1st Marine Division Fire Support Coordination During Operation IRAQI FREEDOM

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'The artillery, like other arms, must be collected in mass if one wishes to obtain decisive results.'

—Napolean

During the 1st Marine Division's (1st MarDiv's) initial attack into Iraq, referred to as the "Opening Gambit," the opportunity for fire support coordination to break down was at its greatest. Consider managing a fire support coordination line shift, a battlefield coordination line (BCL) shift, coordinated fire lines (CFLs) shifting up to seven times, opening and closing multiple keypad variations of up to six different killboxes, coordinating numerous no fire areas (NFAs)/restricted fire areas, and managing a restricted target list of over 12,000 targets all within a matter of 12 hours. In addition, these fire support coordination measures (FSCMs) were coordinated with a counterobservation post program of fire, breaching operations, three regimental combat teams attacking at separate times, general support to direct support artillery mission changes, artillery positioning challenges, supporting attacks by separate Marine expeditionary force (MEF) major subordinate commands, going in and out of Mission Oriented Protective Posture 4, two counterbattery programs of fire, one counterarmor program of fire, attacking high-payoff targets of opportunity, communications challenges, a rapidly changing enemy situation, a transfer of control between the division main combat operations center (COC) and the division forward COC, counterbattery missions, and deteriorating weather conditions.

Introduction

"No better friend, no worse enemy" were the watchwords given to the 1st MarDiv by the commanding general (CG), MajGen James N. Mattis, when he assumed command and prepared the division for future conflict in Iraq. We were to befriend those who did not wish to fight us and make those who did regret that they did. Such guidance was seen in everything we did as a division to prepare for war. In terms of fire support we were to bring all powers to bear on those who chose to fight, while at the same time protecting those we sought to free in the liberation of Iraq. This article focuses primarily on how the division developed, refined, and adapted fire support coordination in order to meet the needs of the maneuver commanders during Operation IRAQI FREEDOM (OIF). The predeployment section provides a common base from where the division started. The preparation and execution sections focus on major issues that presented themselves during the course of the conflict where tactics, techniques, and procedures (TTP) developed just prior to or during the fight vice from the division tactical standing operating procedures (SOPs).

Predeployment Training

Thanks to the great vision of the leaders within the division and MEF, we had a tremendously farsighted training plan prior to deployment. A testament to our training plan is that several Marines within the division fire support coordination center (FSCC) stated that during combat it almost felt like we were executing a MEF exercise (MEFEx) because the tasks were so similar. In the year leading up to the conflict, the division FSCC trained with the division COC on how we were going to manage the issues of potential war plans. We executed a Marine Air-Ground Task Force Staff Training Program command post exercise (CPX), a division-level fire support coordination exercise, a counterfire battle drill CPX and a counterfire battle drill live fire exercise, and monthly division CPXs. We drilled on proper procedures for creating and distributing new FSCMs as well as the clearance of counterbattery and cross-boundary missions. We developed and refined battle drills that were developed by our staff noncommissioned officers and later refined by the application and hard work of the FSCC sections throughout the division as a result of the rigorous training plan. We had set up our internal SOPs that would allow us to cover every contingency that we believed would happen. The quality after-action reviews from these exercises allowed us to effectively modify our SOPs to include FSCM verification net calls, digital rehearsal formats, and voice fire support back brief net calls.

Essential fire support tasks (EFSTs). Central to the division's fire support coordination plan was the development of EFSTs. The EFSTs developed for OIF were determined and refined as a part of the Marine Corps Planning Process. The purpose of an EFST is to translate a maneuver commander's intent into usable information for the FSCC and division battle staff. Once approved, EFSTs focus supporting arms agencies on essential tasks that must be accomplished to complete the mission. Once our

tasks were determined, FSCMs were built to support the coordination of fires to accomplish the task.

BCL/CFL. As we trained with the regimental COCs during CPXs we focused on FSCM management, with the CFL being drafted and proposed by the division FSCC in the operational planning team (OPT) and then refined by the regiments after they received the order. Initially, we enforced a division-level CFL that proved to be inflexible and not conducive to the separate regiments' schemes of maneuver. However, by moving away from the use of the division CFL, responsiveness to the counterbattery fight and control of how the division shaped the deep battle for the regiments was taken away. The compromise was the coordination of regimental CFLs by the division FSCC during OPTs and refinement during execution.

During our training phase, shifting the BCL also became an FSCM that required close management. During the May MEFEx we learned that during offensive operations units sometimes moved much faster than what was expected based on course of action wargaming during the planning process. This could put the maneuver element at risk of attacking beyond the BCL and being exposed to potential fratricide situations. The TTP developed to overcome this issue was to develop clear, identifiable triggers that were refined at the regimental level. Additionally, we added to the "shift" time required by I MEF from 4 hours to 5 hours. In working with I MEF force fires during MEFEx 02, we would recommend placement of the BCL, in addition to developing our procedures for shifting that coordination measure during the operation.

Counterfire execution. As a result of our combined arms reactive counterfire battle drill training evolutions, that included direct air support center (DASC) participation, we confirmed that air fires alone were not responsive enough to limit the counterbattery threat. The average response time for air on target was 5 to 10 minutes. Consequently, the 11th Marines developed the TTP of using cannon fire for suppression and/or neutralization then, through an air support liaison team (ASLT), requesting air fires directed against the counterbattery acquisition. The division FSCC then developed battle drills (both manual and digital) to issue the fire order to the DASC and clear the mission as required.

Additionally, we devoted a lot of our training time to the advanced field artillery tactical data system (AFATDS), which greatly increased our ability to quickly transmit large amounts of data, such as battlefield geometries and coordination measures, to 11th Marines, the maneuver unit fire support coordinators (FSCs), and I MEF force fires. The AFATDS proved to be reliable in the garrison environment and in training evolutions. Backup procedures were maintained though to ensure that we were proficient in the transmission of data and clearance of fires manually.

Preparation

Fire support rehearsal. During precombat training the fire support plan was generally integrated and rehearsed during the combined arms rehearsal. The division conducted three such combined arms rehearsals or rehearsal of concept drills at Camp Matilda, Kuwait (with the fire support plan integrated) during the weeks leading up to crossing the line of departure (LOD). Additionally, due to the complexity of the fire support plan during the Opening Gambit, the G-3 directed that a separate division-level fire support rehearsal be conducted. Since the other two rehearsals were held on large-scale terrain boards, it was decided that the format of the fire support rehearsal would be rehearsed from command and control personal computer and advanced deep operations coordination system (ADOCS) graphics imported to Microsoft PowerPoint slides. This format was used to show more detail with actual graphics and to give a wider perspective to the entire audience of the division battlespace. Nondivision participants included I MEF force fires coordination center personnel and 3d Marine Aircraft Wing (3d MAW) personnel. The agenda for the rehearsal started with the CG's intent, division EFSTs, FSCMs in effect for that phase, division air, and surface fire support actions. Each regiment then gave a synopsis of its scheme of maneuver for that phase followed by the regimental commanding officer's intent, regimental EFSTs, FSCMs in effect, regimental air, and surface fire support actions. Issues were captured by phase with responsibility assigned. The fire support rehearsal paid large dividends. The division was able to refine and synchronize fire support actions within the division and, of equal importance, offer an indepth look at our plan to our higher headquarters and 3d MAW. The rehearsal also built situational awareness among all of the participants and across the MEF on the division's fire support plan.

Local dispersal area rehearsal/CPX. The division also rehearsed our movement from life support areas to local dispersal areas and then conducted a tactical exercise without troops from dispersal areas to the LOD. The FSCC had the golden opportunity to once again rehearse/refine the division's fire support plan, this time in a CPX format. Besides having the opportunity to test communications links over long distances, the most valuable aspect of the CPX was rehearsing/refining the division's execution checklist. The FSCC's product for this was the scheme of fires worksheet (SOF WS). The SOF WS listed in detail the sequence of fire support events to include the trigger/decision point to initiate event, observer, enemy unit, task, purpose and effects of event, fire support system, munitions/volume of fire, and FSCMs in effect during that event. The SOF WS proved to be an excellent tool to ensure that all watch standers within the division FSCC, our higher element, adjacent units, and subordinate elements had a common picture of how the division planned to execute fires during the Opening Gambit.

Execution

Killboxes and BCL. The concept of

killboxes was first introduced to the division fires section a couple of months before we deployed to Kuwait. The term "killbox" was something we had heard before but had not had the opportunity to use extensively in training under a centralized system. The concept was a U.S. Central Command (CentCom) procedure spelled out in the *CENTCOM Killbox Interdiction and CAS CONOPS* [*Close Air Support Concept of Operations*] and, when combined with emerging joint CAS procedures, streamlined terminal control requirements.

The killbox concept involved dividing up the area of operations into squares that were 30 minutes by 30 minutes based on the latitude and longitude. Each killbox naming convention was based on the row and column it fell in, using an alphanumeric combination. If the killbox was in row AB and column 87 then it was named killbox AB87. The intent of the killboxes was to allow for the free engagement of enemy units located within them by coalition aircraft. In effect they represented a three-dimensional free fire area (FFA). The boxes were to be either opened or closed based on the decision of the ground commander who owns the battlespace that the box falls over. Aircraft directed to an open box were cleared to freely engage enemy units within it without the need for terminal control.

Killboxes offered a great flexibility for the division. No longer were we tied to a set piece method of shifting the BCL. If the conditions were met based on the planning process to shift the BCL, we requested the shift with no second-guessing as to the rapidly changing enemy situation. If the enemy situation changed and there was a need for division shaping fires or reactive fires after the BCL was shifted, we could simply open the appropriate killbox or keypad (subdivision of the killbox). We could react to the enemy and not to the plan. The DASC directed all air into open killboxes short of the BCL. Our targeting priorities were passed through the DASC to aircraft as they checked in. We were also able to turn killboxes on and off through the DASC in a relatively short amount of time (anywhere from 10 to 15 minutes). The key to successful employment of killboxes in this manner was the active coordination with each regiment to ensure the killbox was clear of friendly forces and that the regiments knew which killboxes were open in their zone and understood the coordination and time required to close the killbox.

Based on the large amount of time the FSCC spent on managing the killboxes in OIF, it is highly recommended that FSCCs—at both the division and regimental levels—understand what they are and what they can do for us in future joint environments. Additionally, if killboxes become the TTP of the future in different theaters, perhaps we should standardize them for training purposes.

Cross-boundary fires with V Corps and 3d Infantry Division (3d ID). During our push north of the Euphrates along Highway 1, our route of march took us close to the boundary between I MEF and V Corps. The Corps' boundary was between 5 to 10 kilometers off Highway 1 at some places as we neared the city of Ad Diwaniyah. The city was in V Corps' zone along Highway 8 and, based on intelligence reports, was the center of organized resistance in the area. During execution V Corps and 3d ID executed a fragmentary order based on the enemy situation in their zone. This created a seam at Ad Diwaniyah. We saw this as a serious threat to our flank and a hindrance to our forward movement. The issue was compounded by the fact that we had limited digital communications with 3d ID. We did, however, have good digital communications with V Corps via AFATDS. We were able to coordinate our fires with 3d ID (following the principal of coordinating at the lowest possible level) via satellite cell phone. As the situation in Ad Diwaniyah developed we saw a need to ease the coordination effort. The FSCC coordinated with 3d ID to establish a large FFA along Route 8 and around the city of Ad Diwaniyah. A boundary change would have required combined force land component command approval and would not go into effect until the next air tasking order cycle approximately 12 hours later. The coordination measure covered somewhere between 100 to 150 square kilometers along the Corps' boundary and was coordinated with our maneuver elements. Eventually, the boundary was changed and the FFA cancelled. Although the FFA is in current doctrine, the division rarely used an FFA in this manner during training. The FFA rapidly allowed the division to execute reactive fires without lengthy coordination against high-payoff targets in a very rapid manner.

Another example of a hasty FSCM that was used to ease coordination efforts was what 3d ID termed a "coordination area." As U.S. forces moved to attack enemy forces in Baghdad, the I MEF/V Corps boundary was the Tigris River, the 1st MarDiv on the east side and 3d ID on the west. The Tigris provided a very visible boundary that helped delineate the battlespace for the converging divisions. In the center of Baghdad the river turned to the west for a couple of square blocks and then turned back onto itself thus creating a jut of land surrounded on three sides by the river. The Baghdad University was located on this peninsula of land that jutted out from the Marine side of the river. 3d ID saw the geographical advantage of this area as an opportunity to isolate this area of resistance and engage enemy units from all three sides. After coordinating with the 3d ID fire support element, the division met their request to establish a coordination area over the peninsula and to restrict any movement of our maneuver forces into that area. This allowed 3d ID forces to engage enemy units in this area that attempted to fire upon them from across the river as they mopped up remaining resistance in palace complexes on the west side of the Tigris. An important aspect to approving the coordination area was the restriction on munitions types. We restricted dual-purpose improved conventional munitions due to the probability of unexploded ordnance in an urban area.

CFL in an urban environment. Prior to entering Baghdad proper, and while division units were tightening their

cordon, we saw a need to establish a division CFL along the forward line of troops. The CFL followed the north-south running Diyala River that served as our LOD for moving into Baghdad in the final phase of the operation. Due to the threat of Iraqi indirect assets that had been able to fall back into the city as U.S. forces continued to advance on Baghdad, we considered FSCMs that would allow us to quickly detect, engage, and destroy enemy indirect fire systems. It proved to be beneficial as the following morning after establishing the CFL, the 11th Marines became heavily engaged in a counterbattery fight. Numerous Iraqi indirect systems were firing blindly out of the city in the hopes of hitting the forces that were gathering. The CFL allowed the 11th Marines fire direction center to quickly process the counterbattery radar acquisitions, return rounds, and coordinate for air before the enemy could displace and fire again.

Just as the Tigris River acted as an easily identified boundary between 3d ID and 1st MarDiv, so too did the Diyala River serve as a coordination measure. By understanding the maneuver plan and coordinating with the division operations officer, we determined that it would be another 24 hours before any unit crossed the river. So, while the division units were moving into place to cut off the city, we saw the need to establish a division CFL and to quickly reduce the Iraqi combat power that would slow our final push into the city.

Use of airspace coordination areas (ACAs). Based on the excellent situational awareness maintained by the DASC and the use of preplanned air corridors for ingress and egress, the division did not use formal ACAs during OIF. Some of this situational awareness (gun-target lines) was due largely to the fact that 11th Marines had an ASLT that passed battery locations directly to the DASC. Another contributing factor to the DASC's situational awareness was our well-rehearsed reactive counterfire battle drill. The TTP of engaging counterfire acquisitions immediately with surface assets then following up with air assets created a natural time-space separation due to the air response times previously discussed. Air officers and FSCs were well-drilled on methods for informal ACAs as a result of our training and the Combined Arms Exercise program. Of greatest concern were counterbattery fires beyond the CFL. In this situation general support or general support-reinforcing surface fires could be called upon to execute counterbattery missions within regimental zones beyond the CFL. The DASC was able to superbly manage the deconfliction of these fires without the use of a formal ACA.

Restricted/no strike target list. Although the division FSCC had extensively used NFAs during past training exercises, we were not prepared for the size and scope of the theater restricted/no strike target list. This list contained over 12,000 targets. When converted to NFAs and input into the AFATDS, the system experienced greatly decreased processing times and sometimes crashed. The only reliable automated tool that we had to manage such an extensive list was ADOCS, which was maintained in the targeting cell at division level. This meant that at times our division forward (the targeting cell jumped to the COC element in control), regiments, and below would have to manage the list manually. Our TTP for this was to produce computer generated spreadsheet copies sorted by geographic area. If a proactive or shaping target was plotted in the vicinity of a structure, the grid was cross-referenced against the Microsoft Excel spreadsheet. Updates to the list were sent via secure Internet protocol router network to regiments. Reactive targets, within the limits of the rules of engagement, were attacked as required. Although this TTP worked for the division, it would have been preferred to manage the restricted/no strike list in an automated manner at all levels. Benefits include decreased mission times and greater accuracy.

Joint special operations area (JSOA). Another control measure that we had limited training experience with was the JSOA. When Task Force (TF) Tripoli, a 1st MarDiv element, attacked from Baghdad to Tikrit we discovered while en route that two JSOAs were in effect north of Tikrit within our zone. This created some serious implications; we had already submitted our targets for shaping. We had not received the measure in AFATDS from higher and did not know it was active until after crossing the LOD. After hastily plotting the JSOAs, the southern boundaries within our zone were passed by voice as a restrictive fire line (RFL) to subordinate elements. After cross-checking our shaping targets, those in violation of the RFL were verified as cancelled. Most AFATDS within the TF were down due to the movement. Once the TF arrived in positions in the vicinity of Tikrit, we developed battalion zones, cancelled the RFL, and effected coordination through a liaison officer who eventually linked up. This isolated incident raises the issue that fire support coordination is continuous and that as enemy and friendly situations change FSCMs have to be carefully managed at all levels.

Conclusion

The FSCCs throughout the 1st MarDiv had the benefit of a strong training plan that allowed the sections throughout the division to obtain "brilliance in the basics" when it came to fire support coordination. This basic knowledge allowed the division to refine SOPs and develop battle drills during predeployment training and combat preparation. During combat operations this solid knowledge base provided the flexibility to fire support personnel to offer workable solutions on the fly that adequately met commander's intent. The TTP discussed in this article worked for the given situation at the given time and by no means are offered as the only solutions that work for every situation. The bottom line is that a rigorous training plan, combined with flexibility and imagination, can make fire support coordination work for the commander, not limit his actions.

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>LTC Smythe served as the 1st MarDiv's assistant fire support coordinator during OIF.