

# Rethinking Legacy and Functional Logistics

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A lot of thought has been given recently to the concept of multifunctional logistics, but not necessarily to functional logistics. Many assume that functional logistics comprises the three separate logistics branches—Ordnance, Quartermaster, and Transportation. But those titles represent legacy more than function. In this context, function is an activity reflected in the three branches by differences in technologies, scope of activities, and thought processes.

As the Army has expanded, so has the need for specialization and functional expertise. But did the branches evolve efficiently, and if not, what is a more efficient organization of logistics?

## Ordnance Branch Legacy

The Ordnance Corps was created first in 1812 for the procurement, research, and maintenance of ordnance materiel. Then named the Ordnance Department, it managed armories and arsenals and eventually gained responsibility for handling ammunition. With the introduction of trucks into the Army's inventory during World War I, the branch picked up the maintenance function since it already performed maintenance and repair on artillery pieces and carriages.

After World War II, Ordnance gained responsibility for ordnance disposal, which evolved into explosive ordnance disposal (EOD). In 1962, the Army Materiel Command assumed responsibility for many Ordnance Branch functions, such as research, development, procurement, production, storage, and technical intelligence, leaving the branch with

the responsibility for only ammunition, maintenance, and EOD.

## Quartermaster Branch Legacy

The Quartermaster Department existed during the American Revolution and managed supplies, billeting, and transportation. Line officers were detailed to duties as quartermasters until Quartermaster became a separate branch of the Army in 1912.

Its current service functions except for parachute rigging and mortuary affairs were acquired by the time of the Civil War. After the Civil War, the branch received responsibility for graves registration, which evolved into mortuary affairs. During World War II, it received responsibility for parachute rigging. So both Quartermaster and Ordnance involved managing supplies and providing services to the line.

## Transportation Branch Legacy

Before 1942, military transportation was managed by two branches. The Quartermaster Department handled wheeled vehicles, water transportation, and ports of embarkation and debarkation, and the Engineer Corps managed rail and harbor craft. Supplies, services, and transportation were managed separately by class of supply, individual service, and mode of transportation.

In 1899, after the invasion of Cuba, the Army created the Army Transportation Service to operate ports of embarkation and debarkation and manage the sea-going fleet—the beginning of a new thought process. Almost 20 years later, the expansion and complexity of transportation during World War I revealed the need for a single manager to syn-

chronize all military transportation. This was a radical way of thinking. Instead of managing transportation by mode, the Army would connect the dots from end to end.

The Transportation Corps was created in 1942 primarily to manage traffic, and it picked up the railroad and harbor craft units from the Engineer Corps but not the assault landing craft units. It took over responsibility for the port units and ships of the Army Transportation Service from the Quartermaster Corps but not the trucks and amphibious truck units.

Basically, the Engineer and Quartermaster Corps kept the more interesting modes of transportation and gave up what they did not want. So the Transportation Corps was created to manage transportation from the point of origin to the final destination. But, to effectively synchronize transportation from end to end, the Army needed to turn over the remaining modes of transportation to the new branch.

In 1946, after World War II, the Quartermaster Corps was directed to turn over the truck and amphibious truck units to the Transportation Corps, and in 1954, after the Korean War, the Engineer Corps was directed to turn over its landing craft. So the synchronizer of transportation also controlled almost all modes of theater-level transportation.

Army aviation had a stint under the Transportation Corps from 1950 to 1983, but the addition of machine guns and rockets on helicopters changed the Army's perception of helicopters from flying trucks to weapon platforms, which led to the creation of the Army

Aviation Branch.

By 1983 the three logistics branches had evolved into the functions they provide today, each reflecting its individual legacy. The scope of activity for supplies was divided into 10 classes spread out among Quartermaster, Ordnance, and the Medical Corps. The scope of services included the same branches but also included the Finance and Adjutant General Corps. The Transportation Corps seemed the only logistics branch aligned along a single function.

### **Multifunctional Theater Logistics**

Multifunctional theater logistics organizations originated in World War I and evolved into permanent commands during the Korean War. The Services of Supply provided theater logistics for the American Expeditionary Forces during World War I, but World War II saw the greatest proliferation of logistics units in the history of the Army.

Each branch provided units under the control of a single logistics structure at the theater level and managed its units at the group level. During the Korean War, multifunctional logistics was pushed down to the port level and the 2nd Logistical Command in Pusan, Korea, became the first permanent multifunctional logistics headquarters.

The 1st Logistical Command in Saigon would later provide command and control for all Army logistics units during the Vietnam War and establish subordinate support commands to manage multifunctional logistics at the subordinate ports.

During Operation Desert Storm, the Army created forward support battalions, pushing the multifunctional structure even further inside the combat divisions. This process of managing branch organizations at the battalion level came to fruition with the reorganization to multifunctional organizations during the modular transformation and with the creation of sustainment commands, sustainment brigades, and combat sustainment support battalions.

As the Army embraced modularity in the 21st century, it created sustainment organizations with multifunctional capabilities above the combat brigade level.

### **Functional Logistics**

So what is functional logistics? If we start with the branches, we find that the Ordnance Corps has responsibility for ammunition (a class of supply), maintenance (a service) and EOD (disposal of ammunition).

The Quartermaster Corps has responsibility for managing five of the 10 classes of supply, and service functions such as food service, laundry and bath, parachute rigging, and mortuary affairs.

The Transportation Corps came in late, so it only picked up one function—transportation. It does not control aerial delivery, which still belongs to the Quartermaster Corps. Using the three branches as a rule, Army logistics can be reduced into three basic functions: supply, services, and transportation.

So a difference has evolved between branch and function. Based on the three functions of logistics, the Ordnance and Quartermaster Corps are not aligned by function but instead by legacy. Since they have both service and supply functions, they have more readily embraced multifunctional logistics. Only the Transportation Corps is purely functionally aligned, which has made it more resistant to becoming multifunctional for fear of losing its functional expertise.

### **Efficiency**

While it would be a step in the right direction, realigning logistics along three functional lines is still not the most efficient alignment. For example, the civilian industry aligns logistics horizontally and vertically for better efficiency. In vertical alignment, or supply chain management, a company owns the warehouses as well as the trucks, thus reducing competition, redundancy, and cost. Vertical alignment of logistics in the

Army would include distribution.

The Army's current distribution methods consist of 11 functions, three of which belong to Quartermaster and eight that belong to Transportation. To consolidate the functions operationally, the Army has integrated both branches into the Military Surface Deployment and Distribution Command, which has responsibility for door-to-door, strategic-to-operational distribution and deployment.

The Army has also created theater sustainment commands, expeditionary sustainment commands, and sustainment brigades. These organizations are all a combination of the different branches at the company and battalion levels and, therefore, still do not operate with a single, cohesive thought process.

According to supply chain management principles, the participants should work off of each other rather than against each other. Consequently, redundancy exists at the operational level of logistics because of the different thought processes of the separate branches.

For example, a shipping and receiving point was formed at the corps distribution center at Logistics Support Activity Anaconda, Iraq. The Quartermaster-managed supply support activity (SSA) operating the yard focused on accountability and proper requisitions, which resulted in unwanted delays. In 2003, a Transportation-managed cargo transfer company began arranging supplies by destination instead of by supply line number and the result was expedited cargo to the customer.

By 2005, the 1st Corps Support Command inherited and refined the process, coined the term central receiving and shipping point (CRSP) and exported the CRSP concept throughout its subordinate logistics hubs in Iraq.

The SSA and CRSP are similar in function, but they are products of their branch's thought processes. At the end of the day, a quartermaster

wants to see everything accounted for and organized in its proper place, while a transporter wants to see the yard cleared.

A single mindset would reduce redundancy and friction. Like the Military Surface Deployment and Distribution Command at the strategic level, realigning all the distribution functions into a single distribution management structure at the operational level would improve efficiency because materiel could be tracked from the warehouse to the customer. That could reduce logistics to two functions: distribution and services.

### The Logistics Corps

The Logistics Corps was created in 2007. Currently the Ordnance, Quartermaster, and Transportation Branches exist only at the enlisted, warrant officer, and lieutenant levels. Under the umbrella of the Logistics Corps, the noncommissioned and warrant officers are considered the functional experts, so their training remains specialized, but officer training focuses on management.

Officers join the Logistics Corps only after completing the Combined Logistics Captains Career Course. But in reality, the Army assigns the vast majority of the lieutenants to multifunctional assignments, and it is not managing the lieutenants by their primary branches.

It would make sense to consolidate the three logistics Basic Officer Leader Courses into a single course with lieutenants separating only for branch-specific training according to their next assignments. Although officer education includes common core logistics, the Army still needs officer education for functional—not branch—specializations.

### Integrators and Functional Experts

The evolution of Army logistics has followed a varied path that has adequately sustained the Army throughout two centuries of wars. Although that path has trended more toward multifunctional logistics, the Army cannot afford to fail in certain areas,

such as ports of embarkation and debarkation and joint logistics over-the-shore (JLOTS).

A deploying Army cannot afford any problems in the areas where the flow of units and equipment funnels through a small node. Officers have no time to learn JLOTS or port opening during the peak flow into and out of a theater of operations. Any problems would delay deployment, sustainment, and even retrograde. Consequently, some logistics operations do not allow as great a margin of error as others do.

Throughout history, the great logisticians were those who understood how all the pieces fit together. For example, Lt. Gen. Joseph M. Heiser, Jr. was considered the smartest logistician in Vietnam, having commanded the 1st Logistical Command and authored two books on logistics during the Vietnam War. But he needed a functional expert in motor transportation like Col. Joseph Bellino, commander of the 8th Transportation Group, to champion a solution for convoy security. History teaches that while there is a need for great integrators, there also remains a need for functional experts.

The trend with modularity is to do more with less, which demands greater efficiency. It is clear the three original logistics branches are not completely aligned by function; some branches have maintained certain functions purely because of legacy. With the need for multifunctional integrators and functional experts, it would make more sense to realign the original three branches by the functions of service, supply, and transportation.

Out of a sense of self-preservation, however, no branch will likely volunteer to give up any legacy. Restructuring usually results from outside pressure during times of fiscal austerity. In such times, Army logisticians have to rethink the way they do business.

To improve efficiency, the Logistics Corps should realign into two

functional areas: distribution and service. Distribution would combine the three quartermaster and eight transportation functions, and the service function could be a catch-all for everything else.

Ordnance should turn EOD over to the engineers, since EOD's main focus has shifted to improvised explosive devices rather than ammunition disposal. Realigning along single, cohesive thought processes would then reduce specialized training to just two functions—unfortunately, at the loss of branch identity.

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