

Reverse Logistics Operations in Afghanistan

While easy to overlook and often difficult to implement, reverse logistics operations are key to maintaining efficient living and work areas at combat outposts and forward operating bases.

By Captain Christopher A. Donnahoe



After 10 years at war in Afghanistan, many Soldiers agree that logisticians are phenomenal at pushing “beans and bullets” and other supplies needed for force sustainment. With the force surge in Afghanistan, the amount of supplies pushed forward from each brigade combat team is astronomical, estimated at approximately 1 million tons of supplies per month. Since such a significant amount of supplies is pushed to the small combat outposts (COPs), one might wonder what happens to the residue and unserviceable equipment. Many units are burdened by the question of how to dispose of equipment, such as unserviceable refrigerators, heating and air-conditioning units, air compressors, and even battle-damaged vehicles. The method used to properly dispose of these materials is reverse logistics.

Reverse logistics systems are vital to the proper removal and disposal of residue and unserviceable items. Reverse logistics is a doctrinal supply chain term describing how byproducts and other materials are returned through the original supply chain in order to recycle, refurbish, or ensure proper disposal. Army Regulation 711-7, Supply Chain Management, describes reverse logistics as “the process by which a product is returned to some point in the distribution system for credit, reworking, recouping, restocking, or disposal.”

The intent of this article is to highlight the reverse logistics processes currently used and explain why they deserve more attention by logisticians throughout the Army and all of the other organizations directly involved with the supply chain in Afghanistan.

Important but Difficult to Execute

The commercial retail industry is increasingly focusing on reverse logistics in order to trim costs, drive profit, and increase customer service. The Reverse Logistics Executive Council defines reverse logistics as “the process of planning, implementing, and controlling the efficient, cost effective flow of raw materials, in-process inventory, finished goods and related information from the point of consumption to the point of origin for the purpose of recapturing value or proper disposal.” From this definition, we can clearly relate this to Army logistics and how we can begin setting up the systems to facilitate retrograde operations. [The Reverse Logistics Executive Council is a nonprofit professional organization of manufacturers, retailers, and academicians whose purpose is to develop industry standards for best practices for reducing costs for consumers, retailers, and manufacturers.]

Some benefits of reverse logistics are a cleaner environment and recycling or reallocation and potential financial recovery of equipment. According to the Defense Logistics Agency (DLA) website, in fiscal year 2008, the DLA disposition services served more than 56,000 military units and received more than 3.5 million items. Within disposition services, DLA first offers the items to the Department of Defense (DOD) for reutilization. This amounted to \$2.2 billion worth of property being reutilized in the system in fiscal year 2008.

If reverse logistics is so important, why is it not focused on



A transportation platoon from D Company, 1st Battalion, 506th Infantry Regiment, loads retrograde items for transport. Through detailed coordination, retrograde operations can be conducted without hindering the unit's ability to provide support. (Photos by CPT Christopher A. Donnahoe)



Before a means to remove scrap items was established, items would pile up, decreasing work space and creating a hazardous work environment.

more? Quite simply, it is not the focus because it does not concern moving “beans and bullets” to the warfighters on the front lines. The warfighter’s mission in Afghanistan is to take the fight to the enemy. The logistician must ensure that the warfighters have the supplies needed to accomplish their mission.

With daily logistics pushes to the outlying COPs, air and ground assets are routinely maxed out. Therefore, dedicated retrograde channels may not be effectively included in the overall logistics plan. However, this does not mean that reverse logistics needs to stop and allow the materials to accumulate to unmanageable stockpiles. In fact, this is exactly why logisticians must effectively manage their current supply chains: to minimize the amount of retrograde items collecting at all locations throughout the battlespace.

It is often said that we have not been in Afghanistan for 10 years; we have been there for a year 10 different times. This statement illustrates that continuity is a problem in logistics operations and that we should consider continuity-based systems with all operations.

Organization Improves Achievability

As the law of gravity says what goes up must come down, the law of logistics could state what goes out must come back. This sounds simple, right? With a well organized plan, it can be this simple. Although you may not be able to retrograde all items in one big push as you might wish, moving a little at a time is more effective than moving nothing at all. These small pushes, usually through rotary-wing operations, are regularly called “opportunity moves.”

Establishing retrograde lanes at the helicopter landing



zones has proven to be a great catalyst for these movements. Using helicopter landing zone retrograde lanes may assist units in two ways. First, it identifies requirements for retrograde, enabling units to be more proactive in submitting air movement requests and improving their visibility of materiel movement for planning. Next, it provides units with an organized management tool to ensure that no aircraft returns empty and wastes valuable resources.

Planning for Reverse Logistics

In the same way that units report their requirements for supply, they also should report their requirements for retrograde. The requirements then become the logistician’s goals, and systems are set up in order to meet the requirements. As supplies are pushed out to the COPs, by either ground or air, planning must take place in order to meet forward and reverse logistics goals. For example, if an airframe returns empty, then neither goal has been met and the logistician’s problem at the COP continues to grow. Coordination is paramount in meeting both goals and more likely even more coordination is required in order to perform retrograde operations. Warfighters are focused on their mission, therefore a dedicated reverse logistician may be required in order to maximize returns and facilitate coordination of such operations.

During Operation Enduring Freedom 10–11, we at Task Force Currahee established the following goals in order to



When retrograde items are identified and a transportation movement request is submitted, the transportation unit can ensure that forward and reverse logistics requirements can be fulfilled. In this photo, Soldiers secure retrograde items for transport.

meet requirements for retrograde:

- Properly dispose of all scrap metal and wood.
- Properly dispose of all DLA disposal items.
- Properly dispose of all hazardous materials.

These goals were identified with the intent of setting up self-sustaining systems that would last well after our tour ended in order to ensure continuous operations.

Identifying Excess Items and Making a Plan

As the reverse logistics officer for Task Force Currahee, I visited many locations throughout Regional Command East to help units identify items for retrograde and to teach them how to package the items for movement and submit air movement requests. The warfighters were busy with their mission, and many did not know what movement assets were available to them, let alone how to take full advantage of these assets. I continually revisited these sites to understand their problems with the systems and work with them to improve the processes in order to make them as simple as possible. Removing the excess items helped improve the units' pride and ensure that hazardous working environments were minimized.

The COPs identified a buildup of scrap metal, unserviceable equipment, and battle-damaged equipment. Movement from COPs to hubs, like Forward Operating Base (FOB) Sharana, Afghanistan, was limited because of the mountainous terrain, enemy activity, and limited



As units began to use the retrograde systems, they were able to better organize their work areas and increase their available workspace.

assets. Retrograde movement was a slow process that had to be managed daily in order to minimize the buildup of unserviceable items and maximize asset use as much as possible.

With 22 COPs in the battlespace, the amounts of retrograde items to consider were significant. Without a clear and defined process to facilitate the movement from the COPs to the hub and onward, the hub would inevitably become a dumping ground. Thus, by having defined the goals and established self-sustaining systems at the hub, we eliminated the problem before it became overbearing. We addressed our goal of properly disposing of scrap metal and wood by taking our problem to the contractors on FOB Sharana and asking how they could help. The contractor placed 10-foot containers in the unit areas and emptied them daily.

Through the contractor, we provided the units with a catalyst for cleaning up their areas and mitigated the potential for units to improperly dispose of equipment away from their areas. This system exceeded our expectations in the first 2 weeks of service with 20 strategically positioned containers removing more than 150,000 pounds of materials.

Getting Materials to Bagram Airfield

To dispose of all unserviceable items that were not required to be turned in to the supply support activity, we first had to identify how to properly dispose of these items. Since no system was set up on FOB Sharana, we had to create a system that would bridge the gap to the nearest disposal center at Bagram Airfield (BAF). With more than 100 miles between the locations, we had to identify a secure, no-fail way to move the materials to BAF.



A transportation platoon from D Company, 1st Battalion, 506th Infantry Regiment, uses the well-organized retrograde lanes at a forward operating base to ensure that no truck returns empty, thus increasing transportation asset efficiency and removing the growing amount of retrograde items.

The DLA personnel at BAF informed us of the items that would be accepted, the configuration in which the items would be accepted, and the proper paperwork needed.

We then worked with the Surface Deployment and Distribution Command to allocate containers to transport the materials to BAF. The containers were placed in the central receiving and shipping point yard in a dedicated retrograde lane in order to facilitate loading them onto combat sustainment support battalion (CSSB) convoys traveling to BAF.

Coordination with the CSSB is imperative and should be initiated as soon as possible in order for the CSSB to coordinate assets to backhaul the container(s). In some cases, items do not require an escort for transport to BAF DLA; these containers may be loaded onto host-nation trucks and sent directly.

Although we allocated many containers directly to the unit for mass loading, units normally scheduled turn-in appointments during which the unit's items were loaded in the central receiving and shipping point yard, relieving the unit of any further coordination. To determine if we could push the containers to a location other than BAF, we addressed movement back to Kuwait. However, we discredited this idea because we would lose security on the container and Kuwait services were inundated with materiel from downsizing operations in Iraq.

Hazardous Materials Retrograde

To address our goal to dispose of all hazardous materials (HAZMAT), we worked closely with the contracted FOB Sharana HAZMAT team to better understand how

we could facilitate the turn-in procedures for units. After much discussion with units on the FOB, it was clear that an education process had to be set up.

With that in mind, we developed a training class that would address the HAZMAT turn-in process and inform units of the systems in place to assist them with proper disposal of their retrograde items. After five classes, we learned that units had been waiting for this for a long time. Soldiers do not like their areas to become hazardous nor unkempt; moreover, they want them to be organized and neat. Thus, we had great success in setting up systems to facilitate cleaning up their areas and improving their positions.

The following are key points and recommendations identified throughout the process of setting up systems for reverse logistics operations:

- ❑ Assign a reverse logistics officer-in-charge and non-commissioned officer-in-charge.
- ❑ Train to understand the reverse logistics process.
- ❑ Assess the FOB for scrap wood and metal bins, and emplace them throughout the FOB.
- ❑ Travel to COPs to assist units in establishing systems for reverse logistics operations.
- ❑ Train all tenant units on DLA and HAZMAT turn-in procedures.

As logisticians, we must consider all phases of moving supplies and materials to the warfighter and ensure that all missions are executed by setting up systems and coordinating operations that will facilitate both forward and reverse logistics. In doing so, we will stop recreating the wheel year after year and ensure that we have a positive effect on all of our locations and on the Afghan environment. Furthermore, we must ensure that items that may be used elsewhere are effectively reallocated; the impact will be huge. All it takes is a conscientious mind to plan, coordinate, and maximize the total supply chain. In doing so, we will improve the quality of life for our Soldiers, promote sustainability for the battlespace, and prepare follow-on units for success with a functional sustainment system and operating bases that are free of clutter.

The actions taken to establish reverse logistics described in this article are the minimum needed to get the program established. The more detailed the plan, the more efficient the logistics operations will be.

Captain Christopher Adrian Donnahoe is the S-4 for 1st Space Battalion, 1st Space Brigade, at Peterson Air Force Base, Colorado. He was deployed to Forward Operating Base Sharana, Afghanistan, with Task Force Maintaineer as the reverse logistics officer when he wrote this article. He has a bachelor's degree in business management from Arizona State University and is currently pursuing a master's degree in logistics from Trident University International.