

# Training Notes



## Battalion Sustainment Operations in Decisive Action: A Lost Art

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### Sustainment: Continuous Planning and Execution

Imagine a battalion deploying to an austere environment to fight a hybrid/near-peer threat, or perhaps it was simply tagged for the excitement of another Combat Training Center (CTC) rotation. Chances are the S4 either possesses a maneuver background but struggles to understand logistics or is a logistician who struggles to understand his place within maneuver. As the S4 tackles the daily grind of staff work, rarely does the opportunity present itself to open doctrine and understand how sustainment operations work in a brigade or within a larger combat environment. Unfortunately, Army manuals and their sustainment chapters only explain the theoretical steps or elements of sustainment. One must piece parts of each doctrine manual together to understand how a battalion sustainment cell continually operates, plans, and executes. Figure 1 is a diagram of how a maneuver battalion continually operates and plans sustainment.

The sustainment cell executes and plans support for the companies, but first it is necessary for those companies to provide input with timely and accurate sustainment reporting. It

is the sustainment cell's duty to develop a sustainment common operating picture (COP) in order to capture the battalion's status and accurately plan. With the accurate portrayal of the unit's status and receipt of a new mission, the S4 can then conduct logistics estimates, which will allow for accurate forecasting of logistical support and identify any shortfalls. Sustainment planning must absolutely cover resupply, recovery, and casualty evacuation (CASEVAC). If these elements of sustainment are not thoroughly planned, any unit or mission will have great difficulty during combat operations. The sustainment cell must ensure throughout planning and execution that sustainment is synchronized and integrated with other warfighting functions (WFFs) and adjacent, higher, and subordinate units. Finally, the sustainment cell must complete a detailed sustainment plan and overlay that allows for a shared understanding. The order and overlay are the output the sustainment cell owes to the companies for a successful completion of the mission.

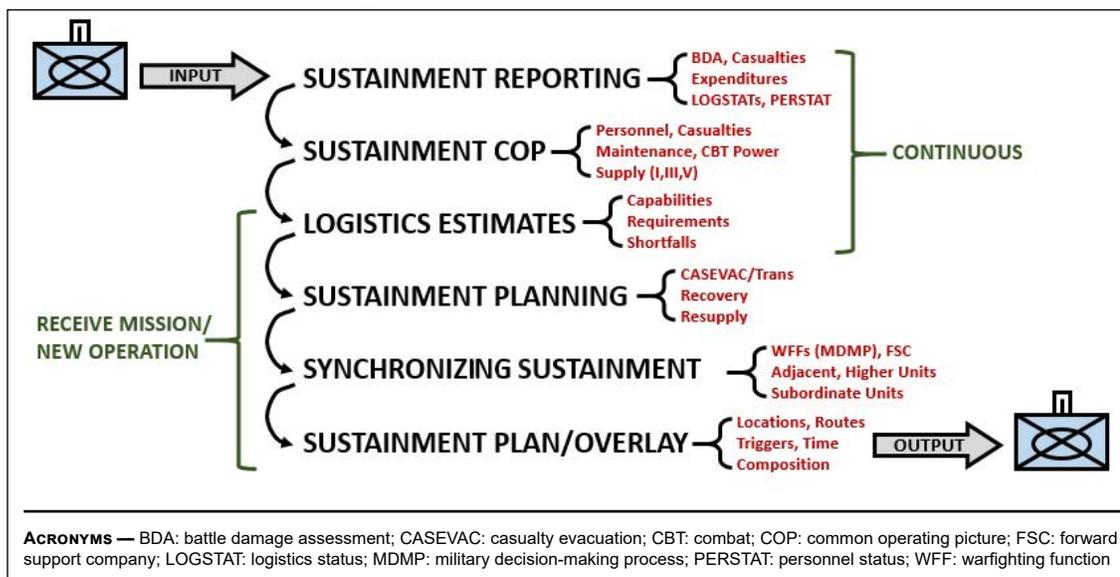
### Sustainment Reporting: It All Starts With Input

Timely and accurate reporting from subordinates is crucial to the continuous sustainment of the battalion. The more rapid

and accurate reports are, the more effective planning and support for the companies will be. The major reports that a company needs to send are logistics, personnel, casualties, battle damage, and maintenance status reports. The battalion leadership must support the battalion S4 and emphasize prioritization of mission command system capabilities of sustainment nodes.

Commonly, administrative and logistics (A/L) radio nets and

Figure 1 — Maneuver Battalion Sustainment



digital systems (i.e., Joint Capabilities Release [JCR]) are the primary means of communication for the battalion's sustainment. Battalions typically do not have enough equipment to retransmit an A/L net or dedicate JCR tactical operations center (TOC) kits to combat trains command posts (CTCPs). Therefore, units must use JCR chatrooms and analog reports at logistics release point (LRP) meetings for routine reports and the A/L FM net for immediate and emergency reporting. A battalion may use a variety of digital systems to communicate sustainment reports with brigade. However, battalions encounter difficulty resourcing secure mission command systems between the various command posts (CPs). A possible solution is to submit an operational needs statement (ONS) for equipment to acquire a diverse range of connectivity. With a wide range of communications capability, units can maintain an expanded contingency plan and provide a shared digital sustainment COP.

The CTCP is the central node controlling the communication architecture for the battalion's sustainment reporting. The headquarters and headquarters company (HHC) commander and S4 are responsible for coordinating with subordinate leaders, battalion executive officer (XO), and S6 to ensure a contingency plan is in place for redundant communication. The sustainment reports must be formatted with a common language and able to be sent with ease. Redundancy and simplified formats will provide seamless reporting from company up to brigade.

Secure tactical internet at CTCPs gives battalions extended capability. Therefore, if the TOC and tactical command post (TAC) are neutralized by enemy action, the CTCP acts as a tertiary CP. This allows the CTCP to rapidly monitor and collect reports on digital, FM, and analog systems. The added benefit of "battle tracking" maneuver/fires/intelligence reports allows the CTCP to better forecast/synchronize sustainment operations during continuous operations. The redundancy in communications will safeguard medical, supply, and recovery assets and get them where they need to be in a timely manner. The CTCP must execute the six TOC functions to receive, distribute, and analyze sustainment information for the battalion, brigade, and the support operations officer (SPO) in the brigade support activity.

**COP: Know Yourself**

Maneuver, intelligence, and fire support WFFs commonly maintain a COP to effectively track, react, and plan operations on digital and analog maps. The S4 needs to develop and maintain a sustainment COP for the same reasons. COPs required for sustainment give a shared understanding of logistics, personnel, and operations, and these must be depicted both in digital and analog systems.

The S4 supervises the development and implementation of the logistics COP, but this is only one part of all sustainment COPs. The CTCP acts as the main collection point of all sustainment-related information; therefore, it maintains the unit's sustainment COP. An analog version of the sustainment COP is commonly filled out on whiteboards that break sustainment

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status into key elements: personnel, casualties, combat power (maintenance, firepower, mobility, and catastrophic), classes of supplies, and ammunition (by company, by Department of Defense identification code [DODIC]). The unit maintenance command post (UMCP) would maintain a more in-depth maintenance COP to feed the CTCP with repair status and updates to the combat power. Update the analog sustainment COP continuously and maintain it digitally for rapid analysis.

Within the CTCP, the HHC leadership tracks the maneuver fight and continually updates a maneuver COP on a map. This allows the CTCP to depict all moving sustainment assets in conjunction with effective communication with company XO's/first sergeants (1SGs), forward support company (FSC) CP, and CASEVAC (medical platoon). Depicting maneuver and sustainment allows for the sustainment cell to see the flow of support and not jeopardize its assets by exposing them to the enemy.

A digital COP provides the sustainment cell redundancy and efficient tracking of information (i.e., ammunition by type). Compiling information digitally at the CTCP with secure tactical internet enables the battalion to immediately update its status with other battalion mission command nodes and higher headquarters. At a minimum, the CTCP prints copies of these products for the S4 to bring to the TOC for planning; they can also be brought to an LRP meeting for the companies.

Both digital and analog COPs complement each other with redundancy if the combat trains is on the move. Distributing this information rapidly/real time allows for a shared understanding. Maintaining a sustainment COP and a maneuver COP allows sustainers to nest logistics planning, execution, and forecasting. It is the S4's goal to maintain a sustainment COP tracking the same information at the company CPs, battalion TOC, CTCP, field trains command post (FTCP), and brigade support area (BSA) for shared understanding.

**Logistics Estimates: How We Forecast Logistics**

The S4's input during the military decision-making program (MDMP) primarily comes from the logistics estimate. It is a continuous process that begins during mission analysis and continually updates through mission completion. The logistics estimate is the essential method for forecasting sustainment requirements 48-72 hours out. The logistics estimate does not have a doctrinal format at the brigade level; however, it must at a minimum address the following areas: requirements, capabilities, comparison, shortfalls, analysis, and solutions.

The first step in the process is to determine the logistical requirements for the mission. First, understand the mission and



***Soldiers assigned to the 3rd Squadron, 3rd Cavalry Regiment assemble a casualty collection point at Fort Irwin, CA, on 10 February 2018.***

Photo by SPC Courtney Hubbard

all units involved to include organic, attached, and assigned units requiring support. Although estimates are continuous, the planning process brings on a change of requirements when a new mission is received. Compile a list of all specified and implied tasks to determine requirements for supplies, equipment, and personnel. Determine who needs support where and when it is needed; then conduct a time/distance analysis to develop triggers. Lastly, determine needs for critical and emergency resupplies required for mission success.

Automated systems such as Operational Logistics (OPLOG) Planner or the Combined Arms Support Command's (CASCOM's) logistics estimate spreadsheet program are tools to estimate requirements. Planning factors from the Command and General Staff College (CGSC) Student Text (ST) 101-6 determine estimates for consumption rates and other systems. Units at all levels capture historical data to develop trends. Brigade and higher levels capture logistics estimates with these methods; however, the S4, medical officer (MEDO), and S1 may apply these tools for battalion sustainment planning.

The sustainment COP captures all of the information for real-time status. Meanwhile, logistics estimates determine the unit's capabilities and needs. Determining the unit's capabilities is not entirely complete until analysis is complete on supply capability in terms of storage, distribution, and transportation. Additionally, the battalion's capability can be determined by considering the current and projected status of each company during execution.

Take the estimated requirements and capabilities and compare them to determine the battalion's shortfalls. Shortfalls may occur in terms of supply, storage, distribution, and transportation. Shortfalls may also come from personnel,

equipment, vehicles, or maintenance. A shortfall might also arise with complex terrain, short time, or inadequate facilities. Compile all shortfalls and at what point in the operation the shortfall will likely occur.

Whether or not there are shortfalls, the analysis process must continue for all support operations. The logistics estimate nests within the battalion's courses of action (COAs) and how each COA would affect the ability to conduct sustainment operations. The S4 must determine when the operation begins, how much time there is to prepare, the purpose and priorities of support, the duration, and if it can be supported from a forward or fixed location. When identifying a shortfall, the FSC commander is likely involved with the S4 to first attempt to solve the problem/shortfall and secondly find resources within the brigade to solve it. The goal is to build internal solution before requesting higher headquarters for assistance. Never assume that higher headquarters can provide the additional capability needed to solve shortfalls. Continually work internally with the battalion to build solutions before requesting for higher support.

### **Sustainment Planning: The Essential Needs of Resupply, Recover, and CASEVAC**

Sustainment planning is continuous in a maneuver battalion as casualties, maintenance, or supply issues can occur at any time. The FSC commander, S4, MEDO, and S1 must remain flexible and simplify plans. Having contingencies, alternate routes, locations, and emergency resupply are crucial for the unit's success. Just as maneuver staff plans different COAs, the sustainment cell needs to look at operations the same way and nest its plans. The enemy may force maneuver units to change

their operations, thus sustainment plans must be adaptive.

In wide area security or stability operations, an S4 must focus on flexibility for support in planning. Over time, trends, standard operating procedures (SOPs), and schedules will assist in planning and execution. During offensive operations in a decisive action fight, the sustainment plan must balance speed and flexibility to support forward units while ensuring that assets/supplies are protected. In the decisive action defense, construction materials become imperative for reinforcing survivability and counter-mobility obstacles. Planners should consider caching ammunition and prepositioning recovery assets with company trains forward behind battle positions. Similarly, in wide area security missions, forward operating bases and outposts can always use more supplies for defense.

The S4 should always have a thorough understanding of mission, tactical plans, commander's intent, and the brigade's sustainment plan. The sustainment planner should always think: priority of support by unit, by weapon system, and by class of supply. There are three primary elements of sustainment that take priority in sustainment planning: CASEVAC, resupply, and recovery. Sustainment leaders must methodically plan for these elements; otherwise, the battalion will fail.

### **Synchronization and Integration: Higher, Adjacent, Subordinate, and the WFFs**

The battalion XO/S4 must ensure that the sustainment plan is synchronized with the operation and assets are integrated with maneuver. The sustainment cell must avoid planning in a vacuum. Intelligence drives maneuver, maneuver drives sustainment, and sustainment dictates all. This WFF determines whether or not maneuver can be accomplished by its capability to support. Similarly, the S4 cannot conjure up any sustainment plan without the support and confirmation by the FSC commander. The S4 plans and supervises, but it is the FSC that executes the logistics/maintenance and the medical platoon that executes CASEVAC.

MDMP allows for the sustainment planners to integrate themselves and synchronize their efforts with the other WFFs. Other than maneuver, particular attention should always be made for intelligence, as the enemy situation during planning and execution affects the sustainment locations, routes, and timing.

During logistics estimates, shortfalls may occur that require higher support from brigade at the BSA. The S4 is responsible for this coordination but may have to get the battalion XO involved. It is crucial that the MEDO understands and synchronizes the CASEVAC plan with brigade. If the FSC commander is with the field trains, it is easier for him/her to engage with the SPO cell at the BSA. Maneuver leaders often overlook that the SPO will best be able to solve sustainment shortfalls; therefore, the FSC commander can best interact with the SPO.

There are times that may require a battalion S4 to support or reach out to adjacent battalions. Maintain a tactical cross-load mindset when looking at classes of supply in each of the battalions. Additionally, when units within the battalion are

detached or attached, the S4 must understand the command support relationship to ensure they are adequately supported.

Bottom-up refinement and coordination with company XO/1SGs are needed for complete plans. It is good practice to receive bottom-up refinement during logistics synchronization (LOGSYNC) meetings on the radio and LRP meetings. In both of these instances, the S4 can receive feedback on what he/she is planning rather than blindsiding companies during an order.

### **Sustainment Plan: Paragraph IV, Overlays, and Rehearsals**

The routine sustainment plan must be adjusted to the final operations plan from all the previous steps of sustainment operations. A sustainment planner should think similarly to a maneuver commander who executes with a decision support matrix. The sustainment cell develops triggers to launch emergency resupply, recovery assets, and CASEVAC assets (for example, a company down to 50-percent ammunition, three or more mobility damaged vehicles, or a mass-casualty event requiring transportation assets). The sustainment plan is the output in this process to give back to the companies for their input in reporting. There are three essential medians for information to ensure that the plan is complete: the order, the overlay, and the sustainment rehearsal.

Brief sustainment plans with as much detail as any base order. The most practical way to brief the sustainment plan during the operation order (OPORD) is to brief with graphics or on a terrain model for a common understanding. Supply, recovery, and CASEVAC situations are always evolving and non-contiguous. Sustainment planners should always describe the following in the plan by phase: supply status (by class, actual vs. predicted), plan for resupply, recovery plan, transportation plan as needed, casualty estimates, CASEVAC, mass-casualty events, decontamination, mortuary affairs, special equipment, enemy prisoner of war (EPW) collection, and captured equipment/intel handling. Some of these may be in a unit SOP, but units often neglect to remember if they do not encounter them.

The sustainment planner must graphically depict the information briefed in the OPORD. If it is a fragmentary order or short planning timeline, planners must at least be able to brief off of the map, which will allow them to ensure that locations, routes, and asset locations are feasible. With a map, the S4/MEDO must create a sustainment overlay that depicts primary/alternate/CBRNE (chemical, biological, radiological, nuclear, and explosives) "dirty" routes, sustainment nodes (CTCP/FTCP/forward aid station [FAS]/main aid station [MAS]/Role II), ambulance exchange points (AXPs), helicopter landing zones (HLZs), time/distance analysis, and locations of any other logistical/medical assets. A sustainment overlay on a JCR may be shared across the force and updated in real time.

The sustainment rehearsal is where the battalion S4, company XO, and FSC leadership brief their understanding of the recovery and resupply plan while the 1SGs and MEDO brief their CASEVAC plans. The S4, FSC commander, and MEDO primarily come together to cover these concepts;

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meanwhile, the battalion XO and command sergeant major (CSM) supervise and approve the concepts and scheme of support. The sustainment rehearsal typically follows the battalion rehearsal and can use the same terrain model as the battalion rehearsal. All graphics from the sustainment overlay need to be reflected on the terrain model. Contingencies for reduced capabilities, branch plans, and sustainment plans nested with alternate maneuver COAs require attention during this rehearsal. The final outcome is that all echelons are able to get the warfighters what they need at the right place and the right time, saving lives.

### **Combat Trains Vs. CTCP: The Difference**

All leaders must remember that the combat trains is made up of several elements that include the FSC and HHC. First is the unit maintenance platoon consisting of several shops and capabilities, and inside their footprint is their CP — the UMCP. The medical platoon consists of the battalion aid station (BAS) that may split with the FAS and the MAS. Recovery assets as well as an emergency resupply of water, food, fuel, and ammunition are commonly located with the combat trains. If the battalion wishes to receive hot meals, the field feeding team is best facilitated with the combat trains based on the number of logistics package rotations and refrigeration units. Lastly, a technique to provide security for the combat trains is to utilize the battalion's reserve platoon. If not, the HHC commander must find a way to maintain and resource security internally. All of these elements comprise the combat trains. It is easiest to look at it as the battalion FOB and the HHC commander as the FOB "mayor." The large footprint requires a CP to synchronize all of these assets to support the battalion; therefore, this is the CTCP.

When looking at the combat trains, location and layout are key. The combat trains should not be visible by the enemy, dispersed, and tied into the terrain for security. Terrain must not be overly restrictive since the unit maintenance platoon and the BAS require avenues of approach and flat terrain to operate. The HHC commander must select a site that maintains a balance between functionality and security. The layout of the combat trains should have the aid station closest to the main supply route with access in and out for rapid CASEVAC and treatment. Routes need to exist (or be made) with the combat trains for traffic flow, and an entry control point (ECP) can be made/manned as applicable. Combat trains and BSAs should use signs to direct units and attachments for ease of traffic flow and situational awareness. Security should constantly be adjusted with sector sketches made, casualty collection points set, fighting positions dug, C-wire laid, and amenities added. The concept of the combat trains is simple. It is the beginning of an austere battalion FOB, and as time continues the position improves until it becomes a FOB. When it moves, establishment and security start over and do not end until complete.

At the heart of the combat trains is the CTCP. It maintains several functions and it is best broken down into four elements: the base defense operations center, HHC CP, tertiary battalion TOC, and the administrative and logistics center (ALOC). The HHC commander must look at how to layout the CTCP to allow for these functions to work. Typically, it is best to break up the

CTCP in halves with one acting as the ALOC and the other covering CP and TOC operations. Manning this CP presents difficulty, and a battalion XO must look to support the HHC commander and S4. Enough manpower must be allocated to staff the CP while allowing for sustainment personnel to conduct planning and operations. The HHC commander must devote time to ensure this capability exists, rehearse set-up/tear-down, and stress the systems during field training exercises.

The key roles players of the CTCP include but are not limited to the HHC commander, HHC 1SG, S4 OIC/NCOIC, S1 OIC/NCOIC, and FSC XO. The MEDO and maintenance platoon leader are involved with administratively supporting and reporting to the CTCP along with any other leadership. The FSC commander often does not look to involve the FSC XO at the CTCP; however, the XO is crucial to support the FSC elements and improve coordination with the UMCP, FTCP, field feeding, and emergency resupply. The FSC XO advises the S4 on logistics while the HHC commander advises both on maneuver. The S4 is the supervisor for all these sustainment nodes and needs to draw in the S1, MEDO, and FSC leadership to get them all the information they need to plan and execute. The HHC 1SG focuses on security and running the combat trains while the HHC commander focuses on commanding and running the CP. The HHC commander constantly monitors the battalion situation and plans to always be prepared to assume the role of the tertiary TOC and fourth in command of the battalion.

### **S4 and the Sustainment Cell: A Crucial Team**

The heart of all battalion sustainment planning is the battalion S4. However, each leader's input solidifies the battalion's sustainment cell and plan. The leaders mentioned throughout this article hold crucial tasks and purposes, and each must have clear duties and responsibilities. Tempers flare and personalities clash in any environment, austere or garrison. Even if these personnel reside in different garrison units, this concept of sustainment planning and operations requires everyone to work together. The battalion must not let a deployment or training center rotation be the first time these leaders work together. Leaders must delegate and mentor subordinates to execute these systems. Most importantly, a battalion XO and battalion commander must assess their Soldiers' talents and manage accordingly. There is no maneuver without proper support; therefore, the S4 must be trained and mentored to execute sustainment, be prepared to establish the sustainment cell with the HHC commander, and most importantly, build a relationship with the senior logistician in the battalion — the FSC commander. The science of sustainment exists, but we must engineer it all together to create the art of sustainment and apply it to war.

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