

THE 21ST CENTURY SOLDIER

Adapting young leaders through learning, training concepts, the Profession of Arms Campaign



Firescontents A superior of the superior of t

4	Success through Soldiers, leaders By MG David D. Halverson
6	Adaptable, flexible, agile air defense professionals By COL Daniel Karbler
8	Distinguishing the unique profession of field artillerymen By COL Mike Cabrey
10	US Army Air Defense and Field Artillery Award Winners
10	Fires change of command ceremonies
11	An interview with COL Dan Pinnell, US Army Field Artillery 2nd BCT, 1st AD brigade combat team commander By Shirley Dismuke
16	Employment of the M982 in Afghanistan: US Army and Marine Corps differences by MG (RET) Toney Stricklin
20	Meeting the fire support challenge By COL Gene Meredith and COL Richard M. Cabrey
24	Things you must get right as a battalion commander By COL Steve Maranian
27	Fires Author's Guide
28	A chief warrant officer's advice about promotion boards By CW5 Manuel Vasquez

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David D. Halverson Major General, United States Army Commanding General, Fort Sill, Okla. **PURPOSE:** Founded in 2007, *Fires* serves as a forum for the professional discussions of all Fires professionals, both active and Reserve Component (RC); disseminates professional knowledge about progress, developments and best use in campaigns; cultivates a common understanding of the power, limitations and application of joint Fires, both lethal and nonlethal; fosters joint Fires interdependency among the armed services; and promotes the understanding of and interoperability between the branches, both active and RC, all of which contribute to the good of Army, joint and combined forces, and our nation. **REPRINTS:** *Fires* is pleased to grant permission to reprint; please credit *Fires*, the author(s) and photographers.

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36 42 44 46 52 58

Modern Musicians of Mars

The evolution of junior fire supporters By MAJ Elijah M. Ward (U.S. Army), CPT Fred A. Janoe (U.S. Army), Capt Thomas F. Hicks (Canadian Army), Capt Richard W. Heaser (U.S. Marine Corps)

Fear-based leadership:

Motivation is key By Gene Kamena

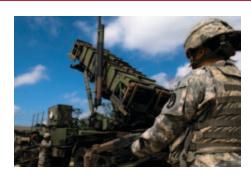
Terms of engagement

Army captains from Fort Sill, Okla., receive a different type of training in Norman By Damien Lodes

Winners of the 2011 Fires Photo Contest

Evolving Marine Artillery:

Utilizing the Triad of Fires in the 21st Century By Capt. B. A. Friedman



On the cover: PFC Danica Sasakura and PFC Dean Werner, Patriot Missile operators from Charlie Battery, 1st Battalion, 1st Air Defense Artillery Regiment, perform pre-launch checks on a Patriot Missile launcher as part of a field training exercise. (Photo by Airman 1st Class Maeson L. Elleman, U.S. Air Force)

Combat Training Center and training unit partnership:

Supporting and designing pre-deployment training events for a mixed field artillery battalion

By MAJ Corey Landry and MAJ Jon B. Fausnaugh

Electronic Warfare:

The newest military career field choice

Compiled by Shirley Dismuke from articles by: Marie Berberea (The Cannoneer), SGT Justin A Naylor (2nd BCT, 1st Cav Div), Adrienne Anderson (The Bayonet), and SGT Brandon Bednarek (4th BCT, 1st Armored Div)

Fires Center of Excellence social media portals

regiment and battlefield coordination detachment (BCD) headquarters; 13 per FA/Fires battalion/squadron; 3 per fire support element (FSE), Fires and effects cell (FEC), effects coordination cell (ECC) fire support cell (FSC), and separate battery or detachment; 2 per fire support team (FIST); and 1 per Master Gunner. Free copies to Army ADA units: 7 per air and missile defense command (AAMDC) and ADA brigade headquarters; 13 per ADA battalion; and 3 per air defense airspace management cell (ADAM) and separate battery or detachment. The FA and ADA Schools' departments, directorates and divisions each get 2 copies. Other Army branch and US armed services units/organizations and US government agencies that work with FA or ADA personnel, equipment, doctrine, tactics, training organization or leadership issues may request a free copy—including, but not limited to—ROTCs, recruiting commands, libraries, attaches, liaison officers, state adjutants general, public affairs offices, military academies, laboratories, arsenals, major commands, etc. Contact *Fires* at http://sill-www.army.mil/firesbulletin/.

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Commanding General's Forward

Success through Soldiers, leaders

By MG David D. Halverson

Commanding General of the Fires Center of Excellence

ith 2011 behind us, the Fires force enters the new year better prepared than ever before for the challenges of 2020 and beyond. Today's Army is significantly different from the Army of 2001. The Fires force has evolved and adapted to stringent demands of the current fight and realities of reduced resources. The past 10 years of war have drastically changed our doctrine, equipment, organization and leader development; however, in the midst of all this change one critical asset remains steadfast: the Fires Soldier.

The Soldier is the driving force behind the Army's transformation. This has been true for every major conflict in which our armed forces have been engaged. The innovation of our Soldiers and leaders in the field, coupled with years of warfighting experience, is what allows us to successfully wage the Global War on Terror, a conflict which consistently changes and challenges our organization. This ingenuity assisted the U.S. in defeating the Taliban and Al Qaeda in Afghanistan and has led to great success in Iraq. We learned early during these conflicts that lessons learned, and tactics, techniques and procedures created in combat must be codified so they are not lost, which could cost more than just resources but the loss of life unnecessarily. As we end our combat



mission in Iraq, we face yet another enduring challenge as we retain a focus in Afghanistan.

Without looking past the current fight, we must analyze and prepare for future threats. The challenge and operating environment is to retain the knowledge of the last 10 years of conflict, which has focused primarily on wide area security, while maintaining our ability to conduct combined arms maneuver in a joint environment.

Even the concept of the joint operation is evolving. 'Joint' no longer just means multi-service or multinational. Joint applies to a combined effort of all assets available to any commander. Part of our job as leaders is ensuring our Soldiers and junior officers have the knowledge and the confidence to apply all aspects of joint Fires. From multi-national and multi-service to multi-asset, the Fires Center of Excellence has made, and

will continue to make, great progress in training future leaders to fight and win in a joint environment.

If there is one thing we know for certain, we are moving toward a period of transition and uncertainty. As the Army and the Fires force face uncertain challenges ahead, we must remain focused on leader development. Training agile leaders will give us the edge to continue to be an adaptable Fires force that can confront and overcome future threats. We have incorporated the Joint Fires Observer course into the Basic Officer Leadership Course and the Warrant Officer Advanced Course. An article in this edition of the Fires Bulletin, co-authored by CPT Fred A. Janoe along with several other instructors, explains exactly how the Field Artillery School is integrating this critical training into established POIs. This type of creative thinking will keep our Fires officers and Soldiers in high demand for the next decade and beyond.

We have already seen a shift in the thought process of some of our most-senior leaders. The first U.S. Army Field Artillery brigade combat team commander, COL Daniel A. Pinnell, acknowledges the tactical expertise and professionalism the Fires force brings to the fight. The Fires Bulletin staff recently interviewed COL Pinnell, and in this edition he shares his insight and experience on shaping our junior officers' careers and how to keep them on a successful path. His role is even more important as his brigade tests new concepts and capabilities, modernizing our force.

Several articles in this issue are geared specifically toward preparing Soldiers for successful careers. CW5 Manuel Vasquez shares his insight on the warrant officer selection board, how board members make their selections, and how Soldiers can better prepare their records to appear before the board. Professor Gene C. Kamena, instructor of Leadership and Ethics at the Air War College in Montgomery, Ala., writes about avoiding the pitfalls of fear-based leadership, and COL Steve Maranian, commander of 19th Battlefield Coordination Detachment, Ramstein Air Base, Germany, shares his experience with, "10 things you must get right as a battalion commander."

As we move forward, preparing future leaders, the Army has realized the importance of two-way communication between senior leaders and the Soldiers we lead.

One initiative is the Army Chief of Staff's annual Future Study Plan, Unified Quest. Recently, Fort Sill hosted the Army Profession Junior Leader Forum, a part of Unified Quest, designed to examine issues critical to current and future force development. This annual study integrates issues and insights into concept and capability development programs through seminars, workshops, symposia, and war games and immediately impacts both Training and Doctrine Command (TRADOC) and



Soldiers participating in a training opportunity with the M67 Gun Laying and Positioning System (GLPS). The officers are participating in the Basic Officer Leadership Course on Fort Sill, Okla. (Photo by Rick Paape, Jr., U.S. Army)

the Army Capabilities Integration Center. I appreciate all of those who participated in making this an exceptional forum directly impacting the Army of 2020.

Although we do not yet know exactly what the Army of 2020 will look like, we do know the Fires force must continue to develop leaders, who are proficient in understanding and framing difficult and complex problems. Intellectual thinkers, who are able to adapt to an ambiguous environment and overcome future threats and challenges, will emerge as our future leaders. If we train our Soldiers, who value the ideology of defending the Constitution and the citizens of this great nation, in the ethical and expert application of lethal force, then we will have succeeded in developing professional Soldiers.

The challenges that lay ahead of us are great. Our fortitude to overcome these challenges must be greater. Technology will assist us, however the key to winning any battle rests with our Soldiers. Take care of them; teach them; lead them...and 2020 will be just another amazing year for our Fires force.

Fit to Fight – Fires Strong!

Fires Mud to space

Adaptable, flexible, agile air defense professionals

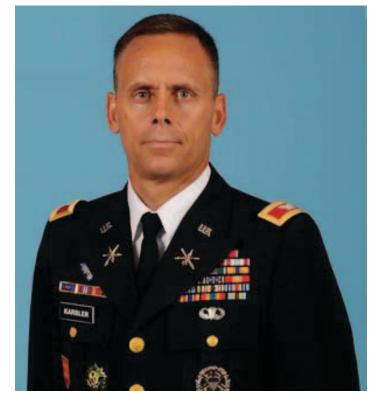
By COL Daniel Karbler

environment requires adaptable, flexible and agile leaders in an air defense profession that demands attention to detail, precision, technical know-how and the highest standards of execution. But, today's operational environment also rarely provides black-and-white problems with clearly defined solution sets.

Today's *Air Defender* is responsible for the lives of U.S. and coalition pilots, as well as the lives of military and civilians on the ground. The failure of an *Air Defender* to properly execute their friendly protect function could result in a tragic fratricide; failure of an *Air Defender* to establish and demand the highest standards in readyfor-action crew drills could result in catastrophic missile or indirect fire impact into a defended asset.

The U.S. Army Air Defense Artillery junior leaders face a myriad of challenges in accomplishing their missions. They must understand and follow rigid procedures for identification and engagements; rules of engagement promulgated at the highest service command levels; structured national and regional chains of command for mission accomplishment through identification authority, engagement authority, emission control, operational control, and administrative control; missions within the national capitol region or combatant command's area of responsibility.

However, the ADA junior leader must also account



for the many vagaries associated with their missions. System equipment performance anomalies require *Air Defenders* to be agile and adaptive thinkers as they apply professional military judgment in making decisions. They must remain flexible in their outlooks and actions as they adapt to the different cultures and procedures of the other services or coalition partners.

Our learning and training concepts and Profession of Arms Campaign are postured to help our junior ADA leaders adapt to the aforementioned challenges. The newly instantiated air defense airspace management/brigade aviation element (ADAM/BAE) course taught at Fort Sill, Okla., brings together U.S. Army *Air Defenders* and aviators ensuring we have seamless mission execution throughout the airspace. Existing functional training courses, such as counter-rocket, artillery and mortar (C-RAM), air defense artillery fire control officer (ADAFCO), Patriot Top Gun, and Patriot Master Gunner Course expose *Air Defenders* to the joint participants throughout the air and missile mission areas.

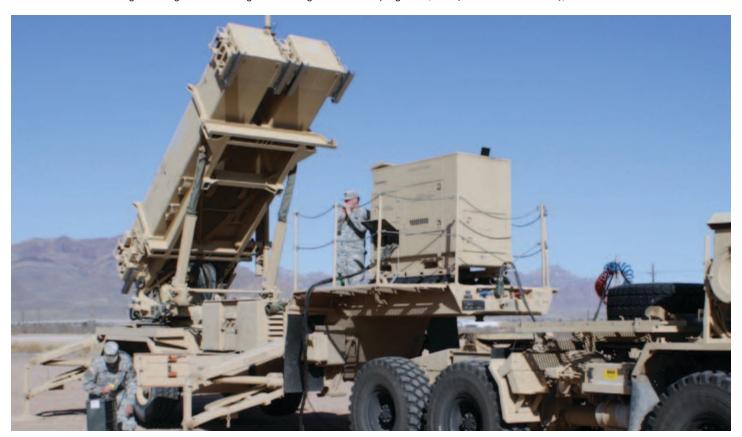
This includes resident ADAFCO courses at Kirtland Air Force Base, N.M. Training of our German and Emirati air defense coalition partners has commenced at Fort Sill and will ensure better cooperation and understanding for our allied air defense forces. The standing-up of a Patriot battalion's worth of Reconfigurable Table Top Trainers (RT-3) in the Jared Monti Hall Joint Training Facility at Fort Sill will provide an unprecedented local and distributed-training capability, including nationallevel air and missile defense exercises. As a result of these training capabilities, ADA junior leaders will further their knowledge of strategic and operational issues confronting them, increase their tactical expertise, and better adapt to their operational environments -be it defending the Homeland, combatant command (COCOM) strategic assets, or providing air defense of tactical brigade combat teams.

New learning concepts are not limited to air defense specific training. The Captain's Career Course's cultural learning program will provide air defense captains an opportunity to focus on the region to which they will be assigned. Captains being assigned to brigade combat teams will have their cultural training tailored to Afghanistan, as this is their most likely deployment

location. Captains assigned to Forces Command (FORSCOM) Patriot battalions will have their cultural training tailored to Southwest Asia – Kuwait, Bahrain, Qatar, or the United Arab Emirates – and will be based on the regionally-aligned brigade to which they will be assigned. Captains assigned to a brigade outside the continental United States (OCONUS) will likewise have tailored cultural training – Korea, Japan, and Europe (Germany, Poland, Israel, and Turkey). In the learner-centric environment defined by the Army Learning Model, students will conduct research, as well as interact with students from their region, and then be evaluated on a region-based scenario requiring understanding of that region's culture, language, military and how they bear on the military mission.

There are many more complex challenges the ADA junior leader of today faces. At Fort Sill, the institutional training base must ensure our training and learning concepts help our leaders. We must help them understand their environment, be agile, adaptive and flexible leaders while still adhering to stringent standards, attention-to-detail and precision execution in performing the U. S. Air Defense Artillery's mission.

SPC Brian Deaton and PFC Edward Nedweski, power generation equipment repairers with 5th Battalion, 52nd Air Defense Artillery, perform a load bank test of a Patriot Launching Station generator during a week-long maintenance program. (Photo by CPT Dan Moore, U.S. Army)



Fires Mud to space

Distinguishing the unique profession of field artillerymen

By COL Mike Cabrey



recently returned from an International Artillery Symposium in Draguignan, France. While there, I had the opportunity to speak with the chiefs and directors of field artillery from many of our NATO allies. From our discussions, it was confirmed that field artillerymen from around the world continue to be proud of their contributions, focused on providing Fires in support of operations and decisive in their efforts to identify new and improved methods of training. Additionally, we all are working through the challenge of reduced budgets while continuing to provide our militaries with the most agile branch on the battlefield.

As a force, we remain fully engaged; our field artillery units are firing more than 6,000 rounds per month in Operation Enduring Freedom in joint and combined operations. Fire support is being executed from platoon up through the battlefield coordination detachment (BCD), creating a tremendous pool of seasoned Soldiers, NCOs and officers.

Our FA Soldiers and leaders today are the most combat tested in generations. We are taking advantage of our seasoned leaders by bringing them back to the FA School in order to enhance the quality educational experience of our upcoming leaders and young Soldiers. The experiences of the last 10 years reinforce the need to develop FA Soldiers who are both accomplished at the tactical level and competent and capable leaders at the operational and strategic level. At the FA School we will continue to provide training opportunities in a quality environment that expose our Soldiers and leaders to what they will face in the future.

While preparing our Soldiers and leaders for the challenges they face in the current and future fight, we are also providing a context of learning that is tied to our past, but not limited by it. We are working within the outlines of TRADOC's Army Profession Campaign, by providing our students and field artillerymen a connection to our history and traditions. Through this connection, we hope to reinforce the values and traits that define and distinguish the unique profession of field artillerymen.

So along those lines, I invite everyone, not just our field artillerymen, to check out our new "Redlegacy" interactive database located on the school's public facing webpage at http://sill-www.army.mil/usafas/. There you will find biographies of great field artillerymen who have laid the foundation of professionalism for today's Redleg. This list in not all-inclusive, but provides an illustration of the professional achievements past and current Redlegs have attained. It also demonstrates the

quality of service the field artillery branch provides through a variety of experiences plus the foundation of skills and opportunities that have allowed some of our own to accomplish great things – not only for the field artillery but for the Army and America.

Each FA leader listed in the "Redlegacy" interactive database is an exemplary role model who embodies the identity, character, and capabilities that each member should strive to attain in our chosen profession. Being a field artilleryman is a calling; it is more than a job. The branch as a whole understands we have an abiding commitment to provide effective, ethical, and honorable service to the Army and to the nation. We have incorporated this ideology into our entire leadership curriculum.

As part of a greater effort, the TRADOC initiative to merge the Army Learning and Training Concepts into "Army Learning Concept: Educations and Training, 2016-2028," we are also building a platform of cultural awareness for our students in all of our courses taught here at Fort Sill, Okla. We have combined quality educators with PhDs working with our best and brightest instructors with contemporary operational experience to provide an education which will produce the future strategic leaders in our Army.

We are also working to enrich leader training and education by leveraging technology and training methodologies to replicate complexity and hybrid threats in the classroom. Combined arms training is progressing at Fort Sill through the use of technology to collaboratively plan and execute with our maneuver brethren at Fort Benning, Ga., and Fort Rucker, Ala. The FA School, as a part of the Fires Center of Excellence, is using gaming technology not only to teach students attending the Field Artillery Basic Officers Leader Course (FA BOLC-B) here the fundamentals of calling for fire, but to give them a glimpse of what to expect when they are teamed up later in their careers with maneuver commanders in combat.

The FA School earlier this year conducted two collaborative leadership development exercises (LDXs) with the Maneuver Center of Excellence (MCoE) and Aviation Center using Virtual Battlespace 2 (VBS2). The school is leveraging VBS2 as one of the gaming platforms, working towards Live, Virtual, Constructive & Gaming (LVC &G) instructional integration as part of the Army Learning Concept: Education and Training, 2016-2028. The LDX teamed up students attending the Maneuver Captain's Career Course (MCCC) at Fort Benning, the Aviation Center Captain's Career Course (ACCC) at Fort Rucker and Fort Sill's Field Artillery Basic Officer Leader Course (BOLC-B) students.

We are also working an initiative that will add Joint Fires Observer (JFO) academics, including the JFO online

course, to the Basic Officers Leader Course program of instruction. The goal is to have every BOLC graduate who has a follow on assignment to a brigade combat team complete JFO certification as an assignment oriented training (AOT) course following graduation. This pilot JFO AOT initiative is scheduled to begin in January 2012 with BOLC class 7-11. Currently, the JFO is offered as an additional skill identifier course (L7) for 13Fs or fire support specialists as well as for company fire support officers/NCOs, platoon forward observers, combat observation lasing teams and members of scout/reconnaissance organizations.

We will also continue to harness the benefits of training with our joint services and ally nations such as Canada, U.K., Singapore, Jordan, Germany, Korea, Japan – to name a few. By engaging and collaborating with other branches, our sister-services and our allies, we hope to expand the interoperability and the expeditionary mindset of our students and develop them into master integrators of Fires and effects at all echelons of command. So no matter in what country or area of operations our FA leaders and Soldiers find themselves, they will be able to effectively and efficiently conduct fires missions in conjunction with the maneuver commander.

So in closing, we are actively working to produce curriculum and training opportunities across the branch to produce Soldiers and leaders who are:

- Competent in their core proficiencies
- Broad enough to operate with a global mindset and across the spectrum of conflict
- Able to operate in joint, interagency, intergovernmental, and multinational (JIIM) environments, and leverage other capabilities in achieving their objectives
- Culturally astute and able to use this awareness and understanding to achieve an intercultural edge
- Courageous enough to see and exploit opportunities in the challenges and complexities of the operational environment
- Grounded professionals who close-hold the Army values, our traditions and the warrior ethos

Looking forward, we expect to encounter hybrid threats, budget limitations, and continued deployment cycles – to name a few challenges. But now, more than ever, we here at the FA School will continue to do what it takes to grow 21st Century leaders through the learning and training concepts and the Army Profession Campaign.



US Army Air Defense and Field Artillery Award Winners



Field Artillery Winners

Henry A. Knox Award

Headquarters and Headquarters Battery, 3rd Battalion, 320th Field Artillery Regiment, 3rd Brigade Combat Team, 101st Airborne Division (Air Assault), Fort Campbell, Ky.

Alexander Hamilton Award

B Battery, 1st Battalion, 623rd Field Artillery Regiment, Kentucky Army National Guard

BG Edmund L. Gruber Award

SFC Malcolm A. Lewis, A Battery, 3rd Battalion, 321rd Field Artillery Regiment, Fort Bragg, N.C.

Winners will be featured in our March-April 2012 issue

Air Defense Artillery Winners

Henry A. Knox Award

D Battery, 5th Battalion, 7th Air Defense Artillery Regiment, 10th Air and Missile Defense Command, Kaiserslautern, Germany

Alexander Hamilton Award

Headquarters and Headquarters Battery, 2nd Battalion, 263rd Air Defense Artillery Regiment, South Carolina Army National Guard

BG James A. Shipton Award

CPT Will D. Andrews, 2nd Battalion, 44th Air Defense Artillery Regiment, 108th ADA Brigade, Fort Campbell, Ky.



An interview with COL Dan Pinnell, US Army Field Artillery 2nd BCT, 1st AD brigade combat team commander

By Shirley Dismuke

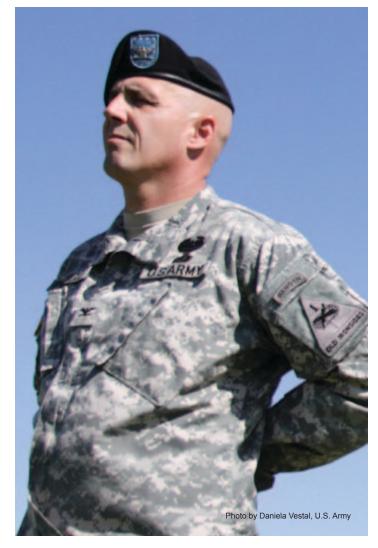
"Donot follow where the path may lead. Go instead where there is no path and leave a trail."

-Harold R. McAlindon, author of, "The Little Book of Big Ideas: Inspiration, Encouragement & Tips to Stimulate Creativity and Improve Your Life."

eldom in our careers do we get the opportunity to be 'first' at something truly significant. In a Soldier's world, all ranks have been achieved by one person or another, all medals have been earned and many great tasks have been accomplished. Occasionally, however, leaders emerge from their peers and important 'firsts' are unexpectedly achieved.

Fires Soldiers are no exception. Throughout history, our Soldiers have achieved many firsts. Harry S. Truman was the first and only U.S. Army Field Artillery officer to become president of the United States. GEN Charles Summerall (the namesake of Summerall Hall, Fort Sill, Okla.) was the first *Redleg* to serve in the position of chief of staff of the Army. We now add, to our distinguished ranks of firsts, COL Daniel A. Pinnell who is the first field artillery officer to be selected as a brigade combat team commander, a position traditionally, and until recently by modification table of organization and equipment (MTOE), filled by armor and infantry officers.

Pinnell, a New York native, comes from a military family with both his father and grandfather serving as career naval officers. He was commissioned as a second lieutenant in the U.S. Army Field Artillery in 1986, earning a bachelor's in Political Science from Hofstra University, N.Y. After training at Fort Sill, Pinnell was assigned to the 82nd Airborne Division, Fort Bragg, N.C., where he served as a battalion and company fire



support officer and battery executive officer in support of the 325th Airborne Infantry Regiment.

It was in an assignment at Fort Bragg where Pinnell served under one of the most influential leaders in his career, CPT Paul Terkelsen.

Influence through leadership. "I have served under many great leaders, including (then Colonel now

Chief of Staff of the Army) GEN Raymond Odierno, who have had a positive and lasting impact on my career."

However, it was Terkelsen's name which immediately came to mind when asked, "Has there been one leader who has significantly influenced your leadership style and whose traits you have adopted and still use today?"

"He taught me how to

be totally predictable to my Soldiers in all I do, but to be totally unpredictable to the enemy," said Pinnell.

He explained how Terkelson taught him to integrate deception into his strategic operational plan and recalled an exercise that still impacts him today.

"During one particular exercise, the evaluators setup our battery for failure. Following the exercise as planned would have meant capture for the entire battery. Terkelson set up a completely false battery to deceive the

opposing forces (OpFor). Using old telephone poles, old camouflage net systems, a recording of old radio transmissions, even a couple of Soldiers smoking in the middle of the perimeter, they quietly moved one gun at a time out of the attack area to a new location. Over a three-hour period starting at 2 a.m., we camouflaged our guns and had the entire battery moved before the OpFor

attacked. We defeated the enemy because of deception and it had been totally integrated into our operation,"

COL Daniel A. Pinnell, brigade commander, 2nd Brigade, 1st Armored Division, leads his Soldiers during the pass and review at the 1st Armored Division uncasing and change of command ceremony at Noel Field on Fort Bliss, Texas. (Photo by Daniela Vestal, U.S. Army)

It's the way we fight. It should

be the way we always train, and

we must do it live-fire and close

enough to 'scare the hair off

you' at every opportunity we get.



Pinnell explained. He went on to share how he has used this tactic throughout his career and it was especially helpful in Operation Iraqi Freedom/Operation Enduring Freedom and during his time at the Joint Readiness Training Center, Fort Polk, La.

Preparing for new challenges. When asked how his field artillery training prepared him for the challenges as a BCT commander, Pinnell talked about his various assignments, specifically 82nd Airborne, 2nd Infantry Division, and 7th Infantry Division.

"All three organizations required us to improve our technical and tactical skills through written and hands-on evaluations. The evaluations were regular, ruthless and conducted to exact standards." He also talked about the vital importance of live-fire exercises. Simply stated, simulations can go only so far to prepare Soldiers for combat…live-fire takes over where simulation stops.

With more than 14 years of fire support time, Pinnell was adamant about the importance of training

The best path is to maximize

opportunities, in both education

and assignments. It will make you a

better, well-roundedleader. We are

here to serve the Army . . . selflessly .

in a combined arms environment. "It's the way we fight. It should be the way we always train, and we must do it live-fire and close enough to 'scare the hair off you' at every opportunity we get."

As we looked through Pinnell's biographical sketch before the interview, the staff was truly impressed at the variety of assignments and experiences he had over the past 25 years.

"GEN Odierno advised me to constantly broaden my skill set and increase my value to the Army, and I have followed that advice every chance I got."

Pinnell said his psychological operations (PSYOPS) training and follow-on assignments were an "amazing contribution" to his skill set.

"I learned a key lesson while serving as a Strategic PSYOP Detachment Commander in Rwanda in the mid-90's: to conduct patient, detailed studies of the population you find yourself among and are trying to influence. My primary mission during my time in Rwanda was to assist the Rwandans in reducing civilian casualties from mines and UXOs scattered around the country as a result of an ongoing civil war."

"I learned from the PSYOP NCOs I served with the value of conducting a detailed analysis of the population-with special emphasis on understanding the web of formal and informal relationships which link the members of a society. Put simply, you must research and understand other's motivations in order to understand and then positively impact their behavior."

"I learned first-hand that reacting to another's behavior without understanding the "why" behind it can lead to wasted effort and ineffective responses, or worse, mission failure. Making accurate assumptions about other's motivations without investigating them first hand is difficult within your own culture, and is nearly impossible – and extremely dangerous-when done cross-culturally."

"My NCOs, in conjunction with our Rwandan partners, used a detailed understanding of the target audiences in the most effected districts of the country to craft what turned out to be a highly effective campaign that dramatically reduced casualties among the civilian population and returning refugees. I later leveraged this and other lessons from my PSYOP service to great effect in accurately assessing the motivations of my Iraqi counterparts, shaping my own actions for maximum effect, and influencing my partners and opponents to behave in ways that were supportive of our efforts to restore civil society and terminate the insurgency."

"My language training and cross-cultural engagement

experiences in central and Southern Africa also later helped me, along with LTC Steve Heidecker, create what became the extremely effective and successful Engagement University (EU) crosscultural engagement and negotiations program at JRTC. EU, and practical experiences provided by role players during the typical JRTC rotation were consistently cited by rotational units as the

most important and effective training experience they had received at the CTC. "

Pinnell also emphasized the value of pursuing education outside the military education system. He earned his Masters in Human Resource Development in night school while attending Command and General Staff College, Fort Leavenworth, Kan., in 1998/99, and cited it as being particularly useful in his career.

As part of an interpersonal communications course taught by an experienced Kansas City Police community affairs officer, he learned a critical component to successfully diffusing angry situations and solving an immediate problem, while at the same time setting good conditions for positive, long-term relations, was to take your ego out of the equation.

"She taught us to ignore personal attacks or accusations delivered by others in emotional distress, and respond with empathy and a lot of patience while we probed to discover the actual underlying cause of the person's distress, then to work with the individual to solve that underlying cause. Her simple but elegant observation, 'just because someone throws a knife at you, doesn't mean you have to catch it,' and the conflict resolution

lessons she taught, were critical to my success later in dealing with very tough actors among the political and militia groups I interacted with during my time in Iraq," said Pinnell.

These 'non-artillery' assignments broadened his experience and skill sets, Pinnell explained it is "indispensible for individuals to broaden their military and civilian experiences – to learn and experience as much as they can - and be able to give back more to the Army because of it."

Pinnell believes there is no clear path to promotion or leadership assignments.

"The best path is to maximize opportunities, in both education and assignments. It will make you a better, well-rounded leader. We are here to serve

the Army... selflessly. Seek out opportunity and make the best of it. I tell young officers to always do the very best they can do in the job they are given, and not worry about promotions or assignments. If they are doing the absolute best they can, and it's meant to be, everything else will fall into place."

"Over the years, I've seen the Army do an exceptional job of caring for its people, rewarding merit, and getting the right talent to the right place at the right time," Pinnell advised.

Bill Gates once said, "As we look ahead into the next century, leaders will be those who empower others." Pinnell personifies this principle.

How to better equip leaders, making

educated decisions under stressful situations. "I believe one of the best courses we can provide for our young officers headed for deployment is the Joint Fires Observer course. Frankly, all 13 series officers and fire support NCOs should be trained JFOs. I also feel the Army should strongly consider creating a significant number of Army JTACs in order to ensure we have the depth and quality of coverage of trained controllers required to meet the demands of any conflict. Army aviators and field artillery officers, and 13Fs are the best prepared populations to draw these new JTACs from.

Rapid, accurate, and integrated ground and air Fires have been decisive in ensuring our victory over our enemies time and again over the last century. Soldiers

should be trained and allowed to call for and directly control all of them without restriction"

Education for the future. As the first U.S. Army Field Artillery BCT commander, Pinnell outlined his opinion on how the Fires Center of Excellence could better educate future commanders on the value and use of guided munitions. "This is a problem, because leaders don't have the time to try and learn this once they deploy. Pre-command courses are not technical enough and move too quickly to cover much of this stuff."

"The Army needs to make the investment to show leaders the application of these (precision) systems. One solution might be to bring all BCT commanders to a central location, such as Fort Sill, and

give them a one or two day experience with both the Guided Multiple Launch Rocket System and the Excalibur," he stated.

Commanders depend heavily on their fire support officers; however, knowing both the capabilities and limits on both precision weapon systems could pay huge benefits in time, reduced collateral damage, and ultimately, the outcome of the battle.

As the commander of 2nd Brigade Combat Team, 1st Armored Division, Pinnell is responsible for the 1st Battalion, 6th Infantry;1st Battalion, 35th Armored Regiment; 4th Battalion, 27th Field Artillery Regiment; 47th Brigade Support Battalion; 1st

Squadron, 1st Cavalry Regiment; and 2nd Brigade Special Troops Battalion.

The brigade's mission is to be the Army's user representative to test and evaluate new doctrinal concepts and equipment in a tough realistic operational environment.

"We provide candid feedback to military senior leaders so they can make the difficult acquisition decisions for the Army's future," Pinnell explained.

With the Army Profession of Arms campaign in full swing, the 2nd BCT has already implemented training and evaluation of the concept.

"I have been asked to teach, emphasize and evaluate the concepts presented in Profession of Arms

The Army needs to make the investment to show leaders the application of these (precision) systems. One solution might be to bring all BCT commanders to a central location, such as Fort Sill, and give them a one or two day experience with both the Guided Multiple Launch Rocket System and the Excalibur



U.S. Army Chief of Staff GEN Raymond T. Odierno, center, receives instructions from SPC Allison Ferrone and COL Dan Pinnell, commander of 2nd Brigade Combat Team, 1st Armored Division, on how to operate a mine resistant ambush protected (MRAP) all-terrain vehicle at a training site in White Sands Missile Range, N.M., Nov. 17, 2011. (Photo by SSG Teddy Wade, U.S. Army)

white paper, and provide feedback to the Army on whether the renewed emphasis on the tenets of our profession and methods used to deliver it have had the intended effect" said Pinnell.

"We've already conducted the 'classroom' instruction – 'chain teaches', LPDs, and inclusion of discussions on the tenets of the ethical performance of duty in everything we do. Now we're in the practical exercise phase

of examining our actions on a given day - examining everyday issues that come up that challenge the ethics and values we say are central to the profession.

These friction points provide opportunities to talk about the practical application of our values and ethics, and begin to reverse negative trends. "

We at the Fires Center of Excellence are proud of Colonel Pinnell, not only for his selection as the first field artillery BCT commander, but for the sterling example he sets for other Fires officers.

Pinnell is excited about the Army Profession Campaign and is extremely proud of the high quality of Soldiers and officers who will be evaluating it for the entire Army.

MG David Halverson, commander of the Fires Center of Excellence and Fort Sill, stated, "We at the Fires Center of Excellence are proud of COL Pinnell, not only for his selection as the first field artillery

BCT commander, but for the sterling example he sets for other Fires officers." John Quincy Adams wrote, "If your actions inspire others to dream more, learn more, do more, and become more, you are a leader." Pinnell is an inspiration for other Fires officers and a true personification of Army values.

Employment of the M982 in Afghanistan:

US Army and Marine Corps differences

by MG (RET) Toney Stricklin

ur country has been engaged in a long and costly war for over a decade. At the same time, the military services have made major changes to remain relevant and to adapt to an enemy grounded in 12th century tribal culture but fully adept at prosecuting a 21st Century insurgency. The U.S. Army and Marines Corps have spearheaded our nation's efforts on the ground. While taking the fight to our enemies in forbidding terrain and circumstances, the Army has gone through significant organizational and training adaptations to better prepare itself for the war we fight today and those in the future.



Marines with Charlie Battery, 1st Battalion, 12th Marine Regiment, fire an M982 Excalibur round from an M777A2 howitzer during a fire support mission. (Photo courtesy of U.S. Marine Corps)

The U.S. Army Field Artillery branch has, unfortunately, seen more than its share of Army level, top down, directed changes, and while well intentioned, has created unintended consequences for our current organizations. If these unintended consequences are not corrected, and is a greater concern, the long term impact they will have on our ability to decisively defeat our adversaries in future wars. This article is intended to address one aspect of Army level, top down change so adversely affecting the Army in Afghanistan and contrasting it with how the U.S. Marine Corps field artillery units are thriving in the same environment.

Fire support coordination organizational changes to field artillery units over the past decade have had unintended consequences for the employment of precision muntions in theater, especially the employment of the M982 Excalibur. The USMC has not been subjected to the Army's organizational changes and is able to employ the M982, in Afghanistan, at a significantly higher rate than the Army. In researching this article, I was interested in all aspects of why the Army was not employing the M982 at the same rate as the USMC.

Over the six month period from October 2010 to April 2011, Army maneuver commanders have employed the M982 in Afghanistan only 11 times. Over the same period, USMC commanders have fired the M982, 149 times and heralded its effectiveness. Also during this time, USMC commanders have used the M982, 13 times more frequently than Army commanders. Similar rates have remained consistent over recent months. This is a remarkable statistic given the weapon is equally available to both services and, according to the Marine Corps, its effectiveness is beyond expectation. The reason I have written this article is to address this significant difference in M982 employment.

Typically, the engagement of Al Qaeda and Taliban forces in Afghanistan occurs in areas and locations where the potential for collateral damage is a certainty. We must minimize the unintended consequences of the war. The M982 gives maneuver commanders the organic capability to deliver the precision necessary to avoid civilian casualties and collateral damage. On August 3, 2010, GEN David Petraeus released his guidance for conducting counterinsurgency (COIN) operations in Afghanistan. He said, "We can't win without fighting, but we also cannot kill or capture our way to victory. Moreover, if we kill civilians or damage their property in the course of our operations, we will create more enemies than our operations eliminate. That's exactly what the Taliban want. Don't fall into their trap. We must continue our efforts to reduce civilian casualties to an absolute minimum."

The Marine Corps has overwhelmingly embraced the M982's accuracy, lethality and its ability to minimize collateral damage effects; it can engage targets close to friendly forces; it can engage targets requiring extraordinary precision; and it can reduce the logistics tail, which in the past, required mountains of 'dumb-iron' munitions. The M982 is designed to be employed against targets where collateral damage must be minimized and the target is accurately located. The M982 is best used in situations with 'troops in contact,' friendly forces within 100 meters of the target, and where collateral damage must be limited. With the M982, 'dangerclose' is a technique that may be no longer necessary. I have read reports that Army units, using the M982, are surprised and disappointed the building being engaged was not destroyed. Other munitions are engineered to destroy structures and kill its inhabitants – the M982 is engineered to provide a precision kill without destroying the structure or infrastructure surrounding the target. After much research, I believe, the single greatest impediment for why Army maneuver units do not employ the M982 consistently, is

the loss of fire support coordination functionality at the brigade combat team (BCT) and division levels. This is manifested in the loss of the army's senior fire support coordinators (FSCOORDs) in the BCT and division headquarters and the elimination of the division fire support element. Although organic fire support officers (FSOs) remain assigned to the BCT and division, their experience, training and access to senior maneuver commanders is not as effective as were senior FSCOORDs. In today's organizations FSOs may not function as the full time fire support officer on a day-to-day basis. Army modularity force structure changes eliminated the brigade fire support element from the direct support artillery battalion and made it organic to the BCT. The Army's decision to inactivate its division and corps artilleries eliminated the fire support coordinator for divisions and corps that make up many joint task force organizations. Those colonels (formerly division artillery commander) and brigadier generals (formerly corps artillery commander) who served as the senior FSCOORDs had the training, experience, confidence, and access to the senior maneuver and JTF commanders that our current field artillery commanders do not. The senior FSCOORD's credibility had a profound impact on brigade, battalion, and company commanders' ability to employ and deliver indirect Fires for their units. Simply stated, the lack of senior fire support coordinators inhibits the tactical and operational understanding that U.S. Army maneuver commanders need to employ the M982 and other precision munitions at the appropriate time and circumstance. This is not an indictment of the U.S. Army or our field artillery commanders. Instead, it points to a significant gap regarding support relationships between senior commanders and multiple organizations. As the U.S. Army made its modularity decisions a few years ago, I confirmed it was the intent of senior Army leaders

to review, at a later time, the sweeping organizational changes made and address any unintentional repercussions. Changes in fire support coordination structure have created significant ramifications across the Army and the BCT. All of the evidence I have reviewed suggests that today's maneuver commanders and the fire support officers serving in BCT and higher headquarters have significantly less

functionality and expertise today than in similar organizations 10 years ago. But fire support isn't the only inhibiting factor effecting M982 employment. For a combat capability to be used effectively and consistently, it must be readily available to the

maneuver commander regardless of weather, time of day or availability of other assets. Another significant reason why Army units do not use the M982 more frequently is the infantry brigade combat team (IBCT) commanders do not have an organic weapon capable of firing it. The Army IBCT's have no organic LW155 mm howitzers in their MTO&E. Many IBCTs, however, have task organized in Afghanistan and include a LW 155 mm howitzer battery.

Though my research indicates there is little or no training for the delivery of the M982, in the IBCT, prior to deployment because the system is not available during the pre-deployment training at the Joint Readiness Training Center, Fort Polk, La. The USMC however has the LW 155 mm howitzer as their direct support cannon system which provides a full M982 delivery capability. With the NLOS-LS system terminated by the Army and no LW 155 mm howitzers to fire the M982 in the IBCT, the Army, in its IBCT, has no organic means to employ precision munitions. They have instead, relied heavily on close air support to deliver

precision munitions. Composite field artillery battalions may be the only near-term solution for the Army now. Field artillery precision munitions should complement tactical air and attack helicopters and provide the maneuver commander scalable engagement options for a variety of targets. It also gives the maneuver commander a 100 percent organic capability, day or night, good or bad weather, 24/7 to deliver precision

commanders to employ the M982 against Al Qaeda and the Taliban. In the north, the Army must contend with many more command layers than the Marine Corps, including NATO. In the east, Army units have CAS only 10 minutes away which creates an over reliance of that asset. There is no guarantee our nation's next fight will readily have CAS only 10 minutes away. Organic delivery means must be available for Army/JTF

The M982 is best used in situations with 'troops in contact,' friendly forces within 100 meters of the target, and where collateral damage must be limited. With the M982, 'danger-close' is a technique that may be no longer necessary.

attacks at the designated time and place of his choosing regardless of support availability.

Another significant factor effecting M982 employment in Afghanistan is air space command and control. Some may argue this is the most significant factor. The Marine Direct Air Support Center is responsible for coordinating direct air support missions along with the Fire Support Coordination Center. As a result, the fire support coordination measures associated with artillery and air support are much less complex than what the Army has to deal with. Marine Corps M982 missions are sometimes cleared at the battalion/ regimental combat team as opposed to the Army, where clearances must be elevated to the Air Support Operations Center/Coalition Air Operations Center or International Joint Command in Afghanistan. For Army troops in contact this coordination procedure is clearly non-responsive to the needs of the maneuver commander. However, the position of units also affects why USMC commanders are so much more likely than U.S. Army

commanders. Finally, inadiscussion about why Army units are hesitant or unwilling to employ the M982, I was surprised to hear a young, former fire support officer say the M982 is so expensive

he was hesitant to use it. This is an example of a training issue that should be easy to solve. Young officers and NCOs need to understand, once the institutional Army procures a munition for employment in combat, its cost is not a factor in the 'how best to kill the enemy or save U.S. lives' decision process. The M982 does not cost \$100,000 per round. The cost of the M982 1A is now \$80,000 and 1B is \$40,000 – it's not as inexpensive as the Army would like, but it has not yet been procured in quantities that will reduce individual unit cost to a more desirable amount. Do our officers and NCOs think about the life cycle costs of employing precision munitions from the U.S. Air Force, Marine Corps or Navy tactical fighter bomber who support them? I don't think that enters the tactical or operational calculus of whether or not to employ air delivered precision munitions. So why should it be a factor in employing the M982? In the December 2009 issue of National Defense magazine, then Commandant of the Marine Corps, GEN James Conway stated, by the time security and transportation

expenses were applied to USMC jet fuel destined for Afghanistan the actual cost of one gallon of jet fuel was \$400. For a typical F/A 18 Super Hornet internal fuel load that is a cost of over \$800,000 dollars of fuel for one aircraft. Many argued this was not the actual cost of the fuel; however, it is doubtful this factor, regardless of cost, was a consideration before a commander employed the F/A18 on a target. Nor should any dollar amount be a factor of employing the M982 on a target.

I was impressed by the comments Marines made extolling the accuracy, speed, and lethality of the M982 to defeat the Al Qaeda and the Taliban forces. "Always on target. Two JDAMs missed the target, called in Excalibur and had a 'shack.' Accurate to a gnat's a__. At the end of the day, my CO always asks, what's the status of my Excalibur inventory? I fired at max range with a cold tube and still had a 10 meter hit. I had eight bad guys in a building, Excalibur went through the roof and got them all. It has given new life to the field artillery. No collateral damage."

Perhaps the most telling story came from Election Day in Afghanistan: Two forward operating bases (FOBs) were attacked simultaneously by the Taliban. "We called in Excalibur on one of the targets, at about 100 meters from us and had a direct hit. Because of the accuracy, not only did the Taliban retreat from our FOB, but also from the other one as well."

And finally, "we had eyes on our high-value target with Scan Eagle but couldn't get him, even with a gunship. He went into a small courtyard and we hit him with an Excalibur with no collateral damage to the surrounding buildings."

The last and most important comment made by a Marine was, "Excalibur saves Marines' lives."

The M982 is a very accurate and effective munition and there are some steps the U.S. Army should immediately undertake to make it more responsive to maneuver commanders. First, is to repair the functionality loss of fire support coordination in the Army. We need



Spc. Michael Payne, an assistant gunner with Company A, 3rd Battalion, 321st Field Artillery Regiment, 18th Fires Brigade, 82nd Airborne Division, fires the XM982, March 8, 2011, on Forward Operating Base Salerno. It was the first time the unit had fired the Excalibur in the four months they had been in Afghanistan. (Photo by SPC Tobey White, U.S. Army)

senior field artillery officers as fire support coordinators responsible for advising, training and mentoring maneuver commanders on the employment of Fires. Secondly, the Army must develop a less cumbersome and more responsive airspace coordination process. When the process cannot support 'troops in contact' it is ineffective and must be fixed. Thirdly, IBCTs must have an organic weapon to employ precision munitions. Equipping changes must make the LW155 mm howitzer organic to the IBCT. Finally, as units prepare to deploy to Afghanistan it is essential they train as they fight by firing the M982. The National Training Center at Fort Irwin, Calif., is capable of this but the JRTC does

not allow the IBCT to fire the M982 during training. These are five modest changes that if incorporated will enhance our BCTs effectiveness and save lives today and in the future.

MG (RET) Toney Stricklin served 32 years as a commissioned officer and commanded the United States Army Field Artillery Center and Fort Sill from July 1999 to August 2001 and is now chairman of a consulting firm. He was appointed by former Secretary of the Army, Pete Geren, as Civilian Aide to the Secretary of the Army, Oklahoma (West) from 2008 to 2010 and Oklahoma Governor Mary Fallin appointed him to the Oklahoma State Regents for Higher Education in 2011. Stricklin continues to provide leadership and selfless service to the Lawton-Fort Sill community.

Meeting the fire support challenge

By COL Gene Meredith and COL Richard M. Cabrey



Soldiers from C Battery, 1st Battalion, 321st Filed Artillery Regiment fire the M777 while deployed to Forward Operating Base Wright, Afghanistan. (Photo courtesy of the U.S. Army)

rom discussions with recently deployed and redeployed leaders from the Army and Marine Corps, the topic of Excalibur, M982, employment has surfaced in numerous forums. These discussions highlight some of the unintended consequences modularity has had for the Army and specifically for the field artillery. These unintended consequences have not only caused degradation in the ability of field artillery to provide indirect Fires (Excalibur included) but have also caused degradation in the entire fire support system. The good news

is the Army and the Fires Center of Excellence (FCoE) have already recognized the situation and have taken/are taking steps to mitigate these unintended consequences.

The U.S. Marine Corps has done a great job employing the M982 Excalibur in Afghanistan; however, it must be noted that the fight they face in the Regional Command South (RC-South) is very different from the one the Army faces in the Regional Command East (RC-East). In fact if one examined the total number of artillery rounds fired in RC-East vs. RC-South over the last eight months, the Army

shot 22 times the total number of rounds that the Marine Corps fired. Therefore, direct comparison of a single munition does not provide the entire picture. Additionally, the Air Force has been focused on supporting the close air support (CAS) mission in Afghanistan since there has been no need to execute air interdiction and counter air missions. This has created a situation of unprecedented CAS availability for the maneuver commander. Although this has provided excellent results in Afghanistan, it has also had the 2nd order effect of allowing the forward observer and his maneuver

commander to become extremely reliant on CAS for fire support. This is a luxury we may not have in the next conflict. One benefit of the CAS availability is the validation of the joint Fires observer (JFO) program that has been ongoing since 2006. After acknowledging these facts we must also acknowledge that over the course of almost 10 years of persistent conflict, degradations in Army fire support training, certifications and leader development have occurred. Modularity has had a contributing effect of degrading the entire fire support system from Army Corps through brigade combat team thus not providing the maneuver commander with quality of fire support he requires to accomplish his mission. The Fires Center of Excellence's mission has been/is to improve the entire fire support system through several venues.

The FCOE is currently pursuing an initiative that will address these changes through a force design update (FDU). The FDU will reorganize fire support Soldiers and leaders into the Fires battalions, facilitating standardized fire support training across the BCT thus institutionalizing fire support training 'best practices' to ensure critical certifications through Table XII are conducted to standard, and to facilitate the professional development of fire support personnel. The fire support teams will continue to integrate with their maneuver companies during the Train/Ready phases of Army Force Generation but will place the responsibility of certification and training on the green tab Fires battalion commander, thus ensuring a unity of effort for training the entire fire support system belongs to one commander. The concept paper for reorganization has been agreed upon by both the Fire Center of Excellence and the Maneuver Center of Excellence (MCOE) commanders and is currently awaiting TRADOC and Headquarters Department of the Army approval.

The second organizational change/FDU is the composite Fires battalion

for the infantry brigade combat team. This organization will consist of one M777A2 battery and one or two M119A2 batteries. The FDU will provide greater flexibility, mobility, range, and lethality to the IBCT commander in addition to the precision capability found in the 155 mm weapon system. The composite battalion FDU has been approved by Army Capabilities Integration Center (ARCIC) and is currently in staffing at HQDA. In the interim, IBCT units train on M777A2 prior to deployment to Afghanistan and or have an M777A2 battalion attached to them in theater. The follow on effect of this FDU will be a renewed emphasis on fire support in the IBCT, specifically training precision Fires tasks for employment of a weapon system that was not previously resident in their formations.

Alongwithorganizationalchanges doctrine is also being addressed. Most importantly is the role of the organic field artillery battalion commander to the BCT and the Fires brigade commander to the division. In accordance with the new FM 3-09 (Final Approved Draft) Chapter 2-17: "The fire support coordinator is the brigade combat team's organic Fires battalion commander; if a Fires brigade is designated as the division force field artillery headquarters, the Fires brigade commander is the division's fire support coordinator and is assisted by the chief of Fires who then serves as the deputy fire support coordinator during the period the force field artillery headquarters is in effect. The fire support coordinator (FSCOORD) is the primary advisor on the planning for and employment of field artillery and fire support. The responsibilities and authority given to the FSCOORD should be fully delineated by the supported commander. The FSCOORD may be given authority by the commander to:

 Provide for consolidated and focused FS-specific training, certification, readiness, and oversight (personnel management, equipment issue, and training);

- Facilitate establishing standard operating procedures across the brigade (to save time and ensure a single standard);
- 3. Ensure efficiently resourced training packages.

Although this doctrine change does not return to the concept of a division artillery and direct support battalions it does clearly put FA commanders in charge of the entire fire support system. FM 3-09 has been approved by the FCoE commanding general and received "Final Approved Draft" status from the Combined Arms Doctrine Directorate (CADD) for publishing.

The FCOE is implementing changes in fire support system institutional training as well. The skill set required to call for and execute precision Fires missions at the forward observer level is complex. Use of equipment like the pocket sized forward entry device (PFED) and knowledge of the precision Fires software must be second nature in order to execute time sensitive missions in the combined arms maneuver/wide area security (CAM/WAS) environment. This issue maybe indirectly linked to the lack of formalized training while fire support personnel have been assigned to maneuver formations, but no direct correlation should be made. However, within the FA School and specifically in the NCO Academy, this education has received renewed emphasis. With the most recent Basic Officer Leader's Course, each student will complete the Joint Fires Observer Course (JFO) curriculum and attend a two week Assignment Oriented Training for JFO certification. Although designed to enhance the ability to direct aviation down to platoon level, the instruction includes target mensuration and collateral damage estimation (CDE); both skills required to employ precision munitions. Additional classes added to the BOLC-B POI include:

- 1. Excalibur/Precision Guided Munitions 6 hours
- 2. Precision Strike Suite-Special Operations Forces/Collateral



- Damage Estimate (PSS-SOF/ CDE - 8 hours
- 3. PFED 8 hours
- 4. PFED integration in Call For Fire Trainer/Live Fire
- 5. PFED use during walking shoot/ Fire Support lane and static observation post operations during *Redleg War*

The NCO Academy has also recently adjusted curriculum to improve the skill set required of our 13F NCOs. In the Advanced Leader's Course (E-6) they have added 40 hours of target mensuration and training on the PFED with precision software. The Senior Leader Course has expanded for 13F as well to include: weaponeering, target mensuration and joint operations targeting process. The Warrant Officer's Basic Course students receive 40 hours of instruction on CDE and an additional 40 hours of instruction on target coordinate, mensuration, both tasks directly applicable to firing precision munitions. The Warrant Officer's Advanced Course students receive 80 hours of instruction in joint operational Fires and an additional 32 hours of instruction on target coordinate mensuration. Within the curriculum of Advanced Individual Training, recent program of instruction (POI) adjustments include: PFED familiarization training into 13F AIT POI. Although notaskilllevel10task, familiarization training and hands-on opportunities on the observation post exposes them to equipment that is in their future fire support teams.

Collective training is another area being addressed. While it is true that the IBCTs cannot live-fire Excalibur at the Joint Readiness Training Center, Fort Polk, La., due to range restrictions, we are taking steps to address this issue at Fort Polk and with the program manager for the M982. The issue is the Fort Polk training area is not large enough to accommodate the standard surface danger zone (SDZ) roughly 30x30 Km to meet the 1:1,000,000 criteria from AR 385-63. Excalibur can currently be fired only at the National Training Center, Fort Irwin, and

Twentyninepalms, Calif., because these are the only installations with maneuver areas large enough to account for the SDZ. The program manager (PM) for Excalibur is planning to implement a software change on block Ia-2 Excalibur round that could potentially shrink the SDZ by up to 50 percent of the current size. This change, if implemented, will allow firing of the M982 at other installations. Although livefire training on Excalibur, and other indirect Fires munitions, is important, they can all be trained in the dry fire mode at any location. This is critical for units based outside the U.S. since it will never be possible to live fire the M982 in most OCONUS training locations. What JRTC and the other CMTCs provide is the opportunity to train the entire fire support system, and this is what is absolutely critical to providing the maneuver commander the fire support he requires to accomplish his mission.

In order to further improve the fire support system, the FA commandant has personally attended Maneuver PreCommand courses to discuss the training and use of fire supporters in the BCT formations. These discussions also include the ability of their fire supporters to integrate the use of precision fires if properly trained and equipped. The commandant has also provided guidance to the MCOE Fires cell, who has in turn instituted a number of efforts in maneuver basic officer leadership course (M-BOLC) and the captains' career course. Infantry and Armor BOLC receive overview briefs on PSS-SOF and PFED and demonstrations of the equipment, while the maneuver CCC is offered an elective on precision Fires providing more details/aspects of precision Fires and includes hands-on training with systems.

Although modularity may have had a contributing effect on the ability of the fire support team to provide indirect Fires due to unforeseen 2nd order effects on the field artillery, the FCoE has and currently is addressing these issues across the doctrine, organization, training, material,

leadership, education, personnel, and facilities (DOTMLPF)domains. Excalibur usage is just one symptom of a larger issue that is currently being corrected. With the implementation of the FDUs, training, and doctrinal revisions outlined in this article, changes are being made to address the modularity induced unintended consequences. By implementing these changes the FCOE will provide the Army a highly trained, skilled, and adaptable fire support system that is prepared to support the maneuver commander in the combined arms maneuver/wide area security (CAM/ WAS) environment today and into the future.

COL Gene Meredith has served as a field artillery officer for 22 years spending the majority of his career in Airborne units to include the 82nd Airborne Division, 18th Fires Brigade (Airborne), 173rd Airborne Brigade, and Special Operations Command Europe. He has deployed to Panama, Iraq, and multiple times to Afghanistan where, on his last tour,

he commanded 1-321st Airborne Field Artillery Regiment providing 155 mm Fires in support of the 82nd Airborne Division. Meredith is currently assigned to the Fires Center of Excellence at Fort Sill, Okla.

COL Richard "Mike" Cabrey currently serves as the commandant, U.S. Army Field Artillery School. He is also a graduate of the U.S. Army Ranger School, and has served in various field artillery positions throughout his career such as infantry company fire support officer, platoon fire direction officer, platoon leader, operations officer, battery commander, and corps fire support coordinator. Cabrey has also attended the Advanced Operational Arts Studies Fellowship (AOASF) where he served as a seminar leader in the School of Advanced Military Studies. Following the fellowship he served as the commander, Operations Group COE in the Battle Command Training Program. He has also served in the position of assistant commandant of the U.S. Army Field Artillery School, and previously commanded the 214th Fires Brigade, Fort Sill, Okla.

Soldiers from C Battery, 1st Battalion, 321st Filed Artillery Regiment fire the M777 while deployed to Forward Operating Base Bostick, Afghanistan. (Photo courtesy of the U.S. Army)



Things you must get right as a battalion commander

By COL Steve Maranian



LTC Mark O'Donnell, right, jumps to a Hesco barrier as he makes his way to a firing position to talk to Soldiers on Vehicle Patrol Base Badel in Konar province, Afghanistan. O'Donnell, commander of the 1st Battalion, 32nd Infantry Regiment, was on a routine mission to communicate face-to-face with junior leaders. (Photo by SSG Andrew Smith, U.S. Army)

n officer, who used to work for me and with whom I've maintained a mentor/mentee relationship, approached me recently and asked me for advice about command. He asked if I had saved any products over the years along the lines of '10 things that you must get right,' as a battalion commander. Advice about being a commander is ubiquitous, and I certainly have multiple documents filed away as 'keepers.' Nonetheless, as I pondered my mentee's request and as thoughts about what makes an officer successful in battalion command swirled around in my head, I decided to sit down and share with him what I thought were some nuggets of advice to add to his leadership arsenal. He was gracious enough to permit me to share my thoughts with a wider audience.

First, success in command at any level starts with the Army **values.** If you have one silver bullet to fire early in your tenure, spend it stressing upon your unit what matters most to their new boss, being a team and values-based organization. Grounded with Army values as a foundation, the sky is the limit. As a commander of commanders, battalion command is different than company/battery/ troop command. It takes 16-18 years to grow a battalion commander. You are experienced -- have been 'around the block' -- so most of what I have to say will seem obvious to you. Taken holistically however, the points

below build a picture of what, I believe, Soldiers, junior-level leaders, and senior-level commanders look for from battalion

commanders.

are for your Soldiers, and I mean genuinely care for them. As a company/battery/ troop commander you probably knew every Soldier, their strengths and weaknesses, and many of their families. At higher echelons it gets

harder and harder to know everyone. This should not be a deterrent. Strive to get to know as many of your Soldiers and their families as you can. Write note cards, if need be, to remember names after meeting people for the first time. When dealing with Soldiers' and families' problems, take an interest and follow through. Troops will know instantly if you do not really care -- and so will their families.

rom those to whom much is given, much is expected. It's not all about you. Never let personal career goals interfere with the unit's success, or the direction in which it is led. To me, genuine humility in a commander is one of the most desirable traits, as well as working well with peers and being a great teammate. Give both peers and subordinates credit where credit is due. Developing the Army's future leaders may be the

most important thing we do, and the focus should be on leaders two levels down. Real success as a commander is the long-term success of those who you currently lead.

Words mean a lot; as a field-grade commander choosing them carefully is important. Soldiers will lay awake at night analyzing and worrying about things said to and about them. Praise often and publicly. Criticize privately, and whenever possible, in a mentoring way. I'm not saying coddle people; there is a time and place to raise your voice in a calculated manner. Never lose control. A commander does not have the luxury of having a bad day.

higher echelons At gets harder and harder know everyone. This should not be a deterrent. Strive to get to know as many of your Soldiers and their families as you can.

> The organization takes its cues from you and adopts your personality so when you are not 100 percent and still remain positive, your unit will be positive as well. Your team will know something is wrong if you are behaving uncharacteristically unhappy or distracted. It will affect the unit, and performance will suffer. A commander has to leave distractions at the door and put on their game face.

> Deceive bad news well. Do not **\'\'shoot the messenger,' or no one** will want to deliver bad news about which you need to know. Very few 'bad things' require your immediate personal involvement, (you'll know which ones those are) and typically the first report is seldom correct or complete. When receiving the first report of something bad, and feel the need to give guidance, try directing: "Develop the situation, ask X, Y, and

Z, check the facts as we know them and get back with me in an hour."

\/ou're not the XO. Do not micromanage, and delegate as much as possible until the point you are uncomfortable; then delegate some more. The key is to find the right frequency and intervals for spot checks, and touch on major points with the staff. Train your executive officer and S3 to do your job when you are on leave or away on temporary duty. It empowers them, and when you return, support the decisions they have made in your absence.

Forgive and forget honest mistakes. Nobody wakes up and says, "I think I'll screw up at

> work today." If you truly want to develop troops to work at the next level up, they need the freedom to mess up every now and then. When things go wrong, have an after action review, fix them and then move on.

> Establish your red-lines. Those things absolutely not tolerated are red lines. Communicate them clearly to leaders and Soldiers. These tie back

to the Army values, but they also tie into those things important enough that only you, the commander, can make the decision.

Walk the walk. Never, ever, ever, ever do anything you tell your Soldiers not to do. Don't drink a single drop of alcohol and get behind the wheel of a car if you tell your folks "don't drink and drive." Subordinates should never be able to say, "he/she talks the talk but doesn't walk the walk".

ngage people in person. E-mail Lis not a method of leadership and should be done before/after PT, at lunch, and/or at the end of the day. When Soldiers are working, be where they are (this also helps getting to really know them). Don't stifle your subordinate commanders by hovering, but know what they need and what their challenges are. As a commander of commanders,

your job is to ensure subordinate commanders have the resources they need to be successful in the eyes of your boss – their senior rater.

Be physically fit. You cannot lead from the front if you cannot lead

from the front. Remind Soldiers the enemy is who chooses the time and place where they will have to display their physical readiness. Not being fit is being undisciplined.

Be technically and tactically competent. Know, maintain, and properly account for equipment. Many skills, which were second nature to older generations of company grade officers, are becoming a lost art. Take the time to teach people by varying leader

development sessions to cover the art of our profession as well as the science. Finally, and I saved this for last so it lingers in your mind...

Your family is your life. Your job is your job. As a commander, this is often forgotten; however, there will be no second chances to go to ball games, school plays,

and dance recitals. Your spouse is the most important person in the world...she/he needs to know you feel that way every day. I'd rather my tombstone say, "loving husband" than "Colonel." Take awesome,

Don't stifle your subordinate commanders by hovering, but know what they need and what their challenges are. As a commander of commanders, your job is to ensure subordinate commanders have the resources they need

unforgettable family vacations, and do not lose leave. Caring about your family will show, and will set a tone within your formation (getting back at the values I mentioned at the beginning.)

to be successful in the eyes of

your boss — their senior rater.

I hope this advice gives every leader something to think about. It's not perfect, nor is it all-inclusive.

Many people would debate some of what I've written to you – good! Talk about these ideas with your leaders. Be yourself, and have fun.

COL Steve Maranian, field artillery, is the

commander of 19th Battlefield Coordination Detachment Ramstein Air Base, Germany. His past commands were the 4th Battalion, 319th Airborne Field Artillery Regiment in Afghanistan and Bamberg, Germany, and two batteries, Charlie Battery, 2nd Battalion, 82nd Field Artillery and Headquarters and Headquarters Battery, 1st Cavalry Division Artillery both at Fort Hood, Texas. His significant staff assignments include executive officer to the Director of Training, Headquarters Department of the Army, assistant chief of staff G-3/5/7, Washington DC; Special assistant to the

commanding general, USAREUR, Heidelberg, Germany; Deputy assistant chief of staff - G3, 1st Infantry Division, Tikrit, Iraq; and XO, 1st Infantry Division Artillery, Bamberg, Germany. COL Maranian holds a masters degree in Human Resources Development from Webster University, St. Louis, Mo., and a bachelors in Business Administration from Bucknell University, Lewisburg, Pa.

COL Thomas James expresses his appreciation to the Soldiers of the 4th Brigade Combat Team, 3rd Infantry Division for their service after his final tank ride at Forward Operating Base Iskan. (Photo by SPC Sophia Lopez, U.S. Army)



Fires Author's Guide

rticle subjects. Fires strives to be "forward-looking." We're at the dawn of a new Army transformation. Many exciting things are taking place in the field and air defense artillery fields of expertise. Article subjects should therefore be current and relevant. Writers may share good ideas and lessons learned with their fellow Soldiers, as exploring better ways of doing things remains a high emphasis with Fires.

If an article subject is significant and pertains to field artillery or air defense artillery and its diverse activities, as a rule of thumb we'll consider it appropriate for publication. Article subjects include (but aren't limited to) technical developments, tactics, techniques and procedures; how-to pieces, practical exercises, training methods and historical perspectives (Army Regulation 25-30, Paragraph 2-3, b).

We are actively seeking lessons-learned articles which will enhance understanding of current field and air defense artillery operations. The magazine's heart is material dealing with doctrinal, technical or operational concepts. We especially solicit progressive, forward-thinking and challenging subject matter for publication. In addition to conceptual and doctrinal materials, we encourage manuscripts dealing with maintenance, training or operational techniques.

Good ideas or lessons-learned articles should have two closely related themes: one, what did you learn from what you did? The second theme is: what is most important for others to know, or what will you do differently in the future? Include only the pertinent information on how you did it so someone else can repeat what you did. Don't include a blow-by-blow of your whole deployment. The article's emphasis should be that your unit has a good idea or some lessons-learned to share.

Steps involved in submitting an article to *Fires* are outlined following.

All articles should have the bottom line up front; however, to better ensure your chances of publication, we recommend that you read all the criteria contained in this article as well as apply the guidance contained in the *Fires* style manual at sill-www.army.mil/firesbulletin/style.asp for more details. We do not pay for articles or illustrations other than providing contributors with complimentary

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defense artillery community. The topic must professionally develop members of these fields. Write an outline to organize your work. Put the bottom line up front and write clear, concise introduction and conclusion paragraphs. Follow the writing standard established in Army Regulation 25-50, Preparing and Managing Correspondence, Section IV (the Army writing style), and Department of the Army Pamphlet 600-67, Effective Writing for Army Leaders, especially Paragraphs 3-1 and 3-2.

The Army standard is writing you can understand in a single rapid reading and is generally free of errors in grammar, mechanics and usage. Also see Fires' style manual. Maintain the active voice as much as possible. Write "Congress cut the budget" rather than "the budget was cut by Congress." (Department of the Army Pamphlet 600-67, Paragraph 3-2, b[1]). Write as if you were telling someone face-to-face about your subject: use conversational tone; 'I,' 'you' and 'we' personal pronouns; short sentences and short paragraphs. Articles should be doublespaced, typed, unpublished manuscript, between 3,000 and 3,500 (or less), but no more than 5,000 words, including inline citations as appropriate.

Authors should check their articles' contents with unit commanders or or ganization directors or S2s/G2s to ensure the articles have no classified or operations security information in them. Clearance requirements are outlined in Army Regulation 360-1, Chapter 5, Paragraph 5-3. Headquarters Department of the Army/Office of the Secretary of Defense clearance is required if your article meets any of the criteria listed there. Article clearance is further covered in Paragraph 6-6, with procedures on how to do so outlined in Paragraph 6-9. The bottom

line on most article clearance is discussed in Paragraph 6-6. While you certainly may ask your local Public Affairs Office's advice, it is the "author's responsibility to ensure security is not compromised. Information that appears in open sources does not constitute declassification. The combination of several open-source documents may result in a classified document."

So while the *Fires* staff may question the sensitivity of an article we receive, it is not our responsibility to officially clear articles; however if we do see something within an article that might cause concern, we reserve the right to withhold publication of such an article until it is thoroughly vetted with the proper subject matter expert or Army authority. But it still remains the author's responsibility, as outlined in Army Regulation 360-1, not to compromise national security or U.S. Army operational security matters.

We reserve the right to edit an article, so the *Fires* staff will edit all manuscripts and put them in the magazine's style and format. The author of an article or interviewee will receive a courtesy copy of the edited version for review before publication; however, if the author does not get back to the *Fires* staff with any questions or concerns within a specified suspense date (typically five to seven working days) it will be assumed the author concurs with all edits and the article will run as is.

Except in the case of Armywide news items, authors should not submit a manuscript to *Fires* while it is being considered elsewhere. A comprehensive biography, highlighting experience, education and training relevant to the article's subject and credentialing the author as the writer of the article also is required. Include e-mail and mailing addresses and telephone, cell and fax numbers. Please keep this information current with *Fires* for as long as we're considering the manuscript.

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By CW5 Manuel Vasquez

t is a pleasure for me to write a message to the 131A community concerning my experiences in the last promotion board. Some of the remarks included in this note are my personal observations. I will do my best to highlight when I give my opinion so as not to confuse the reader. For the people who like to read here are some of the most important reference material used during the board process: Title 10, U.S.Code, section 611-647, Promotion Boards, Title 10, U.S. Code, section 571-583 Appointment, Promotion, and Involuntary Separation and Retirement for Members on the Warrant Officer Active-Duty List, AR 600-8-29, Officer Promotions, a memorandum of instruction (MOI) from the secretary of the army, and any other pertinent Army regulation.

SPC John Cunningham, Bravo Troop, 1st Squadron, 18th Cavalry, California National Guard, delivers a departing salute to CSM Harold London of the 79th Infantry Brigade Combat Team. Cunningham had just completed an intense Appearance Board with the top sergeants major of California, the final event in the 2011 Best Warrior Competition held at Camp San Luis Obispo, Calif., Sept. 17, 2011. (Photo by SPC Joseph Samudio, U.S. Army)

I was one of 12 voting members, seven of the members were active duty warrant officers, and the other five officers were colonels (COL). All 12 officers came from different branches with one warrant officer and colonel being Army aviators. Two of the seven were chief warrant officers of the branch (CWOB) or regimental warrant officers of branch (RWOB) and the aviation (AVN) COL was the current Warrant Officer Career College (WOCC) commander (CDR). The promotion board president was a brigadier general (BG) and chief of staff (CoS) of an Army command (ACOM). We all had an undergraduate degree with some having at least one type of graduate degree. All the warrant officers were of the rank of CW5 and graduates of the Warrant Officer Senior Staff Course

(WOSSC), which is a mandatory requirement according to the U.S. Army G-1 Officer Selection Board Policy Branch Standing Operating Procedures (October 2009). All the chief warrant officers had held the rank for a minimum of 2 years with some more than 10 years.

One myth I want to quash has to do with equal opportunity and the promotion board. Over the years, I have heard rumors that promotion boards must contain certain races or specific genders and must promote certain groups over others. There is no Army regulation or U.S.C. that stipulates the board has to consist of a certain amount officers from various races or be of a specific gender. However, US Army G-1 Officer Selection Board Policy Branch Standing Operating Procedures (October 2009) states, "Each selection

board will have at least one minority officer as a voting member," and "... (that) some boards (might) require more than one minority officer as a voting member." The SOP further states that, "For boards requiring one minority representative, the minority member should be from the minority category having the greatest representation in the considered population," and "...at least one minority member should be of the minority category having the greatest representation in the considered population." In addition, the MOI never instructed the board members to give preferential treatment to members of a certain minority group or to women.

The Army did a tremendous job in selecting members from various ethnic groups, races and genders for the Fiscal Year 2011 CWO Promotion

CSM Necati Akpinar, command sergeant major, 2nd Battalion, 25th Aviation Regiment, Task Force Diamond Head, briefs promotion board Soldiers and their sponsors about the day's promotion board standards prior to the TF Diamond Head's monthly board at Contingency Operating Base Speicher, near Tikrit, Iraq. (Photo by SSG. Mike Alberts, U.S. Army)



Board. The board had 10 male officers and two female officers. There were six Caucasian officers, four African-American officers, one Asian officer, and one Hispanic officer and the board demographic lay-down closely matched the figures in the Army G1 2010 Demographic Profile of the Army. As a voting member, I can honestly say that the Army could do away with the photo and remove gender and race from the Officer Record Brief (ORB) because it was not a factor for me. My quantitative vote was based on the contents of the file. I would ask if you hear someone say race or gender has anything to do with a promotion board or the promotion process you immediately stop the erroneous information.

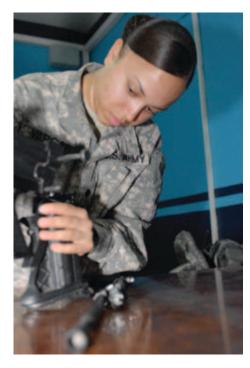
According to specific U.S.C. and Army regulation, there are only two competitive categories for Army warrant officers. The two categories are aviators and technical services. The board must consist of at least five core members serving in a permanent grade above major or lieutenant colonel and from the same service as the selectees. The Secretary of the Army may appoint warrant officers as additional members to the selection board that are senior in grade to those under consideration. There must be at least one warrant officer originating from each of the competitive categories, unless there is an insufficient number of warrant officers within the competitive category that are qualified and senior in grade to all those being considered.

A few things that are important in the previous passage to the reader is all warrant officer promotion boards must consist of at least five core members that are Army O-grades and there is no mandatory requirement for the Secretary of the Army to appoint warrant officers to the selection board. Nevertheless, the Secretary of the Army has habitually appointed warrant officers as additional members on warrant officer selection boards, so there must be at least an aviator and one technical services warrant officer serving on the boards. This does not mean that an aviator or technical

services warrant officer holding a specific military occupational skill (MOS) are going to be members of every board, but it does mean that at least one qualified individual from one of the two competitive categories is going to be present to represent their cohort. Finally, no officer may serve on two consecutive boards if the second board is considering anyone looked at by the first board.

The memorandum of instruction (MOI) is the official method for the Secretary of the Army to provide his guidance to the board. The MOI is a living document and it is constantly changing. It states the maximum number of warrant officers recommended for promotion and the promotion zone for warrant officers on the warrant officer activeduty list. The Secretary, through the MOI, orders the selection board to consider all warrant officers for promotion to the next higher grade either from the promotion zone or above the promotion zone for promotion. The selection board may not recommend a warrant officer for promotion unless the officer receives the recommendation of a majority of the members of the board and a majority of the members of the board finds the officer is fully qualified for promotion. The Secretary shall establish the number of warrant officers the selection board may recommend from among warrant officers considered from below the promotion zone (BZ) within each grade or competitive category. The number of warrant officers recommended for promotion from BZ does not increase the maximum total number of warrant officers. which the board is allowed to recommend. The number of officers recommended for promotion from BZ may not exceed 10 percent of the total number recommended.

In addition, the MOI lets the board members know what is to be considered positive or negative information within each file. From memory, the MOI made it clear that the lack of civilian or professional military education and the lack of deployments are not discriminators



SPC Stephanie Vargas, an operations clerk with the 506th Quartermaster Company out of Fort Lee, Va., and a Manhattan, N.Y., native, practices disassembling the M249 Squad Automatic Weapon in preparation for the upcoming board. (Photoby SGT Ryan Twist, U.S. Army)

for promotion. Additionally, it told the board to look favorably at information about officers serving in military transition teams (MiTT), embedded training teams (ETT) or any other type of unit that provides those types of functions. One area in which I remember the MOI was lacking guidance was concerning warrant officers recovering in warrior transition units (WTU). Again, I need to reinforce I am pulling from my memory and this was an issue on a couple of files. My personal opinion is these individuals had incredible files due to their performance and were most likely going to be promoted anyway.

At this point, I want to move on to the actual promotion files. All the files are in a digital format, shown on computer screens, and are randomly displayed to the board members. There are no loose papers for the board members to shuffle through or the possibility for something unauthorized to enter into the file without being cleared by the appropriate authority.

All members are sitting either at a cubicle-type desk or at an individual desk. There is no talking allowed among members unless a recorder is present. There were at least three recorders in the room at all times: one was answering questions received from members online, working on administrative information, or preparing for the next segment of the board process; the other two were roaming the room to ensure the members are following the established rules, answering verbal questions, and keeping unauthorized

personnel from disturbing the board.

Upon opening a file, the first thing the board member sees is any retirement paperwork that might have been submitted anytime during the individual's career. A white sheet of paper

is displayed with the person's full name, social security number, the date the paperwork was submitted and the approved retirement date. I noticed certain things when it came to retirement paperwork. The first, was some officers had submitted retirement paperwork with an approved release date approximately 90 days after the board was expected to convene. In this scenario, my perception was these officers were challenging the board to promote them, and if not selected, they were going to retire and move on. It made me question their loyalty. The second thing I noticed was some officers, for one reason or another, had submitted retirement paperwork earlier in their career and decided not to follow through. In this second scenario, it made me look deeper into a person's file during the timeframe to find out what exactly had occurred to make them pull their paperwork. No matter what scenario you may find yourself in, ensure that when retirement paperwork is submitted,

it is exactly what you want to do. This, at least for me, sent a definite message.

The next part of the promotion file was in the 'Derogatory Information' part. The first thing that shocked me was the number of warrant officers getting into legal trouble. It ran the gamut from driving while intoxicated, adultery, as well as other illegal or immoral behavior. All of which are signs of immaturity within the ranks. I am far from perfect; however, some of the things I saw in the files were truly startling.

Some officers had submitted retirement paperwork with an approved release date approximately 90 days after the board was expected to convene. In this scenario, my perception was these officers were challenging the board to promote them, and if not selected, they were going to retire and move on. It made me question their loyalty.

The voting member cannot proceed without opening the derogatory file, if there is one. It does not mean I have to read the contents, but I must at least open it for the program to give me permission to move forward. In my opinion, very few officers who have received punishment under the Uniform Code of Military Justice do not have the ability to overcome the smudge in their files. I gave everyone the benefit of the doubt and read their entire file to see if they were remorseful by overcoming the indiscretion. Something you can take from this is that UCMJ action against an officer is probably a career terminator. Even if the officer attempts to improve him or herself, it is most likely too difficult to overcome in the long run. My advice to everyone is to think before acting. Don't destroy your livelihood.

Finally the most important part of this entireessay concerning the board: the Officer Evaluation Report (OER) and how I used it in developing a word picture on a warrant officer. We

all agree the OER is not perfect and may never fit perfectly in describing the performance of a warrant officer. According to FY10 statistics maintained by the Army G1, warrant officers only make up approximately 3 percent and commissioned officers account for 14 percent of the entire end strength of active-duty force. Nevertheless, this is the system used to articulate promotion potential to future promotion boards. That being said, remember... you are your best career advocate and manager. It is your responsibility to ensure your

administrative data is correct, so as a board member, I only scanned this area. To a certain extent, OER block III and IV were not very important to me; however, block IV - c, 'APFT/height and weight' was extremely

important. It was not my job to question or verify rater or senior rater's entries in the block. However, if the block had APFT failure, no entry or it mentioned the rated officer did not meet the Army height and weight standard, I wanted to see a profile date or a comment in the rater block concerning the non-compliance. This is simple for warrant officers out in the field to correct. I personally have been injured in the past, so I understand if a Soldier cannot physically do an assigned task. However, make sure it is annotated correctly on your evaluation. Army Regulation 623-3, Personnel Evaluation- Evaluation Reporting System has the specifics on what must occur to rectify this problem.

The part of the OER I consider the most important is the back page, block V (rater) and VII (senior rater). These two portions are what I used to develop your potential for promotion. Throughout the entire process of the board, I read every rater and senior rater entry for each individual. I read almost 4,000 files over a two-week period and I can honestly claim I gave every file the same level of scrutiny. Every file contains all OERs and DA 1059s Academic Evaluation Reports that are allowed to be shown to the board. It is a falsehood the board can only see five years worth of reports. The board sees it all and there is no time limit on how long a member can spend reviewing any particular file. The rumor of specified time limits has evolved through the recorders monitoring the times board members spend on files. If the recorder notices a particular member taking a long time to review files, the recorder might

ask if the member is having issues with voting. On the other hand, if the member is moving quickly through the files, the recorder might engage the voter to ensure they are giving the proper attention the files deserve.

Back to the rater and senior rater blocks of the OER. Because these two blocks hold so much weight for board members, it is imperative raters and senior raters do a better job of quantifying their claims. For example to say, "This is the best warrant officer I have rated in my entire career, which has spanned more than 28 years," does not do much. It is better for them to say, "I consider this warrant officer the best

out of 25 I have rated in my entire career, which has spanned more than 28 years." The difference might be slight, but very important because it does not force the board member to try and figure out what the raters or senior raters are attempting to impart. Another example in support of the point I am attempting to argue is, "This officer is in the top three of more than 15 warrant officers I currently senior rate." To some this might be an awesome write-up, but in reality, it does not say much except this particular officer cannot breakout of the 'top three' logiam to be the very best officer. A board member might conclude this officer

Ms. Tannie Jackson, lead human resource specialist with the 81st Regional Support Command's boards branch, searches through some of the more than 600 files received for the next senior enlisted promotion board. Helping her search the files is one of the directorate of human resource's four staff members, MSG Maria Colon-Suarez. (Photo by Gail Anderson, U.S. Army)



is a strong center of mass performer - promote with peers.

A number of raters and senior raters have found a way to change the font size or to bold particular lines in their write-ups. In my opinion, these illegal techniques did nothing to get the rated officer a higher vote and did not accomplish what the raters and senior raters intended. Another thing most senior raters did was use 'gimmicky phrases' to describe an officer. One phrase I remember was to compare an officer to a 'rock star.' I recommend rated officers advise their senior raters not to do this unless you truly aspire to be in a band.

Another area I noticed were warrant officers who stayed in one location for an extended amount of time. Many of us call this 'homesteading.' It appeared to me that officers who stayed at one post for a long time had stale OERs. It was almost as though evaluations were photocopies of previous OERs, even when they changed jobs within the same organization. If the officer was a steady-state performer, his file showed he was steady state for the entire time with no sign of improvement or any further development. There are tremendous benefits to having officers move to other locations to experience new things and overcome different sets of challenges. At a very minimum, when an officer moves it is customary to receive an award for past performance. This shows the board signs of improvement and growth.

The final three areas I want to

address have to do with the Officer Record Brief (ORB), the official photos, and being a member of a special mission unit (SMU). The ORB was my primer before I delved into the officer's promotion file. I know from experience it is very difficult to keep the ORB up to date, specifically concerning awards and assignments. However, I could tell the officers who cared about being selected for promotion by the accuracy of the ORB

Although I applaud members of SMUs, they do not get favorable treatment as compared to other officers serving in conventional units, unless the Secretary of the Army mentions it in the MOI. For this board, he did not. From my perspective, SMU rater and senior

A U.S. Army North (ARNORTH) Soldier appears before a promotion board Feb. 25, at ARNORTH's Headquarters and Headquarters Company building on Fort Sam Houston, Texas. (Photo by LTC Kim Chaney, U.S. Army)



raters have the same difficulty quantifying their warrant officers as the rest of the conventional side.

The official photo is an area where the lack of attention to detail can hurt an individual. I've already made the point the promotion file could get rid of the official photo and it was not important to my vote; however, some warrant officers were wearing awards in the wrong locations or wearing unauthorized awards. There were officers wearing insignias of aides to Presidential, Vice Presidential, Secretary of Defense, or other staff over the wrong breast pocket. In addition, Army regulation does not authorize the wearing of the German Marksmanship Award (Schuetzenschnur) by officers, but officers can wear one of the various levels (bronze, silver or gold) of the German Armed Forces Badge for Military Proficiency or any other Bundeswher award that German military officers are allowed to wear.

Three more points on the official photo: (1) wearing the Army Service Uniform (ASU) or the Class 'A' green uniform in the official photo made no difference to me, (2) female officers need to pay specific attention to hair color and makeup, and both must be within Army standard, and (3) I was shocked at the sheer numbers of warrant officers who have outdated photos, many of which were still wearing their NCO rank.

The most important thing to take away from this is everything you do, or do not do, comes down to the needs of the Army. Promotion has nothing to do with open slots. You might be an officer with the right schools, assignments, deployments, awards and still not get selected for promotion. Nevertheless, I can guarantee if you quit and stop doing all the right things, you will never get selected for promotion. To me it is like playing the lottery. Even when the odds are so great, the chances of winning are almost non-existent, people still buy tickets and have the same opportunity to win as everyone else. The individual with no ticket is guaranteed to never win. I know this euphemistic example might



CSM Cedric Green, the senior enlisted Soldier for the 479th Chemical Battalion, based at Fort Tilden, N.Y., and CSM Thomas Colvin, the senior enlisted Soldier for 4th Battle Command Training Brigade, 75th Battle Command Training Division, review a senior enlisted promotion packet. (Photo by SFC Mark Bell, U.S. Army)

appear simplistic, but in reality, it can happen if you decide to quit on yourself and your career.

Since 1993, CW5 Manuel Vasquez has been a 131A Field Artillery Targeting Technician and has served at every level of command expected from a warrant officer in his career field. Vasquez has performed traditional FA Targeting Technician functions and nontraditional duties at various locations from Germany to Afghanistan as a member of various military units. He has two conventional deployments in support of Operation Iraqi Freedom (OIF) and one deployment in support of Operation Enduring Freedom (OEF) for a totality equating to almost 40 months of deployment time. Vasquez has completed many Joint Courses (Joint Firepower Control

Course, Joint Airspace Command and Control Course, Joint Targeting Course, etc.), Army specific courses (Army Operational Electronic Warfare Course, U.S. Army Red Team Member Course, etc.) and all the recommended warrant officer professional military education courses. He is currently serving in the newest U.S. Army Service Component Command (ASCC) - U.S. Army Africa Command (USARAF) as the command targeting officer. The U.S. Army has selected Vasquez for attendance at the Advanced Military Studies Program (AMSP) class 12-02, Fort Leavenworth, Kan. Vasquez is a graduate of the Austin Peay State University with a Bachelor of Science in Homeland Security field of study and presently enrolled in the Long Island University Homeland Security Management graduate program.

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The evolution of junior fire supporters

By MAJ Elijah M. Ward (U.S. Army), CPT Fred A. Janoe (U.S. Army), Capt Thomas F. Hicks (Canadian Army), Capt Richard W. Heaser (U.S. Marine Corps)



Soldiers participating in the Basic Officer Leadership Course gather around thier instructor during training on Fort Sill, Okla. (Photo by Rick Paape, Jr., U.S. Army)

"There is still a tendency in each separate unit... to be a one-handed puncher. By that I mean that the rifleman wants to shoot, the tanker to charge, the artilleryman to fire... That is not the way to win battles. If the band played a piece first with the piccolo, then with the brass horn, then with the clarinet, and then with the trumpet, there would be a hell of a lot of noise but no music. To get the harmony in music each instrument must support the others. To get harmony in battle, each weapon must support the other. Team play wins. You musicians of Mars must not wait for the band leader to signal you... You must each of your own volition see to it that you come into this concert at the proper place and at the proper time..."

-GEN George S. Patton, Jr.

COL Arthur Kandarian, commander of 2nd Brigade Combat Team (BCT), Strike, 101st Airborne Division (Air Assault) quoted the above passage by GEN George S. Patton referencing Mars, the Roman God of War, in every after action review during his BCT's Walk and Shoot exercises in October 2009. In this exercise each company/troop of the *Strike* Brigade employed surface and air delivered Fires while maneuvering on targets to increase fire supporters and maneuver commander's confidence in indirect fire employment. In 2010, the *Strike* Brigade deployed to Afghanistan to Regional Command South as the main effort to secure the people of Zhari, Panjwayi and Arghandab districts as a part of the presidential directed surge of forces. From the first days in the summer of 2010 when the BCT arrived, the fire support community was employing mortars, artillery, close combat attack (CCA) and close air support (CAS) to defeat an entrenched and determined enemy. The success of the BCT was predicated in the fact that there was an early realization of the need for joint Fires capability and for precision Fires experts. The following article demonstrates how Fort Sill, Okla. is adjusting to meet the demands of units like the *Strike* Brigade.

The Field Artillery Basic Officer Leaders Course-B (BOLC-B) at the U.S. Army Fires Center of Excellence Fort Sill, serves as the cornerstone for training future U.S. Army and Marine field artillery officers. The program of instruction (POI) which trains future fire support officers for infantry and armor units throughout the Army and Marine Corps has undergone several changes in the past 10 years. The reason for these changes is varied and sometimes inter-related but important to understand before they are detailed.

The most important change is applying lessons learned from operational commanders and experienced fire supports gained after 10 years of conflict in Iraq and Afghanistan. The Army and Marine Corps Fire Support systems were

ideal for the initial hostilities in both theaters when the focus was on a linear fight as our AirLand doctrine outline and as we have fought for more than 50 years. However, with the shift of operational focus to full spectrum operations the feedback from operating forces was that Fires needed to be precise and joint assets were being applied at all levels which increased requirements for joint Fires experts.

These changes, along with a host of others across the Warfighting Functions initiated the publication of a new Army FM 3-0 Operations. This manual, produced by TRADOC in February 2008 and re-issued in 2011, elevates full spectrum operations to the level of the offense and the defense in focus in training and equipping Army and Marine Corps units.

However, in the past 24 months senior-military leadership has recognized the fact a 10-year involvement in conflict has eroded some core competencies. So the combat training centers have undertaken the mission to ensure the Army is equally capable of conducting offense and defense, as well as full spectrum operations. Feedback from these centers, as well as from operational commanders indicates fire supporters are now more experienced than any time since 1973, but that experience is skewed towards conducting counter-insurgent operations. Fire supporters now struggle to synchronize company and battalion fire plans with maneuver after 10 years of conflict focused at the squad and platoon level.

The final significant stimulus for change is the incorporation of Army Learning Concept 2015. In short this concept focuses on ensuring our doctrine is able to be understood at all levels of the force and that training units incorporate a variety of methods with an emphasis on practical exercise and application to train the Soldiers of the 21st Century.

The fire support portion of BOLC-B is prepared to ensure our leaders are fully trained for all elements

of conflict due to the fact the fire support department never really left its doctrinal focus but did incorporate lessons learned from theater, specifically the leveraging of close air support and close combat aviation. The non-contiguous battlefield and advancements in precision guided munitions (PGMS) has changed the way of thinking of the fire support community from echelonment of Fires to support AirLand concepts on linear battlefields to applications of precise Fires to neutralize targets and minimize damage to host nation populations in non-contiguous areas of operation.

In 2008-2009, the chief of the officer instructor group and the fire support instructors began leaning forward in ensuring our course material incorporated those lessons learned, doctrinal evolutions and ALC 2015. Although the foundations of fire support have not changed much over the years, new materials and methods of instruction are being updated at the Field Artillery School.

The fire support section of the BOLC-B course is conducted in three separate blocks of instruction.

Block 1: Learning the scales (fundamentals of fire support). Just as a musician has to learn the fundamentals of his instrument and how to produce the desired melody, young officers must learn the fundamentals of their branch to include its capabilities and characteristics. The students learn the field artillery structure, how fire support functions and how it is integrated with ground maneuver, and who is responsible for fire support up to and including the brigade level. This portion of the course has been updated to include the changes in structural organization which began in 2004 with the restructuring of the brigade combat team with organic Fires capability as well as the establishment of Fires brigades. The enabling learning objectives (ELOs) that encompass block one emphasize the command relationship and tactical missions that artillery officers have been doctrinally tasked to perform as well as elaborating on

operations with ground maneuver forces at all levels. The primary focus is on the basic fundamentals of fire support. Students learn how Fires can and should support maneuver forces; which includes integrating fire support assets with lethal and non-lethal effects to accomplish tactical tasks. As block one of instruction gathers speed, the students are taught all fire support assets available in the U.S. arsenal and how to properly apply each asset in tactical scenarios. This instruction includes the application of Fires ranging from mortars, light to heavy field artillery assets, as well as a knowledgeable understanding of the Multiple Launch Rocket System (MLRS) as well as the High Mobility Artillery Rocket System (HIMARS) assets. The BOLC-B course utilizes multiple system trainers in addition to live fire practical exercises so that students can apply the skills they learn in the classroom utilizing virtual reality simulators. One such trainer is the Call for Fire Trainer (CFFT), which utilizes a panoramic tactical view of a given operation area. This trainer which has replaced the GUARDFIST familiar to earlier generations allows the students to practice the techniques of applying indirect fire support in an enhanced visual environment so the student is capable of understanding the challenges faced by their forward observers.

At the end of this block students are capable of adjusting indirect fire themselves and have demonstrated this with graded evaluations of adjustments of Fires. The lieutenants are also cognizant of the capabilities of the force within which they will serve.

Block 2: Practicing the song (planning and preparing fire support plans). Just as a musician then progresses to learning solo pieces and finds that practice is essential, in block 2 students are taught to take the fundamentals of block one and start applying them to the maneuver plan. In the second block of instruction, the focus evolves to the planning process for

defensive and offensive operations and how to integrate fire support assets to achieve the maneuver commander's intent for any given operation. The students are taught to develop these plans as a part of the military decision making process (MDMP) of the tactical planning cycle. By focusing heavily on troop leading procedures (TLPs), the fire support instructors emphasize the planning and coordination process at the company level. This transition proves challenging for the students at this early stage in their overall understanding of the planning process because after four years of pre-commissioning training rooted at the platoon and squad level the students must begin thinking at the company and battalion level. The course is taught utilizing lectures and reinforced with multiple practical exercises on planning operations to support a company defense and offense. The culmination comes in two simulation exercises utilizing the Joint Conflict and Tactical Simulator (JCATS) which replaced the Janus exercise, and is supported by staff at the SFC Jared C. Monti Hall Mission Simulation Center Facility, the newest and most advanced facility on Fort Sill for this type of training. This exercise has a dual purpose. It requires the students to produce two deliberate fire plans and brief one for grade to a fire support or combined arms division instructor acting as a maneuver company commander. The second portion of the event designates each student a role in a battalion fire support element and they utilize the simulator to conduct self-learning on how well their battalion and company fire support plan is integrated with the simulated maneuver plan. This allows the students an understanding of the importance of timing, triggers and the ability to adjust planned targets to engage targets of opportunity. These plans are a good azimuth check as well for the instructors, as it allows them to gauge the student's ability to apply the lessons learned to this point in the POI much better than the role memorization and referencing

required for the written exams.

The student finishes Block 2 with the first of two graded JCATS exercises complete. There is also a written test to demonstrate understandings of concepts taught in this portion.

lock 3: Tuning and toning (precision software and joint **Fires applications**). Musicians can be technically proficient in their craft but without the fine adjustments which come through toning the piece will not have allure to the listener. In the same way, the fire supporter must understand the finer points of his craft in order to best complement the maneuver plan. The third and final block of the fire support training in BOLC-B focuses on artillery specific employment with respect to precision Fires, urban Fires, and tactical employment of lasers, but the emphasis of this block of training is onjoint Fires observer (JFO) training. The evolution of JFO trainings incorporation into the BOLC POI has consisted of several phases.

The first of these changes began in 2010 when several blocks of instruction which JFO certified instructors had found useful in that course were incorporated into the BOLC-B Fire Support instruction. These classes were taught primarily by the Joint and Combined Integration Directorate (JACI) instructors over a two day period. This instruction was reinforced with a four hour block of time for each platoon to participate in hands-on training in the Joint Fires and Effects Trainer (JFETS) on Fort Sill where students are able to simulate attacks utilizing CAS and CCA in the simulators. Also added, was a four hour introduction to Precision Strike Suite Special Operations Forces (PSS-SOF) by the warrant officers within 1st Battalion, 30th Field Artillery in order to aid students in understanding collateral damage estimates and precision effects. Fire support instructors concluded with a four hour 'round robin' exercise to further develop the students' skills using the CFFT on CAS, CCA, AC-130 CFF, advanced artillery calls for fire, target talk on skills, and naval surface fire support.

In 2011, another modification was added to the POI. The JACI JFO OIC and the Fire Support Department in coordination with Joint Knowledge Online, developed a self paced learning block to complement the existing JFO classes taught within BOLC-B. These classes are congruent with the recently approved prerequisite course required by all those who desire to attend the resident IFO course on Fort Sill. These classes cover the same material as those classes taught in JFO and BOLC-B; however, by mirroring the approved prerequisite course, all BOLC students will now be considered to have completed the prerequisite requirements to attend the JFO course for a time period of one year after completing BOLC-B.

The focus of this training is not necessarily in producing more JFOs who will only be utilized for one year in a fire supporter role as it is to develop leaders who understand the importance of joint Fires integration and maintaining currency of the JFOs throughout the force and fleet.

Additionally, the PSS-SOF training increases from four hours to an eight hour block of instruction per the guidance of the FA commandant, which now includes collateral damage estimation (CDE), and weaponeering taught by instructors from JACI and the Basic Fire Support Branch. Additionally, an eight hour block of instruction on the Pocket-sized Forward Entry Device (PFED) has been added to the course in order to emphasize the first

requirement of accurate predicted fire (accurate target location) by using Precision Fires Image (PFI). This training is also a direct result of a desire from ground commanders to have fire supporters capable of assessing targets and determining the residual effects munitions may have as employed in the operational environment. The student is now capable of understanding the ability that the BCT fire support cell has of developing targets and selecting munitions which achieve effects while minimizing collateral damage.

At the conclusion of this final phase of training, the lieutenant understands the capabilities of precision guided munitions and the technological capability to analyze targets. He also has developed the

Students, 2LT Ellery Lungmus and 2LT Chase Prasnicki participate in call-for-fire at McKenzie Hill observation point, Fort Sill, Okla., during a training exercise. (Photo by 2LT Nick Rinaldi, U.S. Army)





Students in the Basic Officers Leadership Course begin building a terrain model during a training exercise. (Photo by 2LT Nick Rinaldi, U.S. Army)

confidence to engage targets with joint platforms. He has completed a second JCATS exercise and also demonstrated quick fire planning while conducting a dismounted fire support lane to test his ability to employ the skills from Block 2 with limited time and resources.

Redleg War: Conducting the orchestra (integrating joint Fires into the maneuver plan). The Redleg War serves as the culminating event for the BOLC-B course. During this one week field training exercise, students rotate through different stations and systems consisting of the fire support lanes, combined arms division's maneuver lanes, skill level IV gun-line operations, and the fire direction center. Traditionally, the combined arms maneuver and fire support lanes were combined and the students executed a combination of counter insurgency operations and call for fire training. During the fall of 2010, under the guidance of LTC Nick Mauldin, 1-30 FA, commander, the fire support department separated from the maneuver lanes and

overhauled the fire support portion of the *Redleg* War. In the past, lieutenants would occupy a static observation point (OP) in large groups with one or two instructors and call for fire for extended periods of time. Under the new concept, the fire support department has taken the instructor to student ratio from 1:20 to 1:8, providing more focused instruction and feedback to potential future FSOs.

The fire support department has divided its resources into two focus areas. First, the new static OP location used primarily during hours of limited visibility now exposes the lieutenant to the STRYKER fire support vehicle, the Bradley fire support vehicle, and a dismounted OP. On the dismounted OP the student demonstrates proficiency with the laser locater designator rangefinder (LLDR) and Vector 21 used in conjunction with PFED. These additional tools allow the students to enhance their skills and provide tactical mensurated target coordinates to the FDC, JTAC, and

CAS platforms that are utilized during the *Redleg* War.

The second focus of the new fire support concept is the tactical dismounted lane. The lieutenants are given an operations order, a fire support execution matrix, and a battalion level target list worksheet as part of a tactical scenario. Students are then given limited time to plan, prepare and execute a quick company fire plan while tactically moving and adjusting indirect Fires. During this exercise, the fire support instructors serve as a maneuver company commander, while the FSOs must manage their fire support teams (FIST), as well as meet the commander's guidance. With the addition of the PFED to the fire support lanes, the students now understand how to balance tactical movement, fire planning, and current technological assets to achieve first round fire for effects. By integrating current technology along with traditional doctrinal procedures, students learn the value of fire planning and executing calls for fire on the move with precision. nto the concert hall (the way ahead for fire supporters at the **company level).** The Field Artillery School continues to produce the maestros of the modern battlefield, true professionals who understand their instruments and how to bring them together in harmony with a maneuver plan. The changes within BOLC-B have been made in response to the needs of the operating forces and the Fleet Marine Force to try to minimize the gap in the skill level required in combat zones and the skill level of those leaving the school house. Under the guidance of the former commandant of the Field Artillery, BG Thomas Vandal, and the 428th FA Brigade commander COL John Drago, the Field Artillery School has begun to fully implement a JFO program as a follow on course after BOLC-B to certify those lieutenants going to a BCT.

All these changes were incorporated in the course with FA BOLC Class 7-11 which will graduate Jan. 10, 2012. With class 7-11, all BOLC lieutenants will be required to complete 20 hours of JFO distance learning prior to the start of their fire support training. During their fire support training, BOLC students will receive the same 32 hours of JFO academic training that is taught in the JFO course. All lieutenants that are assigned to a brigade combat team, will then attend the JFO course that is taught by the FCoE after graduation from BOLC. This will allow lieutenants going to BCTs the opportunity to become a certified JFO prior to arriving at their first unit of assignment.

The lieutenants trained at the Field Artillery School receive a plethora of information during the course. During the Fire Support portion of their training, updated TTPs combined with new technology is producing a better quality, more versatile fire supporter in 2012 and beyond. The BOLC-B Fire Support department continues to prepare future Army and Marine junior officers to be an integral component for U.S. Army and Marine force

units to conduct operations in today's contemporary operating environments anywhere on the globe.

Captain Thomas F. Hicks enrolled into the Canadian Armed Forces in 1982 as a noncommissioned officer. He served as an NCO for 18 years before commissioning from the ranks. His various duties have included, fire support NCO for 3 Commando (First Special Service Force), recon NCO with 2nd Regiment Royal Canadian Artillery, Parachute Instructor (Canadian Parachute Training Centre). Hicks then commissioned from the ranks in 2003, he assumed the duties as troop commander F Bty 2nd Regiment RCA. He deployed to Afghanistan in 2005 with the Afghanistan National Army mentor teams in Kabul, Afghanistan. He was attached to 2nd Bn Princes Patricia's Canadian Light Infantry Bn as the company FSO/JTAC and once again deployed to Afghanistan. Hicks has completed tours of duty in the Middle East as well as the FRY, and was then posted to Fort Sill, Okla., Fires Center of Excellence as an instructor with BOLC-B. Hicks completed two years as an instructor at Fort Sill, Okla., before being posted back to Canada to the Peace Support Training Center as a standards officer.

Captain Richard W. Heaser enlisted in the U.S. Marine Corps in 1995 as a combat engineer serving in India Company, 3rd Battalion 2nd Marines, 2nd Marine Division and Alpha Company, 2nd Combat Engineer Battalion 2nd Marine Division, Camp Lejeune N.C. During this time he deployed with the Marine Expeditionary Unit -26 and served in Operation Joint Guard in Bosnia/Herzegovina and Operation Deliberate Guard in Albania/ Montenegro. He also served in Marine Wing Support Squadron 172 in Okinawa, Japan. In 2004, he earned his Bachelor's Degree from Campbell University and was commissioned. He completed the Basic School in Quantico, Va., and the Field Artillery Basic Officer Leadership Course at Fort Sill, in 2005. Heaser served as a forward observer and assistant executive officer in Fox Battery, 2nd Battalion 10th Marines, 2nd Marine Division in Camp Lejeune, deploying in support of the Unit Deployment Program to Okinawa, Japan. Upon returning from the deployment he became the assistance operations officer for 2nd Battalion 10th Marines. Shortly thereafter he deployed to Iraq in support of OIF and

became the battalion operations officer for the deployment. Upon returning from Iraq Heaser became the executive officer of Golf Battery 2nd Battalion 10th Marines where he assisted in the transition of the Battery from the M198 to the M777. Heaser is currently the Fire Support Branch Chief and Instructor at the Field Artillery Basic Officer Leadership Course at Fort Sill, Okla. Heaser has recently been selected for the Inter-service Physicians Assistant Program at Fort Sam Houston, Texas where he will transition to the Army and attend PA school in April of 2012.

Captain Fred A. Janoe is a BOLC-B fire support instructor for 1st Battalion, 30th Field Artillery Regiment at Fort Sill, Okla. His previous assignments include platoon leader and battery executive officer with 2nd Battalion, 18th Field Artillery Regiment (MLRS), Fort Sill, along with a 15-month deployment to Combined Joint Task Force-Horn of Africa. Upon return from the deployment, Janoe served as the battalion fire direction officer in the same battalion. He is a graduate of the Field Artillery Officer Basic Course, Joint Operational Fires and Effects Course, Fire Support Coordinator Course, Joint Fires Observer Course, and the Joint Collateral Damage Estimation Course.

Major Elijah Ward has served as a fire support instructor with 1st Battalion, 30th Field Artillery Regiment since August 2011. Ward graduated from FAOBC in June 2002 and served as a fire support officer for C/2-327th Infantry, 1st Brigade, 101st Airborne Division (Air Assault) at Fort Campbell, Ky., while assigned to 2nd Battalion, 320th Field Artillery and deployed to support the initial phases of Operation Iraqi Freedom and later served as the FDO for C/2-320th FAR. He served a second tour in MND-N with 2-320th FAR as the battalion adjutant in 2005-2006 before attending FACCC in 2007 and returning to 2nd Brigade, 101st Airborne Division (Air Assault) at Fort Campbell. Ward then served as fire support officer for 1-502nd Infantry from 2007 to 2009 to include 14 months in West Baghdad on his third deployment to Iraq. In 2009, he assumed command of Bravo Battery, 1st Battalion, 320th Field Artillery, for 19 months and deployed his battery to Afghanistan in June 2010. Ward is a 2001 graduate of Virginia Military Institute with a B.A. in History.

Fear-based leadership: Motivation is key

By Gene Kamena

"You gain strength, courage and confidence by every experience in which you really stop to look fear in the face. You must do the thing you think you cannot do."

- Eleanor Roosevelt

very leader possesses a motivating spark--the energy that drives a leader forward and determines how the unique characteristics and traits possessed by that leader are actually brought to bear. When the spark of leadership is lit, by a desire for making things happen and for making a difference in the lives of others, regardless of personal cost, the outcome is usually positive for all involved. Unfortunately, some leaders today are motivated by fear; fear of failing, fear of making a mistake, fear of what others might think...fear of being wrong. This article is directed to those leaders residing in this category, with the intent of calling them out, having them examine their actions, and most importantly, reappraising their motivational spark.

If you have been in, or around, the military for any length of time, you know the kind of leader I am writing about. They are overly cautious, test the environment before acting, are risk averse, and all too often, they are rewarded for not making waves. One might assume fear-based leadership is most prominent in junior leaders, and that time and maturity would remedy this deficit of character. My personal experience and observations indicate this is not the case; in fact, fear-based leaders are found at all levels of command and throughout the gamut of leadership positions in our services.

Fear-based leaders are most effective when things are going well and when there is no requirement for decisive action. They are at their best when the environment is predictable and certain. The reality of our world, however, is no one can promise stable environments

and certainties. The thing that keeps these leaders up at night is the specter of crisis, when the spotlight of attention places them front-and-center, demanding a critical decision be made without hesitation. When circumstances prevent the sampling of opinions and perceptions, when action is required and risk must be accepted, the fear-based leader often proves inadequate to the task. They usually pick the 'safe' course of action because the middle of the road is where fear-based leaders live. Sometimes the 'safe' choice works out fine, but there are times when it is absolutely the worst course of action possible.

ow are fear-based leaders made? They are formed in environments that do not allow for creativity or mistakes; zero-defect atmospheres become the genesis of fear-based leaders. Once formed, these leaders often

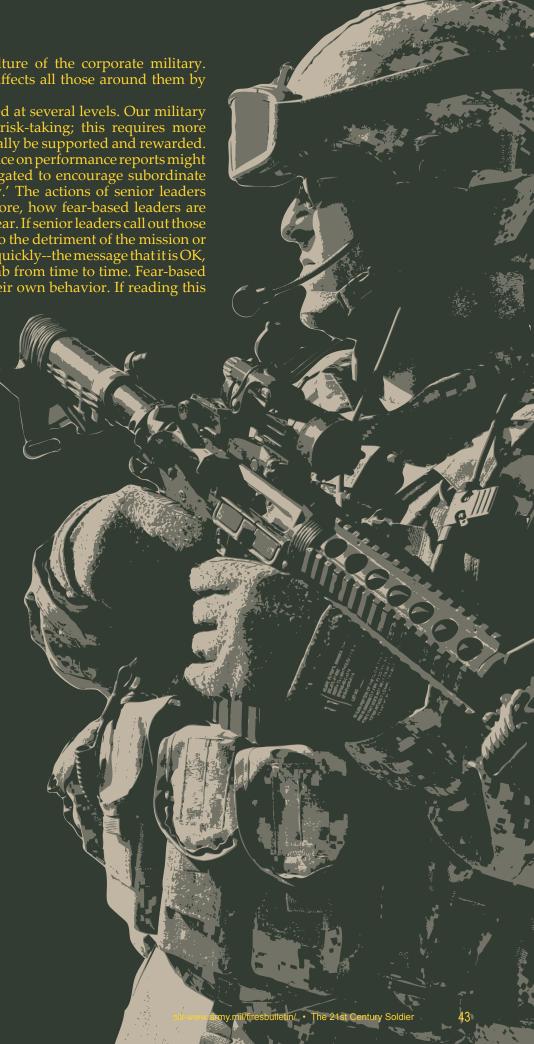
thrive in the 'don't make waves' culture of the corporate military. Unfortunately, this species of leader affects all those around them by becoming a model of how to succeed.

hat can be done? Action is required at several levels. Our military services must value appropriate risk-taking; this requires more than just words. Risk-takers must actually be supported and rewarded. Addressing creativity and risk acceptance on performance reports might be a first step. Senior leaders are obligated to encourage subordinate leaders who do not 'go with the flow.' The actions of senior leaders speak louder than their words; therefore, how fear-based leaders are handled will come through loud and clear. If senior leaders call out those leaders who always play it safe, often to the detriment of the mission or progress, then the message will spread quickly--the message that it is OK, and actually valued, to go out on a limb from time to time. Fear-based leaders can do much to self-correct their own behavior. If reading this

short article causes you to question your own actions, then it achieved its purpose. If you find yourself overly cautious, then ask yourself a question-am I more concerned with appearing wrong than being wrong? A leader can be forgiven for being wrong (once in a while) if acting in the best interest of the mission, organization and others. What cannot be tolerated is the leader who is more concerned with appearances than doing what is required.

At the end of the day, all leaders must look into the mirror and know they did their best. No leader can achieve good outcomes if motivated or unduly influenced by fear. When fear-based leaders peer into the looking glass, they see only half a person: one who plays it safe and risks nothing. Motivation does matter; in fact, it matters a lot. What type of leader do you see in the mirror?

Professor Gene C. Kamena currently teaches Leadership and Ethics at the Air War College in Montgomery, Ala. He is retired from the Army as a Colonel of infantry. He holds a B.A. in History from Auburn University and a Masters Degree in Military Art and Science from CGSC at Fort Leavenworth. He graduated from the Army War College in 1998 and commanded the 2nd Brigade, 1AD. He also served as the chief of staff for the 1st Infantry Division, director of staff of U.S. Space Command and the deputy chief of staff for U.S. Northern Command, director for Iraqi Security Forces and formed and led an Iraqi special border commando brigade on the Syrian border. His operational deployments include; Desert Shield Desert Storm, Macedonia, Kosovo, and Iraq (OIF.)





Captains from Fort Sill, Okla. are briefed in how to speak to reporters before they take part in mock interviews with Oklahoma University journalism students. (Photo by Dwight Normile, Oklahoma University

Terms of engagement

Army captains from Fort Sill, Okla., receive a different type of training in Norman

By Damien Lodes

On a brisk winter Friday morning, a squad of U.S. Soldiers headed nervously into unfamiliar territory. Dressed in camouflage utilities, the troops did their best to prepare for whatever lay ahead. When they finally arrived at their destination, they knew there was no turning back. On the morning of Feb. 18, 2011, 65 captains and four majors from Fort Sill, Okla., invaded Gaylord Hall to take on a small but determined force of journalism professors and students.

Since 2008, the Gaylord College of Journalism and Mass Communication has trained military members from Fort Sill on the art of speaking with reporters. The Army Media Engagement Training is part of the Field Artillery Captain's Career Course, and is held six times a year at the Oklahoma University through a contract with the U.S. Department of Defense and is earning accolades.

"It's been talked about nationally as a model for hands-on interactive education in a civilian setting," said Gaylord College Dean, Joe Foote.

This particular morning started in the Ethics and Excellence in

Journalism Foundation Auditorium, where Charles Self, Institute for Research and Training director, laid out the day's battle plan for the Army and Marine Corps officers in attendance.

After Self's introduction, Gaylord Visiting Professional Professor Mike Boettcher joined the class via computer video conference. Currently in London, Boettcher was on his way back to Afghanistan to resume his work as an embedded journalist with the 101st Airborne Division. His goal on this morning, however, was to give the captains a firsthand look and feel at what journalists are looking for and need when they are attached with military personnel. He also showed video clips of pieces he had produced to illustrate how the process works.

Boettchersaid he wanted to change the common perception among service members that the media were 'out to get them'. He also explained to the Soldiers how the training exercise to follow was designed, bridging the gap and improving the working relationship between military personnel and journalists. "You're not just waging a war on the ground, you're waging an information war," he said.

But Boettcher did emphasize one piece of advice before he signed off.

"The guidance I would give is engagement," he said. "You engage that [journalist] on a personal level. Don't be confrontational."

The participants were then divided into four groups and deployed to the third floor of Gaylord Hall. In separate rooms, the men and women were briefed by Gaylord faculty members on expectations during their ensuing mock interviews with journalism students.

Gaylord professors Warren Vieth and Bob Dickey instructed one group. A professional journalist for 26 years, Vieth held a unique insight, having covered the U.S. occupation of Iraq in 2003.

"[The media training] gives the military a much more realistic perspective on how the press operates and why things don't always turn out the way they think they should," Vieth said.

As Vieth and Dickey were conducting their brief, some shared

their personal and professional experiences with the media. One Soldier told the class about a journalist who overheard him talking with one of his friends, and how his comments ended up in a story without his knowledge or permission.

A common theme during this interview preparation session was the service member should remain in charge of the interview, not the reporter, and does not have to divulge anything to the press. For some, this was a hard lesson to learn.

"Nine times out of 10, they're going to ask the guy what his name is, and five minutes later he's told them his entire life story," said MAJ Paul Harrison, who was in charge of one of the groups.

Prior to the actual interviews, the troops studied a scenario based on an actual battle in Afghanistan. The journalism students were provided only rumors from which to compose their interview questions.

"It's a high-pressure, think-onyour-feet setting that also help students develop their interviewing skills," Vieth said.

As the captains entered the rooms to conduct their one-on-one interviews, some of them looked as if they were walking into a firing squad. Each interview was videotaped and lasted five to 10 minutes. The students did their best to trip up the captains, and sometimes succeeded.

After CPT Ray Augustine entered the room, OU student Emily Erichsen started with easy questions.

"Do you feel you have the same goal as the Afghanistan military?" she asked.

"Yes, we both have the same goal of rebuilding and stabilizing Afghanistan," CPT Augustine replied, his right foot tapping slowly throughout.

The questions got tougher though. "Some of the soldiers deserted you. Can you trust them? Why did it take 45 minutes for the MEDEVAC to arrive?"

Augustine maintained his calm throughout, even if some of the answers sounded rehearsed. "I've been to Afghanistan and Iraq, but I've never been in front of a camera before," said one captain. When asked if it would be scarier to look down the barrel of a gun or a camera he said, "A camera, definitely."

Afterfinishing his actual interview, the captain looked greener than the uniform he was wearing.

"That was horrible," he said. The entire room erupted with laughter.

After a few more captains finished with their interviews, they began to compare notes. It soon became clear, one of them had inadvertently thrown his fellow captains 'under the bus' when he misunderstood a question.

As the others found out, anticipation grew to watch this captain on tape in the afternoon review session.

As the participants reconvened from lunch into the classrooms, their faces registered a range of emotions. The class started watching the interviews and the feedback was mostly positive. Many of the captains had good posture and bearing, while some were noticeably fidgety.

As Harrison had predicted, the biggest mistake was giving up too much information before answering the question. But that was the point of the drill.

"I think it's a huge benefit for them," said Harrison, who spent a year in Iraq between 2008 and 2009. "This is my fourth time [at the OU training], and I always learn something new."

Harrison also explained that the Soldiers and Marines are briefed at Fort Sill about certain informational limitations.

"You're required to answer questions if you're asked, but you have to maintain operational security, those kinds of things, the basic stuff," he said.

After a couple of embarrassing and somewhat robotic interviews later, the moment everyone was waiting for finally came. No one wanted to miss anything from the infamous interview.

His eyes were the size of golf balls as the video began. His posture

started to sag as the interviewer, Gaylord student Morgan Downing, asked about a comment made by the previous captainshehad interviewed. With renewed confidence, he boldly proclaimed, "He is wrong. That didn't happen." His peers exploded with laughter, and the tape had to be paused as the mood settled.

"I've told them, 'You're gonna get up there, and you're gonna mess up, and we're gonna laugh at you. But when you walk away from here, hopefully you'll have a positive experience from this," said Harrison.

After the debrief was finished, the captains headed back to post, having completed one of the most unique days of their training.

Self, a former editor at the U.S. Army Newspapers and reporter for United Press International, said the program, which began as 'just a one-shot thing,' has evolved through the years.

"It's a little different than what we originally thought we would be doing," he said. "But our goals are still the same: to build a more open and transparent and cordial relationship between the captains and the journalists, so they're more comfortable in the situation."

Asked for his vision of where the Army media training would be in 10 years, Self paused and said wistfully, "If the Afghanistan war continues for some time, I think the Defense Department is going to want to expand this program."

Gaylord College and Fort Sill have created an exemplary model for other installations to replicate.

Kingfisher, Okla., native Damien Lodes, a sophomore broadcast meteorology major, served five years in the Marine Corps as an Air Traffic Controller.

(Editor's note: This article was originally printed in July 2011 in the Pulse Alumni Magazine published by the Gaylord College of Journalism and Mass Communication at the University of Oklahoma, Norman, Okla.)

Winners of the 2011

First Place Combat Photo



CPL Jefferson Norrel and PFC Bobby Orr, both from 3rd Platoon, A Battery, 2nd Battalion, 8th Field Artillery, 25th Stryker Brigade Combat Team, direct fire with the M777A2 howitzer at Combat Outpost Al Masaak, Zabul, Afghanistan, on July 9, 2011. Photo taken by CPT Wolf-Ekkehard Hindrichs

Fires Photo Contest

First Place Training Photo



A Multiple Launch Rocket System (MLRS), from A Battery, 2nd Battalion, 4th Field Artillery, sends a rocket downrange during a live-fire training exercise at Fort Bliss, Texas, February 2011. Photo taken by 2LT Justin Nash

Winners of the 2011

Second Place Combat Photo



A Soldier from B Battery, 3rd Battalion, 17th Field Artillery Regiment, fires the M777A2 from Forward Operating Base Spin Boldak, Afghanistan, August 2009. Photo taken by 1SG Michael McMurdy

Third Place Combat Photo

Smoke billows out of the muzzle of the howitzerasmembers of 3rd Section, 2nd Platoon, B Battery, 3rd Battalion, 321st Field Artillery, 18th Fires Brigade conductacalibration mission at Camp Wright, Asadabad, Kunar Province, Nov. 9, 2010. Photo taken by SPC Joseph Gallegos



Fires Photo Contest

Second Place Training Photo

SSG Shaun Umi, from C Battery, 1st Battalion, 37th Field Artillery Regiment, 3rd Brigade Combat Team, 2nd Infantry Division, oversee the firing of the M777A2 howitzer during section certification at Joint Base Lewis-McChord, Wash., April 1, 2011. Photo taken by 1LT Alexander Kim



Third Place Training Photo



Canon crew-members from B Battery, 1st Battalion, 101st Field Artillery, 86th Infantry Brigade Combat Team, fire the M119A2howitzer during a live-fire exercise at the Ethan Allen Firing Range in Jericho, Vt., Aug. 27, 2011 Photo taken by SPC Ryan Richards

Winners of the 2011

Combat Photo Runners Up



Photo by 1SG Michael McMurdy



Photo by 1SG Michael McMurdy



Photo by 1SG Michael McMurdy



Photo by 1SG Michael McMurdy



Photo by SPC Joseph Gallegos



Photo by SGT Steven Parsons

Fires Photo Contest

Training Photo Runners Up



Photo by 2LT Justin Nash



Photo by SSG Shaun Ortego



Photo by SGT Bryan Ploughe



Photo by SPC Ryan Richard



Photo by SSG Latroy King



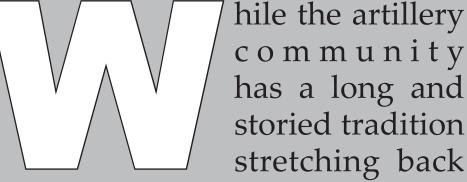
Photo by PFC Ashley Thompson

Evolving Marine Artillery:

Utilizing the Triad of Fires in the 21st Century

By Capt. B. A. Friedman





centuries, modern combat has ushered in changes in the ways that the King of Battle is employed. Since 2001, U.S. Marine artillery has led the way in adapting to the requirements of modern warfare by employing split battery operations and experimenting with enhanced battery operations. However, these new missions have stretched the capabilities of the classic artillery structure to the point where major structural changes are necessary to operate on the modern battlefield. The last significant changes to the structure of U.S. artillery units were the introduction of the fire direction center in 1935 and the first use of forward observers in 1942.

An M777 howitzer kicks rocks and dust into the air after firing during a recent mission. The Marines with Charlie Battery, 1st Battalion, 12th Marine Regiment, remain undaunted as they listen to the recorder to see if they have another mission. (Photo by Cpl. Jeff Drew, U.S. Marine Corps)

In the last decade, the artillery community has acquired three new weapon systems to replace the one system previously in use. Rapidly advancing digital communications technology enables a plethora of new possibilities for the employment of fire support. However, the structure of Marine artillery has not sufficiently evolved from the traditional battalion originally adopted by artillery units after the Franco-Prussian War of 1870-1871 nor has the potential of digital technology been fully embraced. Fortunately, the last 10 years have yielded more than enough data to chart a way forward for Marine artillery to remain a potent capability. While the Marine Corps has taken steps towards reorganizing the battery, a more comprehensive change must be made to truly optimize Marine artillery. In order to be relevant and effective on the modern battlefield, Marine artillery must reorganize around the triad of Fires utilizing the lessons of Iraq and Afghanistan and the capabilities of modern digital communications equipment.

helast 10 years. As a community, Marine artillery is a vastly different field than it was in 2001. Every artillery unit in the Marine Corps fielded the M198 155 mm towed howitzer. Planners could focus on the employment of artillery in large scale, conventional warfare against a near-peer competitor. Artillery fought as battalions or supported Marine expeditionary units' (MEU) deployments as batteries but did not operate as independent platoons or sections. Close air support (CAS) was a job left to the air officer and the only precision guided munition available, the M712 Copperhead round, was so rare that it was almost

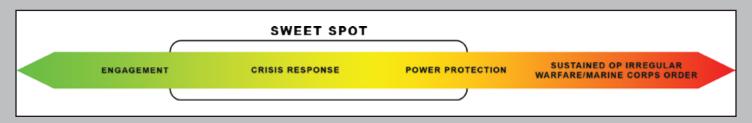
mythical. Today is vastly different. Marine artillerymen employ not one but three different weapon systems: the M777A2 155 mm lightweight towed howitzer, the High Mobility Artillery Rocket Systems (HIMARS), and the Expeditionary Fire Support System (EFSS). The requirement for a regiment or battalion worth of massed artillery fire is rare. Instead, the infantry needs artillery coverage over as wide an area as possible. Artillery forward observers must now be just as adept at CAS nine lines as they are at calls for fire and, for the foreseeable future, precision guided munitions will be in high demand or become the norm. While our tools and the requirements of modern combat have drastically changed, our structure, methods, and employment have not kept pace. This has led to strains as artillery units attempt to bend to meet modern requirements. Artillery now has long, medium, and short range capabilities that should grant it the flexibility needed to support any contingency. This flexibility has thus far eluded us because we have not sufficiently evolved to our environment or our tools. Two major changes to the Marine artillery community are drastically needed in order for us to be relevant and capable in future operations. First, we must restructure artillery units around the three weapon systems rather than just plugging them into the existing structure. Second, we must embrace decentralized fire direction, made possible by advancements in automated fire direction.

eorganization. In a 1999 information paper entitled, "Comprehensive review of Marine Artillery" GEN E. R. Bedard, commanding general, II Marine Expeditionary Force to the Commander, wrote "The current artillery structure does not provide the flexibility required to support current or future Marine Corps missions."

The above statement is as true today as it was at the close of the last century. Despite the acquisition of three new weapon systems, the structure of Marine artillery has not evolved one step in the intervening years. Marine artillery has always fought and trained as battalions, and this should not change. However, we are far too wedded to homogenous battalions (meaning, artillery battalions utilizing only one kind of weapon system.) We now have one active duty and one reserve battalion composed entirely of HIMARS batteries despite the fact that they will never be employed as such. HIMARS are best suited for high payoff targets in the deep battlespace or for targets that require precision guided munitions that other systems cannot reach. Thus, they are being employed in Iraq and Afghanistan as sections composed of two HIMARS systems. A scenario where an entire battalion of HIMARS systems must be massed is ludicrous and maintaining them in such units off the battlefield is equally ill-advised. Furthermore, since HIMARS systems are best employed as sections, it only makes sense to disperse these sections as widely as possible throughout the force.

The artillery community has gone in the opposite direction with the EFSS. Rather than integrating the mortar throughout the artillery community, it has been relegated to a sole battery in each regiment. This only ensures that most artillerymen will never get the chance to work or train with the system unless they

Figure 1: Flexibility is the key to relevancy across the range of military operations.



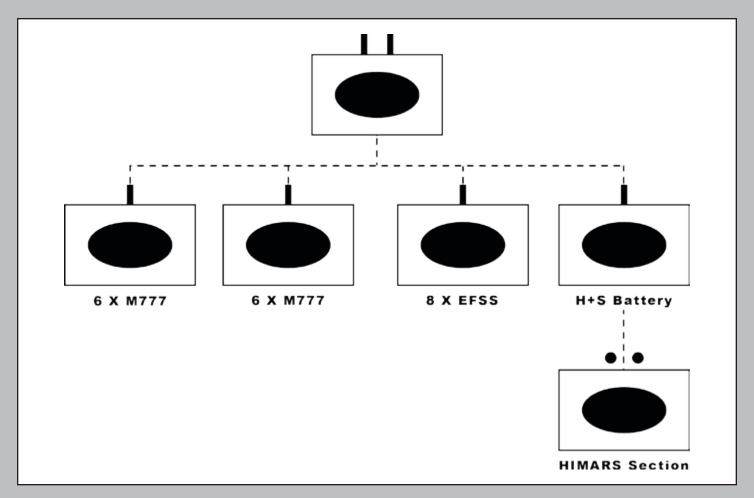


Figure 2: The proposed artillery battalion of the future offers far more flexibility to the RCT commander, including a deep battle space strike capability, while maintaining the ability to mass fires on a decisive point.

are assigned to these few batteries. Once they are assigned to these batteries, they may bring with them no knowledge or experience with the system, but must be brought up to speed. For the EFSS system to reach its full potential and to be fully integrated with the other two legs of the triad of Fires, we must begin to build institutional knowledge and experience with the system. This can never be achieved under the current system.

Since artillery will continue to fight and train as battalions, the ideal way to utilize the 'triad of Fires' is to integrate all three weapon systems into the Marine artillery battalion. The artillery battalion of the future should consist of two 6-gun M777A2 batteries, one 8-gun EFSS battery, and a Headquarters and Service Battery that includes a HIMARS platoon (one 2-system section and its support). This heterogeneous

battalion offers the regimental combat team (RCT) commander the complete range of capabilities that Marine artillery can provide and the artillery battalion commander a wide range of options to meet the commander's intent. During lowintensity, distributed operations, the M777A2 and EFSS batteries can provide wide-ranging indirect fire coverage while adding the longrange, all-weather, precision strike capability of HIMARS. The EFSS battery allows the RCT commander to weigh his main effort with a more responsive weapon system with a higher rate of fire. During conventional operations, this method can yield the same ability to mass Fires on a decisive point as the classic artillery battalion while giving the RCT commander the ability to affect the enemy in the deep battle space.

This organization has additional benefits while not deployed. It

would give the artillery battalion commander the ability to cross train his battalion on each weapon system. Currently, artillerymen will utilize one weapon system for a three-year fleet tour, serve on a B billet, and then return to the fleet, possibly utilizing a vastly different weapon system. This will lead to gaps of six to nine years or more where artillerymen do not train on two out of three systems. This is obviously unsustainable. The only solution is to maintain those skills through cross training and a battalion with access to all three systems is the ideal organization to accomplish that goal. Additionally, because of this skill cross-training, the EFSS battery in each battalion will be able to quickly transition to M777A2 operations if necessary without a long lag time. The battalion will also be better able to support task-organized MEU requirements since each Marine artilleryman will

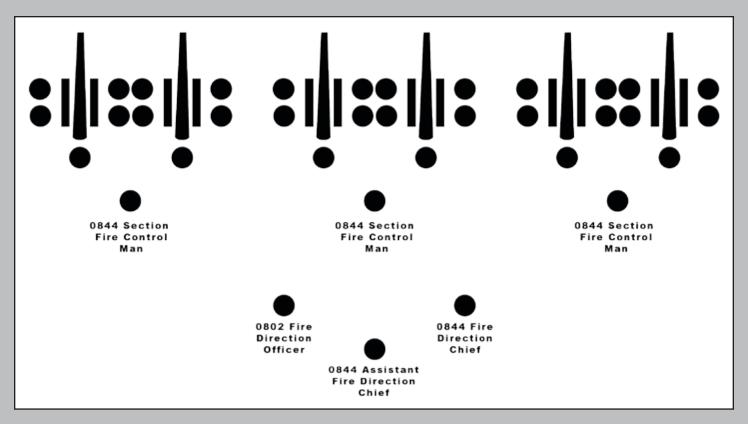


Figure 2: The proposed Artillery battalion of the future offers far more flexibility to the RCT commander, including a deep battle space strike capability, while maintaining the ability to mass fires on a decisive point.

be knowledgeable on each system.

Becentralized fire direction.
Bedard also wrote, "As we develop and field more digital communications systems for the artillery, to include Advanced Field Artillery Tactical Data System (AFATDS), the personnel structure and training must support its implementation."

The other major change to artillery that must be embraced is decentralized fire direction. Batteries that have experimented with EBO or conducted split battery operations in Afghanistan have strained to conduct these operations with classic, centralized fire direction that the Marine Corps has utilized for years. While automated fire direction has been a reality since 1944, this capability has never had an evolutionary impact on artillery structure or employment. This lack of evolution was partly due to the limitations of early automated fire direction systems, but technology has now advanced to the point where evolution is possible. The decentralized nature of modern

infantry combat necessitates the parallel decentralization of fire support and thus, decentralized fire direction. In situations where counter-battery fire is a concern, centralized fire direction is fraught with liability. Decentralized fire direction would also greatly enhance Marine artillery when conducting operations such as a 'jumping barrage.' With the right software, an off-the-shelf iPod Touch or other similar technology can provide automated fire direction in the palm of your hand. The inherent communications capability enables these devices to communicate with each other. There is no longer a reason to continue concentrating fire direction at the battery level in a pair of ancient desktop computers. Many will find the elimination of battery fire direction center (FDC) to be uncomfortable, but it is not without precedence. The German 18th Artillery Division was able to mass the Fires of its batteries using an experimental fire direction battery at the division level in 1943, utilizing a primitive electronic computer linked

Centaur Handheld Fire Direction System, now outdated by civilian technology standards, was capable of battery fire direction some years ago. Yet, we have failed to translate new capabilities into improved tactics, techniques, and procedures. With training, future cannon crewmen could compute their own firing data, specific to their gun, on handheld computers while 0844s provide oversight, expertise, or conduct manual computation as a backup system. The technology to accomplish this is not only present, but has been for quite some time. It is up to us to finally take advantage of it. Challenges. The largest hurdle that implementing this plan would face is the new logistical challenges that three weapon systems would present to the battalion S-4. Additionally, the S-4 will be strained by the logistical requirements of the HIMARS platoon resident in the Headquarters and Service Battery. These challenges can be mitigated by shifting some of the burden for resupply onto the batteries

to teletype machines. Raytheon's

themselves as each battery has assets capable of transporting ammunition. Another significant challenge is the lack of a suitable East Coast firing range for HIMARS live-fire training. Fort Bragg, N.C. is the best option for East Coast units, but live-fire can always be conducted at Twentynine Palms during pre-deployment training. Another hurdle is that, thus far, HIMARS have been deployed as a division level asset. This was proper for a new weapon system, but the time has come to fully integrate HIMARS where it can best be employed by the artillery battalion supporting the RCT. The RCT is more than capable of conducting the aerial de-confliction necessary to utilize HIMARS. To do otherwise limits its potential and is detrimental to our ability to support the infantry in both conventional and irregular warfare.

Lastly, many will resist replacing six M777A2s with eight EFSSs in each artillery battalion. However, the ability to field two additional tubes, the superior rate of fire, and the increased blast radius of high angle of fire weapons makes up for its smaller size. The flexibility and responsiveness of EFSS is a capability that should not be denied to the supported unit. The reduced range of EFSS in comparison with the M777A2 will produce an additional but not insurmountable challenge to the artillery battalion S-3 when directing battalion operations. Additionally, in the July/August edition of The Artillery Journal, LTC Michael Forsyth, USA identified the decreasing need for the massing of Fires concurrent with the proliferation of precision guided munitions in both close air support and indirect fire support. The increased effectiveness of highly accurate firepower decreases the need to cover point targets with massive amounts of rounds. On the other hand, the Marine Corps could also consider increasing the amount of guns in the M777A2 batteries to eight tubes to maintain the current level of firepower. Eightgun batteries composed of M198 Howitzers were used in the 1980s



Marines with Charlie Battery, 1st Battalion, 12th Marine Regiment, fire an M982 Excalibur round from an M777 howitzer during a fire support mission. (Photo by Cpl. Jeff Drew, U.S. Marine Corps)

and a study conducted in 1980 of various artillery battalion structures concluded that a battalion composed of eight-gun batteries was the most effective organization.

volution. Marine artillery is organized in the exact same way as every other artillery community on earth and employed in much the same way that Napoleon employed his Corps artillery. But we are not every other artillery community and we have certainly come a long way since the early 19th Century. The Marine Corps has a unique mission set and versatility is key when it comes to supporting those missions. Additionally, the technology we use to accomplish our missions is vastly different than it was just 10 years ago. We have a long history of developing cutting edge tactics that has been ignored for far too long. Future warfare, whether it takes the form of conventional combat operations against a near-peer competitor or counterinsurgency operations against irregular combatants, will require flexible fire support provided by multiple weapon systems geographically separated from each other. The artillery battalion as it

is currently organized with access to only one weapon system and saddled with outdated fire direction methods cannot provide the flexible and responsive fire support that 21st Century warfare requires and remain relevant. Since the near future will be one of tight budgets, we are fortunate that most of the technology required to evolve artillery for the future is already developed and acquired. This article, if nothing else, is meant to serve as a starting point to evolve Marine fire support to fit the present and future environment. All we need now is the intellectual leadership to develop a new path and the will to make the required changes.

Captain B. A. Friedman is currently serving as the Fires action officer, Current Operations Branch, Training and Education Command G-3. He has also served as a fire direction officer during the operational test of the Expeditionary Fire Support System, a Fires and effects advisor with an Iraqi army battalion, and the liaison officer of India Battery, 3rd Battalion, 10th Marines. He holds a Bachelor's Degree in history from Ohio State University and is currently working on a Master's Degree in National Security and Strategic Studies through the United States Naval War College.



By MAJ Corey Landry and MAJ Jon B. Fausnaugh

n the summer of 2010, the 172nd Separate Infantry Brigade's long range calendar included force generation, training, and preparation for an Operation Enduring Freedom deployment in the winter of 2011/2012. That timeline afforded 1st Battalion, 77th Field Artillery, the SIB's organic Fires battalion, ample time to reorganize from a modified table of organization and equipment Army-of-Excellence Paladin battalion to a mixed towed artillery battalion as part of the 172nd SIB's transition to an infantry brigade combat team.

In the fall, however, the brigade received notification its deployment timeline had drastically changed, forcing the brigade and Fires battalion into an accelerated timeline allowing only six months to task organize, field equipment, qualify crews and

execute a mission rehearsal exercise at the Joint Multinational Readiness Center, Hohenfels, Germany. The battalion's mission in OEF was to be Fires'pure,' making it imperative each crew attain maximum proficiency in their core skills.

Beginning with Joint Multinational Readiness Center's (JMRC) Leader Training Program for 172nd BCT in December 2010, the Vampire observer/ controller-trainer (O/C-T) team (fire support trainers) and 1-77 FA opened a continuous dialogue to determine how the team could best support the battalion commander's training objectives and prepare the unit for deployment. The challenges facing the battalion were many. In short order, the battalion and batteries needed to task organize, borrow towed howitzers from 2nd Stryker Cavalry Regiment and 173rd Airborne BCT, train, and conduct live-fire exercise certification of Paladin crews on M119A2 and M777A2 cannons, all prior to the start of their mission rehearsal exersice (MRE).

The transition and certification on new systems would consume much of the battalion's remaining training time, leaving little time to train tasks outside of their core competencies.

To prepare for deployment, the *Vampire Team* and 1-77 FA immediately began working together to maximize the value of the remaining training time. The 1-77 planned several weeks of systems training, section certification and platoon-level gunnery leading up to their MRE. The Vampires would support this with an independent set of eyes from experienced O/C-Ts, helping coach and train battery leadership through platoon certification. As for the MRE, the team needed to design a comprehensive FA situational training exercise lane

which would exercise and assess core competency skills, as well as additional counterinsurgency training not fully achieved during train-up.

By maintaining constant communication with 1-77 FA's leadership, the *Vampire Team* supported and designed training for the battalion, which was approved by the command teams of the unit and JMRC.

Pre-rotation gunnery training. At 1-77's request, two months before the battalion's JMRC rotation, the *Vampires* sent a battery O/C-T

team (minus), consisting of a battery senior officer, two 13B senior noncommissioned officers, and a 13D senior NCO, to assist the unit in executing platoon-level gunnery training at the Grafenwoehr Training Area, home of the 7th Army Joint Multinational Training Command. Because

of the relatively close proximity of JMRC to United States Army Europe units, the O/C-T teams frequently work with units prior to a rotation, building solid relationships and establishing communications early.

The battalion commander focused the O/C-T's observations towards critical areas which he wanted feedback and coaching, including 6400 mil operations, fire direction center and section crew drills, high angle, direct, and sweep-and-zone Fires. Each platoon, having completed their transition to M119A2 and M777A2 over the previous 90 days, had different levels of proficiency. The O/C-Ts conducted numerous classes at the platoon level to improve proficiency in crew drills.

During the unit's combat outpost defense LFX, O/C-Ts instructed sections on tactics, techniques, and procedures, as well as doctrine for engaging targets with direct fire and 'Killer Junior' (direct fire with and adjusted trajectory and time fuze designed to achieve a 10 meter height-of-burst) from the M119A2. Sections adjusted crew drills to incorporate 10/R, which raises tube elevation, achieving the 10 meter height of burst for 'Killer Junior.'

The unit also spent considerable time focusing on special missions they expected to execute during Field Artillery Cannon Battery, firing the center aim point first, followed by the remainder of the sweep-and-zone.

Fire direction centers (FDCs) at each firing platoon were proficient in computing firing data for single targets inside a safety box, but were not yet comfortable with back-up manual computational procedures, as they had only recently received graphic firing tables, graphical site tables, and tabular firing tables. The O/C-Ts assisted the FDCs in establishing manual procedures, including computation of site

and extracting data from TFTs. Finally, the team assisted FDCs in developing and implementing standardized tracking systems to incorporate prior to their IMRC rotation.

The O/C-T team would brief the battalion commander and battery commander daily on its observations and

recommendations. Based on this feedback, the battalion commander adjusted training as necessary, and gained insight allowing him to refine training tasks for the upcoming MRE and squad training exercise (STX).

STX development. Following the platoon-gunnery exercises, the battalion commander and Vampire Team were able to focus the MRE STX design on observed weaknesses and the commander's additional training objectives. Having achieved section and platoon-level proficiency in core competency tasks, the commander decided to focus STX week during the MRE on platoon table XII live fire and additional mission-essential skills, including fire base operations, air assault rigging, M777A2 direct-fire

The 1st Battalion, 77th Field Artillery Regiment planned several weeks of systems training, section certification and platoon-level gunnery leading up to their mission readiness exercise.

their upcoming deployment: high angle, sweep-and-zone, and actionazimuth (or out-of-traverse), with the latter two missions being focus areas for the O/C-Ts. They assisted gunners and section chiefs in improving crew drills by using their M137 sights as compasses, establishing action azimuth markers, issuing warning orders from the FDC, and establishing alternate aim-ing reference points to support 6400 mil operations. Each firing unit worked through several versions of sweep-and-zone missions, varying the order in which sections fired aim points. O/C-Ts assisted the unit in developing standing operating procedures from FM 6-50, Tactics, Techniques and Procedures for the

Squad Training Exercise (STX) / Command Post Exercise (CPX)							
Unit	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1/A/1-77	Field Artillery STX (Fire Base)			Direct Fire	AAR	Air Assault Rigging	Depart to MRE/ Occupy FOB
2/A/1-77							
3/A/1-77							
1/B/1-77	TLPs/ Air D30 Access			Field Artillery STX			A A D
2/B/1-77	Cross– Training	Training	Assault Rigging	(Fire Base)			AAR
1/C/1-77	Air	TLPs/ M777	Field Artillery STX			AAR/	Depart to MRE/
2/C/1-77	Assault Rigging	Cross- Training		Fire Base)		D30 Training	Occupy FOB

AAR = After Action Review

MRE = Mission Rehearsal Exersice

FOB = Forward Operating Base

Figure 1: Table showing the squad training exercises (STX) and command post exercise (CPX) schedules.

and crew cross-training on howitzer systems. Furthermore, the battalion was to begin a partnering mission with a D30 artillery battery from the Afghanistan National Army, which required familiarization with the D30 system. To support this, the team designed a week long training schedule consisting of a three-day live-fire STX in a fire base, and one day of each specialty training objective: direct fire, sling load operations and D30 familiarization. Fire base occupation and training events would be conducted by consolidated batteries, allowing commanders to command, control and assess their platoons during training, as well as coordinate the multiple tasks required during fire base occupation. The final schedule is depicted in figure 1.

The *Vampires* developed the FA live-fire STX as a 72-hour tactical mission, in support of a notional company air assault, and attack of an objective inside the impact area. Prior to occupation, the battery O/C-T issued a battalion-level operations order to the battery commander, complete with graphics, annex D

and schedule of fires. Once each unit issued their order, the *Vampires* replicated the maneuver fire support team and fire support element while conducting a task force fires rehearsal, which was a first for many of the commanders. Clarifying the rehearsal process, from the combined arms rehearsal through fire support, FA, and finally technical rehearsals, greatly enabled platoons and sections to understand and execute the fire plan. The firing battery was assigned to a 200 m x 100 m fire base with 6 foot berms, a logistics support area and an entry control point. Movement from the forward operating base to the fire bases was unimpeded, allowing the unit to focus on advanced party procedures and TLABSPAP [trails, lay, aiming point identified, boresight verified, safe, pre-fire checks performed, ammunition prepared, and position improvement]. The priorities of the troop to task throughout the STX lane stressed the leadership to manage personnel and accept risk.

The battery was responsible for defending the fire base, operating the ECP, maintaining a platoon-size quick reaction force, and maintaining a platoon prepared to fire in support of the maneuver operation. The battery O/C-T team replicated the maneuver headquarters and coordinated the tactical scenario by providing reports and situational updates.

The 1-77 FA combat operation laser team (COLT), along with a COLT O/C-T, occupied an observation post, observed and requested Fires as part of the tactical scenario. Additionally, the battalion radar sections incorporated friendly and hostile fire tracking into the STX lanes by occupying radar positions on opposite ends of the impact area. The Q36 and Q37 radars provided secondary observers and sent digital counter-fire missions to the firing platoons with hostile fire replicated by fire markers in and around the fire base. Using embedded trainer mode on the radar systems, counterfire points of origin were generated from inside the impact area, and were completely integrated with the tactical scenario and indirect fire impacting on the fire base.

During the firing battery STX lane,

each battery conducted all Artillery Table XII tasks.

Depending on the task, targets were either built into the tactical

fire support plan or sent as targets of opportunity by the COLT or radar section. Each type of mission was initially sent as a do not load mission, and

then executed live. The FDCs for each battery received maneuver reports from O/C-Ts; battle tracked, live fired using manual computations, and conducted technical fires rehearsals

to prepare for a schedule of Fires in support of the final assault. Additionally, O/C-Ts assisted batteries in solidifying crew drills

The battery was responsible for defending the fire base, operating the ECP, maintaining a platoon-size quick reaction force, and maintaining a platoon

and SOPs for FDC and gunline operations that included warning orders, battle tracking, fire order Standard Operating Procedures (SOPs), out-of-traverse procedures,

prepared to fire in support of the maneuver operation.

fire command standards and terrain gun position corrections to streamline communication and increase efficiency. O/C-Ts assisted

> section chiefs, fire direction officers and platoon leaders in developing sound, yet flexible, fire order SOPs to facilitate rapid crew drills in the

FDC and predictability on the gun line. These crew drill modifications reduced the platoons' out-of-traverse mission times by more two minutes and enabled the gunline to orient

Soldiers from 1st Battalion, 77th Field Artillery Regiment perform Table XII tasks from the fire base in Grafenwoehr Training Area, Germany during their Joint Multinational Readiness Center (JMRC) Mission Readiness Exercise (MRE). (Photo courtesy of 1st BN, 77th FA)





Soldiers from 1st Battalion, 77th Field Artillery Regiment perform Table XII tasks from the fire base in Grafenwoehr Training Area, Germany during their Joint Multinational Readiness Center (JMRC) Mission Readiness Exercise (MRE). (Photo courtesy of 1st BN, 77th FA)

on an action azimuth while the FDC computed technical solutions. In addition to continuous FA operations, critical operational environment training events were distributed throughout the exercise. Each battery conducted an information engagement in the adjacent village with the elders, mullah, and police chief; reacted to negative villager sentiments and civilian casualties from an improvised explosive device; and defended their firebase from an aggressive attack. Leaders conducted an information engagement immediately after occupation and, after 24 hours of LFX operations, were approached by the populace with negative sentiments regarding the disruption to daily life caused by the artillery Fires. Subsequently, the villagers struck a victim-operated

IED leaving the fire base, forcing the battery to deploy its QRF, execute the 5Cs [confirm, clear, cordon, check, and control, and treat civilian casualties (medical rules of engagement). Finally, O/C-Ts focused on developing engagement areas and defending their fire base. Batteries were able to refine and rehearse their defense plans, develop mass casualty event SOPs and observation plans for dead space, as well as reposition and harden crew-served positions. They also established platoon sectors and assigned howitzer responsibilities to sections with reduced manning. Platoons also developed aid and litter teams, refined casualty collection points, and instituted sweep and clear tasks as a QRF planning priority.

Concurrent to the FASTX, each radar section executed STX lanes

incorporating movement to and occupying a radar position, reacting to an IED, and unexploded ordnance, as well as survivability moves. Throughout the lanes, the battalion leadership was allowed to observe and assess training, make corrections and retrain as needed. Specialty training during STX week included D30 familiarization training, sling load training, system cross-training, and direct fire training for the M777A2 battery. D30 mentorship training included eight hours of instruction from O/C-Ts on occupation, emplacement, lay, crew drill and fire direction procedures. Units learned to emplace and march order the D30, conducted indirect and direct fire missions, and laid the platoon with the 6000 mil aiming circle. FDCs learned to compute manual firing solutions for the D30 manually and how to operate the Afghan Field Artillery Computer.

In addition to each firing battery, the battalion master gunner and FDC chief, who would be supervising the battalion's partnering mission, participated throughout to gain proficiency. During sling load training, the batteries rigged and hooked up howitzers to German CH-53 Sea Stallion helicop-

ters or Slovenian Cougar helicopters, training between 10 and 15 hook-up teams. This training was enthusiastically received by the unit, as these skills are crucial in Afghanistan's operational environment and not easily resourced for training. Another first for the battalion wastheopportunity to direct fire the M777A2 howitzer. Although this skill had been previously trained on the M119A2, the ability to execute live, direct fire of a 155 mm projectile was a confidence

booster for the relatively new M777 crews.

Upon completion of STX week, the firing platoons were placed under the tactical control of the maneuver task forces for the duration of the MRE. They entered the MRE in a much better position to integrate with and support maneuver operations in a COIN environment. Battalion and battery leaders entered the MRE confident they had gotten the most training value possible from their limited time, and perhaps not perfect, their platoons were certainly proficient in delivering Fires. The flexibility of FA battalion missions and task organization in support of OEF has spawned even more

flexible approach to exercise and training design. As a result, each MRE involves early coordination with the rotational unit chain of command and event tailoring to fully meet pre-deployment requirements and prepare units for success. This article represents one such example to maximize the training value for an FA battalion fielding and training on new equipment in preparation for an OEF fires mission.

where he served as a fire support officer, fire direction officer, battery executive officer, and battery commander for 2nd Howitzer Battery (M198) during Operation Iraqi Freedom (OIF) I. He served as a basic fire support instructor for the Field Artillery Officer Basic Course and Basic Officer Leadership Course III at Fort Sill, Okla., from 2005-2006. He then commanded Bravo Battery, 2nd Battalion, 4th Field Artillery Regiment, 214th Fires Brigade, deploying to OIF from NOV 07 - FEB 09. He was then reassigned to the Joint Multinational Readiness

Units learned to emplace and march order the D30, conducted indirect and direct fire missions, and laid the platoon with the 6000 mil aiming circle. FDCs learned to compute manual firing solutions for the D30 manually and how to operate the Afghan Field Artillery Computer.

Had early communication not been established between the battalion and the O/C-T team, these events may not have been so successful. The team would have designed and resourced FA STX in a vacuum, with no previous visibility of unit strengths and weaknesses, and not as well-nested with the battalion commander's training objectives and key tasks. Fortunately, the mutual efforts of 1-77 FA and the Vampire Team resulted in a very productive exercise, which yielded great improvement at the most important level – the platoon.

Major Corey Landry's first assignment was with 2nd Armored Cavalry Regiment, Fort Polk, La.,

Center, Hohenfels, Germ-any, where he served as battalion/task force fire support, firing battery, and a field artillery battalion operations observer/controller-trainer (O/C-T). He is currently attending Intermediate Level Education at Fort Leavenworth, Kan.

Captain Jon B.
Fausnaugh's first
assignment was to
1st Battalion, 77th
Field Artillery, Fort
Sill, Okla., where
he served as a
support platoon
leader and Multiple
Launch Rocket
System firing
platoon leader.

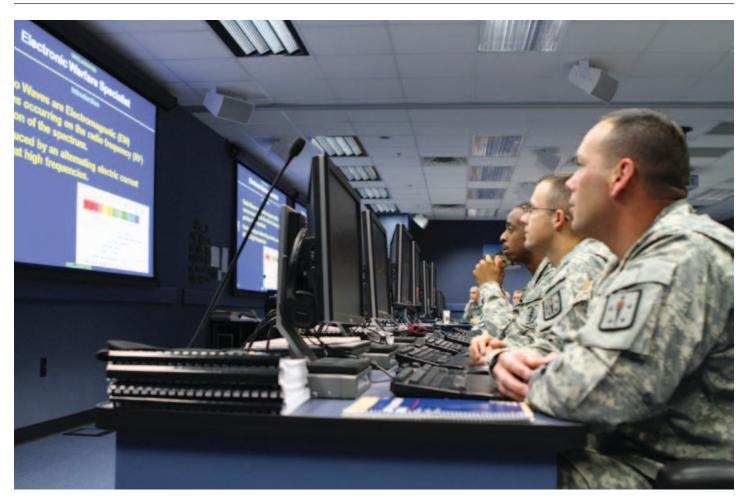
He later joined 1st Battalion, 11th Armored Cavalry Regiment, where he served as a fire support officer in OIF from February 2005 through January 2006. Following the Field Artillery Captains Career Course, Fausnaugh was assigned as the brigade S3 for 5th Battalion, 2nd Infantry Division (Stryker Brigade Combat Team) during the first nine months of its generation. He went on to serve as the Brigade Assistant S3 until he took command of Bravo Battery, 3rd Battalion, 17th Field Artillery Regiment in December 2008. Fausnaugh deployed with Bravo Battery to Kandahar province, Afghanistan from July 2009 through June 2010. He is now stationed at the Joint Multinational Readiness Center, Hohenfels, Germany, where he serves as a battalion operations observer/control trainer.

Electronic Warfare:

The newest military career field choice

Compiled by Shirley Dismuke from articles by:

Marie Berberea (The Cannoneer), SGT Justin A Naylor (2nd BCT, 1st Cav Div), Adrienne Anderson (The Bayonet), and SGT Brandon Bednarek (4th BCT, 1st Armored Div)



Students sit inside a secure classroom Jan. 21, 2011, in the Electronic Warfare Specialist Course, as they learn how to integrate, coordinate, execute and assess electronic warfare capabilities with ground operations across the full spectrum of joint military operations. There are also courses offered for officers and warrant officers at Fort Sill, Okla. as the Army establishes electronic warfare as a career field. (Photo courtesy of U.S. Army)

If you were to ask 20 people on 'Main Street, USA,' what the acronym EW stands for, you are likely to get about 20 different answers. Some people would say Entertainment Weekly. People with a medical background might say the emergency ward. Environmentalist might say extinct in the wild. And some Soldiers might say EW stands for early warning. Technically, all of them are absolutely correct.

The Army is working diligently to change this, at least for Soldiers. Electronic warfare, has been a 'buzz word' since GEN Peter Charelli, Army vice chief of staff,

recognized the need for EW capability in Iraq. In 2006, he placed Navy electronic warfare officers with ground combat units to manage the complicated electromagnetic spectrum.

Why has the electromagnetic spectrum become so important during the past five to six years? Even if they can't tell you what the electromagnetic spectrum is, just about anyone who has been deployed knows it has everything to do with IEDs, or improvised explosive devices. What the average person might not realize is,

electronic warfare has played a significant role in military operations since WWII, where radar and jamming equipment significantly contributed to the success of an Allied victory.

Prior to Operation Overlord at Normandy in 1944, a

Royal Air Force squadron deceived the German army and convinced them that a second fleet of Allied ships was approaching another French coastline, according to the historyofwar.org website.

Armed with specialized jamming equipment, the squadron's planes mimicked the radar signatures of warships by flying 'low and slow' across the English Channel.

It was a deception tactic used to make the Germans think the fleet was coming from a different direction.

The website also explains how the use of RADAR {radio detection and ranging (yes, it was originally an acronym; although, it has become a commonly used word)} dramatically impacted the outcome of the war.

Once the military began using radar on U.S. bombers and torpedo bombers, the tide began to turn in favor of the U.S. and our allies. The newly incorporated radar systems allowed U.S. planes to successfully conduct night missions against a powerful Japanese fleet, which

controlled the Pacific for most of the war.

Although radar was the first significant use of electronic warfare, it has become a cornerstone in today's military operations. Training the modern Soldier on something as intangible as the electromagnetic spectrum can be a daunting task, one which the Fires Center of Excellence at Fort Sill, Okla., has

operations since WWII, where

success of an Allied victory. enthusiastically embraced.

> MAJ Gregory Griffin, 1st Armored Division Headquarters, formerly an infantry officer, attended the Electronic Warfare Officer's Qualification Course at Fort Sill, after the Army's decision to establish Electronic Warfare, 29-series, as a career field.

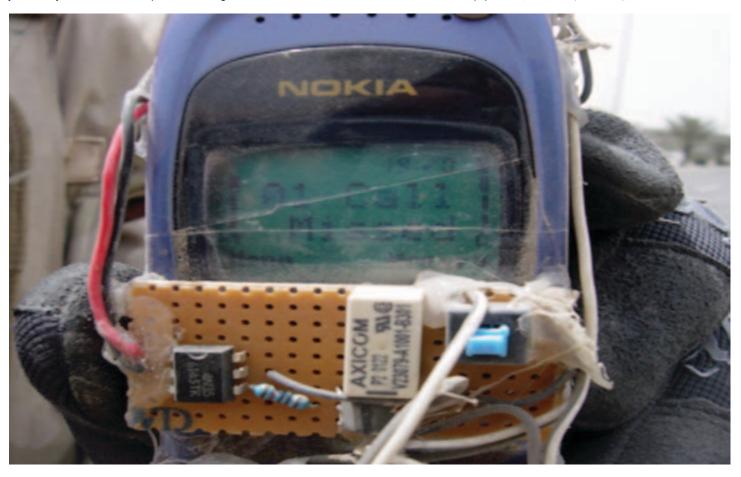
This cell phone was rigged as a detonator for an improvised explosive device (IED). The detonator was recovered undamaged after having been successfully jammed by electronic warfare personnel using Counter Radio-Controlled IED Electronic Warfare equipment. (Photo courtesy of U.S. Army)

Electronic warfare has played

a significant role in military

radar and jamming equipment

significantly contributed to the



"If you're listening to a radio, if you're talking on a cell phone, if you're using a GPS, you're tied to the electromagnetic spectrum," said Griffin. "It's a very functional part of the battlefield. Everyone uses it. Everyone relies on it – adversaries as well as friendlies."

Bill Sprayberry, Northrop Grumman program manager, explained the electromagnetic spectrum in laymen terms. "Imagine a helicopter is flying along and suddenly an F-16 flies by doing Mach 1.2 about 100

My role is to ensure that Soldiers

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know how to properly utilize

EW in planning and operations.

yards away from it. The helicopter is going to fall out of the sky because those two can't use the same air space – one is going to take over the other. Inside the electromagnetic spectrum, it's the same thing."

Because two pieces of equipment cannot 'occupy

the same space' within the spectrum, EW has become a critical tool in combating remotely controlled IEDs in theater; however, blocking detonation signals is just a small piece of what the new 29-series officers and Soldiers learn. There are three subdivisions of electronic warfare: electronic support, electronic protect, and electronic attack.

Electronic support involves searching, locating and intercepting radiated electromagnetic energy for the purpose of finding immediate threat recognition, targeting, planning and conducting future operations.

Electronic protect prevents personnel, facilities or equipment from any negative effects of the electromagnetic spectrum that can degrade, neutralize or destroy friendly combat capability.

Electronic attack uses the electromagnetic spectrum to attack the enemy. Jamming is part of electronic attack and occurs when a stronger signal overrides another signal – for example, preventing a cell phone signal from detonating a radio-controlled improvised explosive device.

Fort Benning, Ga., has incorporated electronic warfare into its training regimen as part of the Maneuver Center of Excellence Fires Cell. Although all of the EW courses are taught at Fort Sill, the goal of the Combined Arms Center's EW Proponent Office, at Fort Leavenworth, Kan., is to integrate teaching electronic warfare into military education at all levels and for all Soldiers.

Lou West, the electronic warfare analyst and instructor at Fort Benning says, "My role is to ensure that Soldiers and the maneuver side of the house know how to properly utilize EW in planning and operations." West served as an electronic warfare officer with the Tennessee National Guard's 278th Armored Cavalry Regiment during Operation Iraqi Freedom. After the unit demobilized, he was hired as a contractor by FSCX, Inc., and attended FA29 at Fort Sill before coming to Fort Benning in March

West provides EW training to Soldiers and units at

Fort Benning and the training is currently integrated into the Armor and Infantry Basic Officer Leader Course, Maneuver Captains Career Course and Maneuver Pre-Command Course.

"In combat, electronic warfare is used to deny the enemy an advantage in the electromagnetic spectrum," West said. It is used "to support military operations involving various levels of detection, denial, deception, disruption, degradation, protection and destruction."

> The big question for role to that of a field

> future electronic warfare officers is how to get all of the systems integrated without unintentionally destroying someone else's capability. The course instructors at Fort Sill likened the EW integrator's

artillery fire support coordinator who draws together fire, such as cannons, rockets, mortars, close air support and Naval gunfire. Besides focusing on how radio waves flow, EW students learn how to fight as a piece of the puzzle. Since no battle is fought by the Army alone, the Soldiers learn the capabilities of the other services and how to use them as well.

"It's easy to get people to walk in a formation. They can see each other. But to coordinate something that no one can see, feel, touch or taste is more difficult, so we try to make them respect the threat that comes with not properly coordinating," said Jeffery Cassidy, Electronic Warfare Specialist Course instructor at Fort Sill. "These Solders are on the staff to coordinate, integrate and synchronize all these systems from the Army, Navy, Air Force and Marines and give them to the command as an asset."

The different classes at Fort Sill are synchronized so whether Soldiers are enlisted, officers or warrant officers, they will have the same capability downrange only working on different parts of the operation. The officer course focuses on strategy while the enlisted training focuses on tactical to operational levels; the warrant officers bridge the gap between the two.

The limits of modern technology are constantly being tested. As that happens, the Army's electronic warfare program will adapt and evolve. Fort Sill is currently working on developing senior leader electronic warfare courses for the future in an effort to sustain a field that is vital to today's operation.

For more information on the Army's newest military occupational skill, 29E, go to Armyreenlistment.com.

Editor's Note: The information in this article is taken from articles written by Marie Berberea (The Cannoneer, Fort Sill, Okla.), SGT Justin A Naylor (2nd BCT, 1st Cav Div), Adrienne Anderson (The Bayonet, Fort Benning, Ga.), and SPC Brandon Bednarek (4th BCT, 1st Armored Div)



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Marine 2nd Lt. Allan Boehm, Field Artillery Basic Officer Leaders Course B student, wipes down the barrel of an M777A2 155 mm howitzer June 22, 2011, during the *Redleg* War on a West range, Fort Sill, Okla. One-hundred and fifteen Soldiers, Marines and international students in Class No. 3-11 completed the five-day capstone exercise, using all the skills they learned in the 18.5-week course for new FA officers. (Photo courtesy of U.S. Army)