 9-2350-297-10-2</td>
<td>WP 0014 00</td>
<td>Initialize TSCP on the M7 BFIST.</td>
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<tr>
<td>TM 9-1260-477-12</td>
<td>Page 3-8</td>
<td>Perform PMCS on the AN/TVQ-2 G/VLLD (dismounted).</td>
<td>30</td>
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<tr>
<td>TM 11-5820-890-10-1</td>
<td>Page 2-8.3</td>
<td>Set up the G/VLLD in a dismounted role.</td>
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<tr>
<td>STP 6-13F14-SM-TG</td>
<td>061-283-1960</td>
<td>Operate the AN/PVS-6 MELIOS.</td>
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<tr>
<td>STP 21-1-SMCT</td>
<td>113-571-1022</td>
<td>Prepare voice communications.</td>
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<tr>
<td>STP 6-13F14-SM-TG</td>
<td>061-355-5101</td>
<td>Prepare the FOS LCU for operations.</td>
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<tr>
<td>STP 6-13F14-SM-TG</td>
<td>061-355-5100</td>
<td>Prepare the FOS HTU for operations.</td>
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<td>STP 6-13F14-SM-TG</td>
<td>061-355-5104</td>
<td>Transmit information messages.</td>
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<tr>
<td>SOP</td>
<td>Conduct PCC/PCI in a TAA.</td>
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<td></td>
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<tr>
<td>TM 9-2350-297-10-1</td>
<td>WP 0076 00</td>
<td>Combat load an M7 BFIST.</td>
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<tr>
<td>TM 9-2350-297-10-2</td>
<td>WP 0125 00</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>STP 21-1-SMCT</td>
<td>071-329-1030</td>
<td>Navigate from one point on the ground to another while mounted.</td>
<td>25</td>
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<tr>
<td>ARTEP 6-115-MTP</td>
<td>06-5-A047</td>
<td>Establish fire support operations.</td>
<td>20</td>
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</tr>
<tr>
<td>STP 6-13F14-SM-TG</td>
<td>061-284-1011</td>
<td>Post information on a situation map and overlay.</td>
<td>20</td>
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<tr>
<td>STP 6-13F14-SM-TG</td>
<td>061-284-3004</td>
<td>Advise supported unit of friendly fire support capabilities.</td>
<td>20</td>
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<tr>
<td>ARTEP 6-115-MTP</td>
<td>06-1-A048</td>
<td>Plan fires in support of maneuver operations.</td>
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</tr>
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</table>

**Legend:**
- **ARTEP** = Army Training and Evaluation Program
- **FOS** = Forward Observer Software
- **G/VLLD** = Ground/Vehicular Laser Locator Designator
- **HTU** = Handheld Terminal Unit
- **LCU** = Lightweight Computer Unit
- **MELIOS** = Mini Eye-Safe Laser Infrared Observation Set
- **MTP** = Mission Training Plan
- **PCC** = Pre-Combat Check
- **PCI** = Pre-Combat Inspection
- **PMCS** = Preventive Maintenance Checks and Services
- **SINCGARS** = Single-Channel Ground and Airborne Radio System
- **SM** = Soldier’s Manual
- **SMCT** = Soldier’s Manual of Common Tasks
- **SOP** = Standing Operating Procedures
- **STP** = Soldier Training Publication
- **TAA** = Tactical Assembly Area
- **TG** = Training Guide
- **TM** = Technical Manual
- **TSCP** = Targeting Station Control Panel

Figure 1: Fire Support Team (FIST) Certification Task Sheet for M7 Bradley FIST (BFIST) Operations
fication programs, respectively. The programs must go beyond just completing BFIST Table VIII and encompass all tasks associated with a FIST.

Units can use the tasks in Figures 1 and 2 to develop FIST lanes with task force FSOs and fire support sergeants evaluating the teams. To make the training realistic, the company commander can attend the certification training to issue the order and fire support guidance.

The fire mission tasks training can culminate with either a live-fire incorporated into the FIST lane or an exercise using the guard unit armory device full crew interactive simulation trainer (GUARDFIST).

The advantage of the live-fire scenario is it tests the crew’s BFIST knowledge. But it is resource-intensive, and synchronization with the rest of the DS battalion’s training plan is difficult.

The GUARDFIST facility calls for fewer resources. It also accounts for four of the five requirements for accurate, predicted fire, allowing the evaluator to focus on target location.

*BFIST Calibration.* The BFIST is an excellent tool for the company FIST, but realizing its full value requires proper training and tools. Units at the NTC were challenged to boresight and initialize the targeting station control panel (TSCP). To complicate the challenge, they often were missing the BFIST operator’s manual (TM 9-2350-297-10-2 Operator’s Manual for Bradley Fire Support Vehicle M7, Turret). First things first, units must ensure all crews have their -10s.

For gunnery, some BFIST crews are boresighting their laser rangefinder (LRF) to the 25-mm cannon to improve their accuracy and times during Table VIII. After the gunnery density, the crews are not re-boresighting to the FIST mode, causing errors from 300 meters to 1.5 kilometers.

Additionally, crews are not verifying the boresighting during tactical assembly area (TAA) operations or after occupying their OPs. Incorrect TSCP initialization procedures have caused target location errors (TLEs) of one to two kilometers.

A small number of crews at the NTC initialized their precision lightweight global positioning system receiver (PLGR) with the North American 1927 Datum (NAD-27) and the TSCP with the World Geodetic System 1984 (WGS-84) datum. This caused the TSCP to believe it was in a different location than it actually was.

One crew that did not have a PLGR initialized its TSCP with the incorrect grid coordinates.

These problems are correctable through a BFIST leaders course or a FIST certification program. Also, units should add TM 9-2350-297-10-1 Operator’s Manual for Bradley Fire Support Vehicle M7, Hull and TM 9-2350-297-10-2 to their inspection checklist to ensure they are present.

*Close Air Support (CAS).* CAS is a major force multiplier if a BCT plans and executes it correctly. The FSO and FSCOORD should incorporate CAS and the supporting tactical air control party (TACP) into every training event, from company to brigade.

At the company level, the FIST must know how to conduct Type 2 CAS control. At the task force and brigade levels, the entire battle staff must understand how to plan and employ CAS and conduct airspace deconfliction. The DS battalion must be able to work stan-

<table>
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<tr>
<td>STP 21-24-SMCT</td>
<td>031-503-2001</td>
<td>Identify chemical agent using M256 series chemical agent detector kit.</td>
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<tr>
<td></td>
<td>031-503-3005</td>
<td>Submit an NBC 1 report.</td>
<td>15</td>
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<tr>
<td>STP 21-1-SMCT</td>
<td>081-831-1000</td>
<td>Evaluate a casualty.</td>
<td>10</td>
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</tr>
<tr>
<td></td>
<td>081-831-1025</td>
<td>Perform first aid for an open abdominal wound.</td>
<td>10</td>
<td></td>
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<tr>
<td>ARTEP 6-115-MTP</td>
<td>06-5-C040</td>
<td>Coordinate and control fire plan execution.</td>
<td>75</td>
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</tr>
<tr>
<td></td>
<td>06-5-A006</td>
<td>Establish an OP (FIST).</td>
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<tr>
<td>STP 6-13F14-SM-TG</td>
<td>061-283-1052</td>
<td>Construct a terrain sketch.</td>
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<tr>
<td></td>
<td>061-283-1001</td>
<td>Determine direction within the target area.</td>
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</tr>
<tr>
<td></td>
<td>061-283-1002</td>
<td>Locate a target by grid coordinates.</td>
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<tr>
<td></td>
<td>061-283-1004</td>
<td>Locate a target by shift from a known point.</td>
<td>50</td>
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<tr>
<td></td>
<td>061-283-1003</td>
<td>Locate a target by polar plot.</td>
<td>50</td>
<td></td>
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<tr>
<td>ARTEP 6-115-MTP</td>
<td>06-5-A008</td>
<td>Conduct fire missions (FIST).</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>STP 6-13F14-SM-TG</td>
<td>061-283-1011</td>
<td>Request and adjust area fire.</td>
<td>50</td>
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<td></td>
<td>061-283-1015</td>
<td>Conduct FFE mission.</td>
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<td></td>
<td>061-283-1014</td>
<td>Conduct immediate suppression mission.</td>
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<td>061-283-2021</td>
<td>Conduct immediate smoke mission.</td>
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<td>061-283-2023</td>
<td>Conduct quick smoke mission.</td>
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<td>061-283-2002</td>
<td>Request and adjust FPF.</td>
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<td>061-354-2014</td>
<td>Engage a moving target.</td>
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<td></td>
<td>061-283-1021</td>
<td>Request and adjust coordinated illumination.</td>
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**Legend:**

<table>
<thead>
<tr>
<th>FFE</th>
<th>FPF</th>
<th>NBC</th>
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<tbody>
<tr>
<td>Fire-for-Effect</td>
<td>Final-Protection-Fires</td>
<td>Nuclear, Biological and Chemical</td>
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</table>

Figure 2: FIST Certification Task Sheet for Observation Post (OP) Operations. A FIST member is certified when he scores at least 1001 of the 1430 points possible in Figures 1 and 2.
standard fire orders for suppression of enemy air defenses (SEAD) and marking rounds. The brigade battle drill must modify the times to take into account the average firing times for SEAD and marking rounds.

Units should train on the CAS battle drill and airspace deconfliction whenever possible.

**Firing Battery Operations.** The groundwork for any battery operation is to plan and prepare for future missions.

- **Troop-Leading Procedures.** During transition training, units need to focus troop-leading on time management and the battery order’s content. It is also useful to train new leaders on these tasks after a high personnel turnover rate.

Batteries must manage their time, maintaining a continuous timeline to ensure critical events are deconflicted and completed to standard. Battery executive officers (XOs) or first sergeants are ideal managers and enforcers of the timeline. Planning and prepping time is very perishable; without a solid timeline, batteries invite mission failure.

The battery commander must develop a brief a solid plan to provide the purpose, method and end-state for the battery. His orders need to address the standard five paragraphs (situation, mission, execution, service and support, and communications).

- **Pre-Combat Checks (PCCs)/Pre-Combat Inspections (PCIs).** PCCs should occur daily before assuming missions. PCCs can be at the direction of either the battalion or battery. If directed by battalion, the tactical operations center (TOC) must have a means of tracking the progress and completion of PCCs/PCIs. In the absence of battalion-directed PCCs, the battery leadership must develop PCCs relative to the type/construct of the upcoming mission.

PCCs must be outlined in the battalion or battery TACSOP to ensure they are completed to standard and tied to an essential FA task (EFAT). Normally the PCC is the first-line supervisor’s task.

PCIs conducted at the sergeant first class (SFC) level and above ensure all PCCs are conducted to standard and identify shortcomings before the unit crosses the LD.

**Rehearsals.** Like PCC/PCIs, rehearsals must occur before any mission. Rehearsals assure the battery key leaders that the battery understands the mission and required key events for success. The battery commander must prioritize the events to be rehearsed because time is limited and the battery needs to focus on rehearsing its assigned EFATs.

- **Ammunition Management.** This is everybody’s job in a firing battery. Leaders throughout the battery must be aware of what ammunition is on hand and what has been expended. This allows the battery to respond quickly to fire mission triggers and decreases confusion during ammunition resupply.

Section chiefs and ammunition team chiefs track the ammo on hand through DA Form 4513 Record of Missions Fired to ensure the AFCS ammunition inventory is updated. This allows the FDC to pull the information from the AFCS, as needed, to report the ammunition status digitally to the battalion FDC and BOC. The BOC then can track ammunition expenditures and keep the battery leadership, battalion TOC and administration and logistics operations center (ALOC) informed about the status of the ammunition.

Platoon sergeants can monitor the guns and FAASVs to ensure the guns can respond immediately to ammunition triggers. The battery commander can track the overall status to determine when he needs additional ammunition from battalion.

Managing ammunition carefully will result in a battery that won’t fail to execute its EFATs due to a lack of the proper ammunition.

- **FDC and BOC Tasks.** The unit should identify and prioritize the information the FDC/BOC must track and then develop status boards and charts to track and manage this information. (See Figure 3 for the minimum information the FDC or BOC must display and monitor.

The battalion also can identify the specific messages the FDC/BOC must process and use pre-printed message forms that automatically provide multiple copies of the information.

Charts are useful tools in handling some types of information. But before developing charts, units should consider the factors in Figure 4. Units should use the charts in garrison to discover their value and train personnel on their use.

Units also should conduct AARs on their tracking system, identifying what is useful and what they need to improve.

**Field Artillery C2.** For command and control, FA battalions must have an effective training strategy and focus on developing leaders, teaching staffs to plan and execute operations, and establishing and maintaining TOC security.

<table>
<thead>
<tr>
<th>Timelines</th>
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<tbody>
<tr>
<td>Mission</td>
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<tr>
<td>Commander’s Intent</td>
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<tr>
<td>Commander’s Critical Information Requirements (CCIRs)</td>
</tr>
<tr>
<td>PCC/PCI Point of Contact and Completion Time</td>
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<tr>
<td>Essential Effects Tasks (EFETs)/ Essential FA Tasks (EFATs)</td>
</tr>
<tr>
<td>Class III/V Status</td>
</tr>
<tr>
<td>Combat Power</td>
</tr>
<tr>
<td>Tracking Friendly Elements—Battery and Maneuver</td>
</tr>
<tr>
<td>Tracking Enemy Elements</td>
</tr>
<tr>
<td>Enemy Battle Damage Assessment (BDA)/Force Multipliers: Persistent Chemicals, Non-Persistent Chemicals, Family of Scatterable Mines (FASCAM), etc.</td>
</tr>
<tr>
<td>Execution Matrix</td>
</tr>
</tbody>
</table>

**Figure 3: Minimum Information the FDC Should Consider Displaying and Monitoring**
• Avoid information and chart overload.
• Use of charts in the planning process significantly reduces the briefing time.
• Must build a box to store and transport the charts to reduce wear and tear on the charts and maximize space.
• Maintain a miniature version of all charts in a notebook for use while moving.

Figure 4: After the battalion has determined the information to be tracked and displayed, it considers these factors in determining if the information should be displayed in a chart.

**Training Methodology.** Units should espouse the crawl-walk-run methodology in developing a training strategy. In other words, training should progress from individual to section to platoon and, if time and resources permit, to battery-level operations. Before moving from one level of training to the next, qualified experts must certify the personnel are trained to standard.

Personnel in low-density military occupational specialties (MOS) should be included in the training. The FA battalion can solicit other members of their BCT to provide technical expertise to train the low-density MOS, especially for certifications (i.e., S6 support for the communications sections). Training plans usually focus more on soldiers than on leaders and staffs, leaving a training gap.

**Leader Development.** The transitioning battalion must emphasize training leaders as it progresses through the crawl-walk-run training. A good place to start training leaders is by reviewing the unit TACSOP. Also, units should validate or refine their TACSOPs before they deploy.

At a minimum, the leaders and staff must understand the reporting requirements and duties and responsibilities outlined in the TACSOP. As a result, the command posts will be able to battle track better.

Professional development sessions are an excellent method to train leaders as well as staffs.

**Staff Planning and Execution.** Training the staff is particularly challenging. The staff experienced in SOSO certainly has executed the military decision-making process (MDMP) and synchronization meetings/drills in a time-constrained and, indeed, often shooting-war environment countless times. But the staff must modify the processes for the mid- to high-intensity scenarios and train new personnel after turnovers.

The battalion commander must train the staff because no one else will. Using the crawl-walk-run methodology, he can start with professional development sessions and progress through practical exercises.

Commanders can write the MDMP into the training schedule, lock the S3 shop in the conference room and support the training with frequent visits to participate in the mission analysis and issue guidance and intent.

The NTC Wolf Team Wargame and Rockdrill demonstrations are excellent aids to support the staff’s professional development. Units may get copies by emailing wolf07@irwin.army.mil. However, practical application is the most effective training—for example, having the staff present briefings to the battalion and battery commanders giving the staff feedback. If possible, the unit can work with the BCT to use an old operations orders (OPORD) to produce an FA support plan (FASP).

Last, the “run” phase can be a simulation exercise with the BCT or an actual field exercise in support of the BCT.

Once the staff is proficient at planning, the training can focus on staff execution. More often than not, staffs take a break after planning and preparation is complete (with the exception of receiving reports during the battle)—in combat they need to keep developing and analyzing the information.

The training can concentrate on the six TOC functions: receive information, distribute information, analyze information, submit recommendations, integrate resources and synchronize resources. These TOC functions can be summed up as information management and staff integration.

A good start to managing information is to develop a battle update briefing (BUB). Focus the BUB on answering the commander’s critical information requirements (CCIRs), anticipating the next event and providing assistance to fellow staffs. The staff can apply the results of the BUB to the TOC functions and put the necessary information out on the command net.

But the training should not focus on information gathering and the analysis process to develop products for the twice-a-day or during-the-battle BUB. The staff should focus on developing a plan for the running estimate—continually gathering and processing information to be ready to update the S3/commander at any time to facilitate their decisions based on what’s happening—not what happened six hours ago.

**TOC Security.** Force protection will be totally different in a high-intensity conflict environment than in SOSO. The SOSO environment tends to offer mutual support in a static site. However, high-intensity conflict is just the opposite.

Units must be prepared to provide their own force protection. They must be proficient in perimeter defense, casualty evacuation and responding as a quick-reaction force. As part of the training, units can incorporate realistic threats.
Field Artillery CSS. Rehearsals, again, are critical; maintenance in SOSO is very different; ammunition resupply in volume is required for mid- to high-intensity conflict; and anticipating CSS needs is different as well as medical skills.

CSS Rehearsals. The transitioning battalion must go back to the standards it once held of conducting a CSS rehearsal and BUB to synchronize the logistics plan with operations. A good CSS rehearsal must include all key players: executive officer (XO), S4, headquarters and service battery (HSB) commander, first sergeants (1SGs), command sergeant major (CSM), physicians assistant (PA), battalion ammunition officer (BAO), battalion maintenance officer (BMO), etc.

The S4 should run the rehearsal with the XO and CSM ensuring it is executed to standard and the plan is synchronized. Ideally, the rehearsal will be on a terrain model that trainees can walk on but minimally on a map or over the radio. Regardless, everyone needs to engage in the rehearsal.

The S4 should use the operations execution matrix as the guide for the sequence of events and the logistics annex/service support paragraph to fill in the details. Attendees should address their specific actions for each event. For example, if A Battery is to fire the smoke EFAT and can anticipate receiving indirect fire, the A Battery 1SG should discuss his battery’s logistics actions. Firing the smoke EFAT may be an ammunition trigger that sets off a sequence of events. A Battery should report to the ALOC it met the trigger as the ALOC is battle tracking and anticipating the call. This trigger causes the ammo trucks to execute double-loop resupply and for the battalion supply operations center (BSOC) to submit a DA Form 581 Request for Issue and Turn In of Ammunition. The 1SG also should discuss his actions as a result of the indirect fire, such as his casualty evacuation (CASEVAC) plan, equipment recovery plan, personnel replacement process, equipment replacement process, etc. In addition to A Battery’s actions, there will be other significant actions at the battalion level—requesting personnel and equipment, tracking casualties, managing ammo and implementing the medical mutual support plan.

Regardless of whether or not the rehearsal is on a terrain model or over the radio, the CSS rehearsal must be interactive and integrated, add friction and force contingency plans. The battalion XO and CSM must enforce this.

- Maintenance. During SOSO, units continue to reach a 100 percent turn-in rate regarding the accountability and completeness on DA Form 5988E Equipment Maintenance and Inspection Worksheet. Units can refine their turn-in systems because they are in a static position operating from a forward operating base (FOB). Units are concentrated in a single location with battlefield distractions minimal, which allows ample time for day-to-day system improvements. The flow of Class IX and services become fluid and operators are easier to obtain and more readily available for turning wrenches.

In contrast, high-intensity operations do not facilitate predictability or a clear battle rhythm. The 5988E turn-in procedures become difficult, and units don’t achieve 100 percent accountability. Turn-in is dependent on logistics packages and can be more difficult due to distance, terrain and battlefield distractions.

As a result, the unit’s preventive maintenance checks and services (PMCS) rhythm fluctuates. Often, the battalion and maintenance shop work with each other for the first time, causing the flow of parts to become irregular. Because of the unit dispersion and extended distances, there’s less time for direct coordination.

During combat, Class IX parts are annotated by the battery mechanics and the annotations have more error because of inexperienced personnel and the effects of battlefield distractions. The 5988Es often reflect wrong national stock numbers (NSNs) for ordering parts, and the equipment deadline report, known as the “026 printout,” is confusing.

Regardless, units should not transfer 026 data to a spreadsheet for supposed ease of readability; the 026 is the Army standard, contains all the information needed regarding the equipment and parts’ status and, with practice, is easy to read.

To compensate for these problems, unit prescribed load list (PLL) teams will draw directly from their PLL stock.

C/4-1, 1st Armored Division, fires from Baghdad at a range near Abu Ghraib 9.5 kilometers away. The 1st Armored Division’s artillery has a limited number of the Paladin howitzers in Iraq for FA sections’ certification.
that quickly depletes. Services become next to impossible and the focus usually shifts from conventional services to battle prep and replacing catastrophic losses. Patterns of “fixing” versus “preventing” become prominent.

**Ammunition Management Resupply.** Many units still embrace the “push” method whereby all flat racks are delivered to the batteries at the beginning of a battle period, irrespective of the battle or FA task. This requires the battery leadership to inventory each flat rack’s contents and then do the staff’s work of matching projectile/propellants/fuze mixes to each EFAT and computing turret and FAASV loads.

Batteries must be executors at this point, not numbers crunchers. Relocating the battery leadership to the battle calculus that the staff should have done is time-consuming, invites error in view of competing requirements and reduces the time available for the battery’s PCC/PCIs and rehearsals.

Units should use the double-loop resupply method. As much as possible, drivers should run the same route: FA trains (FAT) to combat artillery trains (CAT) or CAT to batteries. Triggers for resupply of small arms ammo must be planned for and set. Although units use the double loop as much as possible, they also must employ rearm, refuel and supply points (R’Sps), based on the mission, enemy, terrain, troops-time available and civilians on the battlefield (METT-TC). The R’Sps in the SOP is a great way to resupply the battalion when conducting long movements.

The unit needs to know from whom they request certain types of Class V. The unit requests artillery ammo from the Div Arty and small arms ammo from the brigade support battalion (BSB)/brigade support area (BSA). The FA battalion can create a folder in the BSOC for requesting ammo from Div Arty and then process the request using normal resupply channels.

Units often don’t establish triggers for small arms ammo resupply, but in high-intensity conflict, batteries easily can run out of small arms ammo. The unit should identify and plan for small arms resupply triggers as part of the normal MDMP.

**Anticipating CSS Needs.** Units must track the battle to anticipate what they’ll need next and have good visibility of triggers calling for resupply. One way to do that is to create a visual tracking board using icons of some sort to track where CSS elements are on the battlefield. This does not replace the standard tracking charts, but it does provide a quick visual reference.

The chart provides the ability to record combat-configured loads (CCLs) for flat racks, fueler capacity and battery combat power. It also allows the unit to track the movement of combat vehicles from the battery to the unit maintenance collection point (UMCP) and to the BAS when they are evacuated.

Radio/telephone operators (RTOs) should listen to the battalion command net, so they can help anticipate the battalion’s resupply needs. It is better to have the FAT or CAT ready to execute and have to hold them for a while than have them scrambling to push a resupply package out.

Units should consider using a forward logistic element (FLE). Although not a true doctrinal formation, the FLE is a time-proven, effective organization. It must have a task and purpose. The type of resupply may change with every battle.

If maneuver is using an FLE, units can piggyback on them and create a slightly larger FLE as the maneuver FLE will be near the rear of the movement formation. This may create a bigger signature, but it also provides more force protection than having a single fueler and two PLSSs on the battlefield.

**Medical.** Battalion aid station (BAS) operations in SOSO are marked by support for QRFS, checkpoints, medical civilian action plans (MEDCAPs), tactical operations, such as raids, and other seemingly compartmentalized events.

In SOSO, CASEVAC is likely to bypass the BAS and go directly to Level II care. The PA and senior medic must maintain situational awareness to track personnel from the point of injury to treatment.

High-intensity conflict is marked more by evacuations to the BAS or ambulance exchange point (AXP) and mutual medical support of batteries within the battalion. The location of the BAS and BAS is critical in providing treatment forward but not so far forward that Level II care is out of reach.

Returning to the band of excellence in our conventional delivery of fires tasks will present significant challenges to every FA battalion transitioning after a SOSO mission. But the battalion must ensure that every Soldier and leader has a strong foundation in essential tasks for providing safe, accurate, well integrated and timely fires for maneuver.

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FA Branch: Manning a Force in Transition

By Lieutenant Colonels Dennis J. Jarosz and Raymond L. Bingham
Our nation is at war, and our Army is undergoing a fast-paced comprehensive transformation toward more agile, versatile and modular fighting formations. Manning this new force structure during this turbulent period requires branch assignment officers and professional development NCOs to revamp their procedures.

The Chief of Staff of the Army (CSA) published his “Campaign Plan,” outlining a vision for transforming the force. The CSA’s end state describes a capable joint expeditionary force where homesteading is encouraged, units are focused on depth of experience and Soldiers/families have more predictability, based on force stabilization (longer tours of duty).

This article provides an overview of current procedures, guidelines and considerations for FA Officer and Enlisted Branches at the Human Resources Command (HRC), Alexandria, Virginia, to man the force.

**Force Stabilization.** The Army has developed a new manning strategy to meet the needs of the force (increased deployment operational tempo and support for the Global War on Terrorism) and decrease personnel turbulence. Force stabilization will reduce permanent change-of-station (PCS) moves for individual Soldiers to a level much lower than today. It will benefit families by stabilizing them longer in one place and allow Soldiers to predict future training events and deployments.

Force stabilization has two components: stabilization and unit-focused stability. (See the diagram in Figure 1.) “Stabilization,” as shown in the figure, is a tool for personnel managers to slow down the force and transition to the objective “unit-focused stability.”

**Stabilization.** The Army will use this tool to manage Soldiers and officers, assign them to particular continental US (CONUS) units or installations and stabilize them for as long as feasible. It is conceivable that a Soldier/officer could serve his first six to seven years on the same installation or in the same unit. An enlisted Soldier could remain in the unit through the appropriate leader development level as a staff sergeant and an officer through the appropriate leader development level as a captain, each attending his professional development schools in temporary duty (TDY) status and returning.

The goal of stabilization is only to PCS a Soldier/officer for designated reasons: the needs of the Army, the professional development of the Soldier/officer or Soldier’s/officer’s preference. Moving individual Soldiers or officers into or out of formations frequently violates the basic premise of stabilization.

**Unit-Focused Stability.** This tool will synchronize Soldiers/officers tours within the unit’s 36-month operational lifecycle, reducing personnel turbulence.

The unit of action (UA), a brigade-level formation, will follow the lifecycle model in Figure 2. Each UA will have an organic cannon “battalion” similar to today’s direct support (DS) battalion.

Unit-focused stability will consider a unit’s echelon, type, military occupational specialty (MOS) density, mission-essential task list (METL), geographical location and mission. Unit-focused stability has two components: lifecycle management and cyclic management.

- **Lifecycle management** is a 36-month cycle to minimize attrition in deployed units due to Soldiers’ PCSing or their expiration of time in service (ETS) by planning personnel moves at the beginning of each cycle at the “Reset Phase” (see Figure 2 on Page 38). The goal is to achieve a 25 to 33 percent personnel turnover for three-year tours during Reset.

Lifecycle management has three phases: Reset (2 months), Train (four months) and Ready (30 months). During the Ready Phase, the unit will be available for deployment and continue training to maintain its C-1 Training Level.

- **Cyclic management** will be used to man combat support (CS), combat service support (CSS), and command and control units, focusing on headquarters elements and low-density, high-impact organizations at the division level and above, as depicted in Figure 3 on Page 38. Figure 3 shows the 12-month, two-phase cycle (Sustain-Ready) in a block of 36 months.

With these new manning tools, officer and enlisted assignment procedures and polices have changed.

**Officer Manning.** Officer professional management ain’t what it used to be—yet the HRC remains committed to placing the right officer in the right job at the right time. The impact of today’s challenges has resulted in a complete review of the culture and the parameters used to man the force. The Army’s focus and guidance provided to assignment officers...
is aggressive and noteworthy. Figure 4 highlights the transformation of the officer assignment process. The majority of the changes are not radical; however, they are significant in scope.

As shown in Figure 4, the needs of the Army continue to be the primary assignment consideration. Although officer preference is not listed in the considerations “Now” in Figure 4, generally is a consideration only after the other considerations listed.

The FA Branch receives taskings (requirements) from the Human Resources Command S3 Shop (Officer Distribution Division) in the form of requirements (duty positions). The positions come in three types: 01A Branch Immaterial (officers of any branch can be assigned to these positions), 02A Combat Arms Immaterial (any combat arms officer can be assigned to these positions: Armor, Infantry, Field Artillery, Air Defense, Aviation, Engineer and Special Operations), and 13Z Field Artillery Officer positions (FA only).

The criteria for assignment selection is as follows.
- Army requirements are the priority consideration, based on officer strength projections by installation or location.
- The basic year group of the officer is considered—no officer will be put at disadvantage to further another’s career.
- The officer’s professional development (branch qualification) and assignment history (skills and experience) help determine assignments.
- The officer’s demonstrated abilities (officer efficiency reports, or OERs) are a consideration.
- The officer’s preference is considered (last); FA branch should have each FA officer’s top ten choices of jobs and (or) locations on file.

After receiving a request for orders (RFO) or verbal or other written notification of orders, an officer has 30 days to accept or decline the PCS instructions. In accordance with AR 350-100 Officer Active Duty Service Obligations, Chapter 2 (c), “Failure to submit a request to decline the orders within 30 days implies consent to the assignment, and the officer must comply with the assignment instructions.”

Nominative Assignments. Eighty percent of the assignments for branch-qualified captains, majors and lieutenant colonels are nominative. Nominative assignments require the gaining command to accept the officer’s file before he is assigned. Some nominative positions are competitive; assignment officers must submit more than one file against each position. All nominative positions are staffed outside the FA Branch to validate that the officers selected are best-qualified, based on their performance, skills and experience.

Nominative assignments can include (but are not limited to) the Army Staff (ARSTAF), Active/Reserve Components, ROTC, joint positions, the Combat Training Centers (CTCs), corps and unified combatant command staffs, the US Military Academy (USMA) at West Point, advisory positions and positions at any of the military academic institutions, e.g., the Field Artillery School.

Branch Detailed. By regulation, officers who are branch-detailed are not eligible for re-branching until after they serve at least 24 months in their detailed branch (AR 614-100 Officer Assignment Policies, Details and Transfers). Military Intelligence (MI) and Adjutant General (AG) officers must serve a minimum of 36 months in their detailed branches. Officers will not be re-branching until they have completed their minimum tour in their detailed branch.

Branch Transfer. The FA Branch approves requests for branch transfer on a case-by-case basis. As a general rule, FA Branch will not support a transfer to a branch that is over 100 percent of its accession target for the specific year group. Also, the gaining branch must accept the officer as a transfer.

Regular Army officers can be considered for a branch transfer after they have completed three years (36 months) of active federal commissioned service (AFCS); US Army Reserves (USAR) officers must accept voluntary indefinite status (AR 135-215 Officer Periods of Service on Active Duty).

Functional Area Designation. An officer receives one of 16 functional areas between his fifth and sixth years of service. The needs of the Army, academic background, training and experience, manner of performance and individual preference are all considered during the designation process.

Functional area assignments usually begin when an officer completes captain-level basic branch qualification; however, an officer may not be assigned to a position coded in his functional area.

The officer serves in the functional area position for two to three years. Most officers then will return to their basic branches; others can compete to remain in their functional areas for future assignments.
Officers retain their initial functional area designations for a minimum of two years before becoming eligible for redesignations into another functional area. DA PAM 600-3 Commissioned Officer Development and Career Management is the comprehensive source of information regarding functional areas and professional development across career fields.

Career Field Designation. An officer may or may not have served in or attended advanced civil schooling related to his functional area before his career field is designated. This occurs around the 10th or 11th year of service.

An officer’s personal preference is a heavily weighted factor in designating his career field. However, the Career Field Designation Board (CFDB), a Headquarters Department of the Army centralized selection board, factors in the officer’s experience in his functional area and related advanced civil schooling. The board designates the officer’s career field immediately after he is selected to major.

In Functional Area Army Acquisition Corps (FA 51) of the Operational Support Career Field, captains may apply for selection in their eighth year of service.

The CFDB designates an officer into one of four career fields: Operations, Information Operations, Institutional Support and Operational Support. The results of the CFDB may require a change in an officer’s previously designated functional area.

Captain’s Career Course (CCC). Officers normally will attend CCC after serving 36 months in the field. Officers in lifecycle manned or cyclic management units will attend CCC TDY and return to their previous duty stations. Commanders of lifecycle manned units will manage the timing of the officer’s attendance at CCC to ensure it is in sync with the operational lifecycle of the unit.

AR 350-100 states that an officer will incur a one-year obligation for active duty service after completing CCC. The one-year obligation begins when he signs into his next unit.

Combined Arms and Services Staff School (CAS³) Termination. The Acting Secretary of the Army terminated CAS³ at Fort Leavenworth, Kansas, effective with the class that graduated on 19 May. This is the five-week course that normally follows CCC. The CCC branch proponent schools will assume responsibility for teaching the CAS³ staff officer skills as part of their curricula.

The captain’s education system is under review and will continue to develop as part of the Army’s transformation efforts.

Former Battery Commander’s Decision: Job or Location. Deciding which of these two factors is most important is one of the most critical decisions former battery commanders must make. Eighty percent of our branch-qualified captains will serve in recruiting or AC/RC assignments immediately after commanding a battery. The remaining 20 percent will serve in varying nominative assignments, ranging from positions at USMA and ROTC to observer/controllers (O/Cs) at one of the CTCs and interns on the Joint Staff.

Battery commanders nearing the end of their commands should talk to their assignment officers for specific assignment options.

Branch Qualification. DA Pam 600-3 outlines the requirements for branch qualification of captains, majors and lieutenant colonels.

The most misunderstood requirements are those to branch qualify as major. FA majors must serve in branch-qualifying/developmental positions for 24 months. An officer must serve 12 months in a branch-qualifying job—which are battalion/brigade S3 or executive officer (XO) or battalion/division artillery (Div Arty) S3 or XO—and an additional 12 months in a developmental position—which are corps fire support officer (FSO), assistant fire support (or effects) coordinator (AFSCOORD/AECOORD), deputy fire support coordinator (DFSCOORD/DECOORD), brigade FSO or brigade/Div Arty assistant S3.

Intermediate-Level Education (ILE). ILE is a 50-week military education level 4 (MEL-4) course replacing the Command and General Staff Officer’s Course (CGSOC), Fort Leavenworth, after Year Group 93’s (YG 93’s) board-
selection for CGSOC ends. It will be fully implemented for the class starting in August 2005.

ILE will provide all AC commissioned (ACC) majors a quality, tailored, resident education by year groups. RC and special branch officers will continue to be board-selected for resident ILE. (Special branches are Chaplains Corps, Medical and Dental Corps, etc.) ILE consists of a 12-week common core phase and a 38-week career field phase.

The final CGSOC selection board for ACC officers is projected for the Fourth Quarter of FY04. This board will select 20 percent of YG 93 (last look). YG 93 officers not attending resident CGSOC must complete the non-resident course to be branch-qualified and eligible for promotion to lieutenant colonel.

Starting with YG 94, the HRC will select all ACC majors to attend ILE. The timing of YG 94 officers’ attendance at ILE will be managed by their branches, based on the officers’ assignments and career development cycle. However, all YG 94 officers must complete the course by academic year 2007-2008.

Starting with YG 94, the ILE common core is mandatory for all ACC officers. Officers who attend other-than-Army intermediate staff colleges, such as international or sister service schools, must complete the ILE common core in resident instruction by the deadline prescribed for their individual year groups to be ILE credentialed.

Joint Qualification. There is a common misconception that an officer needs to be joint-qualified to be competitive for battalion command—not true. However, officers must be joint-qualified to be considered for promotion to general officer.

Any commissioned officer who completes a full tour (36 months) in a joint duty assignment list (JDAL) billet is eligible for the Additional Skill Identifier (ASI) 3A Joint Duty Assignment Qualified. The JDAL consists of 3,171 Army joint positions, of which 234 are designated critical billets, as approved by the Under Secretary of Defense for Personnel and Readiness. The Army assigns approximately 900 officers to joint billets each year. The ASI 3A qualifies otherwise competitive colonels to be considered for promotion to general officer.

However, serving in a joint assignment does not qualify an officer to be a joint specialty officer (JSO). To be considered for JSO selection, officers must complete Joint Professional Military Education (JPME) Phases I and II followed by a full tour in a JDAL billet.

Phase I of JPME is taught at each service’s command and staff college (CSC) and senior service college (SSC). For the Army, ILE is JPME Phase I.

Phase II is taught at the Joint Forces Staff College, Norfolk, Virginia. Because of the limited number of joint billets available for Army assignments, the Army cannot send everyone who is eligible to JPME Phase II. Priority of attendance goes to officers going to overseas joint assignments and then to those officers in branches and functional areas that have higher requirements to fill joint critical billets.

Enlisted Manning. It ain’t business as usual. As we write, the Army is reviewing every Army personnel policy to ensure it is applicable to our country at war—and the core of the Army’s might is our enlisted Soldiers.

The FA has 21,995 NCOs and Soldiers. With some overlap, our Soldiers fall into three categories: previously deployed, deployed and deploying. Eighty-eight percent of our Soldiers are in modified table of organization and equipment (MTOE) units leaving only 12 percent in table of distribution and allowance (TDA) units. Given those facts, there is little question that the Army has received approval to temporarily increase its AC strength by 30,000 Soldiers in the next four years. The FA will expand by 4,058 Soldiers. This increase will be primarily in the maneuver UAs in the following MOS: 13B Cannoneer, 13D FA Tactical Data Systems Specialist, 13F Fire Support Specialist, 13R Firefinder Radar Operator and 13W Meteorological Crewmember.

On the one hand, it will be a challenge for the FA Training Center (FATC) at Fort Sill, Oklahoma, to receive and train these additional Soldiers. On the other, the veteran status of our NCO corps allows us to train these new Soldiers with combat veteran instructors. This summer the FATC and FA School at Fort Sill will have an influx of combat veteran NCOs from all over the Army to train our future force.

In terms of Manning, the Army is making some significant changes to support our wartime footing.

Enlistment. To accommodate the unit-focused stability (life cycle management) strategy, the Army is implementing new initiatives in enlistment, such as the variable enlistment length (VEL). Under VEL, some Soldiers being accessed are having their enlistment aligned with the lifecycle of their units.

The 2d Armored Calvary Regiment (ACR) at Fort Polk, Louisiana, will be the first to receive Soldiers enlisted under VEL. Under this program, a Soldier’s enlistment must incorporate basic training (BT) and advanced individual training (AIT) and the entire lifecycle (36 months) of the 2d ACR. This facilitates the section/squad/team’s being together from the initiation of training to the completion of the unit’s lifecycle.

At the same time, the Army will continue to use enlistment bonuses to attract Soldiers in critical skills and help shape and stabilize UAs and brigade combat teams throughout their lifecycles.

Retention. Retaining good Soldiers in the right skill sets is fundamental to maintaining our warfighting force. These young Soldiers represent the future of our branch and our Army.
In the last two years, the FA has done well in retaining America’s best. But to meet the demands of our authorization increases, the Army has initiated several incentive programs. These include increases in enlistment bonuses (EBs), selective reenlistment bonuses (SRB) and targeted selective reenlistment bonuses (TSRB). FA Enlisted Branch is using TSRBs for MOS 13D, 13F and 13R in the 3d Infantry Division (Mechanized), Fort Stewart, Georgia, as it enters its unit lifecycle as the 1st UA to ensure we have the right personnel to man its formations.

The FA also is offering some retention bonuses tied to specific geographical areas, such as Korea and in Iraq for Operation Iraqi Freedom (OIF) and Afghanistan for Operation Enduring Freedom (OEF).

Assignments. The Army’s organizational culture is changing: homesteading no longer is considered an inhibitor to career progression. To improve unit readiness, stability, predictability and cohesion, the Army is encouraging Soldiers to stay at the same installation as long as feasible. However, some assignments will continue to require Soldiers to PCS sooner for professional development reasons and to meet the needs of the Army.

In the past, overseas requirements were about 75 percent of the PCSes Army-wide per year. In the immediate future, overseas requirements will force the Army to continue to move Soldiers until those units are relocated CONUS.

The FA currently has 5,337 Soldier authorizations outside of CONUS (OCONUS) (or 24 percent of FA authorizations); 1,440 are short tours in Korea. Although a Soldier can expect to stay at his CONUS assignment longer, he also should expect to serve overseas with the option to return to his CONUS base.

Another initiative, the personnel lifecycle unit selection system (PLUS?), allows Soldiers to volunteer for assignment in a UA at a particular post as the Army moves to modularity. For a list of units available for selection, Soldiers can go to the Enlisted Personnel website (https://www.perscomonline.army.mil/enlisted/enlisted.htm) and click on PLUS.

Soldiers and NCOs also should update their preferences for assignment locations through Army Knowledge Online (AKO), using the assignment satisfaction key (ASK) program. If Soldiers don’t take the time to let the FA Enlisted Branch know their preferences, then the branch only can make assignments based on the needs of the Army and Soldiers’ qualifications.

NCOES. The Army’s NCOES will remain the foundation of NCO development, but it will change. In the past two years, through no fault of their own, thousands of NCOs Army-wide have been unable to attend NCOES training. This has been due to the large number of units involved in and the duration of recent deployments.

In the Field Artillery, 667 NCOs remain eligible for the advanced NCO course (ANCOC) and 1,751 are eligible for the basic NCO course (BNOCOC). The Army’s inability to send these NCOs to their NCOES schools resulted in eliminating graduation from NCOES schools as a condition for promotion. Centralized boards are being instructed that many NCOs have not attended their required school through no fault of their own and should be considered at the same rate for promotion as their peers who have attended the required NCOES schools. The Army considers this temporary and may re-institute the graduation requirement when the backlog is eliminated.

Under unit-focused stability manning, there has been a significant shift in the NCOES model—from select-train-promote to the more effective train-select-promote. To maintain trained, cohesive teams and reduce turbulence, Soldiers’ attendance at NCOES will be deferred until after their units redeploy. Priority for NCOES attendance will be Soldiers about to deploy followed by Soldiers who just redeployed.

The Army will continually review NCOES to determine course lengths and establish the right balance between resident schooling and distance learning training.

Professional Development. Force stabilization allows Soldiers to become experts in their specialties by leaving them in units longer. Extending the Soldier’s time on station provides for a depth of knowledge as opposed to a breadth of knowledge. Unit-focused stability allows Soldiers to go through a predictable training cycle, culminating with an operational deployment. The NCO then can leave and complete other professional development requirements, such as serving as an instructor, an O/C at one of the CTCs, drill sergeant or recruiter, and return to the operational Army to fulfill the sergeant first class professional development requirements.

Promotion. Enlisted promotions will continue to be based on Army-wide requirements to ensure equity and fairness within an MOS. Obviously, Force stabilization concepts will cause professional development career paths (professional blueprints) to change. Force stabilization will not lessen a Soldier’s chances for promotion as he only will be stabilized in MTOE units.

Promotions will continue to be the reward for demonstrated potential at the next grade. So Soldiers with the desired skill sets, experience and performance will be the ones selected for promotion.

Troop-leading assignments will continue to be the single most important discriminator for promotion. Soldiers should seek out the hard assignments and do them well.

Both the FA Officer and Enlisted Branches strive to meet the needs of the Army while supporting FA commanders and Soldiers alike. Without a doubt, the Global War on Terrorism with the requirement to deploy forces in harm’s way and the transformation of the Army will continue to cause personnel turbulence Army-wide. Regardless, the FA Branches will remain focused on People First and Mission Always!

Lieutenant Colonel (Promotable) Dennis J. Jarosz has been the Chief of the Field Artillery Enlisted Branch, Human Resources Command (HRC), Alexandria, Virginia, since July 2002. He will attend the Army War College at Carlisle Barracks, Pennsylvania, in August. In his previous assignment, he commanded the 2d Battalion, 82d Field Artillery (2-8 FA), Automatic, part of 1st Brigade, 25th Infantry Division (Light), Fort Lewis, Washington. In a previous tour with 2-8 FA, he was the S3 and Battalion Executive Officer.

Lieutenant Colonel Raymond L. Bingham has been the Chief of the FA Officer’s Branch, HRC, since July 2003. In his previous assignment, he commanded the 1st Battalion, 76th Field Artillery (Mechanized), 4th Infantry Division (Mechanized). During Operations Desert Shield and Storm, he commanded A Battery, 3-41 FA in the 24th Infantry Division (Mechanized). He has had two tours with the Joint Chiefs of Staff at the Pentagon as an Intern in J5 and Senior Operations Officer in J3.
Within the Department of Defense (DoD), there’s a lot of discussion about joint operations and the need to achieve joint interdependence. This interdependence is a purposeful reliance on other service capabilities to maximize complementary and reinforcing effects for the joint force and minimize relative vulnerabilities to accomplish the joint force commander’s (JFC’s) mission. Simply put, combat operations require all services work together to achieve the desired effects.

Currently, joint fires training is available in three places: the Joint Firepower Course at the Air Ground Operations School (AGOS), Nellis Air Force Base, Nevada; the Joint Air Tasking Order Processes Course (JATOPC) and Joint Senior Aerospace Staff Officers’ Course (JSSC) at the Army Joint Support Team, Hurlburt Field, Florida; and the Joint Targeting Staff Course/Joint Targeting Application Course at Joint Forces Command (JFCOM), Carlisle, Pennsylvania. Army personnel going to battlefield coordination detachments (BCDs), G3/S3 or G3/S3 air shops, and fire and effects coordination cells (FECCs) or deep operations coordination cells (DOCCs), or who will serve as airspace managers, etc., can attend JATOPC.

The Army’s, War College at Carlisle, Pennsylvania, has developed a Combined Forces Land Component Command (CFLCC) Course, and the Combined Arms Command (CAC) at Fort Leavenworth, Kansas, is working on a Joint Fires Course. But fire supporters need a course to teach them how to integrate joint fires and effects.

So, what is the FA School doing to prepare fire supporters to accomplish these tasks? Fort Sill is working to become the Army’s Joint Fires and Effects Integration Center. It will provide training in the integration of all joint lethal and nonlethal effects, to include FA, close air support (CAS), naval gunfire, information operation (IO), electronic warfare (EW), etc. This will include not only joint training for battle commanders and staffs, but also in the capabilities of the various joint platforms and tactics, techniques and procedures (TTPs) to integrate them into air-ground operations.

Fire Supporters always have integrated and synchronized fires at the tactical level. Now Fort Sill will train them in the skills they need to integrate and synchronize effects in a joint environment.

This article outlines several joint projects that the Joint Fires and Effects Integration Center is working.

The Joint and Combined Integration Directorate (JACI). This new directorate in the FA School oversees and coordinates joint activities, working joint doctrine, TTP and training to integrate joint fires and effects. The organization (see the figure) consists of key individuals from all the services and branches to develop joint training, review joint doctrine and provide the instructor base for the joint training on Fort Sill. A new Strategic Communications Office is being established under JACI that will ensure vital information is shared throughout the joint community.

**Air Force Detachment at Fort Sill.** JACI is working with the Air Force to assign an Air Warfare Center (AWFC) Detachment at Fort Sill, beginning this summer, to coordinate for live CAS and provide CAS training.

**Live CAS at Fort Sill.** This past spring, Fort Sill reinstated live CAS as training for the FA Officer’s Basic Course (OBC) and FA Captain’s Career Course (CCC). Live CAS training now is routine for OBC and CCC and will expand into all aspects of institutional training.

Recently, the 212th FA Brigade conducted a major joint CAS (JCAS) exercise at Fort Sill in conjunction with the XVIII Airborne Corps where they employed cannons, rockets and CAS simultaneously, the latter including Navy, Marine and Air Force aircraft. The centrally located geography of Fort Sill and its ranges provide an excellent, convenient location for multi-service aircraft to conduct live CAS training.

**Falcon Joint Precision Engagement Range on Fort Sill.** JACI is working to integrate Army and Air Force training at the Air Force’s 13,000-acre Falcon Joint Precision Engagement Range on Fort Sill (part of Quanah Range). The Air Force developed the range for its aircraft to drop live ordnance. Integrated Army and Air Force training on the range would allow for a full-spectrum of target types and engagement options.

**IO and EW.** Working with the IO proponent at CAC, JACI is developing an additional skill identifier (ASI)-producing course for tactical-level IO. The purpose is to train individuals going to IO positions at brigade or below without having to re-designate their functional areas to IO Functional Area 30. The Fort Sill IO pilot course is projected to begin in January 2005.

Additionally, IO will be part of other courses at Fort Sill. EW is a core IO element. Its three components are electronic warfare sup-

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**Joint Fires and Effects Integration Center:**

**Fort Sill Initiatives for the Joint Force**

*By Colonel John L. Haithcock, Jr.*

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*Photo by SFC Matt Meadows, Fort Sill Cannonade*
Joint Fires and Effects Trainer System (JFETS). Fort Sill is in the process of developing and testing JFETS as the immersive simulation environment for joint training. JFETS will provide state-of-the-art, virtual joint fires and effects integration training in a specialized facility in I-See-O Hall and a new Fires and Effects Training and Simulation Center in FY 07-08.

This effort will be a multi-year, multi-phased project piloted by advanced technologies developed by the Institute of Creative Technologies at the University of Southern California in conjunction with the Directorate of Training and Doctrine (DOTD) at the FA School.

The trainer will provide scenarios for full-spectrum joint operations with changing environments and conditions. The environments will replicate the visual and aural conditions of employing joint systems and combinations of systems (to include lethal effects) against a variety of target arrays in different physical environments (terrain, weather, enemy capabilities, etc.).

The effects of employing the best joint system (or combination of systems) or the consequences of not employing the best systems will be part of the trainer’s realistic feedback. The latter includes potential responsiveness implications, noncombatant casualties, fratricide and unintended collateral damage. For example, the trainer will reward forward observers for using every means available to identify, locate and attack the enemy by employing the most appropriate sensors, delivery systems and munitions. The scenarios will have utility for current forces, including the Stryker brigades and new units of action (UAs), and future forces.

The trainer will be able to interface with simulations, such as fires simulation (FireSim) XXI, one semi-automated force (OneSAF), Janus, joint conflict and tactical simulation (JCATS), full-spectrum command and real world equipment—the lightweight laser designator rangefinder (LLDR), mini-eye-safe laser infrared observation system (MELIOS), advanced FA tactical data system (AFATDS), etc.—to facilitate training experimentation and combat developments.

JFETS’ Phase 1 demonstrated the two components of technologies at I-See-O Hall. The components were the call-for-fire trainer (CFFT), using the open and urban terrain modules, and staff training, using the fires and effects cell module (FECM). Phase 2 is the transition to a system to train individual and collective tasks.

Using the CFFT, forward observers will be able to operate in all types of terrain, including open and rolling, complex and urban. In open and rolling terrain, from positions of tactical advantage, a commander can employ accurate, destructive fires at standoff distances against high-payoff targets (HPTs) to eliminate enemy combat capabilities.

Employing fires and effects in urban terrain is the most challenging for the entire system of systems. JFETS will simulate the requirement to limit collateral damage and noncombatant casualties, placing demands on the observer to demonstrate the highest level of technical skills, expertise and judgment.

Adversaries will employ military capabilities in the presence of civilian populations or in close proximity to potentially sensitive sites. These tactics may be countered by delivering fires and effects more precisely against both point and area targets in close support of formations in urban terrain.

The FECM trains staffs at the tactical and operational echelons to help the commanders integrate battlefield sys-

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tems and capabilities. Staff components may or may not be collocated on the battlefield, but they always must be capable of collaboration on-demand to adapt to changing situations. The goal is to train commanders and staffs to be highly opportunistic with lightning exploitation of enemy failures.

The JFETS' FECM will train fires and effects integration tasks in a complex distributed environment. The FECM will exploit networked sensors, delivery systems and effects to provide the commander the broadest possible range of options and capabilities. This module will replicate the dynamic nature of applying fires and effects in the operational environment reflected in Operation Iraqi Freedom (OIF) or future warfare in the contemporary operational environment (COE).

Call-for-Fire Trainer. The CFFT will facilitate every Soldier's becoming an observer and maintaining proficiency in calls-for-fire (mortars, FA and naval gunfire). Currently, it is a collective training system that provides a simulated battlefield for training in the institution and units. It is a modular architecture that allows for interoperability with other simulation systems, tactical equipment and future combat training systems. The CFFT will replace the training set fire observation (TSFO) trainer and guard unit armory device, full-crew interactive simulation trainers (GUARDFISTs) II and IIA. It will operate in a stand-alone or integrated mode.

Eventually, the CFFT will train the more advanced and technical aspects of the universal observer (UO) to integrate the fires of CAS and Army attack aviation. It will be spiraled into the open and urban terrain modules of JFETS to train the integration of joint fires and effects in ground operations, ultimately, to train calling for and controlling JCAS.

The CFFT was approved by the Army Review Council (AROC) and has been forwarded to the Joint Review Council (JROC) for approval.

Joint Terminal Attack Controller (JTAC) Memorandum of Agreement (MOA). All services are working the JTAC MOA that standardizes the certification and qualification process for JTACs. The definition of a JTAC was established in Joint Publication 3-09.3 Joint TTP for CAS as a "qualified [certified] service member who, from a forward position, directs the action of combat aircraft engaged in CAS and other offensive air operations." A qualified and current JTAC will be recognized across DoD as authorized to perform terminal attack control of joint aircraft executing CAS.

For some operations in both OIF and Operation Enduring Freedom (OEF), there have been insufficient numbers of JTACS to execute JCAS in support of ground maneuver. The Army has a requirement for JTACs down to the maneuver company level. The shortfall of JTACs is expected to become more acute for transformed Army forces—based on future force and Army Special Forces operations.

Based on the JTAC standards in the MOA, Army personnel may be trained as qualified JTAC instructors, as one possible solution. These instructors would supplement Air Force instructors to greatly increase the numbers of qualified JTACs. Six 13F Fire Support Specialists from the 3d Infantry Division have just graduated from training at AGOS as the first phase of their qualification as JTACs.

Universal Observers. There have been many discussions about and several definitions of "universal observers." The Army G3 defines the UO as "a qualified service member who requests, adjusts and controls surface-to-surface fires to include field artillery, mortar and naval gunfire. A UO will be authorized to provide targeting information and terminal guidance in support of Types 2 and 3 CAS." Type 2 CAS, the most common type, is when visual control of the attacking aircraft at weapons release is not possible or required (in adverse weather, at night or when using standoff weapons). Type 3 CAS imposes a low risk of fratricide and allows for blanket clearance to employ air support on targets in a pre-determined area of the battlefield.

Future Army requirements have identified the need for a controller of full-spectrum joint effects at the company level—a combination of the UO and JTAC—who could be called a "joint effects controller" (JEC). The JEC would be a qualified service member who is trained, equipped and qualified to employ all joint air, sea and surface lethal and nonlethal effects, including CAS without a JTAC or forward air controller (airborne), or FAC(A), present.

The JCAS Action Plan has been the subject of an Office of the Secretary of Defense (OSD) test and evaluation process since 1998. Forces Command (FORSCOM) in coordination with the Training and the Doctrine Command (TRADOC) Futures Center will refine and publish the Army's required operational capability (ROC) for terminal attack controllers.

As the Army and Air Force seek feasible COAs to resource terminal attack controllers down to the company level, the UO concept expands the presence of skilled observers on the battlefield, broadens and enhances sensor-to-shooter links for the JTAC when employing Types 2 and 3 CAS, and provides commanders with Soldiers who understand the Air Force's theater air control system (TACS) and the Army's air-ground system (AGS). The UO would be part of an interim solution to meet ground commanders' requirements to access joint effects while both the Army and Air Force explore more comprehensive solutions. The JECs would be the desired end state, although there are advantages to retaining the current JTACs and forward observers to facilitate the simultaneous application of joint fires without overburdening the JECs.

These are just a few of the many initiatives Fort Sill has begun in its quest to become the Army's Joint Fires and Effects Integration Center. The JACI invites feedback; contact the director at redleg@sill.army.mil.

JACI and all of Fort Sill will continue to work joint issues as the Joint Fires and Effects Integration Center—vital doctrine, TTP, equipment and training for air-ground operations in the COE.

Colonel John L. Haithcock, Jr., until recently, was the Director of the new Joint and Combined Integration Directorate (JACI) in the Field Artillery School, Fort Sill, Oklahoma. He also was the Assistant Training and Doctrine Command (TRADOC) for FA Tactical Data Systems (TSM FATDS) at Fort Sill. He is now a student at the Army War College at Carlisle Barracks, Pennsylvania. He also served as the Plans Officer for the 3d Battlefield Coordination Detachment (BCD) in the Joint and Combined Forces, Korea. He commanded 3d Battalion, 30th Field Artillery (3-30 FA), also at Fort Sill, and A Battery, 6-41 FA in the 3d Infantry Division (Mechanized) in Germany. Among other assignments, he was the Deputy Fire Support Trainer and S3 Combat Trainer at the National Training Center (NTC), Fort Irwin, California; and Battalion Executive Officer and S3 plus Brigade Fire Support Officer for 1-9 FA, also in the 3d Division at Fort Stewart, Georgia.
Field Artillery Author’s Guide

Readership. A bimonthly magazine, Field Artillery is the professional journal for US Army and Marine Corps Field Artillerymen worldwide. Approximately 40 percent of our readership is company-grade, both officer and enlisted, with the remaining 60 percent more senior Army and Marine personnel, Department of Defense (DoD) civilians, retirees, members of other branches and services, allies, corporate executives and others.

Magazine Features. In addition to articles, we routinely print the Chief of Field Artillery’s column (Crossed Cannons on Your Collar); letters-to-the editor (Incoming); interviews with Army, joint and combined leaders; news items from the Field Artillery School (View from the Blockhouse); and book reviews (Redleg Review). We primarily review books focused on Field Artillery or fire support; the publisher must send the book, and we provide the reviewer.

Subjects. The majority of the articles accepted cover subjects at the tactical level of war with some at the operational and strategic levels as long as their contents relate to Field Artillery or fire support or are of special interest to our readers.

If an author is writing about the past, he should analyze the events and show how they apply to Field Artillerymen today—not just record history. If he’s identifying current problems, he must propose solutions. (An author may identify problems without proposing solutions only in a letter-to-the-editor.) In addressing the future, he should clearly explain his points and their implications.

Since its founding in 1911, one of Field Artillery’s objectives has been to serve as a forum for professional discussions among the FA community. Therefore, an author’s viewpoints, recommendations or procedures don’t have to agree with those of the Branch, Army or DoD. But his article’s contents must be logical and accurate, address disadvantages as well as advantages (as applicable), promote only safe techniques and procedures and include no classified information.

Articles must be clear and concise with the thesis statement (bottom line) up front and the body of the article systematically contributing to the thesis. When writing, authors must think like the Field Artilleryman in the field: “What is it?” “What will it do for me?” and “How do I implement it?” (or “When will I get it?”).

Submissions. Include—

- A clean, double-spaced, typed, unpublished manuscript of no more than 4,000 words with footnotes and bibliography, as appropriate. Except in the case of Army-wide “news” items, authors should not submit a manuscript to Field Artillery while it’s being considered elsewhere.

Email us the PC-formatted text or mail us a disk along with the hard copy of the manuscript. (We use MS Word.) Please do not layout your article with columns and graphics inserted or use the automatic footnote feature of some software programs; it causes us extra work to strip out the design before editing and laying it out.

- A comprehensive biography, highlighting your experience, education and training relevant to the article’s subject. Include your full name, rank (as applicable), current job, email and home addresses, and telephone and Fax numbers; please keep this information current as long as we’re considering your manuscript.

- Graphics with captions to illustrate and clarify the article. These can include photographs (preferably color), drawings, slides, maps, charts, unit crests, etc. We accept high-resolution digital photos—those are photos shot at the highest resolution (about 1 MB per photo) and largest frame size the digital camera will allow. Send the photos to us in jpg or tff.

The Field Artillery staff will edit all manuscripts and put them in the magazine’s style and format. Authors will receive a “check copy” of the edited version before publication.

- Call us at DSN 639-5121 or 6806 or commercial (580) 442-5121 or 6806. To Fax, call DSN or commercial 7773. Our email is famag@sill.army.mil.

Mail your submission to Field Artillery, P.O. Box 3331, Fort Sill, Oklahoma 73503-0311.

- Over-night your submission to Building 758, Room 7, McNair Road, Fort Sill, Oklahoma 73503-5800.

- View our homepage at http://sill-www.army.mil/famag. We have magazines online back to 1959.

2005 Field Artillery Contest Rules

The US Field Artillery Association is sponsoring its 20th annual History Writing Contest with the winners’ articles to be published in Field Artillery and the Association’s version of the magazine, FA Journal.

To compete, submit an original, unpublished manuscript on any historical perspective of Field Artillery or fire support by 1 February 2005. The Association will award $300 for the First Place article, $150 for Second Place and $50 for Third. Selected Honorable Mention articles also may appear in Field Artillery.

Civilians or military of all branches and services, including allies, are eligible to compete. You don’t have to be an Association member.

Your submission should include (1) a double-spaced typed manuscript of not more than 4,000 words with footnotes, (2) a bibliography, (3) your comprehensive biography and (4) graphics (black and white or color photographs, maps, charts, etc.) to support your article.

Your article must include an analysis of lessons learned or concepts that apply to today’s Field artillery—it should not just record history or document the details of an operation. Contestants can draw from any historical period they choose.

A panel of three historians will judge the manuscripts without the authors’ names. The panel will determine the winners based on the following criteria:

- Writing Clarity (40%)
- Historical Accuracy (25%)
- Usefulness to Today’s Field Artillerymen (25%)
- Originality (10%)

By 1 February 2005, send the manuscript to the US Field Artillery Association, ATTN: History Writing Contest, P.O. Box 33027, Fort Sill, Oklahoma 73503-0027 (FedEx to Building 758, McNair Road). For more information, call DSN 639-5121 or 6806 or commercial (580) 442-5121/6806 or email us at famag@sill.army.mil.

2005 Field Artillery Deadline

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* Due date for contest submissions; all other articles due 1 April.