

Without supplies neither a soldier nor a general is good for anything.

Clearchus of Sparta Speech to the Greek Army 401 B.C.

Key to Victory. Old Clearchus certainly knew whereof he spoke. History relates numerous instances where entire armies were lost (or nearly lost) when their supplies ran out. Alexander the Great managed to get himself cut off from his naval lifeline while campaigning in 327 B.C. Forced to undertake a desperate 300-mile trek through what is now southern Iraq, he eventually saw as much as three-quarters of his Macedonian army swallowed up by the shifting sands of the Gedrosian desert.

Fast forward 2,000 years to the American Revolution where a similar catastrophe completely undid a less capable British commander. "Gentleman Johnny" Burgoyne found himself isolated at the end of a fractured supply line. Faced with a starve-or-

fight situation at the battle of Saratoga, NY, he wound up surrendering his entire force to the American patriots. Add to that the image of Napoleon's *Grande Armee* dying en masse on their forlorn retreat from Moscow in 1812. Or French paratroopers in the spring of 1954, casting agonizing glances toward the skies over Dien Bien Phu, praying for signs of relief in Vietnam. All are painful reminders that without needed supplies an army is no good for anything.

Confederate General Nathan B. Forrest is credited with having given us a wonderfully succinct definition of military supply operations. He simply called it "gittin' stuff." Of course, there is nothing simple about it. It is a laborious, often painstaking process that entails at least three separate acts: procuring the necessary items, storing them until ready for use, and finally distributing the supplies among the soldiers or user units for which they are intended. Implied too is some form of requisitioning technique, along with proper accounting procedures, various maintenance considerations, and much more for a supply system to work effectively. However,

when that system fails to work or becomes seriously threatened, or undermined, as the preceding examples illustrate, the results can be fatal.

In the United States Army it has always been one of the primary missions of the Quartermaster Corps to provide the supplies that individual soldiers need most to survive in the field. It is no accident that the image of the *Key* is so prominently displayed in the Corps' regimental insignia. It symbolizes the traditional "keys to the storehouse." Other missions have

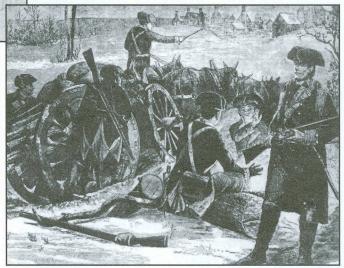
come and gone, but the role of Quartermaster as chief supply master for the Army has remained fixed throughout, from the Revolutionary Era to the present. Fixed but not unchanged. Indeed the scope, scale and the overall way in which the Corps has carried out its supply mission have changed enormously over the past two-and-a-quarter centuries.

Revolutionary Beginnings. General George Washington had ample reason to complain, as he so often did, of the Continental Army's flawed supply system during the American Revolution. Chronic shortages led to widespread hardship throughout the war. Of their retreat from New York in November 1776, for instance, one of his sergeants wrote that "our soldiers had *no* shoes to wair (sic); was obliged to lace on their feet the hide of the cattle we had kill'd the day before." Similarly, those who trudged over ice and snow-covered roads on Christmas Eve 1776 to win the battle of Trenton, NJ, were still wearing summer clothes, and many were without shoes. Even worse shortages occurred the

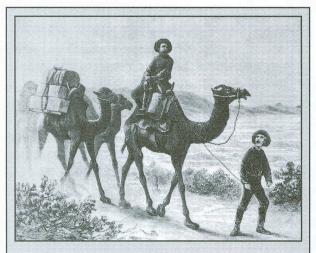
following winter at Valley Forge, PA, where bloody footprints were again seen in the snow and where the mournful cry of "No meat! No meat!" was heard echoing throughout the camp. Yet again, even worse, at Morristown, NJ, a year later. All telling evidence of a supply system that refused to work.

Some of the problems were unavoidable. Since the colonies were not as yet a manufacturing country, many finished products (such as cloth for clothes and blankets, and canvas for tents) had largely to be imported. Which was both risky and costly. Money indeed added to the patriots' logistics woes throughout the war. There was never enough of it to ensure the purchase of adequate supplies. Congress' attempts to print and allocate more money only fueled inflation and led to devaluation of Continental currency. This rendered farmers, shopkeepers and artisans all the more reluctant to sell to Army supply agents.

Even when agents succeeded in acquiring needed goods – through direct purchases, contracting, state



quotas, foraging, impressments and the like – they faced no less a burden with efforts to store and distribute them. The Quartermaster General's Department in the Revolution had neither the organization nor the personnel needed to effect proper storage of supplies. Nathanael Greene, as Quartermaster General, created a series of supply magazines (mostly for temporary storage of food and forage) that served as a "line of communication" and



In the 1850s a line of isolated forts protecting the western frontier stretched across the Great American Desert. Often separated by hundreds of miles, these farflung outposts were connected by neither navigable streams nor practical roads.

It was generally felt that an animal that could move swiftly, pack a heavy load for long distances and live off the land would be the answer to the problem of providing a line of supply and communications between forts. The solution lay in pack mules ... or possibly camels.

The suggestion of importing camels for servicing military outposts was given strong support by Secretary of War Jefferson Davis in 1853. In 1856, 75 camels were landed in Indianola, Texas. With patience, the Army learned to cope with the animal and its harness. Subsequent expeditions from Texas to California proved the camels could travel every day twice as far as mules, while packing a heavy load.

Although the camel experiment weathered every major test, it was interrupted by the Civil War and eventually abandoned when the first transcontinental railroad became a reality.

Courtesy of the US Army Quartermaster Museum

allowed Washington's army to move more effectively in the wake of Valley Forge. But these hardly qualified as well-run *depots*, which is what the Army really needed.

Distribution remained the single most vexing problem for Revolutionary Era logisticians. The Quartermaster General and his deputies in the field contracted with civilian agents and wagoners to move supplies from place to place. Goods typically went from agent to agent, until finally reaching the hands of an issuing officer in uniform, then to a Regimental Quartermaster Sergeant who actually disbursed the goods with a small group of detailed soldiers from the line. It was a tenuous process at best. With little means for control or careful supervision, distribution was subject to vast amounts of what today would be characterized as "waste, fraud and abuse." All too often wagoners absconded, or left supplies along the roads. Clothes were at times deposited in barns under the supposed care of private individuals – there to be forgotten, abandoned, then rediscovered months later, all mildewed and rotting.

While it cannot be said that supply inadequacies resulted directly in patriot defeats on the battlefield, such shortages placed a severe restriction on what Washington and others might have wanted to do. In fact proposed campaigns had to be postponed or put off indefinitely for want of needed clothes, food, arms, and especially wagons and other means of transportation. Certainly the soldiers themselves suffered unduly because of those shortages.

Reform and Reorganization. The many lessons that might have been learned from supply failures in the Revolution were all but lost in the decades that followed. Colonel Josiah Harmar's and General Arthur St. Clair's ill-fated expeditions against the Indians of the Old Northwest in 1790-91 both failed miserably, in part because of monumental supply shortages. One historian aptly described the civilian contractors and supply agents at that time as "venal rogues, without conscience, who would sell a soldier's life like a pound of flour." It took nearly another two decades, until after the War of 1812, for the many repeated calls for reform to finally take root.

In 1818 Congress established a permanent Quartermaster Department in Washington, DC, with Brigadier General Thomas Sidney Jesup as Quartermaster General. From that point on, supply operations in the United States Army took a decided turn for the better. Jesup immediately set about defining the principles of a well-run supply system. He also drafted new rules and regulations for more effective movement of goods and personnel, and for

much stricter accountability on the part of the officers and civilians charged with carrying out Quartermaster operations. Economy, efficiency and accountability, as Jesup well knew, were the things most lacking in the supply system of old. Moreover, when put to the test in the ensuing four

decades – notably in the Seminole War (1835-42), the Mexican War (1846-48) and various frontier expeditions in the late Antebellum Period – Jesup ultimately succeeded where others had failed.

Civil War Supply. When the Civil War began in the spring of 1861, the Union army quickly expanded from a few thousand to nearly a half million soldiers – all of

whom looked to the Quartermaster Department for supplies and equipment. As Lincoln's Quartermaster General, Major General Montgomery C. Meigs invariably receives high marks from professional historians for his skillful handling of wartime supply operations.

The Army looked to the major urban and industrial hubs, from Chicago, St. Louis and Cincinnati in the west, to Washington, Baltimore,

New York and Boston in the east – and to the various depots established at each of these locations (to the so-called "army behind the army") to procure or manufacture the ever-growing list of supply items needed by a modern force in the field. New technology in the form of telegraphs and steam-powered ships and locomotives allowed for long distance logistics communication and more effective distribution of supplies.





The Civil War indeed saw the introduction of a full-fledged, well-organized, logistics supply system running from "factory to foxhole" (as it might be described in today's terms). Items such as shoes, apparel, tents, leather goods, ambulances and wagon wheels left the factories and were deposited in huge area base depots. From there they moved

by ship or train to still larger advance depots in or near the main theaters of operations that allowed armies to act independently from the base area. The largest advance depot for the Union Army was City Point (present-day Hopewell, VA,) which was used to sustain the Armies of the James and the Potomac for the last nine months of the

war. With the exception of City Point and a few other major depots that were run by colonels and lieutenant colonels, the job of Depot Commander usually fell to a Quartermaster captain, whose responsibilities far outweighed what the pay grade would suggest. *Temporary depots*, landings, railroad sidings and open storage dumps – all purposefully located at convenient points for final delivery or pick up by user units – formed the last link in the Civil War supply chain.

In spite of the many and varied instances of fraud and corruption that surfaced from time to time, broken contracts, the issuance of shoddy goods and whatnot, and wastage on a sometimes monumental scale – the system overall worked remarkably well. It got even better as the war progressed. General Ulysses Grant, for instance, thought City Point Depot in 1864 the best-organized Quartermaster supply operation ever. As for General Meigs, he could recount only two instances during the entire war – after General

William Rosecrans' defeat at Chickamauga and following the capture of Savannah – when Union supply lines were seriously disrupted, if only for a relatively short time.

Road to Professionalism. The three decades following the Civil War found the Army mainly pulling garrison duty on the

western frontier, while engaged in relatively small-scale Indian campaigns, or stationed at coastal fortifications guarding the country's main harbors. A whole new generation of officers and noncommissioned officers (NCOs) was coming to maturity with very little systematic instruction, and no experience in handling large bodies of men. For Quarter-

masters coming of age at century's end, that meant no formal supply training and no firsthand experience solving the complex problems of logistics support for large units. All that inexperience and lack of training – and *unpreparedness* – found full exposure in 1898, with the sudden outbreak of the Spanish-American War.

The "Splendid Little War," as Secretary of State John Hay once called it, got off to a less than auspicious start at the staging area in Tampa, FL. When the new Depot Commander arrived there in mid-May, he was horrified to discover that no less than 1,000 train cars loaded with supplies were already sidetracked in and about the city. Adding to his woes, the depot had only 5 government-owned wagons and 12 contracted wagons to unload them. Said one account: "Freight was arriving at the rate of 50 cars a day and could be unloaded at the rate of only two or three." Despite such difficulties, the force deployed successfully within a matter of weeks.

However, the mass confusion, crowding and congestion that so marred the embarkation was replicated, in fact made worse, at the point of debarkation in Cuba.

In the months following the Spanish-American War, the Quartermaster Corps, along with the other supply

bureaus had to endure a torrent of both official and unofficial criticism. Cries of inadequate supplies, unhealthy living conditions, Army indifference, wholesale neglect and abuse (and of course "embalmed beef") shall forever be linked to the Cuban enterprise - even though the campaign itself was abundantly successful. Nor did anyone seem to take full note of the

many outstanding supply achievements toward the end of the conflict.

Looking back positively though, the Spanish-American War's many-lamented logistical shortcomings focused long overdue attention on the need for reform. For Quartermaster supply personnel that meant the need for better training, enhanced executive and administrative skills, better foresight and improved planning to avoid the problems of the recent past. In a word, more *professionalism*.





As the new century opened, the Quartermaster General began arguing more insistently the need for a "service corps," meaning uniformed troops specifi-

cally recruited, tested and trained to carry out Quartermaster functions, in lieu of hired civilians and untrained soldiers detailed from the line. It worked. On 24 August 1912, Congress passed an act consolidating three supply bureaus (the Quartermaster, Pay, and Subsistence Departments) into a single Quartermaster Corps. At the same time Congress militarized the new Corps with the

creation of a "service corps" of enlisted men to serve as clerks, engineers, firemen, carpenters, blacksmiths, packers, teamsters and laborers. By 1916 their numbers had expanded to nearly 6,000. This foreshadowed the development of Quartermaster military occupational specialties (MOSs) in the years

ahead and also the transfer of Quartermaster officers and enlisted personnel into permanently organized, separate supply and service type units.

At the start of World War I, there were only four types of Quartermaster field units: bakery, truck, pack, and wagon companies. By the time of the Armistice, some 26 different types of Quartermaster units were

operating in France. Among them were various depot and supply units, each filled with trained personnel and specialized types of equipment. Schools had also opened in both Philadelphia, PA (1910) and Jacksonville, FL (1918) to train Quarter-

masters. There young officers were learning the basic maxims: that "supply is a function of command" and "the impetus of supply is from front to rear."

Fledgling officers and NCOs alike practiced requisitioning and providing supplies, property accountability, inventory procedures, and business management skills.

For sure, General "Black Jack" Pershing had still to contend with a host of major supply difficulties, especially in the hectic early

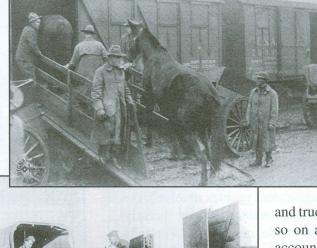
months of the war, as he prepared to send the American Expeditionary Force (AEF) to France. Numerous accounts refer to shipping delays, faulty supplies and equipment, defective goods such as gas masks, wagons without wheels,

and trucks without motors, so on and so forth. Such accounts as the one where a division Quartermaster opened a box of underwear, and was shocked to discover 12 dozen infants' nightshirts!

This all made for valid criticism (not to mention hugely entertaining press copy). However, the real

story lies in the amount of change that had occurred – in Army supply policy, training, techniques, organization and equipment – in such a relatively short period of time. That thousands of trained Quartermaster supply personnel in France (under the







supervision of the Services of Supply (SOS)) had the knowledge and the skill needed to create and sustain a vast array of depots (base, intermediate, and advanced) from the coast to the interior of France; and an equally vast network using trains, trucks and wagons to move supplies forward on a steady basis – speaks volumes as to the role *professionalism* now played in military supply operations in the early 20th Century.

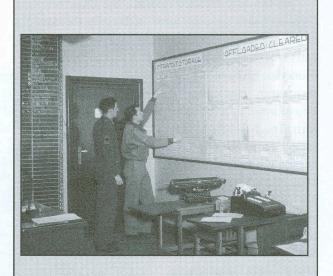
For the first time, the Quartermaster Corps had taken to the field as a militarized organization. The scope and scale of what they accomplished astounded those familiar with supply operations from an earlier era. In testament to which, Major General Johnson Hagood, SOS Commander, later wrote that "in the matter of supply the operation of the Quartermaster Department in the Great War was not only far superior to anything that we had in any previous war, but, as a rule, throughout the A.E.F. the service was more efficient and more satisfactory to the individual than it had been at home in time of peace."

Supply Trends World War II to the Present

Increased Scope, Scale and Reach. In its day World War I was called "The Great War," but then 20 years later came World War II that was greater still, in virtually every respect. Much greater in terms of the number of nations and peoples involved, the demands made on their economies, the greatly enhanced lethality of the many new weapons introduced, and the unprecedented casualties that accrued as a result of their use.

Certainly too the scope and scale of logistics involved was much greater, and far more challenging than ever before. Unlike the First World War, the Second was truly global in nature. US supply lines ultimately ran from New York to North Africa, England, France and Germany; and from San Francisco to Hawaii, Guam, Australia, New Guinea, the Philippines, China and Okinawa.

The amount of Quartermaster supplies it took to sustain an Army of nearly 8 million over four long years was unmatched in world military history. In an







age that rightly proclaimed "Supply Wins Wars!" the numbers speak for themselves: 140,000 tons of Quartermaster supplies arrived and were stored in England in the final months leading up to D-Day. Shortly thereafter, the First Army Quartermaster on the continent in Europe found himself responsible for no less than 70,000 separate Quartermaster items. During the war as a whole, Quartermasters procured

and distributed 505 million pairs of socks, 10 million sleeping bags, and over 17 *billion* pounds of canned vegetables. And the list goes on.

Obviously, compared to World War II, the Korean and Vietnam wars that followed were far more limited engagements. Yet, they reaffirmed the notion that extraordinary amounts of supplies are needed to field sizable forces in the last half of the 20th Century. In Korea, for instance, the Eighth Army's supplies included such things as 1.3 million wool undershirts, 430,000 field jackets, 300,000 pairs of insulated rubber boots, and 90,000 tent stoves. Cargo amounting to more than 500,000 tons of material of all classes passed through the San Francisco Port of Embarkation in August alone, thus

approximating the monthly tonnage processed through that same facility during the peak years of World War II.

Once the logistics buildup in Vietnam had gotten into full swing by 1965-66, more than 150,000 tons of supplies were offloaded monthly at the port of Qui Nhon, another 200,000 tons at Cam Ranh Bay. Further south, more than 300,000 tons monthly were offloaded at the port of Saigon, which soon became

one of the busiest port cities in the world. By then the First Logistical Command in Vietnam had a stock list of over 140,000 supply and maintenance items.

As for the Persian Gulf War that concluded little over a decade ago, that trend toward long-distance logistics and mega-amounts of supplies continued. During the first six months of *Operation Desert*

Shield, 296,000 soldiers deployed to the region, along with 2.3 million short tons of equipment and supplies. Over 90 percent of the latter was transported by sealift. By comparison, 1.6 millions tons were shipped to Korea in a similar period and 1.4 million tons to Vietnam.

Personnel Development and Training. World War I saw the beginnings of a classification program, as skilled soldiers and technicians were trained for service overseas. The MOSs we know today had their real start in World War II. The Dictionary of Quartermaster Enlisted Occupational Skills published in June 1942 lists a total of 125 separate MOSs, generally divided into two

categories: Motor and Transportation specialists and Supply and Service specialists. Each of the nearly 20 supply-related fields had its own three-digit designation. For instance, a Supply Clerk (323) was trained to maintain stock records, conduct inventories, understand military specifications, inventory procedures and so on. An Inventory Clerk (374) learned to control the amount of stock on hand, hold inspections, maintain records, and recommend procurement of needed supplies.

