TTP for Winning the Counterfire Fight

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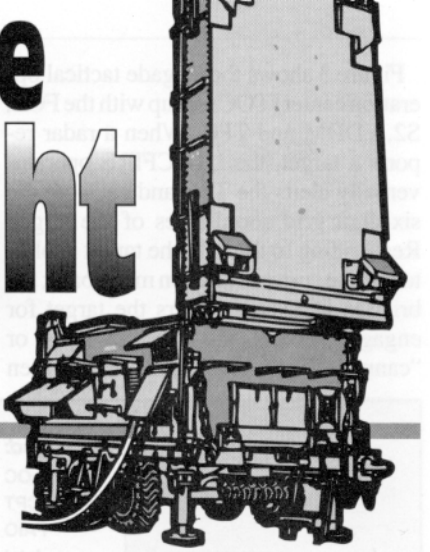

This article describes tactics, techniques and procedures (TTPs) for the artillery battalion to plan and execute counterfire—to win the counterfire fight. The TTP was refined by the 2d Battalion, 82d Field Artillery—a direct support (DS) battalion in the 1st Cavalry Division, Fort Hood, Texas—during a recent rotation at the National Training Center (NTC), Fort Irwin, California. Although in this article we describe a counterfire fight against an enemy using the "Krasnovian" phases of fire, the TTP can be modified to fight an enemy that uses conventional tactics.

DS and general support (GS) battalion S2s face a challenge in fighting the counterfire battle. Unfortunately, not many articles or few manuals address the counterfire fight with any degree of detail. To win, you must understand the responsibilities of key personnel, considerations in positioning the radar, the war-gaming process, radar zone management and considerations in moving and cueing the radar. You also must thoroughly rehearse the plan and then execute it to meet the commander's intent.

Personnel Responsibilities. The key counterfire personnel in the tactical operations center (TOC) are the radar technician and the DS battalion S2, S3 and commander.

The radar technician's role is changing today. Currently, the modified table of organization and equipment (MTOE) states the targeting officer in the S2 section is a radar technician. The mission training plan (MTP) recommends sending the targeting officer to the brigade fire support element (FSE). Therefore, a void exists in radar management in the DS battalion TOC.

During our most recent NTC rotation, we used the radar technician from the radar section in the DS battalion TOC to assist and advise the S2 on radar operations. The radar technician's primary responsibilities are to advise the S2 on radar operations, write the radar deployment order (RDO), write the target acquisition portion of the Field Artillery support plan, coordinate survey for the radar, participate in the orders process, conduct reconnaissance of radar positions, coordinate additional radar zones and coverage with the division artillery and coordinate logistical support for the radar.

The S2 advises the DS battalion commander and S3 on employing the radar. He executes the counterfire fight with the advice and help of the radar technician. The S2 templates the regimental artillery group (RAG) and the divisional artillery group (DAG), ensuring the safety of the radar during position selection, and analyzes possible positions and enemy tactics. For the decision support template (DST), the S2 recommends to the S3 the decision points (DPs) for cueing and moving the radar and changing radar zones.

The DS battalion S3 supervises the planning of the counterfire fight. He ensures the plan meets the supported maneuver commander's intent. He also designates the counterfire unit and ensures it has additional long-range munitions, coordinates land and engineer support for the radar, coordinates force protection for the radar (an infantry squad or platoon) and, finally, accepts or changes the DPs recommended by the S2.

The DS battalion commander issues guidance to the S3 and S2 on the counterfire fight, based on the maneuver commander's intent, and approves the counterfire plan.

Radar Positioning. The primary consideration in selecting a radar position is mission accomplishment. The secondary consideration is survivability.

Radar position selection starts with the S2 and the radar technician's conducting terrain analysis. They use the following products produced by the S2: the enemy's situation overlay, the modified combined obstacles overlay (MCOO), the enemy's avenue of approach overlay, the enemy's air routes overlay and any Terrabase products. Next they conduct a map reconnaissance and select several potential positions. For a list of considerations for positioning radars, see Figure 1.

- Can the radar acquire targets from the RAG and DAG?
- What is the ELINT threat to the radar? The ground threat to the radar?
- Is the radar on a high-speed avenue of approach?
- Does the position offer good communications with the DS battalion?
- Where are the possible enemy air assault sites? Sites for chemical strikes?
- Where are the positions of other friendly units?
- Where are the radar alternate positions? Supplemental positions?
- Is the route clear of enemy, chemicals, mines?
- Are there positions to move forward or fall back to?
- Does the position support the commander's intent?
- Does the position offer a screening crest?
- What is the track volume?
- What is the friendly scheme of maneuver?
- What is the aspect angle?

Legend:
ELINT = Electronic Intelligence
DAG = Division Artillery Group
DS = Direct Support
RAG = Regimental Artillery Group

Figure 1: Considerations for Positioning Radars

As the S2 and radar technician analyze positions on the map, they reduce the number to the best possible sites. They select three (primary, alternate and supplemental) sites and recommend the positions to the S3, who accepts or rejects the positions before the war game. The S3 coordinates the radar's positions with the maneuver unit S3.

The radar technician reconnoiters the sites to select the best one, ensuring it supports the mission. If the primary position proves unsuitable, the radar technician proceeds to the alternate position. He then recommends his choice to the S3. For maximum survivability, the radar occupies the site after dark.

- What is the counterfire unit? (Unit designated by the S3 on the FDO's recommendation, considering range, munition and position.)
- What will happen if multiple target acquisitions occur simultaneously?
- What is the standard fire order? (The FDO recommends the standard fire order for S3's approval, ensuring it meets the commander's guidance.)
- What are the DPs on when to move the radar? (The DPs are based on the phases of fire or accumulated cue time.)
- What are the DPs to change the radar zones? (The DPs are based on the phases of fire or maneuver unit's advance.)
- What are the DPs on when to start cueing?
- Are radar zones planned throughout the depth and width of the battlefield, anticipating enemy and friendly movement?
- When does the S3 want the RAG to move?
- Does the plan account for overwhelming success? For catastrophic failure?
- How many tubes must be destroyed to meet the commander's intent?
- Can the CFFZs be pre-cleared with the FSOs?
- What are the DPs on massing the battalion on the RAG?
- What is the cueing schedule during the different phases of fire?
- What is the methodology to track the destruction/force ratio of the enemy artillery?

Legend:

DPs = Decision Points
CFFZs = Call-for-Fire Zones
FDO = Fire Direction Officer
FSOs = Fire Support Officers
RAG = Regimental Artillery Group

Figure 2: Checklist for Planning Counterfire during War Gaming

War Gaming. The S2 and radar technician plan, coordinate and synchronize the counterfire fight during the war-gaming process. The S2 recommends call-for-fire zones (CFFZ) and DPs, based on the enemy's situation template. He coordinates with the fire support officers (FSOs) to receive their critical friendly zones (CFZ). See Figure 2 for a list of considerations for planning counterfire during war gaming.

There are several critical DPs discussed in the war-gaming process. One of the most critical for the DS battalion is forcing the RAG to move, which allows the radar and the counterfire unit to move. The only way to force the RAG to move is to neutralize (10 percent) or destroy (30 percent) it.

Another critical decision arises when target acquisitions occur simultaneously; the counterfire unit can become overwhelmed quickly. There are several options available when the radar receives dual acquisitions.

The best option is for the DS battalion to engage one target and pass the other to the division artillery. This allows the battalion and division artillery to mass on two separate targets.

Option two is for the DS battalion to engage the targets with organic assets (battalion and mortars). Option two also allows for massing on two separate targets; however, one must be within range of the mortars.

Option three is to pass the targets to the division artillery. This is the least desirable option because the division artillery may not fire on both targets, particularly if it's involved in a heavy counterfire fight with the DAG.

War gaming determines the DPs and triggers for cueing and moving the radar and changing the radar zones. This information should be listed on the DST. Based on the results of the war game, the S2 and radar technician make the CFZ and CFFZ overlay, listing the phase of fire associated with each zone, and then write the RDO.

Radar Zone Management. The S2 and radar technician base radar zone management on friendly maneuver units' locations, the mission and the enemy's phases of fire. The S2 templates the RAG. The radar's primary azimuth of search orients on the RAG, which may be split into two CFFZs.

The most difficult zones to manage are CFZs. The challenge is to manage these zones when the maneuver units move. The CFZs come from the maneuver commander who is responsible for force protection. He decides what critical assets he needs to protect to succeed. Therefore, he decides which assets receive radar coverage.

Unfortunately, many maneuver commanders don't understand the radar's capabilities. Therefore, the fire support coordinator (FSCOORD) or FSO must ad-

C Battery of 2d Battalion, 82d Field Artillery conducts a tactical move in a battalion external evaluation—a train-up for the NTC.

vise the maneuver commander and help him select CFZs.

During Phase I fires in both the offense and defense, the enemy division commander attempts to shape the battlefield for his regimental commanders. The DAG shoots Phase I fires. Generally, the DS battalion's Q-36 radar won't acquire targets from the DAG due to range. Therefore, the radar technician coordinates with the division artillery's Q-37 radar for coverage of Phase I fires.

The division artillery will assign the battalion one to three coverage zones, depending on whether or not the DS battalion's maneuver unit is the main effort. Because the division artillery is already trying to locate the DAG, the DS battalion uses its zones for force protection (CFZs). The S2 gives the division artillery a specific time for the coverage to begin (i.e., "NLT ___"). The S2 should coordinate additional Q-37 CFZ coverage when he anticipates the Q-36's moving—the division artillery may or may not be able to support the request.

The S2 advises the FSO on the number of CFZs available and recommends CFZs, based on the different enemy phases of fire. The FSO advises the maneuver commander on the number of CFZs available, who then decides which zones receive coverage, based on the enemy's phases of fire and the friendly scheme of maneuver. Figure 3 lists the types of targets engaged by the enemy in the different phases.

The S2 changes the radar's zones of coverage as the phases change. The FSOs or targeting officers must give the S2 copies of their maneuver graphics with the axis or route of advance, breach site and maneuver positions with the approved CFZs marked so he can manage the radar coverage.

Radar Movement. The S2 and targeting technician move the radar based on the enemy's phases of fire and accumulated cueing time. Moving the radar at a critical time in the battle may cause the supported unit to take heavy losses.

The radar should move when the RAG is silenced or moving. The best way to anticipate the RAG's moving is to force it to move with counterfire, ideally during its most important phase of fires. During the war-gaming process, the battalion S2 and S3 decide when they want the RAG to move or when accumulated cueing time can cause radar detection; they include these events as DPs on the DST.

During the enemy's offense, the most important fires occur at Phase II. At the start of this phase, the radar is set with no accumulated cueing time. The radar section must try not to use all the cueing time during this phase, saving some for Phase III. Hopefully, the enemy attack will be defeated before Phase IV. However, if the attack succeeds, moving the radar at that point could be dangerous.

During the enemy's defense, the RAG starts shooting in Phase II. Therefore, the S2 should position the radar as far forward as possible with no accumulated cueing time. The most important phase during the defense is Phase III fires, so the radar section uses the remaining cueing time during this phase. The DP to move the radar should be during Phase III fires. The S2 section should move it forward to maintain maximum coverage and have it set prior to Phase IV. The radar should not move during Phase IV or Phase V.

Finally, timing the movement of the radar is difficult. The S2 section should force the RAG to move with the appropriate volume of counterfire. If no acquisitions are made within five to 15 minutes after the last counterfire mission, then it is safe to move the radar.

Any time the radar moves, coverage must be coordinated with the division artillery.

Radar Cueing. Cueing consists of two parts: cueing agents and the cueing schedule. Cueing agents are individuals or units designated to cue the radar. Authorized cueing agents may be the maneuver commander, DS battalion commander, S3, S2 and lead maneuver unit. The number of authorized cueing agents should be limited to prevent unnecessary cueing; the radar should cue for only one minute of accumulated time. The radar section should ask the cueing agent how much time is needed to avoid wasting cueing time.

The most important of the two parts of cueing is the schedule. The cueing schedule informs the radar how long to radiate. Several factors affect the cueing schedule: the electronic intelligence (ELINT) threat to the radar, the enemy's phases of fire, proactive cueing and reactive cueing.

If the ELINT threat is high, the radar should cue no more than 15 to 30 seconds "on" and 15 to 60 seconds "off." Decreasing the cueing time reduces the probability of ELINT detection.

During the enemy's most important phase of fire, the cueing time should increase to 30 to 45 seconds "on" and 5 to 15 seconds "off." This increases the probability of the radar's detecting the RAG during the phase it will be shooting the most.

Proactive cueing is difficult. It requires the S2 to predict when the enemy artillery will start shooting. If he's correct, the radar starts cueing just before the RAG shoots, so friendly assets can attack the RAG immediately. Managing accumulated cueing time is critical during proactive cueing.

The other type of cueing is reactive. Once friendly units receive fire from the enemy artillery, the radar starts cueing. Reactive cueing requires a quick-voice net.

Rehearsing Counterfire. A critical part of counterfire is rehearsing. The rehearsal synchronizes the counterfire fight with the scheme of maneuver and the sensor-to-shooter link. The S2 and radar technician rehearse the counterfire plan with the radar and the S2 sections. They rehearse

Offensive Phases of Fire

Phase I: MLRS, Cannon Artillery, C^3I, Attack Reserves, Reserves, Logistics, Attack Helicopter FARPs

Phase II: Battle Positions, Cannon Artillery, CP, Communication Centers

Phase III: Battle Positions Hindering Advance, Observers, Mortars

Phase IV: ADA, Counterattack Routes, Anti-Tank Weapons, Cannon Artillery, CP, Mortars

Defensive Phases of Fire

Phase I: Artillery

Phase II: 1st Echelon Maneuver Units, ADA,CP, Engineers, Choke Points

Phase III: Breach Site, Massed Troops (Assault, Breach or Support Forces), Engineers, ADA, CP

Phase IV: Same as Phase III

Phase V: Targets are the same as those listed in the first three phases of the Offensive Phases of Fire.

Legend:

ADA = Air Defense Artillery
C^3I = Command, Control, Communications and Intelligence
CP = Command Post
FARPs = Forward Area Rearm/Refuel Points
MLRS = Multiple-Launch Rocket System

Figure 3: The Enemy's Targets by Phases of Fire. The S2 changes the radar's zones of coverage as the phases change.

the radar zones during the different phases; use of the radio nets (digital and voice); times to be ready to radiate, prepare to march order and report accumulated cueing; DPs for movement and to start cueing; cueing schedule; and use of the code words.

Finally, the S2 and radar technician participate in the brigade fire support rehearsal. They rehearse DPs for the zones' becoming active and changing, radar's moving, starting cueing, passing targets and massing the battalion.

Counterfire Fight. The following scenario explains the counterfire fight. The interaction among the S3, S2 and radar technician is the most important factor in synchronizing the counterfire fight.

During the battle, the radar technician manages the counterfire fight and radar zones for the S2. He calls the division artillery to ensure the CFZs coordinated with it receive division artillery coverage as the first DP for Phase I fires approaches. The S2 tells the radar technician when the phases of fire begin changing.

As the time approaches for the DP to cue the radar (Q-36) for Phase II fires, the S2 analyzes the targets the enemy is shooting and tells the S3 when the phases of fire change. He also recommends changing the radar zones.

After changing the zones, the radar acquires two targets. The radar passes the targets to the S2 and radar technician for analysis: Does the location of the targets confirm or deny the templating is correct? Do the zones need to be moved?

The S2 informs the S3 of the acquisitions and the location of the targets, confirms the RAG is firing and recommends attacking the targets. The S3 tells the FDO to engage one target with a battalion mass mission and passes the other to the division artillery.

A DP to change the zones approaches. Once again the S2 analyzes the targets the enemy is shooting and recommends the S3 change the zones. After the zones change, the radar technician alerts the S2 that the DP to move the radar is reached; the S2 makes a recommendation to the S3 on whether or not to move the radar as determined by the situation.

The TTP in this article proved effective during our recent NTC rotation. This information is a start point to help the DS/GS battalion S2 develop a plan for and then execute a counterfire fight that allows the maneuver commander to concentrate on fighting the enemy's maneuver forces—not the enemy's artillery.

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Leadership Vignette: Meeting the Standard

When I was a young private in the 82d Airborne Division, approximately 15 years ago, I had as my first squad leader a hard-nosed NCO named Sergeant Rogers. He had a very basic philosophy: do what I say when I say and complete it to my standards.

It didn't take me long to figure out he was serious. Within two weeks, I had improved my push-ups tenfold. For a while I thought my name was changed to "Drop." It seemed like every time I turned around, Sergeant Rogers was there, and I was doing something other than what I was supposed to be doing.

He made it a point to know everything about me—my family, where I was from, how I did in school, my hobbies and even all about my checking account (which he inspected twice a month). I thought he had a special interest in my room, for every morning at 0515 he would blast into it and identify enough gigs to bring my team leader to the verge of a stroke.

I knew that four years of this would ultimately kill me, so I devised a plan to elude the wrath of Sergeant Rogers. I started spit shining my boots and starching my uniform. Immediately after work, I squared my room away. I anticipated daily missions and completed them before I was told to do so. Throughout the day, I maintained the personal appearance and military bearing expected of airborne personnel.

Soon the push-ups were coming fewer and further apart, Sergeant Rogers' morning blasts into my room were uneventful and I was performing more missions with less supervision. I thought I had finally broken away from Sergeant Rogers' grip. Imagine my surprise when I figured out that in eluding the wrath of Sergeant Rogers, I had inadvertently become a squared-away airborne soldier.

I didn't understand what was happening until I received my counseling statement. It stated I was performing in an outstanding manner, showing initiative, pride and maturity. The statement ended with a "You're doing a great job, Airborne. Keep up the great work."

The art of leadership is defined as "The ability to influence soldiers in such a manner as to accomplish the mission." As a leader, Sergeant Rogers was tough and set high standards, accepting nothing less—mission first, people always. He accomplished this by discovering everything there was to know about his soldiers, then individually and unbeknownst to the other squad members, drew them from their shells and molded them into airborne soldiers.

Sergeant Rogers' squad consistently performed above and beyond the company's standards. His ability to guide, supervise and instill a sense of discipline and pride in all of his soldiers was the key to his leadership style.

Through his leadership, I realized the true meaning of taking care of soldiers. Sergeant Rogers' example has aided me through the ranks from private, to staff sergeant and to my present rank.

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