The Defensive Linchpin:

Unveiling the Vital Role of Class IV Combat Configured Loads in LSCO

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As the sun sets over the National Training Center's (NTC's) Central Corridor after a long day of combined arms breaching, a common phrase is echoed from leaders at all echelons to their subordinates as they prepare for the transition to the defense. Bracing for the imminent transition, the commander immediately asks those around them, **"Where are the CCLs (combat configured loads)?"** In this pivotal moment, the question underscores the strategic foresight and meticulous preparation essential for success in modern warfare.

Introduction

Imagine your unit has been fighting throughout the day for key terrain, and the sun is quickly going down. You receive the order to establish a hasty defense and begin engagement area development.¹ You call forward your Class IV CCLs, which are dropped off just as the sun sets, and the Soldiers on the line begin to pull everything off the flat rack. When they remove the ratchet straps or cut the bands, concertina wire and stakes start getting tangled and stacks begin falling over. Conducting this disassembly in the dark under night-vision devices makes it that much harder.

The scenario above is a common trend at NTC and is the linchpin for a successful transition to the defense. Every minute is important, and a commander's determination to build survivability and countermobility obstacle effects grows stronger throughout the operation. To build a robust defense, it is imperative that construction material (concertina wire, pickets, barbed wire, etc.) and equipment, ammunition, and manpower are in the right place at the right time. Following a successful offensive operation, leaders are



(Photos courtesy of authors)

already thinking about minimizing risk in the defense. One of the most important ways to mitigate risk to mission and force during the defense is the strategic emplacement of obstacles in specified engagement areas using Class IV CCLs. These loads are one of the most vital resources maneuver commanders can utilize during their defensive operation.

In this article, we explain how properly built CCLs can increase lethality protection while mitigating risk to mission and risk to force as well as provide examples of integrating Class IV CCL preparations into unit standard operating procedures (SOPs). We emphasize the need for streamlined processes and a comprehensive understanding of resource allocation across all levels of command synchronization matrix (SYNCMAT) and execution checklist (EXCHECK) integration. We hope this article can help units enhance their defensive capabilities and prepare leaders with the tools to plan for contingencies with greater efficiency and readiness in defensive operations and large-scale combat scenarios.

Background

According to Army Techniques Publication (ATP) 3-90.8, *Combined Arms Countermobility*, "obstacle resource planning, delivery, and emplacement are facilitated by CCLs."² In a brigade combat team (BCT) large-scale combat operations (LSCO) fight, CCLs are mostly referred to as Class IV (construction and barrier materials) and Class V (ammunition) packages, which are prepared ahead of an operation to be moved forward to units in need of those supplies on a M3 Container Roll-in/Out Platform (CROP) flat rack. The term "CCL" can be used for any pre-configured load package of any class of supply; however, this article will focus on Class IV CCLs for defensive preparations. CCLs can be configured in any method to best enable forward elements to quickly receive the supplies they need to prepare to continue fighting or defending against an enemy. Additionally, CCLs of Class IV should be developed based on the identified terrain and the most likely type of obstacles or fighting positions a unit expects to emplace. CCLs cannot solely be a logistics officer's or an engineer planner's priority. The management of CCLs is a leader priority across all warfighting functions.

There are hundreds of Class IV CCL configurations that a BCT may utilize in LSCO operations. For example, these loads may include construction materials to build marking or "fratricide (frat)" fences, 300-meter triple-strand concertina wire obstacles, and include concertina wire, pickets (long and short), barbed wire, and even plywood. Class IV CCLs optimize resource utilization by providing standardized sets of construction materials tailored to specific defensive requirements. This standardization reduces logistical complexity, minimizes waste, and ensures that units have the necessary resources to execute defensive operations effectively. A unit's tactical SOPs (TACSOPs) outline their desired CCL configurations and is vital for shared understanding at echelon.



Figure 1 — Example of a Poorly Built Combat Configured Load Packed with Concertina Wire, Pickets, and Barbed Wire (Note the concertina wire falling over and randomly placed ratchet straps.)



Figure 2 — Consequences of a Poorly Built CCL

Engagement areas utilize multiple Class IV CCLs, which need to be strategically emplaced close to the desired obstacle location to maximize setup time for the emplacing unit. While it may seem simple to have the Class IV CCLs on hand before the transition to the defense, moving CCLs through specified breach points or restricted terrain can take many hours. Additionally, having the CCLs on hand is not always the most significant factor in CCL management. Instead, the way that CCLs are managed and configured can impact mission success the most. During NTC rotations, it is a common trend that CCLs are not always built or maintained in accordance with their unit SOPs. These poorly assembled CCLs can significantly slow down defensive operations and prevent obstacle effects (block, fix, disrupt, turn) from being accomplished within the mission timeframe.

While it might not be the main effort, planning for CCL movement is still an enabling operation (movement of CCLs to the forward line of own troops) and is vital in maintaining tempo and flexibility. In order to transition successfully to the defense during LSCO, planners need to focus on the efficient handling and deployment of the Class IV construction materials contained within CCLs, which represents a pivotal yet often overlooked aspect of defensive planning. At venues like NTC, the hurried preparation and poorly built resource packages during reception, staging, and onward integration (RSOI) can significantly impact defensive operations in LSCO.

During NTC rotations, units often utilize CCLs of concertina wire and pickets to build disruption obstacles of wire integrated with direct and indirect fires. Building a 300-meter-long obstacle of triple-strand concertina requires 160 long pickets, eight rolls of barbed wire, and 60 rolls of concertina wire. Observer-coach/ trainers have witnessed how removing one picket from an improperly packaged and secured stack can cause the entire package to fall apart during transportation. If not labeled properly, the forward receiving unit may be unable to identify what obstacle can be built with the supplied Class IV.

During a previous rotation, the brigade's protection SOP specified how CCLs should be built, but not a single CCL was built to that standard. This became a larger issue when the battalion protection officer assumed there was enough wire to prepare 300 meters of triple-strand concertina wire but only 200 meters had been in the delivered CCL.

Proposed Solution

A simple way for BCTs and their downtrace battalions and companies to be more effective while preparing for a defense and save valuable time is to spend the time up front creating a SOP for how CCLs are assembled, marked, and managed. The unit must then train on this SOP to validate it. At NTC, rotational units usually train on at least two defenses. Most rotations include a hasty defense and a deliberate defense.



Figure 3 — Example CCLs from a Brigade Tactical SOP

Despite knowing they will train on defenses up front, we often see CCL preparation and management take a back seat to other tasks the rotational training unit must do during RSOI.

How Class IV CCLs are built, labeled, and disassembled to build wire obstacles and fighting positions should be understood across a BCT formation and included in the brigade and battalion TACSOPs. Figure 3 is an example of a CCL standardization in a protection SOP.

When preparing for the defense, it is imperative that the composition and location of CCLs are integrated into unit planning and rehearsals. All leaders need to understand the unit's CCL disposition; however, it is particularly important for brigade S-4s and brigade engineers to thoroughly understand and brief this aspect during orders production and rehearsals. At the battalion level, leveraging the expertise of S-4s and battalion engineers or battle captains to brief CCL locations and composition during rehearsals can significantly enhance operational readiness. Additionally, tracking the movement of CCLs throughout defensive preparations is equally important as it ensures seamless coordination across the battlefield.

Incorporating CCL transfers into SYNCMATs or EXCHECKs can foster shared situational awareness within the formation. Including CCLs in friendly force information requirements (FFIRs), specifying their location, current ownership, and disposition, enhances battlefield transparency for all subordinates. Additionally, a critical decision point for commanders arises in determining when to deploy CCLs to facilitate obstacle emplacement. To aid staff members and leaders in risk mitigation, a risk mitigation strategy example is provided as Figure 5 and identifies how you can mitigate risk using other assets for a defense. Recognizing the pivotal role of Class IV in defensive planning, strategies utilizing target reference points (TRPs) and vehicle fighting positions (VFPs) are recommended to mitigate shortages. However, insufficient Class IV



Figure 4 — Marking Examples (Note: The key is to have a shared understanding of what these markings denote.)

resources can significantly constrain engagement area development and increase the risk of minefield fratricide, underscoring the importance of adequate logistical support.

Ultimately, the responsibility for CCLs falls on maneuver and sustainment leaders at both battalion and company levels. By integrating CCL management into operational rehearsals and decision-making processes, units can ensure the effective utilization of vital logistical assets, which will lead to mission success and increased lethality during LSCO.

Conclusion

To streamline efficiency and enhance readiness for future operations and training at NTC, we propose the following recommendations:

1. Establish an SOP for Class IV CCLs at the brigade level and disseminate it down to the platoon level.

2. Specify stacking and securing procedures for Class IV CCL materials to ensure consistency, stability, ease of access, and disassembly.

3. Clearly label each Class IV CCL with its contents and indicate the type of obstacle that can be constructed using the materials provided. This could be on a meals, ready to eat (MRE) box, 100 mph tape, or other available material that is weather proofed.

4. During planning, designate responsibilities for transporting and receiving Class IV CCLs to ensure smooth and timely coordination and execution.

5. During rehearsals, the brigade/battalion S-4 and engineer should brief the composition and locations of CCLs for planned defenses. Individuals owning the CCL at each phase and position should also brief their ownership during the rehearsal.

By implementing these measures, leaders at all echelons will have a clear understanding of the contents and purpose of Class IV CCLs. This will enable units to efficiently plan, prepare, and employ obstacles for both hasty and deliberate defensive operations. The adoption of these practices will undoubtedly yield significant dividends in terms of operational effectiveness and preparedness for challenges encountered in LSCO.

Notes

¹ Army Doctrine Publication 3-90, *Offense and Defense*, July 2019, paragraph 4-29. ² Army Techniques Publication 3-90.8, *Combined Arms Countermobility*, November 2021, paragraph 3-79.

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