



Engineers from the 2nd Cavalry Regiment perform dig site operations at the Grafenwoehr Training Area in Grafenwoehr, Germany, on Feb. 14, 2013. (Photo by Markus Rauchenberger)

Supporting Engineers in Action

■ By Capt. Cristian Radulescu

In April 2015, the 2nd Cavalry Regiment conducted a successful rotation at Hohenfels Training Area in Germany, where it participated in Operation Saber Junction. This decisive action training environment (DATE) rotation, enabled logisticians to practice supporting the regimental engineer squadron (RES), also known as the brigade engineer battalion (BEB).

The BEB is a new concept to the Army. Army Techniques Publication 3-34.22, Engineer Operations—Brigade Combat Team and Below, describes the BEB as a transition from, or hybridization of, the special troops battalion.

Preparing for BEB Sustainment

I am the commander of the forward

support troop (FST) of the 2nd Cavalry Regiment's RES. In command for six months and with a new troop, I had the opportunity to learn how to support a BEB on the battlefield.

I took command of an under-equipped troop that was behind on training. Our leaders understood this, so the DATE rotation represented more of a learning opportunity than a validation, although we eventually achieved validation. Once we received funding, we worked toward equipment readiness for the DATE. We made training opportunities count, we were fielded vital equipment, and shortages were filled just in time.

Considering our available Soldiers and equipment, we maximized sustainment assets to support seven troops (including the regimental

headquarters) and four attached platoons (a total of 741 Soldiers). The FST deployed with 66 Soldiers (nine cooks, 12 distribution platoon personnel, 37 mechanics, and eight headquarters personnel) and 25 trucks.

We fielded two M984 wreckers, two M1113 humvee contact trucks, two forward repair systems (FRSs), a very small aperture terminal (VSAT), two M978 heavy expanded-mobility tactical truck fuel servicing trucks, a containerized kitchen (CK), a multi-temperature refrigerated container system, a load handling system (LHS) water tank rack (hippo), and two water buffaloes.

The challenge with equipment readiness and Soldier availability was apparent when I looked at our modified table of organization and equip-

ment (MTOE). In the 16-Soldier distribution platoon, I had one ammunition sergeant and one petroleum supply sergeant. The rest had to be cross-trained.

Two M1151 gun trucks provided front and rear security and doubled as contact trucks. Two more gun trucks with Joint Capabilities Release served as command trucks. One of them was my command post, and the other accompanied the logistics convoys.

We could distribute logistics packages with four LHS trucks and palletized load system trailers, but those same trucks and trailers also carried our hippo, FRSs, and refrigeration system. The solution was organizing secondary loads and load plans.

The RES in Saber Junction

During Operation Saber Junction, the RES's headquarters and headquarters troop provided role 1 medical care; chemical, biological, radiological, nuclear, and explosives reconnaissance; and a regimental captured persons collection point with two attached military police (MP) platoons from the 18th MP Brigade.

The A Troop engineers were detached; they supported engagement area development for the infantry squadron and conducted a combined arms breach. The B Troop provided engagement area development with a horizontal platoon attachment from the 15th Engineer Battalion and route clearance. Both engineer troops provided obstacle reconnaissance for maneuver commanders.

The C Troop (signal) provided retransmission. The D Troop (military intelligence) flew the unmanned aerial vehicle platform that, combined with field artillery, was effective against the opposing force. Human intelligence teams with attachments from civil affairs were effective in turning the insurgents to our side, enabling the RES to perform wide-area security and conduct stability operations.

Soldiering

The FST, with its trucks, trailers, FRSs, and CK (which must be con-

tinuously dropped and set on flat ground), was challenging to conceal from enemy intelligence, surveillance, and reconnaissance.

After initial entry, the FST scouted a better position to set up its field trains command post. Equipment had to remain expeditionary. This required some planning, considering all of our necessary secondary loads (sanitation unit, class IX [repair parts] bench stock, stacks of flat racks, and petroleum, oils, and lubricants).

We relocated our field trains command post multiple times in the wooded, hilly terrain of Hohenfels and effectively concealed our large silhouette by using what was available to us. We became more efficient with every troop jump, quickly cutting the process to under two hours and pre-positioning our assets to be mission ready.

Our field craft and Soldiering improved in stand-to, roving patrols, and noise, light, litter, and tent flap discipline. In the FST, every Soldier tasked with security is a mechanic, cook, or driver pulled from working a nonstop, real-world sustainment mission, so decisions must be made constantly on security, sustainment, other tasks, and rest (fighter management).

Being on the move limits the ability to dig into hardened fighting positions. Support requirements do not stop, and concealment from enemy reconnaissance is the best defense. We slept in trucks, all facing the rally point, and left our trailers where they could be quickly hitched. We topped off on fuel and water, checked load plans, and secured loads before sleeping.

Field Feeding

The time frame for providing hot meals is affected by the expeditionary mindset. Cooks normally work a hybrid shift schedule just to meet the regular meal requirements. The CK can feed more than 800 Soldiers with just four cooks. (We tested that.)

The CK comes standard with eight juice jugs and 16 Marmite trays, but my field feeding noncommissioned officer-in-charge anticipated a large

headcount, and we arrived at the DATE with 15 juice jugs and 35 trays.

Depending on the menu of items drawn from the class I (subsistence) warehouse, a "break" (a combination of menu items) can require three to five trays per troop and about three juice jugs. Because of our customers and their locations, we met this requirement for breakfast, but we were unable to pick up the used trays for dinner and replace them with newly filled ones. We circumvented this problem starting with situational training days.

We pushed class I to the engineer troops near the forward line of troops, and the first sergeants from the troops located in the rear came to pick up hot chow for their Soldiers. While our logistics convoys conducted other tailgate replenishment operations at forward logistics resupply points (for fuel and ammunition), food was served. We returned with the same trays that we used for dinner.

During force-on-force days, our ration cycle was M-M-M, meaning the Soldiers had three meals ready-to-eat (MREs) per day. All troops crossed the line of departure with three days of supply and needed one logistics package push of MREs midway to see them through to the end of the operation.

Before Saber Junction, I asked our property book officer for a hippo, and with eight total water buffaloes among the supported units, 5,200 gallons sufficed for 741 Soldiers at a rate of six liters per day per Soldier. I find the hippo useful when the customers are many and dispersed, as they were in our case.

Fuel Support

Based on the Operational Logistics Planner, Logistics Estimation Workbook, and other logistics tools, I envisioned our bulk fuel consumption to be a challenge. I had only two available fuel trucks out of the four on the MTOE.

D7 bulldozers, route clearance vehicles, and other horizontal engineer assets have high consumption rates,

but they are designed to run all day. The D7's 126-gallon tank can keep it running for 12 hours, and one M978 can top off 18 D7s.

We easily pumped 25,255 gallons of fuel during Saber Junction. We sent one M978 with the logistics convoy to do bulk-to-bulk fuel transfers and kept one in the rear for retail, following the same concept of push-and-pull logistics as we did with class I.

Class IV Support

An essential task in the regiment's order was delivering class IV (construction and barrier materials). The usual method is throughput from the rear to the area of emplacement, and class IV can quickly eat up pallet space. With my squadron commander forward, I personally commanded the logistics convoy, which included six flat racks of class IV, all mission-configured loads.

Prior to the mission, I realized that no standard planning factors give the necessary depth to class IV logistics data; it is all unit configured. The regiment's engineer planner calculates this data and creates the mission-configured loads. We transported the necessary class IV with our four available LHSs with palletized load system trailers.

One day after crossing the line of departure, we dropped off the class IV to the customer. The engineers canalized the exposed enemy into an open area and prevented their escape when the infantry squadron and Polish allies decisively engaged.

Convoy Operations

During Saber Junction, we conducted 11 logistics convoys without loss by carefully planning our routes, requesting updates on the main supply route status, and staying clear of enemy-controlled areas. We prioritized the use of our assets and supplies sent forward to the customer units and shared our logistics common operational picture with our S-4 and support operations officer (SPO).

To resupply locations forward and to the rear and to meet mission or-

ders, our logistics convoys operated on a ring route, providing supply point distribution to logistics resupply points. My goal was to maintain the 2nd Cavalry Regiment's and the RES's momentum at all times and minimize our footprint and time spent on the road where we were susceptible to attacks.

Maintenance Operations

The first day on the battlefield, our convoy had enemies to the front and rear decisively engaged with the reconnaissance, surveillance, and target acquisition squadron, MPs, and engineers. Damaged equipment was recovered and evacuated by my combat repair teams.

We set up our unit maintenance collection point and recovered a total of 32 battle-damaged vehicles (both real and simulated). The pick-up and turn-in of class IX was effectively administered using the VSAT, and the frequent VSAT tear down and set up had minimal effect. The VSAT phone became a hot commodity in an environment where communication was constrained.

In the initial planning conference, I requested an M88 recovery vehicle in the forward logistics element. That request was supported by the SPO and the regiment's S-4. My FST has some recovery shortfalls, and I saw the M88 as a temporary solution.

By MTOE, my FST cannot lift a Stryker or any of the engineer bulldozers because the M984 wrecker's maximum lift capacity is 14,000 pounds. The Army's inventory has more robust recovery equipment (including trailers with winches) that can greatly enhance our recovery capability, but as of now, we can only flat-tow a Stryker. Maybe future MTOE changes will correct this shortfall since the BEB has specific requirements.

Operation Saber Junction was the first time my FST supported the entire RES and the regimental headquarters and headquarters troop as well as MP, engineer, and NATO attachments. We came to fight and

began doing so during situational training days.

In the field alongside our RES as far forward as we could deploy, we pushed to the forward line of troops and pulled logistics from the forward logistics elements or regimental support area. None of our units ever ran out of any class of supply.

The missions, equipment, and requirements for each of the regiment's troops are diverse and complex. The BEB enables the regiment to conduct any mission in any environment. Supporting such a force-multiplying enabler is a unique experience for an FST commander.

I advise my peers to maintain good communication with the S-4, the SPO, and supported units and to carefully forecast requirements, especially as the battle gains momentum and conditions change. We did not once fail in this, but we learned how hard it is to communicate, especially if the enemy is jamming your primary, alternate, contingency, and emergency communications and you are without modern conveniences while mounted and on the move.

Rehearsals smooth out the little things. A good rehearsal is most easily achieved by training with other units and developing chemistry in working together. We prepared by rehearsing before the DATE rotation during squadron gunneries. In Europe, we have the mindset of interoperability and focus on equipment and personnel readiness. Operation Saber Junction highlighted the critical importance of these priorities in an undeveloped theater.

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