A Lean, Expeditionary Shop Stock Listing

by 1LT Samuel C. Skillman

For the Soldiers of an armored brigade combat team (ABCT) to achieve the kind of readiness required to fight at a moment's notice, they must opt to streamline sustainment. If not, the burden of it will drag them down.

During deployment in support of Atlantic Resolve, 2nd Battalion, 70th Armor Regiment, learned valuable lessons about streamlining maintenance processes to meet the Army's stated goal of readiness, specifically concerning the shop stock listing (SSL). In January 2017, 2-70 Armor had 857 lines of SSL. Battalions across 2nd ABCT, 1st Infantry Division, all averaged 700-800 lines of shop stock. The prevailing logic for SSL management was "Keep everything! We might need it someday."

Yet an SSL that large is impractical. Organic assets do not support movement of a large SSL or splitting it to support units operating in different locations. Most SSLs have duplicate or useless items across multiple companies, taking up much-needed space. For example, one company had a generator that was for a howitzer, but that unit had no howitzers. Keeping an SSL managed with this philosophy is inefficient and actively prevents the unit from maintaining readiness and tactical maneuverability.

The reason this philosophy has flourished is a fundamental misunderstanding about what SSL does for a company. The fundamental purpose of an SSL is not to immediately fix everything in a company that might break someday. Instead, the SSL's purpose is to solve most vehicle breakdowns quickly so companies can accomplish the mission.

To do this, the SSL should be lean, efficient and deliberately managed. The SSL must be limited by usefulness and space available for transport and storage. It should be comprised of three groups of items: deadlining items; low-reliability parts and diagnostic spares. These items can be determined by asking the following three questions:

- **Will this part bring up a vehicle right now?** The SSL should consist of items that address major deadlining faults like generators and starters. This question eliminates minor deficiencies: faults that are inconvenient but not deadlining like heaters or mirrors. These type of faults can wait for resupply without affecting the mission.

- **How often does this part break?** The SSL needs to be customized for the fleet of vehicles it serves and the maintenance trends those vehicles show. We found that items like solenoids and generator shafts break at an astounding rate in our tanks during field operations. This demand analysis prompted us to add these items immediately to SSL.

- **Can it be taken for next-level repair locally?** For tanks and Bradleys, line-replaceable units (LRU) are computer units that are the heart of the vehicles' electrical systems. They are the common culprits for vehicle breakdowns. They can be taken for next-level repair within the brigade instead of being replaced. Therefore, our SSL contains diagnostic spares for these parts so the vehicle can continue the mission with the spare while the LRU is fixed.

Under previous management procedures during Exercise Allied Spirit VII, 2-70 Armor was unable to move all its SSL into the training area. Instead, it was forced to take a cross-section of parts and was ineffective in maintaining the fleet when resupply was unsuccessful. The unit was also not able to split the SSL to support a company detached to another battalion.

These issues underlined a major failure in our bloated SSL. To be effective and maneuverable on the battlefield, the SSL was cut down to what the company could carry – from 170 lines per company to 50. At 50 to 60 lines per company, commanders and maintenance managers can scrutinize all parts on the SSL and make decisions to improve the effectiveness of repair capabilities. Each company can also move independently from support units with organic equipment to transport the SSL. This allows a company to execute a deployment-readiness exercise and be prepared to deploy anywhere in the world while still maintaining the kind of combat power that wins wars all over the globe.

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Acronym Quick-Scan
ABCT – armored brigade combat team
LRU – line-replaceable units
SSL – shop stock listing