

# Forward observer *A lost art*

By Sgt. 1st Class Robert Hance

*Effective fire support requires an observer that understands the tasks to be accomplished and how these tasks support the overall operation. The observer must be able to accurately locate targets, understand which targets to attack, and effectively communicate what he sees to the rest of the fire support community.*

— Army Techniques Publication 3-09.30, *Techniques for Observed Fire*

Artillery is the King of Battle. It enhances a maneuver commander's range and firepower, attributes to the attrition of the enemy in depth thus favorably shaping battlefield conditions and allowing friendly ground forces to gain a tactical advantage. This capability, when used effectively can win battles long before friendly ground forces ever engage in close combat. Effective artillery increases the speed maneuver elements can seize terrain, lower enemy moral and most importantly save friendly lives. The challenge is the field artillery's ability to provide Fires at the correct time and space regardless of the operational environment (OE). Failure to do so marginalizes our Army's strength and self-imposes an equal playing field for maneuver elements to fight on.

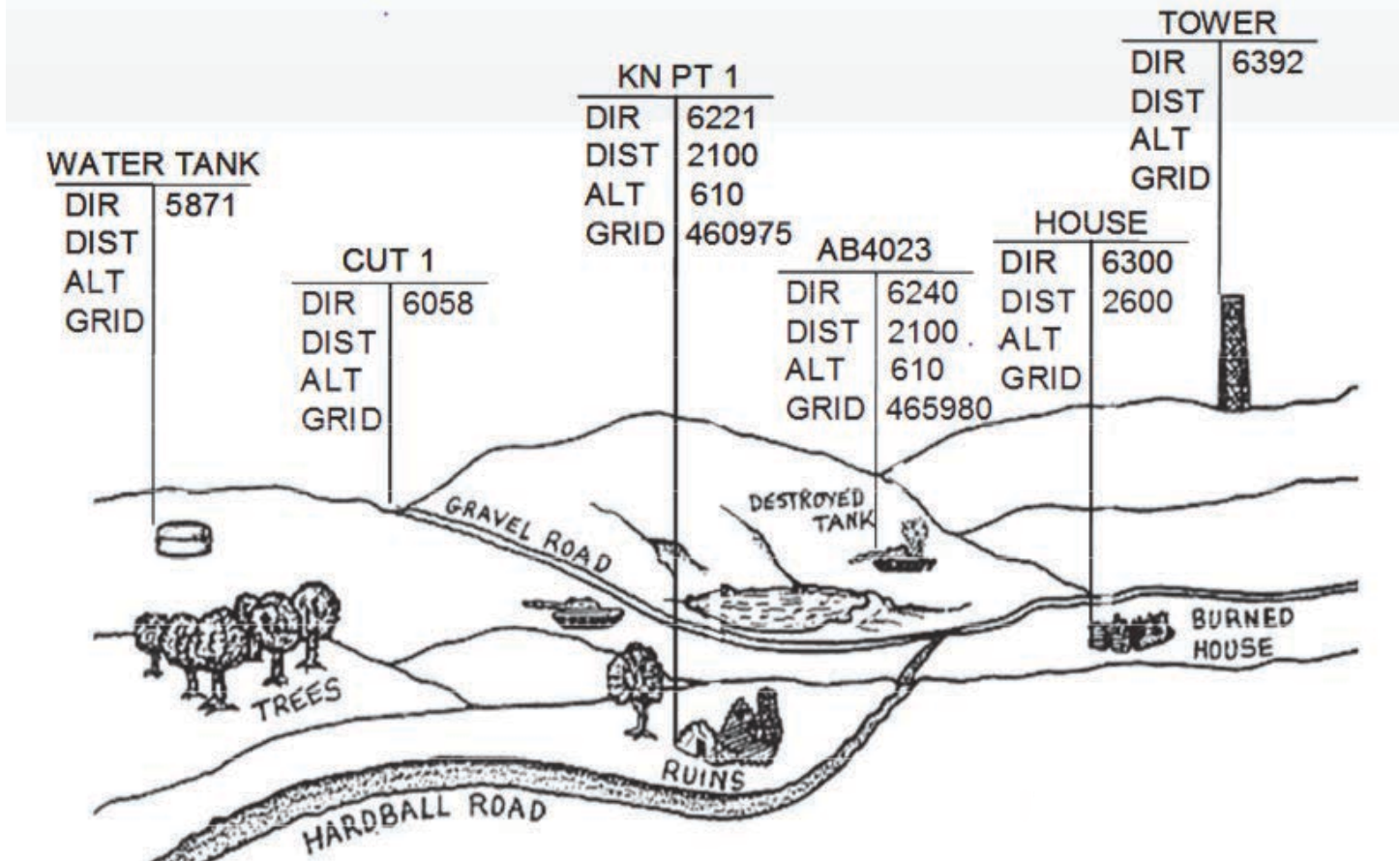


Figure 1. Example terrain sketch. (Army Techniques Publication 3-09.30/U.S. Army)

Company/troop fire support teams (FISTs) that trained at the Joint Multinational Readiness Center the past year experienced difficulties supporting their maneuver elements with indirect Fires during multinational integrated decisive action training environment (DATE) rotations. It was challenging for FISTs to quickly and effectively implement surface-to-surface Fires against targets in open or sparsely populated areas. Given the recent OE and the lack of required fire support coordination measures, fire supporters generally lack experience in multinational DATE rotations and the complexities associated with the integration of fire support and maneuver elements at the tactical level.

As the OE changed, fire supporters changed with it. They integrated close air support (CAS) and close combat attack (CCA) aviation, and have become masters at delivering precision munitions in urban areas. However, the most common training deficiencies JMRC fire support observer coach trainers (OCTs) note are individual fire support tasks that specifically support DATE rotations in preparation for unified land operations.

Deficiencies observed include the following individual fire support tasks:

- Constructing a terrain sketch.
- Locating a target by grid coordinates.
- Developing an observation plan.
- Planning company team fire support.

**Skill Level 1: Construct a terrain sketch and locate a target by grid coordinates**

Terrain sketches are vital to observers for quick and accurate target location and help expedite relief personnel in orienting themselves to their areas of responsibility (Army Techniques Publication [ATP] 3-09.30, Techniques for Observed Fire, Aug. 2, 2013). This technique is especially effective in aiding interoperability efforts when relief personnel are from multinational units. When operating in a static environment, forward observers (FOs) should construct terrain sketches to facilitate calls for fire and battlefield reporting. Many FOs who rotate through JMRC fail to understand the importance of terrain sketches and how they can help them call for fire quickly and accurately without the aid of laser targeting devices.

Given an observer location, a map, compass and artillery binoculars, FOs are

required to locate a target by grid coordinates within 250 meters (Training Circular [TC] 3-09.8, Field Artillery Gunnery, Nov. 15, 2013, with change 1, Sept. 8, 2016). Frequently in these degraded situations, the observer is unable to accurately locate targets and must correct errors in target location by adjusting Fires onto a target, thereby forfeiting surprise and minimizing effects on target (TC 3-09.8). Several times during training rotations, FOs were unable to accurately locate targets and call for fire in a degraded mode (See Figure 1 above).

For example, while in the defense, one unit was in position for several hours, overlooking an open area with several identifying landmarks and roads. While observing a possible avenue of approach for an opposing force (OPFOR) attack, company FOs neglected to construct a terrain sketch of the area. Once the FOs made visual contact with the OPFOR unit, FOs began the target location process. None of the four call-for-fire missions processed from that company hit their intended targets. All of the requirements for accurate fire were met, except accurate target location. Each mis-

	AA	LD	CP7	OBJ GREEN
FSO	INITIAL PREP 1ST PLT	FIRE CA 3012 CFL CHUCK 2D PLT	FIRE C1A GROUP 3D PLT	ACS (CAS) 1400Z
1ST PLT	FA FPF	CFL CHUCK		MORTAR FPF
2D PLT	FA FPF	MORT PRI TGT CA 3014 CFL CHUCK		FA FPF
3D PLT	MORTAR FPF	CFL CHUCK	MORT PRI TGT CA 3017 2D PLT	FA FPF

Figure 2. Example fire support execution matrices (Field Manual 3-21.10/U.S. Army)

sion resulted in a target location error of 500 meters or more for each target. Failing to complete terrain sketches and lacking the experience in locating a target by grid coordinates without the help of laser targeting devices resulted in a slow first transmission for the call for fire and ultimately rounds impacting behind the targets. The unit forfeited the element of surprise without engaging enemy personnel with indirect fire. As a result, the unit was forced to engage in direct fire, which compromised their positions. Whether it was construction of a terrain sketch or locating a target by grid coordinates, fire supporters at the company and platoon level were unprepared to support their maneuver elements during multinational DATE rotations.

**Skill Level 3: Develop an observation plan and plan company team fire support.**

An FO is an observer operating with front line troops, trained to adjust ground or naval gunfire and pass battlefield information.<sup>1</sup> FOs are the link between commanders and indirect fire assets. When FOs fail to position in such a way to observe the battle, the first link in the chain is broken and Fires integration becomes far more difficult. Too often during rotations FOs were given tasks such as clearing rooms or operating as the platoon leader's radio operator, or were positioned in the back of a vehicle; of which provided less than ideal observation points from which they could call for fire.

Company/troop FISTs sometimes fail

to develop observation plans that place observers in the best locations to observe Fires in support of the scheme of maneuver. During one rotation, a company was tasked with conducting an attack to seize an objective. Even though the company had organic 120 mm mortars and a battery of 105 mm howitzers in support, the FIST failed to develop an observation plan that assured multiple observers could spot targets. Only one observation post (OP) was occupied during the operation, creating a single point of failure. Also, the FIST identified observational dead space once they occupied the OP but was unable to adjust fire due to mission requirements. This hindered their ability to observe the enemy because no secondary observer was established. Triggers were not briefed nor coordinated amongst the FIST personnel, which resulted in several missed opportunities for calls for fire. A well-developed observation plan would have assigned primary and secondary observers, identified dead space early in the operation, and expedited calls for fire with trigger points, overwhelming the OPFOR with indirect fire.

Another rotation illustrated the lack of experience many company fire support noncommissioned officers (FSNCOs) have using fire support execution matrices (FSEMs) and rehearsals. FSEMs and rehearsals play a major role in the successful integration of fire support during DATE and unified land operations. A company that was ordered to execute an attack was

unable to request timely indirect Fires because of a lack of synchronization between their FIST and the maneuver plan. The FIST did not publish a FSEM, nor did it rehearse the Fires plan with their FOs or their maneuver element. Platoon leaders and FOs were frustrated by slow mission processing times because they did not understand their order in the priority of Fires. The FIST was late to provide a smoke screen because a trigger point was never briefed to the FOs. FOs also stepped on each other's radio transmissions throughout the attack because they simultaneously requested fire missions, and because indirect Fires were not synchronized with specific phases of the operation.

A FSEM for a company may be as simple as a hand-drawn matrix listing the platoons, phase lines and minimal necessary information.<sup>2</sup>

A FSEM should contain the following at a minimum (See Figure 2, above):

- Priorities of fire.
- Final protective fire by type of indirect means (field artillery or mortars).
- Target numbers.
- Alternate elements for specific Fires.
- Airspace coordination areas and time on station.

The Army's recent operations in Iraq and Afghanistan did not emphasize fire support tasks (FST) with task, purpose, effects (TPE) for each operation, which has created a generational gap in experience and is a contributing factor to the lack of overall integration of fire support during multinational DATE operations observed at JMRC. During counterinsurgency (COIN) operations, fire supporters were more reactive than proactive in providing Fires, unconcerned with ammunition consumption, and had dedicated assets to troops in contact. Fire supporters did not focus on FSTs with TPE because the COIN fight was not linear in nature. Fighting to and through phase lines, against a near-peer adversary requires FST with TPE to maximize overall effectiveness. A FST is a vital part of the Fires plan which fire supporters receive so they can support the commander's scheme of maneuver (ATP 3-09.42, Fire Support for the Brigade Combat Team, March 1, 2016).

OCTs have also observed FISTs that fail to provide company commanders a concept of Fires plan that supports the opera-

1 Field Manual 3-09, Field Artillery Operations and Fire Support, April 4, 2014.

2 Army Techniques Publication 3-09.42, Fire Support for the Brigade Combat Team, March 1, 2016.

tion. The FOs in those companies did not understand engagement criteria and the importance of target selection standards. While one unit was conducting a breaching operation, the company FOs flooded their internal Fires nets with calls for fire requests. The requests were either unsuitable (requesting mortars against tanks) or did not support the mission at the appropriate time (the 2nd platoon FO requested Fires on dismounted troops while the 1st platoon FO was trying to request a smoke mission to obscure the enemy while his platoon breached an obstacle). The FOs simply did not understand the FST and how they tied into the overall operation. The commander and fire support personnel both have a responsibility that contributes to overall success in the integration of fire support.

As stated by ATP 3-09.30, Techniques for Observed Fire, Aug. 2, 2013:

- 1-21. The maneuver commander also has the responsibility to ensure that observers understand what targets can be engaged, when they can be engaged and which targets are the priority for the operation.
- 1-22. Observers have a responsibility to ensure they understand the criteria for engaging targets established by the commander.

Although FOs do not prioritize targets in a vacuum, company and battalion FISTs advise commanders on which targets to engage. FOs should have a healthy understanding of engagement criteria so their observations and call for fire are prioritized, thus expediting the entire process.

#### Recommendations

The common fire support deficiencies observed at JMRC within the last year can be fixed by the battalion/squadron FSNCOs and below. TC 3-09.8 Change 1, Chapter 3, provides fire support leadership a standardized method of training and certifying fire support personnel assigned to their organizations to include training, documentation and qualification standards for all fire support personnel.<sup>3</sup>

Creating terrain sketches and locating targets using grid coordinates are both Skill Level 1 tasks. FSNCOs must utilize the three phases (crawl, walk, run) of lane training methodology described in FM 7-0, *Train to Win in a Complex World*, Oct.

5, 2016, to better assist them in creating a timeline for their training. FSNCOs should begin with the walk phase and provide an explanation and demonstration of supporting individual tasks. FSNCOs should use training and evaluation outlines (T&EOs) as their framework when developing the training situations. T&EOs provide FSNCOs an outline of task steps and measures and other evaluation criteria for evaluating tasks to the Army standard. T&EOs are the Army's source for specific conditions and standards and provide event planners resourcing guidance for developing events that train collective tasks.<sup>4</sup> These techniques will help FSNCOs focus on performance measures that are required for each individual task.

Training should be conducted quarterly and focused on developing terrain sketches and locating targets by grid coordinates in the call for fire trainer (CFFT), which is an excellent tool to use in honing Soldier's individual skills. During the walk phase, FSNCOs can use the CFFT to specifically train Soldiers on their individual skills in a controlled environment, maximizing time and resources. The difficulty can be adjusted to meet individual Soldier needs and the artillery simulator allows leaders to repeatedly train call for fire without safety concerns or ammunition considerations. Once Soldiers have displayed the required level of proficiency, the next phase should be physically occupying an OP and performing Skill Level 1 tasks while contending with weather and other physical elements. The bottom line is regardless of ordnance (conventional to precision munitions) or delivery platforms (cannon, mortar, CAS or CCA), the observer and FIST should always strive to attain the most accurate grid within given conditions and equipment limitations before sending any type of round downrange (TC 3-09.8). Performing Skill Level 1 tasks in different environmental conditions will better prepare FOs to provide accurate and timely fire missions that support their unit's scheme of maneuver while training at a combat training center (CTC).

Brigade/regiment FSNCOs cannot train what they don't know. Senior NCOs are charged with figuring out what aspects of their duties they need work on and educating themselves so they can train less

experienced NCOs and Soldiers. Training plans that start at the brigade/regiment level, prior to executing FIST certification, will help to close the generational gap in Fires knowledge and ensure proper TTPs are being trained. Battalion/squadron FSNCOs should conduct leader professional development quarterly to train company/troop FSNCOs on planning company team fire support. Utilizing the crawl, walk, run lane methodology, battalion/squadron FSNCOs should create scenarios that support upcoming operations for the unit. This will allow company/troop FSNCOs to train and rehearse different situations and begin to focus their energy on the challenges they will face during DATE rotations. Company/troop FSNCOs should work with commanders to develop company team fire support plans that support the maneuver scheme. FSNCOs should be actively engaged in the Fires planning process. They provide the necessary experience needed to create an executable Fires plan which will be instrumental in supporting the commander with indirect Fires.

Units preparing for combat training center rotations should emphasize FSEM and fire support and maneuver rehearsals at their home stations. Standard operating procedures should be established to formalize company/troop FSEMs and standardize information. This will help facilitate the planning process and create a common document that the commander and FIST both understand. Over the last decade, fire supporters have done an outstanding job overcoming the challenges of a COIN-centric fight and have become experts at delivering precision munitions in urban areas. Continuing to build on that success and technology will be important to future operations. However, the fire support community must still train and prepare for war against a near-peer adversary, always maintaining a level of proficiency in their individual core competencies, specifically the integration of Fires at the tactical level in preparation for unified land operations.

*Sgt. 1st Class Robert Hance is a company fire support observer coach/trainer for the Timberwolves, Joint Multination Readiness Center, Hohenfels, Germany.*

<sup>3</sup> Training Circular 3-09.8, Field Artillery Gunnery, Change 1, Sept. 8, 2016.

<sup>4</sup> Field Manual 7-0, *Training in a Complex World*, Oct. 5, 2016.