



## Offensive Operations for the Field Artillery Battalion and Below

### **Introduction**

The purpose of this paper is to provide a context for Field Artillery (FA) units executing offensive operations in a Decisive Action Training Environment (DATE). The specific unit of focus for this paper is the Brigade Combat Team's (BCT), Direct Support (DS) Field Artillery (FA) Battalion. The primary audiences for this paper are Fires Battalion Staff Officers and Non-Commissioned Officers, Battery and Forward Support Company Commanders, and First Sergeants. This paper is a collaboration of Key Developmental billet complete Observer Coach Trainers (OC/Ts) with an aggregate of ~100 rotations of experience at the National Training Center (NTC) Fort Irwin, CA.

This paper is separated into four focus areas consisting of: Battalion operations, Battery Operations, Sustainment Operations, and radar employment considerations. The Battalion operations section highlights the FA Battalion's tasks associated with offensive operations. The battery operations section provides insights from a Battery Commander's perspective to highlight Troop Leading Procedures (TLPs), execution, and subsequent transition. The third section of this paper is Sustainment Operations insights for the offense. Lastly, this paper will identify radar employment considerations specific to the offense.

### **Battalion Operations**

The Battalion Operations Officer (S3) is responsible for understanding the Brigade fight and ensuring the Battalion is postured to deliver fires in order to meet the BCT CDR's desired effect in support of the brigade's defined deep and close fights. The success of the Battalion is contingent upon the staff's ability to conduct deliberate parallel planning with Brigade. The Battalion Staff is responsible for anticipating applicable Field Artillery Tasks (FAT) IAW the enemy SITEMP and friendly scheme of maneuver, positioning of Artillery assets, and proper management of Class V to accomplish the BCT CDR's desired effect. The Battalion S3 must maintain communication with the Brigade Fire Support Officer (FSO), the Fire Support Coordinator (FSCOORD) and the Brigade S3 to understand the Brigade plan. During offensive operations, the Battalion Staff must continually ask the following questions enabled by the Six TOC Functions, running estimates, and Military Decision-Making Process (MDMP):

-Based on the enemy Situation Template (SITEMP) and the brigade's maneuver plan where can we anticipate targets?

-How much Obscuration, Suppression, and Special Munitions will the Brigade's plan require?

-Can we execute our P.A.C.E Plan at speed to execute seamless Fire Mission Processing?

-Does the IPB and assigned battle space / PAAs support the most achievable firing solutions and transitions to affect an enemy Counter Attack and exploit High Payoff Target List (HPTL) and targets of opportunity?

-Are we providing Battery Commanders sufficient time to conduct proper Reconnaissance, Selection, and Occupation of Position (RSOP) and TLPs, specifically turret loads / Class V cross loading?

To answer these questions ensure recommendations can be made to the FSCOORD for decision(s), conditions are set to support the Brigade fight, and Batteries have adequate time to conduct TLPs.



## Battery Operations and Troop Leading Procedures

The Battery Commander (BC) and battery leadership should fundamentally follow the Eight Steps of Troop Leading Procedures to prepare for offensive operations. Also, using the elements of METT-TC and Five Requirements of Accurate Fires, BCs are well able to effectively analyze their mission as directed by the Battalion Field Artillery Support Plan (FASP). During the offense, a Battery may be assigned a Field Artillery Task(s) (FAT) of Suppression, Screening Smoke, Obscuration, Counterfire, and Precision Fires. The BC must thoroughly understand his or her assigned FATs, as they will frame the means in which they will achieve the Commander's desired effect. An enemy formation in the defense is at an advantage based on the amount of time they had to dig in and shape the Operational Environment. Also, an assessment of near peer adversaries will determine that they possess a higher ratio of indirect fire assets with further range capabilities. The BC must consider these facts as they consider direct fire, counterfire threats, and necessary force protection postures to reduce the risk to force and mission. The nature of offensive operations in Large Scale Combat Operations (LSCO) will force the BC to backwards plan from a specified In Position Ready to Fire (IPRTF) times IAW the Brigade Reconnaissance Squadron Line of Departure (LD) time. Leader adherence to the one-third, two-thirds rule allows maximal time for subordinate leader planning, rehearsals, and execution.

Having conducted their analysis, the BC must issue a Warning Order (WARNO) with the proper balance of detail to achieve shared understanding. BCs must rely on practiced Standard Operating Procedures (SOPs) to streamline their WARNO. SOPs should cover topics such as Pre-Combat Checks and Pre-Combat Inspections (PCC/PCI) criteria and subordinate responsibilities for movement, occupation, and special teams so the commander need not dictate these tasks in their order. The WARNO should also include relevant analysis of the enemy situation, terrain, and weather at their echelon and two levels up. BCs must be careful not to simply restate the Battalion Mission to their subordinates, but provide appropriate and applicable analysis that their subordinates need to know. WARNOs should include priorities of work, general timeline, and direction for initial movement and reconnaissance. Finally, the WARNOs should direct action, enable dialogue, and the execution of implied tasks down to the 10 level junior Soldier.

In an offensive operation, the BC may not be able to lead RSOP operations for all templated Position Area for Artillery (PAAs) until maneuver units have crossed LD. BCs may be required to use other assets to conduct their initial reconnaissance, including maps, imagery, Ravens or other Unmanned Aerial Systems (UAS), or querying higher headquarters and adjacent units to help judge routes and positions until their advance party can conduct RSOP.

As the BC completes the plan and prepares to issue the Operations Order (OPORD) for an offensive operation, they must give special attention to triggers and speed at which they must move their battery to the next PAA, the counterfire threat, survivability movement criteria, ammunition resupply triggers, and resupply procedures. When completing their plan, the BC should ask themselves: Do I have the correct ammunition to complete my FAT? Are triggers for battery emplacement and displacement clear? Will my platoons understand the triggers and timing of the targets for which they are responsible? Are we able to effectively communicate internally and externally? Are we meeting all Five requirements for Accurate Fire?

As the commander issues the plan, they must ensure subordinate retention of information through back briefs, or quizzing. The commander must also be prepared to refine their plan through effective supervision, inspections, and completion of RSOP procedures.



## **Execution**

The cannon battery conducts operations through decentralized execution based upon mission orders. Battery leaders exercise initiative to accomplish the mission within the commander's guidance. The capability of the cannon battery is enhanced through the flexibility and survivability of the platoon-based organization. The platoon Fire Direction Centers (FDCs) are equipped with the Advanced Field Artillery Tactical Data System (AFATDS) computer as the primary digital interface between the battalion command post and the howitzers.

## **Methods of Operational Control**

Howitzer batteries operate as either two independent platoons with one Platoon Operations Center (POC) controlling three howitzers or a Battery Operations Center (BOC) with one FDC controlling all six howitzers in the Battery. For offensive operations, the recommended method of control is FDCs operating as a BOC controlling all howitzers within the battery. The primary reason for operating as a BOC under these conditions is the number of howitzers required to conduct an obscuration or screening mission is typically more than three for a combined arms breach at the BCT level. Based on the perceived enemy direct or indirect threat, the BC's guidance for survivability dictates the movement and employment of howitzers throughout offensive operations. Typically, the largest threat during offensive operations is enemy indirect fire (IDF) during long duration fire missions such as Obscuration or Suppression for a BCT combined arms breach. To avoid the enemy IDF threat, it is recommended to increase dispersion between elements to 300-400 meters to reduce enemy IDF effectiveness. However, as the distance between elements increase, so does the difficulty of command, control, and sustainment.

## **Fire Direction Center**

In offensive operations, the controlling FDC, at the battery level, is responsible for maintaining all five requirements for accurate fire. Additionally, the FDC must maintain accurate digital and analog Fire Support Coordination Measures (FSCMs). Once the FDC receives a Target List Work Sheet (TLWS) from battalion it is imperative for the battery level FDC to conduct multiple internal technical rehearsals prior to the Brigade or Battalion driven rehearsal. During offensive operations, the internal technical rehearsals must at a minimum focus on all aspects of the FATs: Obscuration and Suppression. How much smoke do we have on hand? Do we have an achievable firing solution? How many howitzers are required to provide obscuration? How many rounds are required for the build and sustain phases of obscuration? The internal technical rehearsal also ensures the correct ammunition, such as propellant, projectiles, fuses, primers, etc. are on the correct howitzer to support the TLWS. The FDC also utilizes the technical rehearsal to identify and report FSCM violations, intervening crests, range or other ammunition issues that ultimately prevent the successful firing of the mission. The TLWS is a key fighting product that provides essential information for the FDC and battery leadership to continue executing TLPs. The battery level FDC provides refinements to battalion FDC. These refinements include, but are not limited to: Gun Target Line (GTL), Max Ordinate (Max Ord), charge, or any other variable that will prevent the mission from firing. This data is useful to the BCT fires cell in order to maintain a permissive joint fires environment allowing the synchronization and integration of fixed wing, rotary wing, and other Echelons Above Brigade (EAB) assets in support of the offensive operation.



## **Artillery Raid**

Another commonly employed tactical method for offensive operations is the artillery raid. The artillery raid is a rapid air or rapid ground movement of elements into a position to attack a high- payoff target currently beyond the maximum range of available field artillery weapons. This could involve operations across the forward edge of the battle area. Normally, a raid is extremely short and does not involve sustained operations. A detailed plan, surprise, and speedy execution are key factors in a successful raid. Firing units will move forward only the number of vehicles necessary to accomplish the mission. When the fire mission is complete, the howitzer crews prepare the howitzers for movement. Key elements to ask during an artillery raid are as follows: Where are we going? What unit is in the area? Which unit am I supporting? What is the fire mission routing? When is the tactical and technical rehearsal? Who is my Point of Contact (POC)? Where is the nearest role one for medical support? Did we rehearse a Rear Passage of Lines (RPOL)?

## **Transition**

Units at NTC often struggle during transitions either from offensive operations or into defensive operations. Preparation for transitions is paramount for units to succeed in the next phase of operations. The responsibility for planning successful transitions lies primarily at the BCT and BN level; however, BCs need to understand how they fit into the larger plan in order to succeed. Primarily at the battery level, Commanders need to understand their FATs, current location, next location, and ammunition needed for their transition to the next phase. Artillery units often fail to preposition ammunition loads for the next phase of the operation. For instance, units transitioning from offensive to defense understand their next location, but they lack detail in understanding the munitions required at the next PAA. Units must have a TLWS that encompasses transition targets to influence a possible enemy counter attack and friendly branch plans. BCs need to understand transition points with associated FATs to set conditions for the next phase of the operation. If units understand the upcoming FATs and plan, they will know if their battery is in the correct position, have the correct ammo and are prepared to transition into the next phase of operations.

## **Sustainment Operations**

During offensive operations, sustainment planners must consider the locations of both the batteries as well as the enemy. The analysis of this information provides the pertinent information on which munitions, to include propellants, are required to either suppress, neutralize, or destroy the enemy. Two principles of sustainment are responsiveness and anticipation. These two principles are extremely important in FA offensive operations as well as ensuring the unit is sustained properly through the transition. Sustainment planners within the FA battalion must maintain constant communication with the S3 and understand both current and future operations. This communication flow enables the Forward Support Company (FSC) to maintain responsiveness to ensure the battalion can fight through transitions following offensive operations. During offensive operations, mission success depends on providing the firing batteries the necessary ammunition to support FATs and assigned TLWS. Understanding each battery's FAT, TLWS, and an accurate understanding of expenditures enables sustainment planners to project where and when ammunition is needed. This provides accurate resupply triggers and ensures the FSC understands how to keep the battalion in the fight. During offensive operations, sustainment planners must also anticipate the pending breach and understand how much smoke is available within the batteries as well as the FSC. Successful units at NTC understand how much smoke is required to provide obscurity for a BCT breach as well as how execute resupply triggers to ensure the FSC is pushing the right ammunition to the right battery at the right time. In addition to planning for BCT breach operations, the transition to the defense must also be considered. As stated above, sustainment planners must understand the transition from



offensive operations, changes to FATs, and what upcoming ammunition, fuel, or other supplies is essential to keep the battalion fighting through the transition.

### **Radar Employment Considerations**

The employment of Weapons Locating Radar(s) (WLR) in support of offensive operations is key to the success of the maneuver forces as they tactically seize or execute an objective. The BCT FSO or Targeting Officer must first understand the Operational Environment (OE) and the critical task associated with the scheme of maneuver. As situational understanding is achieved, the planner conducts a “reverse” time and distance analysis from the point of attack to the actual distribution of the Radar Deployment Order (RDO). An example is Unit A will seize the objective at H+10, The WLR needs to be in position ready to observe at location NV123456 by H+9; it will take two minutes to march order the system and five minutes to emplace. The section must travel X kilometers from position A to position B. It will take X amount of time for the WLR to travel from position A to position B. Once WLR has arrived at position B, a refined reconnaissance is required to ensure the WLR is at an optimal location or position ready to observe. This process could take a significant amount of time due to the competing factors such as time, terrain, training, and experience. The planning and execution of WLR employment and understanding all considerations associated is vital and may be the difference in the overarching success of fire support operations.

### **Target Acquisition in Support of Offensive Tasks**

The effective assignment of target acquisition assets enables responsive fires during offensive tasks. Quick-fire nets allow the observers to communicate with specific field artillery or mortar fire units. These kinds of communication arrangements enhance responsiveness. Communication planning should also include communications nets for the clearing of targets for air assets.

During offensive tasks, target acquisition radars support the protection of friendly forces by locating enemy indirect fire systems. In offensive tasks, particular attention must be given to planning target acquisition that enables future operations. For example, fires cell Targeting Officers focus on the identification of enemy indirect fire assets. They must identify and coordinate the use of the terrain for the radar and recommend radar zones to the BCT CDR. Detailed planning should provide for continuous coverage of the supported command’s area of operations.

Control and cueing for radars should be decentralized during offensive tasks. The field artillery controlling headquarters should designate cueing agents that can directly contact the radar through the radar deployment order. The radar deployment order identifies the cueing agents and their priorities to the radar section.

Requirements for radar positioning and movement are identified early in the operations process and tied to specific events. This allows continuous coverage by facilitating mutually supporting coverage between radars. The field artillery battalion commander monitors this process closely to ensure that the use of terrain, movements, and radar zones are properly coordinated. General considerations for target acquisition during all types of offensive tasks include:

- Execute target acquisition in support of the supported command’s operations.
- Position observers and radars to support the observation and collection plans.

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- Plan for frequent repositioning of target acquisition assets
- Use call for fire zones to provide target acquisition coverage on suspected enemy firing positions.
- Coordinate radar employment across the supported command's area of operations to ensure there are no gaps in coverage.
- Position radars to maximize range and provide maximum flexibility.
- Position radars to cover critical point targets that are vulnerable to indirect fire.
- Plan for 6400-mil (360-degree) coverage and flank security support the observation and collection plans.

Optimal site considerations are: The best countermeasure to enemy EW is to occupy optimum sites. An optimum site is one in which the WLR is emplaced on level terrain having a gentle downward slope for the first 200-300m in front of the WLR then a sharp rise to a screening crest. The main considerations are the following: slope, area in front of the antenna, screening crest, aspect angle, electronic line of sight, track volume, proximity of other radars, and cable lengths.

The directive to employ the WLR requires an RDO. The RDO consist of the DA Form 5957 defined as an enclosure to the target acquisition tab within Annex D. The RDO provides the information required to deploy the radar section and begin operations.

During Offensive Operations, a method for providing continuous radar coverage is to leapfrog radars forward. This is done by moving one or more radars forward while another radar covers the moving radars sector of search. This can be enhanced by the FAB or DIVARTY radars assisting the BCT radars by providing coverage while they move. Triggers for initiating this movement can be based on phase lines, events, or time determined during the planning process. The movement of radars must be synchronized with the scheme of maneuver.

## **Conclusion**

In conclusion, this paper provides key lessons learned for FA battalions executing offensive operations. The FA battalion staff and S3 have a large role in ensuring BCs have the necessary information, FATS, or fighting products available to conduct TLPs, identify friction, and ultimately ensure they have a firing solution for all primary and alternate targets assigned on the TLWS. Additionally, BCs must understand what is next. What is expected of the battery during the next phase? Am I ready to execute offensive operations and transition to the next phase? The FSC must also maintain communication flow with the FA battalion staff, S3, and BCs to ensure the battalion is postured to support offensive operations and beyond. Lastly, successful radar employment is critical to providing necessary counter fire locating capability during offensive operations in support of a BCT breach.

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