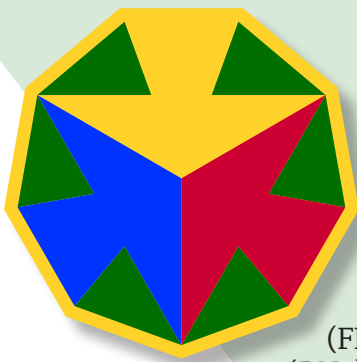




NTC's FDC Ways To Success

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Introduction

A firing battery or platoon will only be as lethal as the fire direction center (FDC) responsible for processing the missions the unit executes. The best battalions (BNs) observed at the National Training Center (NTC) have been those with strong FDCs at the BN and platoon level. The trends for the areas that FDCs have struggled with have persisted throughout the last year. The Wolf Team fire control observer, coach/trainer will highlight these areas in order to spread awareness and identify points for FDCs to improve.

Execution of Proper FA Technical Rehearsals

By CPT Frank Holiday and SFC Zechariah Sahi

The difference between providing accurate and timely fires and frustrated FDCs looking at red gumballs in the Advanced Field Artillery Tactical Data System (AFATDS) is whether a well-executed technical rehearsal was conducted. The Field Artillery technical rehearsal (tech RXL) is one of the most crucial and essential tasks the FDC consistently fails to execute at all echelons at NTC. Rehearsals allow the fire direction officer (FDO) to ensure every howitzer can engage each target, every section has the ammunition available and every howitzer chief understands potential special missions. The FDO and fire control non-commissioned officer (FCNCO) should strive to conduct a rehearsal with all howitzer sections for every target. When possible, the FDO/FCNCO should use the actual firing data. At the very minimum, the scheme of fires should be explained as it pertains to the howitzer sections. However, the more detailed and realistic the rehearsal, then the better the battery will perform during the fight. The BN FDC is the driving force behind the tech RXL. During the planning phase, the FDO/FCNCO should inquire from the BN about the type of rehearsals the battery should conduct, such as quick smoke mission processing. Failing to complete tech RXLs results in desynchronization from sensor to shooter, failure to guarantee timely and accurate fires and an inability to support the maneuver during decisive points in the battle. The purpose of a tech RXL is to integrate the tactical and technical fire control processes and computation of firing solutions, identify technical fire direction issues, verify the digital database and maintain digital continuity of operations and digital interface requirements according to Army Techniques Publication (ATP) 3-09.23. It is the leadership's responsibility to ensure the execution of the FA tech RXL; the overall success of the brigade relies upon one that is both deliberate and coordinated.

Maintaining the Common Operating Picture

By SFC Alejandro Martinez and SSG Ray Bryant

The common operating picture (COP) is an instrumental segment that connects the seven warfighting functions at the echelon. COPs provide visual representation and a shared understanding of battlefield situations across all levels of command, allowing the commander to make an informed decision. A common trend we see here at NTC is that most units begin establishing a COP during the initial planning and preparation stages. Once a unit begins transitioning into the fight, though, updating the COP tends to fall down the list of priorities. Due to the majority of units only having the standard position area for artillery (PAA) and unit locations, they tend to lose sight of battlefield awareness. A vital function of the BN FDC is to assign targets to firing elements; this is done by plotting the target on their map and clearing the target of any friendly units or fire support coordination measures. Without a current and accurate COP, this function cannot happen.

Updating the COP is crucial for many reasons. The COP is the visualization tool in the main command post and is the primary tool for fighting and synchronizing the warfighting functions if digital communications are not working. Neglecting to update the COP can result in incorrect firing orders and could potentially lead to fratricide. Recommendations are to constantly update the COP as new information and reports

come in, allowing for a seamless transition from using AFATDS for friendly unit tracking to the analog map. Once this becomes a steady habit supplemented by 2-minute drills, the battle staff integration all comes together, generating situational awareness for commanders and staff of that essential product they are using for the fight.

Proper Ammunition Allocation and Hauling Capacity Awareness

By SSG Annajean Souza

Field Artillery units within the Army play a critical role in supporting ground forces by delivering indirect fires, often over long distances. The ammunition hauling capacity and allocation across the formation are key factors determining their effectiveness. This capacity refers to the ability to transport and sustain adequate ammunition supplies to support continuous operations. Each artillery piece consumes a significant amount of ammunition during engagements, and without a robust logistical chain to resupply, these units can quickly become ineffective. Ammunition trucks and support vehicles are essential to ensuring that artillery units maintain operational tempo and provide the necessary firepower during extended missions. The hauling capacity also affects how quickly units can reposition and continue their firing missions without running out of essential munitions. Understanding ammunition allocation is equally important because it directly impacts the planning and execution of military operations. Commanders must ensure that their units are adequately supplied for immediate engagements and sustained operations over time. Misallocation can lead to either overstocking or shortages, which burdens logistical systems, hinders mobility and potentially compromises mission success. Effective ammunition management ensures that units have enough firepower to respond to evolving battlefield conditions while optimizing resources. Therefore, an in-depth understanding of ammunition hauling capacity and allocation is crucial to maintaining the readiness and efficiency of FA units during operations.

Fighting Product Dissemination

By SFC Alejandro Martinez and SSG Ray Bryant

Fighting products are essential for all operations to prepare and plan for all possible targets and missions and to better assist units in understanding the COP. The common trends seen from multiple FDCs during their rotations here at NTC are fighting products not being utilized, nor disseminated to all echelons or having version control, causing significant discrepancy and confusion throughout the brigade. Fighting products being received at every echelon can help determine factors such as range, round type and effects needed in order to sustain training objectives and triggers. Common products found in the FA BN include the FA support plan (FASP), FA execution matrix (FAEM) and target list worksheet (TLWS). The FASP informs subordinate units of tasks and a specific operation. It details coordination action and FA tasks (FATS) that units must conduct to provide accurate fires. The FAEM serves as a document that outlines planned fire support operations coordinated through various elements. The sequencing of fires, mission planning and target allocation make the FAEM a coordination tool to give visualization. The TLWS helps units identify their preplanned targets and conduct technical rehearsals. During their technical rehearsals, they can identify primary and alternate shooters and any issues in getting a firing solution. At NTC, it is best to advise units to perform the identified fighting products throughout their operation and during rehearsals. Rehearsals are conducted to standard from sensor to shooter, verifying firing units are able to range targets and have enough ammunition to sustain fires.

Failure to Expediently Troubleshoot

By SSG Blake Baskin

Troubleshooting is a skill that is learned, not taught, and is acquired through experience rather than formal instruction. To master this skill, it is essential to conduct crew drills, encounter natural friction points and collaboratively navigate these challenges with your team. This approach enables the continuous development of tactics, techniques and procedures (TTPs) and establishing a step-by-step action process upon finding a solution. Integrating these step-action processes into your crew drills will enhance your ability to troubleshoot effectively. One common issue we see at NTC is the processing of quick smoke missions.

Quick Smoke Mission Processing

By SSG Blake Baskin

Two common issues occur while processing quick smoke missions. The first issue is determining the best way to extend quick smoke past 15 minutes, for which there are two methods.

Method 1: Build the quick smoke mission in a second AFATDS in order to use as a secondary check and continue the sustainment phase via voice fire commands.

Method 2: After completing the initial 15 minutes of smoke, have a second fire for effect (FFE) mission on standby with the total number of sustaining rounds and the corresponding sustaining guns. All the smoke information is built like usual; only the controlling FDC will set the smoke duration to zero minutes. This will prevent the AFATDS from repeating the build phase, and then the controlling FDC will voice override the method of control after sending the mission down digitally.

The second common problem is not having enough weapon systems/munitions to support the mission. Below are a few troubleshooting procedures to alleviate this issue.

Procedure 1: Wind direction will both increase the tubes required and the total rounds to support the mission. Head and tailwinds will increase the total aimpoints and, subsequently, the number of rounds. Ensure the correct wind direction is being utilized.

Procedure 2: There are instances where the linear target's length will be too great to achieve solutions with the number of guns available. The best practice for this would be to decrease the linear target by 50 meters at a time until solutions are achieved and then send the refined information up to the BN FDC. They will determine the best course of action, either utilizing a smaller smoke screen, transferring the mission to a different battery or having two batteries shooting quick smoke side by side to increase the total length.

Conclusion

As you can see, effective Field Artillery operations hinge on meticulous technical rehearsals, a continuously updated common operating picture and efficient ammunition management. Units must prioritize disseminating and utilizing key fighting products like the FASP, FAEM and TLWS. Furthermore, proficient troubleshooting, particularly for scenarios like extended quick smoke missions, requires practical experience and well-drilled procedures. Addressing these key areas will significantly improve fire support coordination, accuracy and responsiveness, ultimately contributing to overall mission success.

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