

# REDLEG Update

The United States Army Field Artillery Branch's Newsletter

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for new Field Artillery MOS

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Part II: Air Clearance of Fires

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**Purpose:** Founded in 2011, the *Redleg Update* provides past and present Field Artillery leaders with a monthly update of informational highlights to assist in their individual, collective and professional training efforts, as well as report on activities occurring throughout the Field Artillery community.

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William A. Turner  
Brigadier General, U.S. Army  
Commandant,  
United States Army Field Artillery School

*William A. Turner*

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Additionally, if you have a story of interest or wish to initiate a discussion on any topic or issue facing the Field Artillery community, contact Mr. John Folland, (580) 558-0831, or the editor of the *Redleg Update*, Ms. Sharon McBride, Field Artillery STRATCOM officer, (580) 558-0836.

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# From the Commandant's desk

## Farewell from the 51st Chief of the Field Artillery



*Brigadier General William A. Turner*

I want to start off by saying I am proud to have been the 51st Chief of the Field Artillery and Commandant of the U.S. Army Field Artillery School.

As I depart, I will be looking back at Fort Sill, Okla., with fondness, respect and admiration. Fondness for the friendships and relationships I have made, admiration for the community that is within and surrounds Fort Sill, and respect for the people I have worked with for the past two years.

While here, I was fortunate enough to team up with many talented people throughout the branch who have given tremendous energy on several initiatives.

These initiatives have centered on training and educating adaptive and innovative Soldiers and Leaders, the re-integration of our redesigned Division Artilleries into the Operational Force, modernization of the Field Artillery branch, and finally, the ongoing effort to recruit, assess and retain a quality force.

All of these endeavors have merged into the Field Artillery's vision of producing the nation's premier Fires Force; which is organized, equipped, and trained to employ and deliver Joint and Combined Arms Fires to enable Unified Land Operations.

I won't go into details about all we have accomplished over the last two years; but I do want to address a few highlights that illustrate the tremendous amount of effort and the teamwork that it took to achieve our objectives.

Together we have worked on vital organizational changes, training and leader development initiatives, and talent management – in an effort to modernize and continue to strengthen the Field Artillery force.

### Division Field Artillery

First and foremost, it is important the Field Artillery stays focused on our primary mission to support Maneuver forces in Unified Land Operations, so for us as a branch that has meant scrutinizing our organizational structure to identify where we can improve and what we can sustain within our allocated resources.

For us as a branch this has meant getting our Division Artillery force structure re-implemented.

You have made it happen. 10 DIVARTYs are now fully operational providing support for each of our Divisions.

This has been great news, as our DIVARTYs shore up two shortfalls in our force; the need for Division executed operational-level fires, and the need for trained and ready Fires Formations that are disciplined and standards based enabling freedom of Maneuver for our Brigade Combat Teams.

Our DIVARTYs and each of the Field Artillery Brigades organic to the Brigade Combat Teams are operating exceedingly well in Warfighters, at the Combat Training Centers, and on deployments around the globe.

### Field Artillery Brigades

While standing up our DIVARTYs we simultaneously re-invigorated our FA Brigades to provide integrated FA capabilities to the Corps, Joint Task Force and the Joint Force Land Component Commanders.

Our FABS continue to provide superb support. For example, in the last couple of years the 17th, 75th and the 18th FABs have deployed to the Central Command (CENTCOM) area of responsibility to serve as

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# FA CMDT ...Continued from Page 3

the Theater Coalition Forces Land Component Command Force Field Artillery Headquarters. While there they expertly conducted mission command of firing units across the region, developed targets and synchronized intelligence collection, and lead theater security cooperation activities with seven partner nations.

Another example, is the 210th Field Artillery Brigade and how it continues its mission to deter North Korean aggression and maintain peace on the Korean Peninsula.

These are just a few examples of how our FABs are deploying around the globe and providing world class support.

While our DIVARTYs and FABs are doing great, our Battlefield Coordination Detachments continue to serve with equal distinction.



## Battlefield Coordination Detachments

Our BCDs serve as a bridge between the senior U.S. Army headquarters element and the senior Air Force headquarters in each respective U.S. combatant command or theater of operations. Our BCDs enable the coordination of Army-Air Force mission command, fire support, integrated air and missile defense, intelligence sharing, airspace management, and airlift. Additional Space, Cyber, and Electronic Warfare augmentation allow each BCD to further enable the designated Army Force Commander across the complete spectrum of warfare.

By the end of the year we will have four active component BCDs --4th BCD located at Shaw AFB, South Carolina; 5th BCD located at Joint Base Pearl Harbor-Hickam, Hawaii; 19th BCD located at Ramstein Air Base, Germany; and 3rd BCD-K located at Osan Air Base, South Korea.

All are performing exceptionally well, and will continue to do so in the future. Furthermore, two Army National Guard BCDs will form in the next two years for added capability.

It is unquestionable, we have the most combat tested and experienced force today than at any time in our nation's history.

While we have worked hard at revamping our organizational structure, we have also further enabled our Fires Force through educational, training and leadership

development opportunities.

## Fires Targeting Center

One opportunity that we are particularly proud of is the Fires Targeting Center, which we got off the ground this year. Creating the FTC has enabled the Fires Center of Excellence to chart the course for the Fires Force thus giving us a say on when and how we conduct business. It has also given us representation in the Joint, Inter-agency, and International commands.

The FCoE is now the proponent for joint targeting accreditation, the developer of targeting doctrine and policy, and has the responsibility of integrating and developing target materials for all lethal and nonlethal capabilities.

The FTC will continue to transform into the Army Targeting Center, making it the Army's lead for joint targeting issues to include Army targeting doctrine and policy. Additionally, the ATC will also manage the Army's targeting certification programs.

## JFO and Precision Fires

While examining our training, one initiative naturally floated to the top... what we are doing to enhance our

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# FA CMDT ...Continued from Page 4

Fire Support community through the bolstering of our Joint Fires Observer training and certification.

Over the past few years, we have learned how important JFOs can be to the fight, and how a Soldier who is trained as a JFO can extend operational reach.

So, we redefined the 13F, Forward Observer to Joint Fires Support Specialist, and expanded that MOS skill set by placing an increased emphasis on accuracy and leveraging our precision munitions.

Additionally, we increased 13F Advanced Individual Training (AIT). Soldiers now graduate 13F AIT with expanded knowledge of and how to use all fire support equipment, in order to achieve accurate target locations and an expanded knowledge on Joint Fire Observer's techniques. In the near future, 13F AIT graduates will receive qualifications as JFOs, in preparation for being certified at their units.

Additionally, all programs of instruction (POIs) for the Advanced Leaders Course (ALC) and the Senior Leader Course (SLC) have been updated to ensure that Soldiers attending each level of their NCOES are exposed to new concepts and technology and now graduate with a certification in Target Mensuration Only (TMO) and are familiarized with Collateral Damage Estimation (CDE) and Weaponing.

We have also added Joint Fires Observer Assignment Oriented Training to the Basic Officers Leader Course (BOLC-B) program of instruction. Every BOLC graduate with follow-on assignments to brigade combat teams (BCTs) will have the opportunity to complete JFO certification as an assignment oriented training course following graduation.

While looking at JFO, we have also shored up the training we provide to our Master Gunners.



## Master Gunner

To assist the Fire Support community in meeting the tasks and standards within TC 3-09.8 Field Artillery Gunnery, we have added a 13F Fire Support module to the Field

Artillery Master Gunner Course.

Graduates of this new Master Gunners course will provide DIVARTY and FAB commanders with Fire Support Master Gunners who are trained to integrate, execute, and sustain Joint Fire Support training, the Fire Support Certification program, and who will serve as the primary Joint Fires Subject Matter Experts (SME) to the Fire Support Coordinator (FSCOORD).

We continue to also look at expanding our Master Gunner programs across the spectrum of our MOSs, to train them as subject matter experts as well as expert trainers on their systems.

Along that note, we also scrutinized the training we are providing our 131As (Warrant Officers).

## 131A Precision Fires Institutional Training

In an environment where collateral damage has operational or strategic implications, fires delivered with accuracy is a necessity.

We will continue to ensure our Targeting Warrant Officers, 131As, have opportunities to enhance their unique skill set to support the Commander's ability to meet this requirement anytime and anywhere.

As precision capabilities have grown, so has the requirement for FA Targeting Officers with the skill set necessary to employ munitions precisely.

# FA CMDT

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So Target Mensuration Only (TMO) and Collateral Damage Estimate (CDE) certification were incorporated into Warrant Officer Basic Course (WOBC) and Warrant Officer Advanced Course (WOAC) instruction as a requirement for graduation.

The need for this requirement allows our 131As to support the momentum of our initiative to Modernize Field Artillery fires. To further modernize, we also took a holistic look at our 13 series MOS's.

## MOS review

During the last several years, we have also conducted a comprehensive 13 series MOS review that began prior to me arriving at Fort Sill. This was a substantial undertaking led by our FA Proponency Office (FAPO), with the goal of looking at the possibilities, based on technology advancements within our FA systems, coupled with the phenomenal capabilities of our Soldiers, to consolidate our seven MOSs into five by 2020.

Going forward we will focus our training on the following MOS's –

- \* **13M, Multiple Launch Rocket System Crewmember;**
- \* **13B, Cannon Crewmember;**
- \* **13J, Fire Control Specialist;**
- \* **13R, Field Artillery Firefinder Radar Operator;**
- \* **13F, Joint Fires Support Specialist**

We are confident these MOSs will continue to provide invaluable support to the Combined Arms Team and will set the conditions for success on the battlefield.

## Soldier 2020

While inspecting our training, at the same time we have focused efforts on Soldier 2020 initiatives with a main goal of removing barriers, which will give all Soldiers the opportunity to serve in any position where he or she is capable of performing to the standard.

We have endeavored to be better able to select and train our Soldiers – regardless of gender or age – to be able to safely perform the physically demanding tasks of our MOS's.

Soldier 2020 is about increasing opportunities for all. If the Soldier possesses the necessary qualifications, they will be given the opportunity to perform that job. This will only make our Army stronger.

Earlier this year, it was decided that 13B (cannon crewmember) and 13D (field artillery automated tacti-

cal data system specialist) would be open to women. In April 2016, it was announced 13F is open to women.

Recently, we've had our first female graduate from 13B cannon crewmember Advance Individual Training (AIT), here at Fort Sill, Okla. PFC Katherine Beatty is a very impressive young Soldier and she has blazed a new trail for our 13Bs.

Going forward, we must remember that Soldier 2020 is about talent management; we must put the right Soldier, in the right job, where they not only can succeed, but excel.

## High Physical Demands Test

One of ways we will continue to ensure we are putting the right people in the right jobs is by implementing a High Physical Demand Test – it's a way to assess the strength, endurance, and power required to do combat arms tasks – and that of course includes tasks that are required by our 13Bs, 13Ds & 13Fs.

For example, in order to graduate AIT and become a 13B, a Soldier is expected to move 15 ammunition shells weighing nearly 100 pounds in 15 minutes.

The expected end result is that our Soldiers will be able to meet the standards in the Army's most physically-demanding occupations and will contribute positively to our combat strength.

## King of Battle

In closing, I would like my last words to be "Thank You." Thank you for everything you have done as a part of the Army team and the best Branch in the military.

I am excited with how things are coming together for the FA branch; how we are mastering our FA skills, cultivating our professional and leader development in the Fires Warfighting function, while synchronizing all Fires effects – commendably.

We are all achieving great things, and we are truly are on the right path to not only modernizing the Field Artillery, but the Fires Force.



**King of Battle!**

**Fires Strong!**

*Brigadier General William A. Turner*



# 426th RTI hosts first-ever course for new Field Artillery MOS

## *First female Soldier completes 13J course*

By Capt. Joe Trovato, Wisconsin National Guard

FORT MCCOY, Wis. — The Wisconsin Army National Guard's 426th Regional Training Institute at Fort McCoy continues to lead the way in the Army's Field Artillery community.

The RTI hosted the Army's first-ever course for the new 13J military occupation specialty Jan. 3-23, which merged the fire direction and control occupations of both cannons (13D) and rocket systems (13P) into one integrated MOS.

The 13J course taught students how to process missions for both cannons and rockets, which requires students to receive information from forward observers and process that information into data that the cannons or rockets can use to fire. Ultimately 11 students from around the country, including three from the Wisconsin Army National Guard, will graduate as the first nationwide to have completed the course.

Staff Sgt. Nicole Mayberry, currently a supply specialist in the Wisconsin Army National Guard's 1158th Transportation Company in Black River Falls, Wisconsin, will become the first female Soldier to complete the 13J course. The Army's Field Artillery branch and other combat arms branches had long been closed to women until recent Department of Defense changes lifted restrictions on women serving in roles such as combat engineer and in the Field Artillery. Defense Secretary Ashton Carter subsequently declared all military jobs and units open to women without exception in December 2015.

Mayberry hopes to move to a Field Artillery unit sometime in the next few years and completing the 13J school will make that transition easier someday. Getting qualified in a Field Artillery MOS has long been one of her goals. When she first enlisted in 2005, she was assigned to the 426th as a supply specialist. In 2008, the Field Artillery school at the 426th needed some additional help for a live-fire mission and asked her if she'd like to participate. After assisting some of the 13Ds with some fire mission processing, Mayberry



*Staff Sgt. Nicole Mayberry completes a practical exercise at a new field artillery military occupation specialty course hosted by the Wisconsin Army National Guard's 426th Regional Training Institute at Fort McCoy, Wis., Jan. 21. The 426th hosted the Army's first-ever course for the 13J MOS, which merges the fire direction and control occupations of both cannons and rockets into one integrated MOS. Wisconsin National Guard photo by Capt. Joe Trovato*

was hooked and took advantage of every opportunity to do live-fire missions with the unit.

"I tried to take advantage of being surrounded by all of these instructors and so much knowledge and information and just soak up as much as I could," she said.

She eventually moved over to the 1158th, but with the support of her command to receive the 13J training, she aims to work her way into a Field Artillery unit soon. She hopes that someday she will be one of the non-commissioned officers leading and mentoring other young female Field Artillery Soldiers.

"That's one of the reasons why it is so important to me," she said. "I think that if they're going to enlist high school students into combat arms units that there should be some females somewhere in their chain of command and some NCO mentorship in there."

She will have a wealth of knowledge from which to draw, if the initial feedback from students about the first 13J course are any indication. Mayberry and others heaped praise on the RTI's course instruction and subject-matter expertise.

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# 13J

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“It’s excellent,” Mayberry said of the course. “I had prior knowledge of a lot of the stuff that we’re doing based on the live-fires I had gone on, but I’ve gone to a lot of schools and to a variety of schools, and this is the most difficult course I’ve been to as far as the content and the exams. It’s really challenging and really excellent instruction.”

Others in the course, which had National Guard and Army Reserve students from the Wisconsin Army National Guard, Michigan, Texas, Indiana, Arkansas, Florida, Texas and Georgia shared a similar sentiment.

Staff Sgt. Jacob Koutnik, also originally a supply specialist with the Wisconsin Army National Guard’s Milwaukee-based 1st Battalion, 121st Field Artillery, said the course was the most difficult military course he’s experienced.

“This has been the most informative course I’ve ever taken,” he said. “It’s been that challenging for me.”

He said the sheer volume of information made the course difficult, but the 426th’s instructors were very skilled in presenting it and having all aspects of the course in the same building at the Wisconsin Military Academy at Fort McCoy allowed him to focus on what he needed to accomplish.

Koutnik serves alongside fellow classmate Sgt. Steven Eckels in Battery A, 1st Battalion, 121st Field Artillery, and they deployed to Afghanistan together in 2014-15 as one of the first National Guard Field Artillery batteries to conduct a fire mission in Afghanistan. Their 121st brethren became the first on a 2013 deployment.

“Even though the coursework is harder than normal, having the instructors that we do...they’re top notch,” he said.

“If it’s harder here, it won’t be out there,” he added.

Both Soldiers are looking forward to bringing the skills they learned at Fort McCoy back to their unit where they will work with other fire direction special-

ists who have worked with only rockets for their entire career. Now, they will be expected to work across multiple systems.


1SGT Micheal Seefeld, one of the National Guard’s subject-matter experts in Field Artillery, said it was an honor for the Army’s Field Artillery branch, headquartered at Fort Sill, Oklahoma, to select the institution out of seven others nationwide to spearhead the training. The 426th has built a strong reputation as an institution of excellence in the Field Artillery community.

The Army will implement the new MOS into Field Artillery units over the course of the next few years. Staff Sgt. Adam Schwartzkopf and Staff Sgt. Ricardo Perez served as instructors for the course. The two Wisconsin Army National Guardsmen were humbled and honored to be the first to teach the 13J class.

They received the course content from Fort Sill, but since they were the first to teach the class, they took diligent notes and annotated critiques and lessons-learned that they will provide as feedback to Fort Sill for implementation and dissemination to 13J classes at other Field Artillery schools and training institutions around the country.

“It just goes to show all the hard work that goes on here, the quality of the instruction, the professionalism that comes in and out of this building not only from the staff, but what students expect when they come here,” Perez said of the 426th. “That says a lot.”

Schwartzkopf said the RTI’s professionalism is responsible for the good reputation the organization has built for quality instruction.

“Here at Fort McCoy we hold ourselves to very high standards,” he said. “Our chief holds us to high standards, we hold ourselves to high standards, and in doing that Fort Sill will actually send us a lot of the new material first, because we go through it, we’ll figure out what’s wrong, and we’ll send it back. So they actually use us as kind of like their testing ground now.” 



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# CLEARANCE OF FIRES

## Part II: Air Clearance of Fires

by LTC Pat Proctor, PhD

**“Fires leaders have the responsibility to integrate air and space control measures to ensure all commanders have the maximum freedom to achieve their objectives and have maximum flexibility to use assets (organic, supporting and joint) within that airspace.”**

--ADRP 3-09

### Fires in Support of Unified Land Operations

While the Field Artillery has made great strides over the past two years at the Section and Platoon level in improving its proficiency in gun line procedures and technical fire direction, Fire Supporters continue to struggle to integrate fires into the combined arms fight. Among the biggest challenges the fires community faces is in executing the basic clearance of fires battle drill—both ground and air clearance.

Admittedly, this is a combined arms problem; the ground tactical commander owns the ground and airspace and the aviation commander owns the airframes traveling through the airspace. However, Fire Supporters are entrusted by maneuver commanders with the clearance of fires process. Fire Support officers, NCOs, and Soldiers are embedded in maneuver formations at every level from the Platoon through the Brigade specifically to integrate fires into combined arms maneuver and clearance of fires is a key part of that integration.

The previous article in this series (“Clearance of Fires Part I: Ground Clearance of Fires,” Redleg Up-

date, January-February 2016) addressed the first part of the clearance of fires equation: ground clearance of fires. This article, Part II, will address airspace clearance of fires.

### The State of the Field Artillery

Infantry Brigade Combat Teams (IBCTs) executing combined arms maneuver at the Joint Readiness Training Center (JRTC) struggle to deliver timely Field Artillery fires in support of their operations. Tables 1 and 2 show average fire mission processing times, from receipt at the Brigade Fires Cell (FC) to firing of the first round of a fire mission. These two tables provide times for counterfire and other fire missions (pre-planned and targets of opportunity), respectively. The data in these tables has been updated since the previous article, Part I of this series on clearance of fires, to reflect the latest data available.

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Table 1: Counterfire Average Mission Processing Times

Echelon	Average	TC 3-09.8 Standard (Digital)	Delta
Brigade FC	08:55	N/A	
Battalion FDC	2:39	00:35	+02:04
Platoon FDC	02:34	00:35	+01:59
M119A3 section	01:53	00:30	+01:23
M777A2 section	2:41	01:00	+01:41
<b>Average Total Time</b>	<b>12:47</b>		

# Clearance of Fires

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**Table 2: Pre-Planned and Target of Opportunity Average Mission Processing Times**

Echelon	Average	TC 3-09.8 Standard (Digital)	Delta
Brigade FC	08:04	N/A	
Battalion FDC	02:28	00:35	+ 01:53
Platoon FDC	03:33	00:35	+ 02:58
M119A3 section	01:59	00:30	+ 01:29
M777A2 section	02:40	01:00	+ 01:40
Average Total Time	13:28		

This data is taken from the last four Decisive Action rotations executed by active component Army IBCTs at the JRTC. However, BCTs vary widely in their ability to deliver timely Field Artillery fires; some BCTs take an average of 19 minutes or longer to process fire missions while others process fire missions at an average of 10 minutes or less. Moreover, the trend over the past four Decisive Action rotations is toward shorter fire mission processing times. Still, there is much room for improvement.

What immediately stands out from this data is that a great deal of the total fire mission processing time is consumed at the Brigade FC. This time directly correlates to the amount of time required to obtain air and ground clearance of fires. In the nearly three years since the JRTC resumed habitually training combined arms maneuver, two issues have consistently slowed the process of air clearance of fires. First, BCTs have struggled to effectively synchronize airspace coordination measures (ACMs) and the unit airspace plan with surface-to-surface fires. And second, BCTs have struggled to integrate airspace management into their clearance of fires battle drills. But the root cause of all of these issues is that Air Defense Airspace Management/Brigade Aviation Elements (ADAM/BAEs) are not effectively integrated into BCT staffs.

## The ADAM/BAE Is a Fires Asset

**“Fires must be synchronized with the supported commander’s concept of operation based on his intent and guidance for fires.... At corps and below, the maneuver commander normally delegates to his COF/FSCORD/FSO/ air defense airspace management/brigade aviation element (ADAM/BAE) the requisite authority to direct and coordinate all joint and Army fires on his behalf.”**

--ADRP 3-09

Fires in Support of Unified Land Operations

Its personnel may not wear Field Artillery insignia, but the ADAM/BAE is as much a fires asset as the Brigade FC or the Field Artillery Battalion Tactical Operations Center (TOC). During every phase of an operation, from planning and preparation through execution, their function is to manage the Brigade’s airspace to insure that all means of Fire Support—from attack aviation and close air support to Field Artillery and mortar fires—can be employed in the combined arms maneuver fight. Without this critical element of the Brigade staff, the BCT cannot mass fires from all means of Fire Support at the decisive point on the battlefield.

Yet the ADAM/BAE is frequently an “orphan” in the Brigade staff. The ADAM/BAE is not part of the Field Artillery Battalion, so Brigade Fire Support Coordinators (FSCOORDs, the Field Artillery Battalion Commander) and Fire Support Officers (FSOs) do not commonly exercise oversight of their training and operations. The ADAM and BAE are led by the senior-most Air Defense and Aviation officers, respectively, in the Brigade so they receive no oversight or guidance from higher commanders within their respective branches. And they’re Army Battle Command Systems (ABCS) and skillsets are unique within the BCT so Brigade Operations Officers (S3s) and Executive Officers (XOs) are reluctant to oversee their training or operations.

Brigade FSCOORDs and FSOs must take ownership of the ADAM/BAE and make sure they know how to “plug into” the Brigade’s mission command systems and processes. And this is primarily a FSCOORD function; the FSCOORD, as a Battalion commander, is the only Field Artilleryman in the Brigade with sufficient authority to drive the Brigade staff to

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## Clearance of Fires ...Continued from Page 10

integrate the ADAM/BAE. The FSCOORD must ensure that the ADAM/BAE participates in every MDMP that the Brigade staff executes—at home station and at the JRTC—so that the Air Defense Officer (ADO) and Brigade Aviation Officer (BAO) learn what they need to bring to and what they must produce as an output of each step of the MDMP. And during home station CPXs and field training, the FSCOORD must ensure that the BCT staff coordinates with the BCT's parent Division or a home station simulation center to ensure that the ADAM/BAE receives an air picture to allow it to fully participate in the clearance of fires battle drill.

### Airspace Coordination Measure (ACM) Synchronization

**“Fires enable all users of airspace to synchronize, plan, and execute a cohesive air deconfliction resolution. Fires personnel coordinate airspace integration to ensure that conflicts between ground fires and air operations are minimized using FSCMs [(fire support coordination measures)] and ACMs [(airspace coordination measures)].”**

**--ADRP 3-09**

#### Fires in Support of Unified Land Operations

In planning and preparation of combined arms maneuver operations, the ADAM/BAE's role is to help the Brigade FSCOORD and FSO synchronize the unit airspace plan with surface-to-surface fires. And the tool the ADAM/BAE uses to do this is airspace coordination measures (ACMs). Air corridors and airspace coordination areas restrict the movement of aircraft and restricted operating zones can be used either to restrict the movement of aircraft or to “pre-clear” airspace for surface-to-surface fires. Used together and properly synchronized, these measures can dramatically speed the clearance of airspace during the execution of fires.

The key, however, is proper synchronization. ADAM/BAEs training at the JRTC clearly understand that it is their role to plan ACMs. Very seldom does a BCT fail to develop a unit airspace plan. But ADAM/BAEs frequently fall short in synchronizing their ACMs with the movement and maneuver and fires

warfighting functions. As a result, during the execution of fires, ACMs fail in their primary function: to deconflict the airspace between all airspace users (aircraft and surface-to-surface fires). Once ACMs fail, fires must be deconflicted during execution, dramatically slowing the clearance of fires battle drill.

This is why the Brigade FSCOORD and FSO must take ownership of the ADAM/BAE to insure it is integrated into the BCT staff's mission command processes. And the first, most important process in which the ADAM/BAE must be integrated is the MDMP. During mission analysis, ADAM/BAEs identify all of the airspace users and their capabilities and limitations. This includes lift aviation, attack aviation, close air support, and intel collection aircraft. But it also includes surface-to-surface fires assets; in coordination with the Brigade FSO, the ADAM/BAE must also identify the BCT's Field Artillery and mortar assets. And the ADAM/BAE and FC must work together to identify other assets, including general support (GS) Field Artillery and Division-level intelligence collection (IC) assets that might also operate within the Brigade's airspace.

Once all of these airspace users are identified, they must be integrated into the Brigade's unit airspace plan. The ADAM/BAE develops the unit airspace plan during course of action (COA) development. The Brigade S3 will provide the base maneuver course of action, complete with operational phasing, initial maneuver graphics, and tasks and purposes for each element of the brigade. The Brigade FSO will—the FSCOORD, with the help of the Brigade Intelligence Officer (S2), the Brigade Targeting Officer, the Brigade Air Liaison Officer (ALO), and the Field Artillery Battalion S3—develop initial position areas for artillery (PAAs) and Field Artillery, attack aviation, and close air support targets to support the maneuver COA. The ADO and BAO must be a part of this process as well, developing initial ACMs to allow attack aviation and close air support aircraft to attack their targets, allow IC aircraft to observe their named areas of interest (NAIs), and allow aircraft to move within the Brigade's AO without hindering surface-to-surface fires.

But the most important—and most frequently

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## Clearance of Fires ...Continued from Page 11

neglected—step in this process is COA analysis (wargaming). This is the step where the ADAM/BAE synchronizes the Brigade's ACMs with the other warfighting functions. The Brigade staff must gather around a map and walk through each step of the combined arms maneuver operation, reviewing enemy and friendly actions and the activities of each warfighting function to support the maneuver. During this process the FSO, ALO, ADO, and BAO must work closely together, ensuring that ACMs are properly positioned to maximize the capabilities of both aircraft and surface-to-surface fires assets. Triggers must be established and recorded on both the Brigade's synchronization matrix and the Fire Support execution matrix (FSEM) to synchronize the activation/deactivation of ACMs, the firing of targets, and the movement of surface-to-surface fires assets.

During the wargame, the FSO must also plan for mortar positioning and employment. While the Brigade FSO will probably not dictate the location of mortar firing points or mortar targets, Brigade staffs should wargame two levels down. As FM 6-0, Change 1 (dated 11 May 2015) puts it, during wargaming a staff "identifies tasks that the force one echelon below it must accomplish, using assets two echelons below the staff." The FSO must make a "best guess" at how Battalions and Companies will employ their mortars to accomplish their tasks and purposes, and ensure that the ACMs planned by the ADO and BAO will not unduly restrict mortar employment.

Synchronization of the Brigade's fires plan (including targets, FSCMs, and ACMs) is verified during the Brigade fires rehearsal. Frequently, the ADO and the BAO are asked to "play" airspace users during the Fires rehearsal. This is not the best method to ensure synchronization. The best way to ensure synchronization of the airspace is to make sure that all of the users of the airspace are present at the rehearsal. The leaders who actually control aircraft should be present: the Military Intelligence Company (MICO) Commander or even the Shadow Platoon Leader, attack and lift aviation Company Commanders or Platoon Leaders, Mortar Platoon Leaders, and Field Artillery Battery Commanders or Platoon Fire Direction Officers and Platoon Leaders should be at the fires rehearsal. And

these attendees can't just be spectators; they should be on the map board, representing their units and talking through each action they will take as part of the Fire Support plan. Rehearsing with this level of participation will immediately reveal problems with the synchronization of unit airspace plan that can be resolved during the rehearsal rather than during execution of the operation.

### The ADAM/BAE and the Clearance of Fires Battle Drill

**Fires in unified land operations from air-to-surface, surface-to-air and surface-to-surface assets must be coordinated and cleared on the ground and through the airspace to enable the rapid and timely delivery of fires and to prevent fratricide.**

--ADRP 3-09

#### Fires in Support of Unified Land Operations

If the unit airspace plan is not synchronized with the Fire Support plan during planning and preparation, as detailed in the section above, then the airspace will have to be deconflicted "on the fly," during execution of fires. But even if the unit airspace plan is well synchronized with the Fire Support plan, the enemy does not always cooperate by doing what the S2 predicted. There will always be some level of airspace deconfliction that must occur during the execution of fires. This deconfliction occurs during airspace clearance of fires as part of the Brigade's clearance of fires battle drill.

The key piece of information that the ADAM/BAE needs in order to clear airspace for surface-to-surface fires is the gun-target line and the maximum ordinate (max ord) for the fire mission. That is, the ADAM/BAE must receive the location of the gun and the target and the maximum altitude (above ground level, AGL) of the trajectory between the two. Airspace clearance of fires cannot begin until this information is received, so speed is essential in determining and communicating this information. The least preferred method for determining this information is for the Brigade FC to send the fire mission to the Bat-

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## Clearance of Fires...Continued from Page 12

talion Fire Direction Center (FDC), the Battalion FDC to send the mission to the firing Platoon FDC, the Platoon FDC to compute the fire mission and obtain the gun-target line and max ord, and the Platoon FDC to transmit that information back up through the chain to the Brigade FC for transmission to the ADAM/BAE to begin the airspace clearance of fires.


A much better method is for the Field Artillery Battalion to figure out the gun-target line and max ord itself as soon as it receives the fire mission. The Battalion FDC is the right element to determine this information because it is the element that does tactical fire direction, determining which platoon or platoons will fire each fire mission. The Battalion FDC can easily create a tool to rapidly determine max ord by plotting range rings around each firing Platoon on an analog map and consulting tabular firing tables (TFTs) and the lowest charge that can reach each range ring to determine and annotate the “worst case” max ord for each range. Then, when the Battalion FDC receives a fire mission, it simply consults this map, finds the gun-target line and max ord, and transmits that information back to the Brigade FC, which forwards the information on to the ADAM/BAE for airspace clearance of fires. This process can be sped even further if the Battalion FDC, Brigade FC, and ADAM/BAE are all communicating on a common net, such as a clearance of fires FM channel or in a common Transverse chat room.

A similar technique can be used for mortars. Each Battalion FC should maintain an analog map with max ord range rings drawn around each mortar firing point, both Battalion and Company mortars. When the Battalion wishes to fire its mortars, the Battalion FC simply consults this map, determines the gun-target line and max ord, and transmits that information to the Brigade FC, which forwards the information to the ADAM/BAE for airspace clearance of fires. Again, this process can be sped up if the Battalion and Brigade FCs are on a common net with the ADAM/BAE, a clearance of fires net or Transverse chat room.

One final note is in order before closing this discussion on airspace clearance of fires. The biggest problem that Brigade FCs and ADAM/BAEs are

experiencing at the JRTC in clearing airspace is the discipline of U.S. Air Force, aviation, and IC elements in adhering to the unit airspace plan. If Shadow operators, Army Aviators, and Air Force pilots do not keep their aircraft within the ACMs planned as part of the unit airspace plan, the Brigade’s airspace management falls apart. When the ADAM/BAE can no longer trust that aircraft are adhering to the unit airspace plan, then every aircraft must be individually cleared before fire missions can be shot. This quickly slows the clearance of fires battle drill at the BCT TOC to a crawl, crippling the ability of Field Artillery and mortars to deliver fires in support of maneuver.

Army aviation, frankly, is the worst offender; the most common complaint from aviators is that adhering to air corridors and attack by fire positions limits their ability to employ their full range of capabilities. This may well be true, but accepting some limitation on freedom of action—whether it is attack aviation accepting the restrictiveness of ACMs or Field Artillery accepting some degradation in its responsiveness to clear air and ground before shooting—is the cost that each warfighting function must pay to contribute to the combined arms fight.

No matter how much the Field Artillery improves its proficiency in its core competencies on the gun line and in FDCs, it will not be able to provide timely fires in support of maneuver if Fire Supporters and airspace managers in the ADAM/BAE cannot rapidly clear these fires. None of the tactics, techniques, or procedures (TTPs) described in this article are new. In fact, when BCTs habitually executed combined arms maneuver at our combat training centers (CTCs) in preparation for war, these TTPs were SOPs. These skills have simply atrophied over the nearly 15 years of the Global War on Terrorism. Nor are any of these TTPs complicated or hard to learn. The Fire Support and airspace management communities simply need to reinstate these practices as SOPs and integrate them into their training at home station and at the CTCs. With training and repetition in these simple techniques, the Field Artillery can reclaim its title as the King of Battle in the combined arms fight. 

# Is serving as a Noncommissioned Officer Academy Small Group Leader or Senior Small Group Leader, something you should consider doing?

Are you a technically, tactically competent Staff Sergeant (SSG) or Sergeant First Class (SFC) Artilleryman and Army leader? Have you spent most or all of your Army time “on the line” and have one or more deployments “under your belt?” Have you asked, “What do I do next or how do I advance my career?” Is it time for you too seriously think about and consider serving as an instructor at the USAFCOEFS, United States Army, Noncommissioned Officer Academy?

The NCO Academy mission is to train various levels of Noncommissioned Officers with leader technical and tactical war fighting skills through resident, mobile and distributed learning platforms, which are relevant to their missions and maintain the critical skills and core competencies of Air Defense Artillery, Field Artillery and Electronic Warfare NCOs.

To accomplish its mission, the NCO Academy must attract, train and certify the best technically and tactically proficient SSGs and SFCs who are the most competent leaders. Are you an NCO who is thoroughly familiar with Army leader attributes of character, presence, intellect and Army leader competencies of leading, developing, achieving? Are you an NCO who is a natural teacher or who is the “go to guy” when the battalion or battery requires a teacher/trainer for a class, block of instruction or to present leader development training? Do you have a “knack” for teaching, commitment to teaching others and can communicate clearly and effectively? Do you want to make positive impacts in other NCOs and lasting contributions to the Army? An important part of leader development is “Talent management.”

## Talent management

“takes into account the individual talents of an NCO and best applies the unique distribution of his or her skills, knowledge and behaviors and the potential they represent.” Command Sergeant Major (CSM) Lehtonen, CSM of the Field Artillery wants to leverage enlisted Field Artillery talent by identifying and challenging the very best of NCOs. Do you have the “talent” necessary to succeed and thrive as an educator, teaching other NCOs; do you want to make posi-

tive and lasting impacts on other NCOs?

The NCO Academy’s instructors total 26 FA instructor positions, three positions in the Basic Leader Course, 16 positions in the Advanced Leader Course and 7 positions in the Senior Leader Course. The instructors in these 26 positions are responsible for providing Professional Military Education (PME) for Specialist Promotable, FA Sergeant Promotable, through FA SSG promotable from across the Army. The NCO Academy successfully develops trains and graduates up to 2200 Soldiers and NCOs annually. (Army Leader Development Strategy 2013, OCT 2015)

The old days of the, “sage on the stage” instructor who knew it all, and could tell you about everything, because he had, “been there and done that” are long over. Today’s professional military education instructors undergo a demanding credentialing process for up to 90 or 120 days before they are facilitating classes in front of their own students.

**“Leaders in today’s institutional domain create the conditions for quality leader development by having clear plans to promote achievement of desired learning outcomes. Active monitoring, evaluation, and feedback to guide and refine leader development systems and practices. Assessing individual readiness to learn before a classroom experience and facilitate “sense-making” afterwards. Providing qualified, inspirational instructors who have been prepared to teach/facilitate in an adult learning environment. Crafting, current and relevant curriculum that promotes critical and creative thinking, interpersonal skill development, and communication skill development. Providing access to information and technologies that can provide leaders with relevant practice in the classroom and in the field. Providing individuals in resident PME and CES an opportunity to reflect and put into context what they have learned and experienced. Providing a robust capacity to create, archive, and deliver digitized learning products to individuals at the point of need, creating a continuum of learning opportunity that is available in all three domains. “**

-- (Army Leader Development Strategy 2013, OCT 2015)

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BAIB



SAIB



MAIB



## SGL ...Continued from Page 14

Today, successful Small Group Leaders (SGL) put the responsibility for learning on the individual students or groups of students. SGLs focus on “learner centric” and “Outcomes Based Training & Education (OBT&E)” courseware delivery techniques. SGLs provide students with a desired or specified “end state” or “outcome” of individual/group learning and empower, and if necessary guide the student/group discussion, for them to best answer questions, develop solutions or solve problems. All the while, SGLs closely monitor and ensuring students do not stray out of the context of their assignments, lessons or requirements. SGLs beyond any doubt, must be subject matter experts in leader development, leader education and most competent in all tasks through their MOS teaching skill level.

Successful NCO Academy instructors are high competitive with their peers across the Army, on DA centralized promotion boards. On the 2015 SFC selection list, the Board selected 11 of 15 eligible SSGs, or 73 percent of SSGs who were still teaching or had recently moved on to other assignments. On the 2015 Master Sergeant (MSG) selection list, the Board selected four of 18 eligible SFCs, or 22 percent of SFCs who were still teaching or had recently moved on to other assignments.

Through introducing TRADOC Regulation (TR) 600-21, The Noncommissioned Officer Education Professional Development System, Instructor Development and Recognition Program, The Army has formalized the Credentialing of enlisted instruc-

tors. “The AIBs were established in conjunction with personnel development skills identifiers (PDSI), for instructors in the Noncommissioned Officer Professional Development Systems (NCOPD-S).” The Army Instructor Badge is a permanent award consisting of three levels of achievement, the Basic Army Instructor Badge (BAIB), the Senior Army Instructor Badge (SAIB) and the Master Army Instructor Badge (MAIB). “Qualifications for the BAIB include successful attendance of the Army Basic Instructor Course (ABIC), soon to be the Foundation Instructor Facilitator Course (FIFC) Small Group Instructor Training Course (SGITC, soon to be the Intermediate Facilitation Skills Course (IFSC) and facilitating 80-hours of instruction. Qualifications for the SAIB include all prerequisites for award of the BAIB and successful attendance of the Systems Approach to Training-Basic (SAT-BC) or Foundation Training Developer Course (FTDC), Instructional Design-Basic Course (ID-BC) and 400-hours of instruction after award of the BAIB. Qualifications for the MAIB include all prerequisites for award of the BAIB and SAIB, the Advanced Facilitator Skills Course (AFSC) or the Faculty Development Program-1 (FDP-1) and complete the Evaluating Instructors Workshop (EIW) and Master Instructor Board Requirements.”

According to the Army Leadership Development Strategy, 2013, “The Army wants NCOs who are competent and effective in, a broader set experience; these broadening experiences improve individual NCO’s skill sets.” NCOs who successfully complete any of the various broadening assignments, reaps benefits


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## SGL ...Continued from Page 15

from the broadening experience. Sergeant Major of the Army Daily during the 2015 AUSA Convention set the enlisted instructor selection standard, “NCO’s must “OWN” NCOPT-S. Send the “Best” to instruct.” Decision authority will only assign the highest quality Soldiers as instructors. Upon completion of an instructor assignment at the NCO Academy, you will return to the Operational Force as highly skilled facilitator, expert instructor, a most competent and more experienced NCO and better prepared for your next

leadership challenge.

If you are a SSG or SFC who meets AR 614-200 and able to meet TR 600-21 prerequisites, believe that you have the talent necessary to succeed and thrive as an SGL or SSGL and have served a minimum of two years as a chief or team leader for ALC and two years as Platoon Sergeants for SLC. You should consider serving as an instructor at the USAFCOEFS, United States Army Noncommissioned Officer Academy. 

# Social Media Best Practices



**If a Soldier uses a social networking site where he or she is or may be identified or associated with the U.S. Army, they must remember how they appear to represent their organization and the United States of America. UCMJ and other guidelines and regulations still apply.**