

Sustaining the Brigade Engineer Battalion for Decisive Action

Forward support companies can support maneuver units by echeloning trains, but a modified field trains concept would better support brigade engineer battalions.

■ By Capt. Gregory A. Long

Brigade engineer battalion (BEB) forward support company (FSC) leaders are charged with ensuring that the BEB is fueled, fed, and fixed as far forward on the battlefield as possible. Doing so allows the BEB to operate uninterrupted with maximum operational reach, freedom of maneuver, and prolonged endurance.

The BEB FSC relies on current doctrine, a synchronized concept of sustainment across the brigade, and the maneuver commander's intent to guide its operations and the physical location of its equipment and personnel on the battlefield. However, current sustainment doctrine does not necessarily apply to BEB logistics operations.

BEBs typically have low consumption rates and time-distance factors. Sustaining the BEB requires a unique and dynamic application of current doctrine that is synchronized with the brigade concept of sustainment.

FSC Doctrine

Sustainers use doctrine to shape their operations. According to Army Techniques Publication (ATP) 4-90, Brigade Support Battalion, "The BSB [brigade support battalion] enables operational reach by task organizing FSCs with required capabilities to prolong the endurance of brigade operations while maintaining sufficient support to ensure freedom of action."

However, ATP 4-90, which states that echeloning trains is the backbone of sustainment operations, is purposely vague about the manner

in which FSCs enable operational reach.

Echeloning Trains

In their September–October 2016 *Army Sustainment* article, "The Optimal Employment of the Forward Support Company in Decisive Action," Lt. Col. Brent Coryell and Capt. Christopher Devenport state that FSCs are the link between the brigade support area (BSA) and the supported units near the forward line of troops (FLOT).

FSCs accomplish support by employing assets at both the field trains command post (FTCP) and the combat trains command post (CTCP). Coryell and Devenport write, "Both the FTCP and the CTCP are mobile mission command posts for logistics that execute supply break points to build combat-configured support packages for forward units."

Executing sustainment operations through the BSA, FTCP, CTCP, and company trains is known as echeloning trains. Traditionally, the FTCP is either co-located with the BSA or 1 to 2 kilometers from it. The FTCP serves as a sustainment coordination center where the brigade support operations officer (SPO) synchronizes push/pull logistics and convoys to each battalion's CTCP.

The CTCP is typically the closest sustainment node owned by the supported maneuver battalion. The FSC commander and most of the distribution and field feeding assets often reside at the CTCP in order to execute convoys to the company trains

areas to resupply company elements maneuvering near the FLOT.

Estimates Affect Emplacement

Logistics running estimates from the battalion staff determine sustainment node emplacement for the FSC. These estimates, which include planning variables such as consumption rates and time-distance factors, will guide the SPO's concept of sustainment. The concept of sustainment then synchronizes sustainment nodes across the battlefield based on the location of the maneuver elements, the BSA, and where each battalion's FSC places the FTCP and CTCP.

While echeloning trains is doctrinally sound and critical to the success of most FSCs, the model is not well-suited for an FSC that supports a BEB. Logistics estimates from brigade engineers routinely show low consumption rates, and with the exception of two line companies, the supported units within the BEB do not travel anywhere near the FLOT because of the battalion's mission set.

Logistics running estimates alone must shape sustainment node emplacement for the BEB's FSC. The brigade concept of sustainment must then incorporate said nodes in the overarching brigade sustainment plan.

Optimal Emplacement of Assets

How can an FSC best posture itself to support the BEB and its unique mission set? During Army Warfighter Assessment 17.1 at Fort Bliss, Texas, Echo FSC was attached



Sgt. 1st Class Adam Asher, Echo Forward Support Company, 40th Brigade Engineer Battalion, supervises troubleshooting procedures of an assault breaching vehicle engine at the maintenance collection point during Army Warfighter Assessment 17.1 at Fort Bliss, Texas.

to the 40th BEB, 2nd Brigade Combat Team, 1st Armored Division, and provided logistics support without running a true FTCP and CTCP.

Battalion staff logistics estimates showed low consumption rates, and minimal time-distance factors were associated with the rear-area and wide-area security missions for the BEB. This ultimately drove the FSC's asset emplacement strategy.

The distribution platoon and maintenance platoon were co-located with the BEB tactical assembly area (TAA), which was separate from but co-located with the brigade TOC approximately 5 to 7 kilometers from the BSA, which the FSC was also tasked to support. The distribution platoon

used the BEB TAA as its main distribution hub to push bulk petroleum, ammunition, and repair parts.

Fuel asset placement. The FSC had four M978 fuel tanker trucks for bulk fuel distribution. The most economical method to distribute fuel at the BEB TAA and brigade TOC was to station one tanker at each location because of their low rates of fuel consumption. Only one vehicle was needed to refuel of all power generation equipment and vehicles for each area.

The M978s did not need to pull additional fuel from the BSA or to receive refills very frequently. On average, each truck was refilled every three days. The FSC's other two

M978s and crews supplied fuel to the two engineer companies that executed Sapper, route reconnaissance, mobility, and countermobility missions much closer to the FLOT.

Maintenance asset placement. Maintenance operations were conducted at a maintenance control point (MCP) co-located with the BEB TAA. Not only did this prevent the MCP from having to provide its own security, but it also allowed for responsive repairs. Co-locating the MCP with the BEB TAA allowed maintenance leaders to manage and delegate workloads while mechanics quickly diagnosed and repaired equipment from all of the BEB's units.

Forward maintenance teams were

located in the company trains area to provide engineer companies with dedicated maintenance assets to support forward operations. Engineer platforms that could not be fixed in the company trains area were evacuated back to the BEB TAA where the mechanics repaired platforms and returned them to the company trains.

Planning section placement. The FSC executive officer (XO) and the BEB S-4 were co-located in the BSA for sustainment planning, integration, and coordination. The two officers coordinated directly with the brigade SPO, analyzed battalion mission sets and consumption rates, planned convoy operations, and ensured configured loads were built on time for convoy execution. This resulted in seamless sustainment synchronization and coordination, which resulted in planned sustainment operations instead of “emergency” resupply operations.

An automated logistical specialist was stationed with the FSC XO in order to send repair parts forward to the BEB TAA for eventual distribution. A food operations sergeant and an ammunition handler were also stationed with the FSC XO to manage class I (subsistence) and ammunition and ensure the commodities were properly prepared for convoy operations.

Minimal FSC representation in the FTCP and BSA was optimal because it allowed assets to be stationed forward in the BEB TAA to conduct logistics release point operations with the BSB’s distribution company and in company trains with engineer companies that were operating near the FLOT.

Field feeding asset placement. Because the BSA was located in proximity to the food rations break point, Echo FSC experimented with placing its field feeding section in the BSA for easy resupply. Unfortunately, this resulted in the FSC’s headquarters platoon having to convoy to the BSA to receive food from the field feeding section for forward dis-

tribution. This was not efficient and took manpower from the company command post.

The optimal placement for the BEB FSC field feeding section is co-location with either the BEB TAA or the brigade tactical opera-

co-located with the BEB TAA. This was economical because most of the BEB’s Soldiers were in the TAA. It also allowed for easy supply point distribution. The FSC’s first sergeant delivered chow to fellow BEB first sergeants at the brigade TOC

Logistics running estimates from the battalion staff determine sustainment node emplacement for the FSC. These estimates, which include planning variables such as consumption rates and time-distance factors, will guide the SPO’s concept of sustainment.

tions center (TOC). The FSC should choose the location with the greatest personnel head count.

Another BEB FSC’s Experience

Scrapping strict adherence to echeloning trains also worked well for an FSC that was attached to the BEB for 3rd Brigade Combat Team, 1st Armored Division, during its decisive action rotation to the National Training Center in 2016. The FSC commander placed the FSC XO at the BSA in order to coordinate and plan with the brigade SPO.

The commander also had commodity managers in the BSA to process parts and help build supply packages. Most of the distribution platoon was co-located with the BEB TAA, which allowed for responsive delivery of supplies to both the brigade TOC and the BEB’s two engineer companies as they maneuvered near the FLOT.

The maintenance platoon was co-located with the BEB TAA, which allowed for swift repairs and responsive recovery missions. A field maintenance team was attached to each engineer company to provide forward maintenance in their company trains.

The dining facility section was

and other logistics release points as required.

The FSC is an agile organization created with modularity in mind. Each FSC must task organize across the battlefield in a manner commensurate with the battalion S-4’s logistics running estimates that consider fuel consumption rates, time-distance factors, time-idling factors, battle damage losses, and the maneuver battalion’s overall mission set.

By incorporating the running estimates from each battalion into the concept of sustainment, the brigade SPO can effectively synchronize key sustainment nodes across the battlefield with a logistics common operational picture in mind. This leads to streamlined sustainment as the BSB pushes supplies to the FSC to support the maneuver unit.

Capt. Gregory A. Long is the company commander of Echo FSC, 40th BEB, 2nd Brigade Combat Team, 1st Armored Division, at Fort Bliss, Texas. He is a graduate of the Combined Logistics Captains Career Course and holds a master’s degree in justice administration from Boston University. He is also Six Sigma Green Belt certified.