

Exploiting the Effects of Fires: Synchronized Targeting and Execution

by Colonel David C. Ralston and Captain Rodney L. Lusher

This article explains how one heavy brigade refined fire support training to more effectively fight with fires at the Combat Maneuver Training Center (CMTC) in Hohenfels, Germany. Fires must be lethal throughout the depth of the battlefield to set the conditions for success. During our CMTC rotation, the success of fires was the result of the maneuver commander's synchronizing fire support with other battlefield operating systems (BOS).

The brigade's training strategy emphasized two areas: synchronizing targets with all systems and training maneuver shooters. The results were impressive: fire support kills increased by 101 percent over the previous rotation.

Targeting. *FM 6-20-40 Fire Support in Heavy Operations* defines a planned target as "a target upon which fires are prearranged." This definition does not include the most important aspect of targeting, which is the synchronization of targets with other BOS. To emphasize this, the brigade defined *synchronized targets* (see Figure 1). A synchronized target is a planned target with the CMTC's six essential elements. It meets the commander's intent and is inexorably tied to the reconnaissance and surveillance (R&S) plan, the obstacle plan and the scheme of direct fires and maneuver—targets that are totally integrated into the combined arms fight.

Within the context of the *decide, detect, deliver* and *assess* targeting methodology, the brigade followed three simple rules: maintain a manageable number of targets, focus those targets on the enemy's

most likely course of action (COA) and develop a time-line for the battle.

- *Maintain a manageable number of targets.* The commander must resist the impulse to have many targets. The observation plan limits the number of targets one can cover. Each target requires at least a primary and alternate shooter; a 10-target list requires 20 dedicated observers. This ratio may not always be two-to-one as an observer may have responsibility for two targets, but a well-defined observation plan directly affects target planning. The key is to plan fewer targets so each can be fully *synchronized*.

- *Concentrate your limited number of targets on the enemy's most likely COA.* The battalion S2 must commit to this assessment for each battle. The fire support officer (FSO) uses hasty fire plans for separate contingencies.

- *Determine a time-line for the battle.* When a commander selects a COA, he defines the framework of the staff's battle planning. If the battle is expected to last one hour, the FSO plans the battle time-line to ensure he can meet the commander's intent. He asks himself, "Where will the enemy be at 'x' minutes into the battle, and how can I ensure fire support assets are ready to engage him?"

For example, if the call-for-fire and data processing require 10 minutes and the actual firing requires another five minutes, only four targets can be fired in a one-hour battle. The FSO develops a time-line for the entire battle and links it to artillery repositioning to ensure targets can be engaged.

It is this level of detail and integration that makes the artillery effective.

Maneuver Shooter Program. Critical in establishing an effective observation plan was to have at least a primary and alternate shooter for each target. Often, however, even this was not enough. Both shooters were sometimes unable to call for fire (either "killed" or victims of communications failure), leaving no one to

observe the target. Frequently the problem was an insufficient number of trained observers. To correct this, the brigade expanded its maneuver shooter program.

A maneuver shooter program trains tank and Bradley commanders, scouts, engineers and air defense scouts to call for and adjust fires. The program trains every leader in the task force to be an observer.

It began with a one-day program of instruction (POI) taught by the brigade's FSO and fire support NCO (FSNCO) at the Training Set, Fire Observation (TFSO) simulator. The POI taught the skills needed to execute a fire mission and then tested them during simulation exercises—Janus and simulation network (SIMNET)—that focused on indirect fires.

Maneuver shooters were then certified during maneuver exercises. More than 200 maneuver shooters were certified during our CMTC train-up.

The communications net the maneuver shooter should use became a much debated issue. After trying several options, the primary net for maneuver shooters became the company command net to the company fire support team (FIST). The company FIST then relayed the mission to the tactical fire direction system (TACFIRE) on the artillery command fire (CF2) net. Primary and alternate nets are shown in Figure 2.

One initiative to enhance the maneuver shooter program was the scout forward observer (FO) program. To ensure integration of fire support in scout training, dismounted FOs assigned to each maneuver battalion were redesignated scout FOs and attached to the scout platoons. (See Figure 3 for scout FO functions.) When the scouts trained, the scout FOs trained with them.

The senior scout FO rode with the scout platoon leader and monitored all intelligence reports. A fire support expert was, therefore, immediately available to recommend fire support measures and request indirect fires. The other scout FOs rode with scout teams and performed similar functions. Each scout FO carried a portable, secure radio (PRC 77) for communications with the task force fire support element (FSE) and had other equipment to call for and adjust fires.

CMTC Train-Up. To come to a common understanding of how fire support would be employed, the brigade commander brought all maneuver commanders and staffs together for a one-day fire support seminar. The seminar established tactical procedures for clearing fires and setting priority of fires. It set the require-

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Figure 1: Synchronized Target. A synchronized target is one that meets the commander's intent, has the six essential elements listed and is integrated into the overall battle.

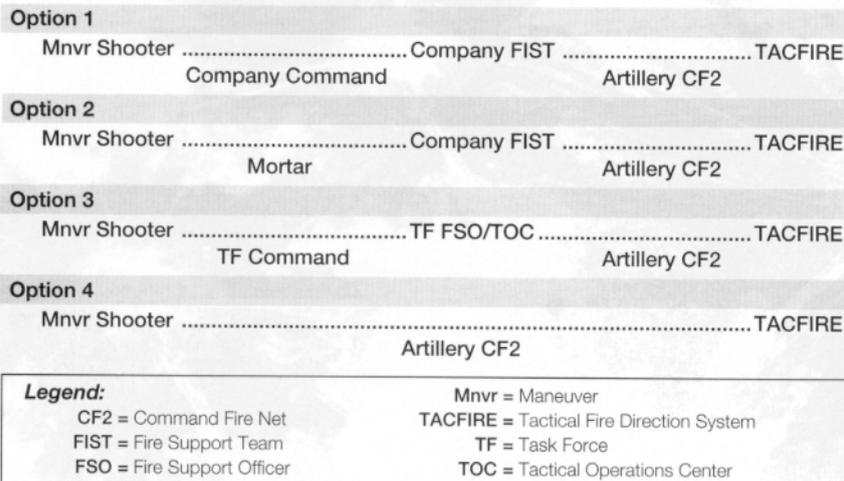


Figure 2: Maneuver Shooter Communications Nets. The nets are listed by primary and alternate options.

ments of a synchronized target, the formulation of the commander's intent, and the execution of a combined arms rehearsal. It established the location of FSOs on the battlefield and the communication nets for maneuver shooters. When the seminar closed, the brigade team had a common understanding of how the commander intended to fight with fires.

Simulations. The brigade trained on Janus and SIMNET exercises extensively. The brigade commander's intent for fires dictated that maneuver exploit the effects of fires. Therefore, during the first iteration of the simulation, units had to fight with fires only. Maneuver was then added to the following iterations. This training approach required commanders to think fires first, then decide how maneuver could exploit those fires. As a result, the commander's intent for fires developed into detailed products that synchronized direct and indirect fires.

Right Seat Rides. Another initiative to improve artillery warfighting abilities was the right seat ride program that allowed individuals to go to CMTC and ride with an observer/controller (O/C).

The coaching provided by the O/Cs was invaluable. From the artillery battalion alone, we sent 92 officers and NCOs in

- Advise the scout platoon leader on employing fire support.
- Train the scouts on calls-for-fire and fire support integration.
- Provide the task force fire support element (FSE) intelligence.
- Link the scouts directly with the artillery.

Figure 3: Scout Forward Observer Functions

one year to strengthen their skills. We then followed up with officer professional development (OPD) seminars to discuss and maximize the lessons learned.

Combined Arms Exercise. Once leaders developed fire support skills and understood the systems, the brigade planned a combined arms exercise (CAX): FireStarter. FireStarter was conducted in two phases, both specifically designed to exploit the effects of fires. It was also the first step in certifying maneuver shooters.

Maneuver battalions conducted the first phase in local training areas. This was the first effort at executing the six elements of a synchronized target in a field environment. It was a free-play exercise organized as a company-level situational training exercise (STX) lane attacking a dug-in enemy platoon. Companies rotated as attacker and defender. After each STX, the task force commander and S3 conducted an after-action review (AAR) that concentrated primarily on fires. The company then could apply the observations during subsequent runs.

A high-mobility multipurpose wheeled vehicle (HMMWV) exercise conducted at the CMTC was the second phase. This was a unique opportunity that allowed us to focus on the synchronization of fires (e.g., timing, triggers, the observation plan, etc.). Companies attacked and defended against the opposing force (OPFOR). CMTC O/Cs coached the companies and conducted AARs. For continuity, these were the same O/Cs the units later had for their rotation.

FireStarter trained the maneuver leaders at the company and platoon levels to own fires as an asset to be integrated into the fight. They practiced how to request

fires, how long it took to get fires and how to adjust them. This training was extremely effective for both maneuver and fire supporters.

The Results. When the brigade arrived at the CMTC for its rotation, it was trained and combat ready.

During the rotation, maneuver shooters initiated more than 50 percent of the missions. The number of planned targets decreased by 20 percent from the previous rotation, but the number of planned targets fired increased by 32 percent. Fewer planned targets enabled the fire support system to focus on synchronized targets. At the same time, the number of targets of opportunity decreased by 54 percent.

Overall, the artillery fired 21 percent fewer missions but doubled the number of enemy combat vehicle kills. Fewer targets were planned, but they were planned more efficiently and were effectively synchronized with the R&S and obstacle plans and the scheme of maneuver. Clearly the disciplined, systematic engagement of synchronized targets was the key to success in fighting with fires.

To exploit the effects of fires, maneuver commanders must ensure synchronized targeting and execution. A common understanding of how the brigade commander intends to fight his fires along with a solid training program will prove effective in fighting with fires.



Colonel David C. Ralston is the Deputy Director of Officer and Enlisted Personnel Management in the Office of the Secretary of Defense at the Pentagon. He commanded the 3d Battalion, 1st Field Artillery, in direct support to the Spartan Brigade, part of the 3d Infantry Division (Mechanized) in Germany. He also has served as Executive Officer of the 1st Cavalry Division Artillery at Fort Hood, Texas, and S3 of the 3d Battalion, 3d Field Artillery, 2d Armored Division, also at Fort Hood. Colonel Ralston is a graduate of the Army War College and was a National Security Fellow at Harvard University.

Captain Rodney L. Lusher is a student at University of Central Florida working on an MA in Simulations. He commanded B Battery, 3d Battalion, 1st Field Artillery, part of the 3d Infantry Division (Mechanized), and was the task force Fire Support Officer for the 2d Battalion, 70th Armored, Spartan Brigade. He is a graduate of the Field Artillery and Armor Officer Advanced Courses at Fort Sill, Oklahoma, and Fort Knox, Kentucky, respectively.



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)