Maneuver-Owned Logistics: Re-emergence of the Support-Platoon Concept in Stryker Maneuver Battalions

by CPT Andrew N. Gregory

The rapidly changing support requirements a Stryker maneuver battalion experiences while conducting offensive, defensive and reconnaissance operations against a peer competitor necessitate a permanent logistics solution at battalion level.

Drawing on a year's worth of experiences and observations from 4th Squadron, 2nd Cavalry Regiment's support platoon, this article seeks to define the specific logistic challenges of a Stryker maneuver battalion; outlines the design and implementation of the support platoon to meet these challenges; discusses the platoon's operational successes and failures during training; and makes recommendations for permanently addressing the unit's logistics requirements. Through five squadron-level field-training exercises, two gunnery rotations and the decisive-action training environment (DATE) combat training center (CTC) Rotation 13-01 between the Grafenwoehr and Hohenfels training areas, 4/2 Cavalry Regiment's support platoon performed and evolved to meet the unit's demands and proved itself as a concept worthy of consideration for codification into the wider modified table of organization and equipment (MTOE).

Logistic challenges

October 2011 saw elements of 2nd Cavalry Regiment's regimental-support squadron (RSS) attached to three infantry squadrons, the reconnaissance squadron and fires squadron for the formulation of squadron-level support platoons. Empowering individual headquarters companies to own the primary logistic support for their squadron, 2nd Cavalry Regiment formalized a support relationship familiar to maneuver brigades before introducing forward-support companies (FSCs) and the modular brigade combat team (BCT) concept.

Originally conceived as an interim formation, the Stryker brigade's designers envisioned a yet-to-be-designed division providing additional assets for the unit. Not exposed during a decade of counterinsurgency (COIN) operations in Iraq and Afghanistan, the unified-land-operations (ULO) training that 2nd Cavalry Regiment conducted in Grafenwoehr, Hohenfels and the maneuver-rights areas (MRAs) demonstrated

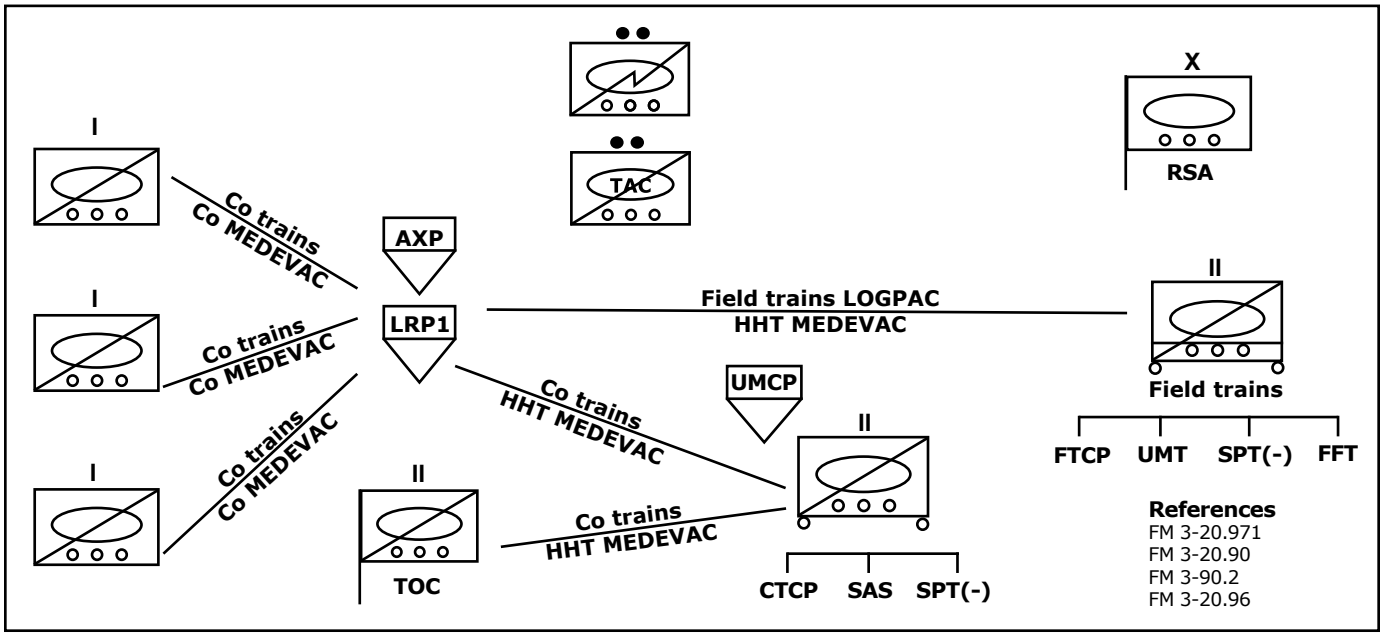


Figure 1. SBCT maneuver battalion concept of support.

the Stryker brigade's logistics MTOE deficiencies.

Following its redeployment from Operation Enduring Freedom in May 2011, 2nd Cavalry Regiment task-organized for ULO training. While the infantry squadrons (1st, 2nd and 3rd) remained pure to the Stryker MTOE, the reconnaissance squadron saw its surveillance troop disbanded[1] and both an engineer troop and anti-armor troop added, which are normally separate regimental assets. The reorganization saw 4/2 Cavalry Regiment grow to become the largest maneuver element in the regiment, with greater and more diverse support requirements than its infantry brethren.

On paper, Stryker maneuver battalions have no organic support assets. Their combat-repair teams (CRTs) reside on the maintenance-troop MTOE, and fuel- and supply-vehicle assets are consolidated in the distribution-troop MTOE. By design, and argued exhaustively by logisticians,[2] Stryker brigade-support battalions (BSBs) cut tailor-made, *ad hoc* logistic-support teams (LSTs) to maneuver battalions for specific mission sets. In steady-state COIN operations, the LST concept usually consists of the maneuver battalion's CRT permanent attachment, a floating amount of distribution assets to meet logistical-package (LOGPAC) needs, and a field feeding team (FFT). This concept met the needs of COIN-employed Stryker brigades but is not the support battalions' preferred method for ULO.

Due to the minimal amount of logistics assets in a Stryker brigade, particularly for fuel distribution (only 14 M978 Heavy Expanded-Mobility Tactical Truck (HEMTT) fuel trucks are on the MTOE),[3] the operational design for the support battalion on paper is to consolidate the preponderance of assets in the brigade-support area (BSA); refine logistics requirements through S-4 and support-operations channels; then distribute Class I (CLI), Class III (CLIII) and Class V (CLV) from the BSA via LOGPACs. This concept of support received refinement from 2nd Cavalry, with the logistics assets pushed down to squadron level for distribution from the squadron individual field trains. This is depicted in the squadron generic concept-of-support diagram (Figure 1).[4]

For maintenance support, the Stryker brigades remain short by MTOE, with only two wreckers per maneuver CRT and inevitably not enough mechanics to fix-forward all deadlined assets. This shortage of assets posed another constraint, as not enough equipment or personnel exist to assign a fully equipped maintenance/recovery section to each troop-sized element. The proposed concept of support, lack of CLIII and CLV distribution assets, and minimal maintenance assets assigned to each squadron posed significant constraints on the support

platoon's formulation and tactical employment.

Designing the support platoon

Familiar to those who trained on ULO before the Global War on Terrorism was initiated, the primary support nodes for a maneuver battalion are the combat trains and field trains. During the winter of 2011-12, the headquarters and headquarters troop (HHT) commander and support-platoon leader organized the sections of the HHT and support platoon to fill out the combat trains and field trains. The design finally settled on for the support platoon broke several traditional norms and required mixing distribution and maintenance assets to achieve the desired endstate.

The platoon started as the recon squadron's CRT equipment and personnel by MTOE; a team of 91L heavy construction-equipment maintainers for support of the engineer troop; and a squad of 88M heavy-vehicle operators and 92F petroleum-vehicle operators with two HEMTT load-handling systems (LHSs) and two HEMTT fuel trucks. These disparate elements transitioned into three distinct sections for tactical employment as seen in the equipment spread (Figure 2). Alpha Section retained the preponderance of the CRT's equipment and personnel for dedicated maintenance.

The forward-repair systems (FRSs), the specialty mechanics (small arms, optics, heavy engineer equipment) and the platoon's sole satellite and Standard Army Maintenance System-Enhanced (SAMS-E) hub resided in this section tactically employed with the squadron field trains. Alpha Section's leadership consisted of the senior Stryker mechanic and maintenance warrant officer.

Bravo Section consisted of the CRT's two wreckers, a contact truck and Class IX parts for quick, forward repairs. Led by the senior wheel mechanic and the motor sergeant/platoon sergeant, Bravo pulled double duty for the platoon. The platoon sergeant was the noncommissioned officer in charge (NCOIC) of the overall combat trains (CRT (-), medics, S-1/S-4), and his medium-tactical-vehicle (MTV)-with-trailer carried one reconnaissance-troop unit basic load of CLV for emergency resupply.

Finally, Charlie Section consisted of the CLI, CLIII and CLV distribution assets for the squadron and resided in the field trains. When deployed to the field, Charlie Section forms the nucleus of the squadron LOGPAC with all troop-supply MTVs attached to this section for supply distribution. The platoon leader, when deployed to the field, primarily organizes the squadron LOGPAC, with the Charlie Section leader[5] acting as the LOGPAC NCOIC.

Not depicted in the figures but crucial during training exercises, the RSS attached an FFT to the squadron field trains. While the permanent attachment of FFTs is common in COIN-deployed Stryker brigades, only temporary attachment is necessary under this concept, as all FFTs need to pool resources to run two garrison dining facilities.

The platoon's design reflects a melding of two different logistics concepts. Before the fielding of FSCs with brigade modularization

K Troop, 4/2 Cavalry, conducts CLIII resupply while training in the Weiden MRA near the German-Czech border in March 2012. Once fully trained, 4/2 Cavalry troops conducted full CLIII and CLV resupply in under 15 minutes, day or night.

Alpha section (field trains): dedicated maintenance/C2

Support/HHT, 4/2 Cav Regiment

Equipment:
- 8 vehicles, 6 trailers
- 2 .50-caliber machineguns
- 1 M240B machinegun
- CLIX parts and POL
- 2 LME, generators
- SAMS-E and VSAT

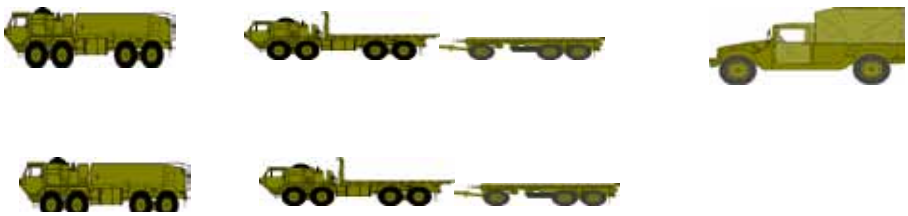
Capability:
- Dedicated maintenance
- Small arms, elec and missile repair
- C2 node for maintenance

Bravo section (combat trains): recovery and repair/emergency resupply

Equipment:
- 5 vehicles, 3 trailers
- 2 .50-caliber machineguns
- 1 M240B machinegun
- CLI and V troop UBL

Capability:
- Expedient repair and recovery
- Emergency resupply of CLI,III,V for troops
- CLIX parts for small repairs

Charlie section (field trains): distribution section resupply



Equipment:
- 5 vehicles, 2 trailers
- 2 .50-caliber machineguns
- 1 M240B machinegun
- Container-handling unit
- 2,500-gallon water hippo
- 10 crops, 1 forklift

Capability:
- Logistics convoy
- CLI and CLIII bulk

TOTAL PAX = 2/15/23 - 40 PAX

Figure 2. Support platoon equipment spread.

in the early 2000s, mechanized units typically had very large headquarters and headquarters companies (HHCs) with separate maintenance and support platoons. These maintenance and support platoons, each led by a seasoned maneuver officer from that battalion, had the ability to task-organize into company-sized support packages, providing the maximum support forward. Of course, now FSCs provide all these functions under a logistics guidon in each armored and infantry BCT maneuver battalion. The Stryker support platoon combines maintenance and support under a maneuver officer, with the motor sergeant wearing a second hat as the platoon sergeant to provide FSC capability within the maneuver headquarters company.

The transition into the platoon's tactical formation from a CRT and small distribution section to its maneuver elements occurs upon deployment to the field and provides three main benefits:

- First, the platoon's task organization seamlessly dovetails with the battalion mission and scheme of maneuver. Clunky cross-attachments and temporary tactical-control (TACON) situations from a support battalion inhibit the timely delivery of support. Leaders read into the battalion scheme of maneuver and internal standard operating procedures facilitated a tremendous amount of flexibility.
- Second, the task organization tailors

maintenance and recovery assets to the Stryker's unique needs and the tactical situation. Maximizing recovery and hasty maintenance assets forward in the combat trains and dedicated (jobs requiring more than two hours) maintenance in the field trains returns combat power to the fight rapidly while preserving critical logistics assets.

- Third, the distro section forming the backbone of a consolidated LOGPAC of all troop-supply vehicles covered the deficiency in supply-distribution platforms found in the support platoon itself. While a heavy formation needs HEMTT vehicles to distribute CLV, an analysis of a Stryker infantry company or reconnaissance-troop ammunition basic load (ABL) demonstrates that it can all be transported on an MTV with trailer.[6]

Further, the LOGPAC that the supply MTVs (each armed with an M240B or M2 .50-caliber machinegun) and support-platoon fuel trucks forms has plenty of protection for convoy operations.

Training successes and failures

The support platoon's field task organization covered all the maneuver battalion's hypothetical logistical needs, but the question remains: how did this formation perform in training?

Fourth Squadron, 2nd Cavalry Regiment's road to the DATE CTC Rotation 13-01 included a tremendous amount of maneuver training and ample opportunities to test the support platoon's task organization. Based out of U.S. Army Garrison Grafenwoehr, the squadron had access to not only the Grafenwoehr Training Area but also the Hohenfels Training Area an hour to the south, and thousands of square kilometers of German MRA located an hour east along the border with the Czech Republic. The MRA afforded the opportunity to train in real German countryside among the population and civilian infrastructure and over doctrinal distances envisioned for Stryker reconnaissance and maneuver operations. An analysis of how each section of the platoon, as well as dedicated maintenance, recovery and distribution performed relative to its design, will flesh out why the support-platoon concept is worthy of further consideration.

The split of CRT assets into dedicated maintenance and recovery sections distributed to the field trains and combat trains respectively encountered three main issues in training: the conduct of repairs close to the forward-line-of-own-troops (FLOT); the placement of CLIX parts relative to the deadline assets; and the evacuation of deadline combat power to the rear for repair. In initial training exercises, the platoon placed one wrecker and one LHS with FRS in both the combat trains and field trains.

The unit discovered that the recovery-section FRS went unused due to how often the combat trains jumped and concealed themselves to avoid enemy detection, while the wrecker in the field trains could not affect the maintenance situation unless it went forward twice daily with the LOGPAC. This led to the reorganization of two wreckers forward, two FRS in the rear. This solution kept the combat trains mobile and maximized recovery assets forward, but it also led to the next issue: that of parts availability and violating the principle of fixing forward.

With only recovery assets and a small amount of shop stock forward, the ability to "pull pack," for example, did not exist in the combat trains. However, the unit found that the fluidity of operations near the FLOT showed that attempting anything but minor repairs forward would quickly overwhelm the number of mechanics on hand, exhaust available parts and compromise the security of the combat trains' site. Thus, a careful selection of CLIX parts situated in the combat trains allowed mechanics to perform jobs that would return most vehicles to the fight immediately while pushing more extensive repairs to the rear.

Of course, what to do with deadlined vehicles needing recovery? The unit found that its best practice entailed the line troop recovering deadlined vehicles to the combat trains/unit maintenance collection point either by themselves or with the help of a wrecker. The vehicles were then evacuated twice daily with the squadron LOGPAC to the field trains for repairs. As combat power came back up, it moved with the LOGPACs forward and rejoined the fight. Wreckers in this cycle moved almost constantly, and the support-platoon sergeant and recovery NCO's expert knowledge proved critical in triaging vehicles for evacuation or repair on-site. The concept succeeded in quickly returning combat power to the fight

The 4/2 Cavalry support platoon LOGPAC conducts training in the Weiden MRA near the German-Czech border in April 2012. The support platoon's extensive training on local roads proved extremely valuable during its DATE rotation in October 2012.

and unburdened line troops and the combat trains from securing long and dedicated repair operations.

The distribution section's, and by extension squadron LOGPACs', experiences in training proved varied and interesting. The heart of all issues the LOGPAC encountered revolved around CLIII bulk (CLIIIB) distribution. An explanation of the LOGPAC's mission cycle fleshes out all the issues and solutions encountered. In training, the unit supported from four to seven company-sized elements at a time, which with only two M978A4 fuel trucks in the platoon proved problematic. The Stryker's rather impressive fuel range (particularly when the 53-gallon fuel capacity is augmented by four five-gallon fuel cans per vehicle) made the situation tenable. Essentially, proven over the course of six squadron-level training events, a Stryker maneuver company would burn between 500 and 700 gallons of fuel a day and thus need CLIIIB resupply once every 24-36 hours.

In regard to support of the squadron, the LOGPAC ran twice daily, resupplying half the squadron in the morning and half in the evening, with troops receiving their hot meal of the day in conjunction with their CLIIIB and CLV resupply.[7] During the DATE rotation, the squadron consisted of six line companies and one HHT, thus an augmentation of one more fuel truck allowed the squadron to maintain its operational tempo of three troops conducting resupply in the morning, three in the evening. Hypothetically simple, the fluidity of ULO tested this operations cycle considerably. Dynamic task organizations during the DATE required the LOGPAC to integrate new supply vehicles and troops into its support plan in stride, while air attacks at times brought the platoon down to one fuel truck. Ultimately, the unit overcame these difficulties by sticking to a stringent LOGPAC schedule.

Distances were such that the LOGPAC would spend one hour in transit from the field trains to logistical resupply points (LRPs), where troop first sergeants would pick up their supply truck with CLI, CLV and a fuel truck. First sergeants had three hours to conduct resupply of their troops in a forward-assembly area, while the support-platoon leader and HHT first sergeant conducted resupply operations for the command nodes. The LOGPAC reformed at the LRP and moved back to the field trains. When constrained to one fuel truck, the support-platoon leader escorted the truck from one troop-assembly area to the next, allowing resupply of all troops and roughly sticking to the three-hours-on-ground time for logistics assets.

It should be noted that the amount of fuel on hand never proved to be an issue, while the number of assets to distribute it was the main constraint. At times, the LOGPAC would emplace a service-station resupply point of CLIIIB and CLV with several troops cycling through the same location. Feasible in setpiece operations (moving from troops in column into a screen, for example), the most realistic training the squadron conducted demonstrated that this concept of resupply was too centralized and not dispersed enough for fluid operations.

After several training events, the 4/2 Cavalry's support platoon proved operationally

flexible and comfortable providing support in this dispersed task organization. Furthermore, at all times the integration of the platoon and its Soldiers into the squadron's operational plan, culture and team atmosphere eliminated the tremendous friction inherit in constantly slicing off assets from the BSB for each individual mission.

Recommendations

The support-platoon concept could serve in place of an FSC with an MTOE adjustment to Stryker maneuver headquarters companies; modification of the BSB MTOE; and a doctrinal review of the Stryker brigade's logistical-support concept:

- First, the addition of the CRT MTOE to its commensurate maneuver battalion HHC would form the backbone of a Stryker support platoon. Furthermore, a distribution section consisting of two LHS systems, three HEMTT fuel trucks[8] and M1151 humvees for the platoon leader and section leader would provide the necessary logistics and protection assets for supply distribution. The MTOE addition of a maneuver officer to lead the platoon would provide more developmental experience for maneuver officers.
- Second, the BSB needs backfill to make up for the assets and Soldiers now in line battalions. The maintenance company would not need more, as the CRTs are already self-sustaining paragraphs of the MTOE. The distribution company, however, would take a significant hit to its overall strength. To backfill the lost fuel-distro assets, the CLIII section could be switched to 5,000-gallon truck-trailer units (over HEMTTs) and thus carry the same amount of bulk fuel with half the Soldiers. The transportation platoon would simply need more LHS systems and Soldiers to backfill, though not a complete replacement of assets moved down to the line.
- Finally, the ***Stryker Brigade Combat Team (SBCT) Logistics Field Manual*** (FM) 4-90.7 would need revision to reflect these changes in MTOE. A different discussion altogether, the current manual assumes the Stryker logistics limitations and lays out overcoming those difficulties through superior situational understanding and a common operating picture (COP) between the BSB and maneuver elements. Furthermore, the FM espouses continually cutting off specialty teams to overcome each individual maintenance or support requirement. The experience of our SBCT in training demonstrates that the level of situational understanding and COP necessary for seamless logistic support in ULO comes only with fusing some logistics assets with the maneuver element at battalion level.

The Army faces a myriad of budget and operational constraints in the near future that may make the addition of FSCs to the SBCT unrealistic. The adoption of this support-platoon concept by MTOE could cover the logistics shortfalls and make the SBCT more logistically independent for future operations.

CPT Andrew Gregory is the brigade assistant operations officer in the Current Operations Section of Headquarters 316th Cavalry Brigade, Fort Benning, GA. His previous assignments include support-platoon leader, HHT and reconnaissance-platoon leader, L Troop, 4th Squadron, 2nd Cavalry Regiment, Vilseck, Germany. He was deployed to Operation Enduring Freedom 2010-11, Kandahar, Afghanistan. CPT Gregory's military schooling includes Armor Basic Officer Leadership Course and Airborne School. He holds a bachelor's of science degree in international relations from the U.S. Military Academy, West Point, NY.

Notes

[1] 2nd Cavalry Regiment MTOEs for the SBCT reconnaissance squadron (WJHKAA) and SBCT BSB (WE35AA), Oct. 17, 2011. The MTOE changes proved very significant for the recon squadron. No longer a reconnaissance, surveillance and target acquisition squadron, the surveillance troop disbanded with its signals-intelligence element, and Shadow Platoon rolled into an enlarged military-intelligence company. The chemical, biological, radiological and nuclear reconnaissance platoon merged onto the organic MTOE of the recon squadron. This left the recon squadron with an HHT and three recon troops.

[2] Butler, Dwayne M. LTC, Bradford, Kenneth C. MAJ and Schwetz, Juliane C. CPT, "Successful Implementation of Logistics Support Teams in an SBCT," ***Army Logistician***, July-August 2008.

[3] From 2011-2012, M978A2 fuel trucks were exchanged for M978A4 versions, so at times the unit had more CLIII assets than it really should have had. Furthermore, the regiment did not have enough personnel to run its organic MTOE, let alone excess vehicles.

[4] 2nd Cavalry Regiment maneuver pamphlet.

[5] The distribution troop intended an 88M30 as the leader of distro assets in each support platoon. Due to personnel shortages, at least in 4/2 Cavalry Regiment, a 19D30 and

then 11B30 held the position through the bulk of the squadron's training. The addition of "line" Soldiers to this element harkened back to pre-FSC support platoons with tankers, scouts and infantrymen filling the holes.

[6] The Stryker maneuver-company MTOE allots an M1083A1 MTV to supply sergeants with an M149 water buffalo. The mortar-section platoon sergeant is allotted an MTV with an M1095 trailer. The ABL for a Stryker maneuver company came out to about 21,000 pounds on 14 pallets, just within the load specifications of an M1083A1 with trailer. The support-platoon sergeant used this configuration in the combat trains to move the emergency CLV for the squadron.

[7] HHT's resupply proved problematic with its forward elements, tactical-operations centers, TAC and combat trains dispersed. The HHT first sergeant and supply sergeant maintained some three dozen fuel cans and normally resupplied these elements with fuel-can exchange, thus freeing up the fuel trucks for resupply of line troops.

[8] Another solution for CLIIIB the unit considered in the abstract: if each Stryker infantry, recon, anti-tank and engineer company had by MTOE a 500-gallon-tank pump unit fixed to an additional M1083A1 MTV with a 92F10 Soldier to run it, the need for HEMTT fuel trucks would drastically decrease while each unit would have the CLIIIB it needed to continue operations.

Acronym Quick-Scan

ABL – ammunition basic load
BCT – brigade combat team
BSA – brigade-support area
BSB – brigade-support battalion
C2 – command and control
CLI – Class I
CLIII – Class III
CLIIIB – Class III (bulk)
CLIX – Class IX
CLV – Class V
CRT – combat-repair team
COIN – counterinsurgency
COP – common operating picture
CTC – combat training center
DATE – decisive-action training environment
FFT – field feeding team
FLOT – forward-line-of-own-troops
FM – field manual
FRS – forward-repair system
FSC – forward-support company
HHC – headquarters and headquarters company
HHT – headquarters and headquarters troop
HEMTT – heavy expanded-mobility tactical truck
LHS – load-handling system
LOGPAC – logistics package
LRP – logistical resupply point
LST – logistic-support team
MRA – maneuver rights area
MTOE – modified table of organization and equipment
MTV – medium tactical vehicle
NCOIC – noncommissioned officer in charge
POL – petroleum, oil and lubricants
RSS – regimental-support squadron
SAMS-E – Standard Army Maintenance System-Enhanced
SBCT – Stryker brigade combat team
TAC, TACON – tactical control
ULO – unified land operations