



The Common Operational Picture at the Company and Below

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At its essence, the common operational picture (COP) is a tool which feeds commanders information to inform decisions. In its entirety, this is comprised of running estimates and statuses across all warfighting functions that feed operational decisions. However, COPs are only as useful as the accuracy and timeliness of their content, which is often lacking even without the stress of ongoing operations. There are two principle reasons for this information shortfall. The first is the inability of battalion staffs to translate running estimates into coherent and prioritized information requirements that are tailored to their commander's COP. The second is an institutional lack of emphasis on command post (CP) operations at the company level and below, which translates into poor COP (information) management.

Information Management and Prioritization at the Battalion and Company Level

Management of information is one of the functions of a CP and is critical to an accurate COP. As COPs are designed to facilitate decisions by commanders, they are not “one size fits all” and must be informed by both staff estimates and the commander's intuition, which when prioritized and articulated in information requirements are then refined by company and below headquarters. For example, during summer months at the Joint Readiness Training Center (JRTC) at Fort Polk, LA, friendly force information requirements (FFIRs) for Class I (food and water) on-hand status and consumption rates are as critical to mission accomplishment as Class V (ammunition). For an infantry company tasked to conduct a movement to contact, accurate reporting of liquid, ammunition, casualties, and equipment (LACE) from the team to the battalion level will confirm or deny staff estimates of consumption rates. This will keep the battalion commander aware of whether or not that company is able to maintain tempo with the rest of the battalion or will require a halt to resupply.

The systemic failure points within the generic rifle battalion COP system

A Paratrooper assigned to the 1st Brigade Combat Team, 82nd Airborne Division studies a map during Joint Readiness Training Center Rotation 21-05 at Fort Polk, LA, on 7 March 2021.

Photo by SGT Justin Stafford



are lack of analysis, lack of prioritization, and untrained or unrehearsed CP systems. Lack of analysis by warfighting function of each staff running estimate will not generate mission-specific information requirements. For example, if S2 and S4 cells do not collaborate and account for weather effects to adjust water consumption rates, they will provide their commander with an unrealistic expectation of resupply windows and consequently not generate pertinent reporting requirements for the companies. The inability to prioritize information requirements will result in information oversaturation and a consequent lack of focus at the company and below level, which is not equipped with a staff that can manage a wide swath of information requirements. Given that in summer conditions a company on the move can expect to deplete a water buffalo in 36 hours or less, an example of prioritization of an FFIR would be a consumption report of every 100 gallons of water depleted from the company water buffalo. Finally, at least for the battalion level, information may not be managed or updated due to lack of training (or cross-training) in CP operations, poor layout, or inadequate talent management. If a radio-telephone operator (RTO) receives an update in Class I status from a company but does not update and display that information requirement to inform the commander (whether by lack of knowledge of information requirements, lack of understanding of CP systems, or lack of care or competence), then the COP fails.

Institutional Lack of Emphasis of the COP at the Company and Below

At the company and below level, the problem of information management is similar. Lack of training, competence, and emphasis can result in critical information being mismanaged or not reported in a timely manner. For example, lack of junior leader development or emphasis can result in late or improper LACE reports from the team through squad levels, which provides inaccurate information to platoons and companies which will then blindside staff running estimates at the battalion level and consequently impact the commander's awareness of the battlefield. Poor information management techniques at the platoon and company level through a lack of rehearsed systems and poor headquarters personnel cross-training will also lead to late and lost reports to battalion, resulting in the same confusion at higher echelon.

The increasing brevity in length of CP appendixes from the battalion to company to platoon level exemplifies the decreasing level of institutional capital invested in information management at each echelon. Defined by Army Doctrine Reference Publication (ADRP) 6-0, *Mission Command*, "the common operational picture is a display of relevant information within a commander's area of interest tailored to the user's requirements and based on common data and information shared by more than one command." Obviously this is a critical function that requires personnel, equipment, and training to systematically function (a CP). At the battalion level, this is accomplished by a staff operating both digital and analog systems, doctrinally guided by a 13-page appendix in Army

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Techniques Publication (ATP) 3-21.20, *Infantry Battalion*. At the company level, which by doctrinal definition is the lowest echelon at which the COP exists (informs a commander), it is accomplished with a company headquarters using primarily analog systems guided by a three-page appendix in ATP 3-21.10, *Infantry Rifle Company*. Finally, while platoon CPs are referenced in ATP 3-21.8, *Infantry Platoon and Squad*, their functions are not defined in doctrine. Despite the fact that any appendix supporting platoon CP functions would be undeniably simplistic, by not defining roles and offering techniques for the operation of a platoon headquarters, doctrine has failed to instruct the lowest echelon of headquarters on how to manage information.

As defined by ADRP 6-0, the COP is a commander's tool. This definition precludes its existence at the platoon level, at least in the U.S. Army. However, when one takes a step back from visions of a COP as a suite of electronics and necks it down to what light infantry rifle companies and below use to maintain situational awareness, which is typically a map board capable of holding several overlays and a margin for notes, the company COP looks suspiciously like the same product that exists in a platoon headquarters. Beyond the doctrinal language that makes it exclusive to commanders, it is the same product used to maintain situational awareness and inform decisions by the lowest level of infantry headquarters.

Acknowledgment that the COP exists at the platoon level is more than a superficial gesture. It needs to drive an update to doctrine and professional military education which will begin teaching new infantry lieutenants the importance of understanding the wider operational environment and managing information at their level. Due to the restricted nature of the terrain at JRTC, the wide variety of non-habitual attachments that infantry brigade combat teams (IBCTs) employ, and the complexity of the environment, companies and platoons that can synchronize their understanding of their area of operations have a significantly increased ability to coordinate efforts with adjacent and supporting units as well as avoid fratricide.

Observed Trends: COP Systems at the Company and Below

In quixotic terms, developing and maintaining the COP at the company level is a windmill joust. While a challenge at any echelon, the reason that companies and, by exten-

sion, platoons are unable to build or maintain a COP is due to a lack of institutional knowledge, manning, and training. If company command teams understand what information they need to manage, select the right personnel to fill the company headquarters, cross-train those personnel to operate the company's communication systems within the battalion's PACE (primary, alternate, contingency, emergency) plan, and enforce timely and accurate reporting of their information requirements, they will be successful at COP management. Unfortunately, the norm for IBCT companies is astride the back of a geriatric equine, visor down and lance in hand, hurtling towards an eco-friendly power source.

Some companies arrive at JRTC with a robust analog system full of trackers and a map. Most of the time, these systems are accurate throughout reception, staging, onward movement and integration (RSOI) but lose relevance almost immediately upon entering the training area. Other companies arrive with a 1:50,000 map and nothing else beyond a vague concept which resides solely in the commander's head. Rarely does a unit actually understand and prioritize the information it needs to successfully own its COP, and cross-training across the company headquarters personnel is never sufficient to successfully manage the COP for the duration of the rotation.

What is undefined, or at least under-defined, by most company commanders is what constitutes relevant information at the company level. This results in either an overcrowded and overcomplicated product that overwhelms the operator with a mix of essential and impertinent information or an undeveloped product that provides nothing more than subordinate unit locations. Both of these examples are detrimental to providing the commander with relevant information. Successful companies adjust systems throughout the rotation until they develop a manageable product that facilitates information management. Some of the most effective examples are simply a laminated piece of a Meal, Ready to Eat (MRE) cardboard or the margins of a map board; as long as it is reliably systematic, looks do not matter.

Defining relevant information is a mission-specific task and should start with a dissection of battalion-level information requirements. After those information requirements are either adjusted or mirrored on the company COP, then commanders can determine what additional information they need to prompt a decision. In the defense, this might be anti-tank (AT) weapon system status and round quantity by type. In the offense, it might be platoon estimates of quarts of water per Soldier during an extended dismounted movement. In all operations, combat power is critical to timely decision making.

Beyond the physical format of the COP, selection and cross-training of headquarters personnel are the other two points of COP management failure for rifle companies. Fully manning a company headquarters is part of the challenge. Given that rifle platoons are typically at 75-percent strength, there is a temptation to either not fill both junior and senior



Photo by Joint Readiness Training Center Operations Group
Soldiers assigned to the 2nd Infantry Brigade Combat Team, 25th Infantry Division take part in training at the Joint Readiness Training Center at Fort Polk on 14 October 2020.

company RTO positions, or to fill one or both of them with profile Soldiers to alleviate burdens on platoons. While this may work in garrison, this is significantly detrimental in the field environment as both RTOs are needed to facilitate 24-hour CP operations both with company trains or forward with the commander. Reluctance to fill all 11B headquarters positions with able-bodied personnel is directly related to the trend of utilizing the company 25U communications sergeant to dual-hat as the company RTO. While this seems like a "two birds with one stone" economization of manpower, it limits the 25U from focusing on the management and troubleshooting of all of the company's communications systems and removes depth from the command post's personnel bench, which impacts its ability to conduct continuous operations and maintain the COP.

Another common friction point for company headquarters that is rooted in home station is the relationship with its fire support team (FIST). Appendix A of ATP 3-21.10 lists the FIST as part of the company headquarters. However, the FIST's integration into company headquarters operations is

only as successful as the frequency with which it trains with the company and masters the company's systems. FISTs that spend more time integrated into their rifle companies are well conditioned to manage the company COP, while FISTs that spend most of their time consolidated either at the infantry or artillery battalion are less familiar with company systems and subsequently less effective at managing the COP as well as other headquarters systems. To ensure FISTs remain integrated into company CP operations, a standard operating procedure (SOP) for headquarters operations must be developed and shared by the company.

The cross-training of all headquarters personnel on digital, radio, and analog systems is chronically under conducted. To achieve redundancy across multiple CP nodes, all headquarters personnel need to have the technical competence to operate all radios and digital systems within the company and battalion's PACE plan. Headquarters personnel also need to understand each of the company's analog tracking systems to ensure information is managed timely and effectively. However, companies often arrive at JRTC with less than half of their headquarters personnel who can effectively operate a Joint Battlefield Command Platform (JBCP), even less who can troubleshoot an Advanced System Improvement Program (ASIP), and only one or two who can use a Distributed Tactical Communication System (DTCS). Analog systems are even more abused, barely surviving RSOI with any degree of accuracy and promptly forgotten about once the unit enters the training area.

Units also struggle with common operational picture redundancy. Overall, this is a graduate-level problem considering that there is enough difficulty in managing one COP. However, if the company headquarters is split, the company executive officer (XO) needs to maintain situational awareness and be prepared to assume command if the commander is taken out of the fight. If the XO has the time to manage a COP, a semblance of situational awareness will exist. Unfortunately, the trend during most rotations is that the XO's bandwidth is entirely consumed by running the company's sustainment operations, resulting in no COP management occurring at the company trains due to the lack of trained headquarters personnel besides the XO.

Techniques for a Successful Company COP and CP

At the core of an accurate company COP is a trained and competent company headquarters. All positions need to be filled to create the depth in the bench that facilitates continuous operations across both primary and alternate command posts. Mature, intelligent, and fit Soldiers who can operate communications systems and update the COP's analog systems need to be selected to fill these positions. Cross-training of communication and analog systems must be completed across all duty positions. The analog products companies bring to the field need to be utilized daily by headquarters personnel in garrison as well, which will create muscle memory.

When all elements of the company are collocated and the threat is low, one COP is sufficient. While conducting operations in a contested environment, both the primary CP (with the commander) and the alternate CP (with the XO) need a COP. The commander's COP will be primarily operations and intelligence focused, run by his fire support officer (FSO) and RTO (similar to a tactical command post — TAC). The XO's COP, often run from company trains and typically further from contact, will be the full COP to support all of the company's and battalion's information requirements across all warfighting functions. If the commander is dismounted, the XO can also serve as the digital crossover point with higher and adjacent units via the JBCP.

The most effective physical system for the company COP is the map board, even for the XO's COP on company trains. While the fold up "football" concept white boards and/or tri-folds are alluring for their ready display of information, the ease of portability of the map board makes it more user friendly to update for the RTO either in the patrol base or sitting in the commander's high mobility multipurpose wheeled vehicle (HMMWV); it also facilitates rapid displacement in case of compromise. Additionally, if the commander becomes a casualty and the XO assumes command, he or she will already have a dismountable map board COP ready. Overall, the best practice is a small map board with enough unformatted space (usually one-quarter to one-third of one side of the board, or the back) to fit the battalion and company-level information requirements and statuses. Formalizing a common size for map boards across a company also facilitates the production and distribution of overlays. Finally, if they are commonly understood, sterilized graphics can be used to reduce risk of compromise if the unit is overrun.

Although ideally the COP is updated in real time, this sometimes does not happen due to stresses of operations or lack of training. Companies must synchronize their COPs with the battalion's via operation orders (OPORDs) and commander's update briefs (CUBs), pulling information from the battalion RTO or physically travelling to the battalion main CP or TAC to gain relevant information. They must then ensure that platoon COPs are updated via either time- or conditions-based syncs or through the orders process. Units successfully manage to keep COPs up to date by enforcing conditions-based COP syncs either as a condition to cross the line of departure or as part of priorities of work during patrol base operations.

Techniques for a Successful Platoon COP and CP

The platoon COP is as robust as it needs to be for the platoon leadership to manage information which supports the company's information requirements as well as for the platoon leadership to stay informed of the fight two levels up. As the lowest level of headquarters in the Army, the platoon still needs to manage information, maintain situational awareness, and make decisions, all which are facilitated by the COP. The functionality of platoon leaders' map

boards should mirror their commanders' for ease of overlay exchanges.

The majority of the time, the COP will be managed by platoon leaders, their RTOs, and their forward observers (FO). When conducting patrol base operations, however, the platoon must formalize CP operations to ensure key leaders get rest. The platoon CP is comprised of the platoon leader, platoon sergeant, RTO, and medic. Across this group, what constitutes higher headquarters information requirements must be understood, along with how to physically make updates to the platoon COP. This can be augmented by the sergeant of the guard (SOG) and a radio guard, if codified in a platoon SOP.

Way Forward

The nature of the Army is to stovepipe information within individual entities. A conscious effort needs to be made to prioritize information requirements from the top down to clearly articulate what the higher headquarters needs to know from subordinate elements. Hand in hand with that, institutional investment in clear and concise reporting from the team to the company level, along with the question of "what do I know, and who else needs to know it?" through focus in entry-level training and professional military education, would reestablish the framework for information sharing and management. In

lieu of a formal doctrinal solution, units and installations would benefit from providing companies and platoons courses on COP systems and information management.

The COP needs to be doctrinally redefined from being solely a commander's tool to encompassing all levels of headquarters, including the platoon. The implications of poor situational awareness can be as dangerous at the platoon level as they are at the company level, and the COP is a mechanism for maintaining situational awareness. If it is truly a common operational picture — and not a commander's operational picture — then we collectively should acknowledge that it already exists on many platoon leaders' map boards across the Army, as well as provide some training on how to manage a COP at maneuver basic officer leader courses and the Maneuver Captains Career Course.

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Soldiers assigned to 2nd Brigade Combat Team, 101st Airborne Division take part in training operations at the Joint Readiness Training Center at Fort Polk, LA, on 20 August 2020.

Photo by Joint Readiness Training Center Operations Group

