



TTP for Clearing Brigade Fires

by Major Samuel R. White, Jr.

Experiences at the National Training Center (NTC), Fort Irwin, California, reveal most heavy brigades do not employ procedures that positively clear fires. In fact, in our doctrine, we have no standardized clearance-of-fire procedures for a brigade.

Units try a variety of methods to clear fires at the NTC. The three most common are as follows:

In the first method, the brigade fire support element (FSE) consults the brigade S3 battle captain, who looks at the S3 situation map. If no friendly “sticky” icon is present at the grid, the battle captain pronounces the grid “clear.” This is the most common technique brigades use to clear fires.

The second method units use to clear fires is to have the task force (TF) fire support officer (FSO) call the observer and ask if he can positively identify the target as enemy. If the answer is “Yes,” the grid is declared “clear.”

In the third method, the brigade FSE calls the FSE responsible for the zone or sector within which the fires plot and requests clearance. The subordinate FSE then either consults its situation map or consults the TF S3’s map. Again, if no “sticky” icon is posted at the grid in question, the mission is declared “clear.”

None of these procedures are effective. During the past year, ineffective clearance of fires has yielded an average of seven fire support “fratricide” incidents

per rotation, resulting in the “loss” of combat systems and 31 soldiers. Additionally, on an average, 25 artillery fire missions per rotation are determined to be “close to friendly”—that is, less than 500 meters from friendly soldiers. Although no casualties were sustained in the close-to-friendly missions, the large number indicates a lack of positive clearance-of-fire procedures. On another battlefield, with live munitions, the casualty count could be tragically higher.

There are a number of steps units can take to protect the force against fratricide. To ensure fires are effectively cleared, units need to employ maneuver control measures, use fire support coordinating measures (FSCMs) correctly, pre-clear fires (in limited circumstances) and train soldiers in a clearance-of-fire battle drill so they can execute the procedures rapidly.

Maneuver Control Measures. The first step in effective clearance of fires is ensuring units use maneuver control measures. Fire supporters must remind both task force and brigade S3s of the effect on clearing fires when S3s don’t give subordinate maneuver units zones or sectors—when units have no established boundaries. Because boundaries serve as permissive and restrictive measures, the decision not to employ them profoundly affects timely clearance of fires at the lowest level possible. The higher headquarters (probably brigade) then has to

coordinate all clearance of fires short of the coordinated fire line (CFL)—a very time-intensive process.

Whenever possible, boundaries should be used as they allow the unit that owns the ground to engage targets quickly, requiring coordination and clearance only within that organization. Boundaries also neatly divide up battlespace and clearly define responsibility for clearing fires.

An important point on maneuver control graphics: staffs must be knowledgeable regarding the different maneuver control measures and their impact on clearing fires. For instance, boundaries are both restrictive and permissive, corridors are restrictive, while routes, axis and directions of attack are neither.

Fire Support Coordinating Measures (FSCMs). The next step in clearing fires is to properly use FSCMs. Judicious recommendation to the division FSE on the placement of the CFL within the brigade zone or sector is extremely important. The CFL should be as close to the forward line of own troops (FLOT) or forward edge of the battle area (FEBA) as the brigade can track.

In other words, the CFL should be placed just beyond the last point on the ground that the FEBA/FLOT can accurately be located. Forces beyond the FEBA/FLOT and, therefore, beyond the CFL—combat observation/lasing teams (COLTs), scouts, etc.—should be protected by no-fire areas (NFAs). If forces beyond the FEBA/FLOT cannot be accurately tracked (so that NFAs can be established), the CFL must be pushed beyond the point these assets would reasonably be expected to be. Note: CFLs only apply to surface-to-surface fires.

It is doubtful if the corps fire support coordination line (FSCL) will be shallow enough to facilitate close air support (CAS)



attacks for the brigade or task force; therefore, all CAS missions, regardless of whether they are long or short of the CFL, must be cleared by the unit owning the ground.

NFAs should be established on all forces forward of the CFL, and these NFAs should be sent to higher, lower and adjacent headquarters. NFAs should be established on assets short of the CFL if that asset is not task organized to the force in whose zone or sector it is positioned (for example, brigade COLTs in TF 1-1's sector, TF 1-1 scouts in TF 1-2's sector, etc.).

Pre-Clearance. Next, units determine which fires short of the CFL will be considered pre-cleared. In some *very specific* instances, fires can be cleared during the planning phase (pre-clearing). These instances are as follows:

- Fires into a planned call-for-fire zone (CFFZ) resulting from a radar acquisition in that planned CFFZ. The CFFZ must have been planned in advance and published in the radar deployment order (RDO). The CFFZ also should have been rehearsed in advance.

This pre-clearing does not apply to fires resulting from a violation of a critical friendly zone (CFZ) because, unlike a CFFZ that targets a specific enemy artillery formation at a specific location, a CFZ generates a fire mission regardless of the location of the enemy artillery and is, therefore, impossible to predict.

- Fires on a preplanned target with a definable trigger, against a specific enemy and in accordance with the scheme of fire support. In other words, when executing the fire support plan, that specific target can be considered pre-cleared. When shifting from a target or known point, these fires must be positively cleared.

Prior to pre-clearing any fire missions, the maneuver commander must assess the fratricide risk to determine if his unit is trained to a level that will allow pre-clearing fires. Because pre-clearing fires is not positive clearance of fires, it is absolutely vital that commanders, not fire support officers (FSOs), decide to employ this technique.

Clearance-of-Fires Battle Drill. Even though units employ all the measures already outlined in this article, there will be times when they must clear fires. This procedure must be a battle drill in all command posts (CPs) and tactical operations centers (TOCs).

Before outlining the battle drill, one caution: *Fires cannot be cleared off situation maps*—the maps are never accurate enough. No matter how much we pride ourselves on battle tracking and situational awareness, our maps will be wrong or considerably behind reality.

A call must go out on radio nets requesting clearance to fire on a particular grid from the force on the ground. This radio call must be a two-pronged attack: a call on the fire support net simultaneous with a call on the command or operations and intelligence (O/I) net. The command net is preferred because more stations monitor that net, but reality says it will more than likely be the O/I net.

A sample scenario: if a brigade COLT wants to fire an unplanned fire mission short of the CFL in TF 3-19's zone, the call would go out on the brigade O/I and brigade fire support nets: "TF 3-19 FSE [or TOC], this is brigade FSE [or TOC], request clearance on grid NK395176." Within TF 3-19, the process is repeated on the task force command or O/I nets and the heavy mortar net: "Guidons, this is TF 3-19 FSE, request clearance on grid NK395176." This request received at the company CP and the company FSO's fire support team vehicle (FIST-V) is quickly answered and sent back to the task force FSE/TOC and then back to brigade as a cleared fire mission. The entire process takes surprisingly little time *if* it is treated and trained as a battle drill.

There are several scenarios that require clearance of fires.

- Fires across one task force boundary into the zone/sector of another task force require clearance. The most effective method to clear fires in this instance is for the brigade to authorize direct clearance

of fires between task forces. That is, TF 3-19 can call TF 2-19 directly to clear a fire mission. This is best done on the brigade O/I and brigade fire support coordination (FSC) nets. The brigade TOC monitors the action and gets involved only to facilitate coordination (i.e., communications between task forces are poor, etc.).

- Fires by a brigade observer—COLT, Q-36 Firefinder radar, military police (MPs), target acquisition and reconnaissance platoon (TARP), etc.—short of the CFL and into a task force zone/sector require clearance. Use the same clearance procedures explained in the previous example.

- Any fires by anyone short of the CFL if task force zones/sectors are not established (as in a defense from a battle position mission) require clearance. This is best accomplished as outlined previously, except the brigade announces a guidons call to the force as a whole. Obviously, this method takes time and highlights why every effort should be expended to use boundaries and FSCMs and to pre-clear fire missions.

Final Thoughts. Maneuver commanders clear fires. Certainly, they may delegate coordination responsibility to their FSEs, but the final "Yes" or "No" must come from commanders.

Fire supporters at all levels must assist their supported maneuver commanders and maneuver staffs in developing battle drills to clear fires. The tactics, techniques and procedures presented here are effective and work—a start point for a brigade or task force clearance-of-fires battle drill in your unit.



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The Artillery S2's *Intelligent* Preparation of the Battlefield

by Captain Ralph A. Patelli, MI

If you ask what area the artillery battalion S2s have the greatest difficulty with at the National Training Center (NTC), Fort Irwin, California, the answer is easy: the intelligence preparation of the battlefield (IPB) process. Often, the difference between the success and failure of an artillery operation is due to either the S2's failure to perform the IPB or his inability to perform it to standard.

"Artillerizing" this intelligence process is critical to performing the IPB correctly. Several products in the Field Artillery tactical orders process will fail if the IPB is not done correctly. These include mission analysis, course of action (COA) development, the decision support template (DST) and any synchronization or execution matrices. Field Artillery rehearsals (technical and fire support) and radar planning, employment and cueing also are affected.

In all military operations, preparation before the battle sets the stage for success. The IPB process really begins during pre-deployment operations.

Pre-Deployment Preparations

The intelligence section must check its load plans like any other organization. Often key references are overlooked. The following are the minimum references needed to perform artillery IPB properly: *FM 34-130 Intelligence Preparation of the Battlefield* (July 1994); *FM 34-81-1 Battlefield Weather Effects* (December 1992); *FM 6-20-1 Tactics, Techniques and Procedures for Field Artillery Cannon Battalions* (November 1990); *FM 6-121 Field Artillery Target Acquisition* (September 1990); and *FM 34-3 Intelligence Analysis* (March 1990). You also need the appropriate doctrine and tactics manuals for the threat you face. The Training and Doctrine Command (TRADOC) Pam 350 series are the standard for the level of detail needed.

While reviewing these references with your section, determine the strengths and weaknesses of your section. Focus your training on the following areas (not listed in priority).



- *Terrain and Weather.* Current information is critical in developing the foundation product of IPB: the modified combined obstacles overlay (MCOO). The better you know the terrain, the weather conditions and their effects on ballistic solutions and firing battery positioning, the more pertinent your analysis will be to planning and execution.

- *Enemy Task Organization.* As the artillery S2, you must know the enemy's artillery organization from the division-level down to the company level. You focus on numbers and types of armored and (or) mechanized equipment. The artillery S2 must be an expert on threat equipment capabilities and limitations in both day and night operations.

- *Doctrine.* You must know the enemy's rates of march as well as formations: depths and widths of the division, brigade (or regiment), battalion and company in both the offense and defense. It's vital to understand how the enemy adjusts his formations in respect to friendly force deployment and actions.

- *Artillery-Specific Information.* As the artillery battalion S2, you're expected to be the subject matter expert on enemy artillery and tactics. At a minimum, you must know artillery types and calibers in

use; the number of tubes in a battery, battalion and groupings; munitions used by type and their ranges (conventional as well as extended ranges); disposition of firing units in relation to maneuver forces in the offense and defense; conduct of fire support in both counterfire and direct support (DS) roles; the intentions the enemy artillery fires telegraph (e.g., phases of fires); and the counterfire assets the enemy has and their capabilities and limitations.

- *Air Defense Artillery (ADA)-Specific Information.* This includes the enemy's equipment capabilities and limitations, employment and doctrinal considerations and the composition of ADA platoons and batteries as well as their locations on the battlefield in the offense and defense.

- *Intelligence Threat Against Artillery and Countermortar/Counterbattery Radars.* You must understand what collection systems and agencies are positioned to target friendly artillery systems. That includes what electronic intelligence (ELINT) systems and reconnaissance units can detect, report and destroy one of your most valuable intelligence/targeting systems, the Q-36/37 Firefinder radar. You must know what countermortar/counterbattery radars the enemy has to detect your battalion, how many he has, what their capabilities are and where they are positioned doctrinally on the battlefield. The local military intelligence (MI) unit, division artillery and (or) the MI battalion liaison officer (LNO) at the brigade tactical operations center (TOC) can answer these questions.

The IPB Process

IPB is a continuous process consisting of four steps.

Step 1: Define the battlefield environment. For the most part, this step is done for you. The brigade or higher headquarters defines your area of operations (AO) and area of interest (AI), which focus the firing units' reconnaissance and surveillance (R&S) efforts and radar deployment order (RDO). The critical pieces of information you need to identify are what the outer limits of the brigade zone are and how far your radar will have to move for-