

Logistics

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- Major Andy Hunt (Supply, fuels, logistics plans)
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The Dimensions of Logistics

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Defining Logistics

The word logistics entered the American lexicon a little more than a century ago. Since that time, professional soldiers, military historians, and military theorists have had a great deal of difficulty agreeing on its precise definition.¹ Even today, the meaning of logistics can be somewhat *fuzzy* in spite of its frequent usage in official publications and lengthy definition in Service and Joint regulations. Historian Stanley Falk describes logistics on two levels. First, at the intermediate level:

Logistics is essentially moving, supplying, and maintaining military forces. It is basic to the ability of armies, fleets, and air forces to operate—indeed to exist. It involves men and materiel, transportation, quarters, depots, communications, evacuation and hospitalization, personnel replacement, service, and administration.

Second, at a higher level, logistics is:

...economics of warfare, including industrial mobilization; research and development; funding procurement; recruitment and training; testing; and in effect, practically everything related to military activities besides strategy and tactics.²

While there are certainly other definitions of logistics, Falk’s encompassing definition and approach provide an ideal backdrop from which to examine and discuss logistics. Today, the term combat support is often used interchangeably with logistics.

The Themes of US Military Logistics

From a historical perspective, ten major themes stand out in modern US military logistics.³

- The tendency to neglect logistics in peacetime and expand hastily to respond to military situations or conflict.
- The increasing importance of logistics in terms of strategy and tactics. Since the turn of the century, logistical considerations increasingly have dominated both the formulation and execution of strategy and tactics.
- The growth in both complexity and scale of logistics in the 20th century. Rapid advances in technology and the speed and lethality associated with modern warfare have increased both the complexity and scale of logistics support.
- The need for cooperative logistics to support allied or coalition warfare. Virtually every war involving US forces since World War I has involved providing for, and, in some cases, receiving logistics support from allies or coalition partners. In peacetime, there has been an increasing reliance on host-nation support and burden sharing.
- Increasing specialization in logistics. The demands of modern warfare have increased the level of specialization among

support forces.

- The growing tooth-to-tail ratio and logistics footprint issues associated with modern warfare. Modern, complex, mechanized, and technologically sophisticated military forces, capable of operating in every conceivable worldwide environment, require that a significant portion, if not the majority of the budget, be dedicated to providing logistics support to a relatively small operational component. At odds with this is the need to reduce the logistics footprint in order to achieve the rapid projection of military power.
- The increasing number of civilians needed to provide adequate logistics support to military forces. Two subthemes dominate this area: first, unlike the first half of the 20th century, less reliance on the use of uniformed military logistics personnel and, second, the increasing importance of civilians in senior management positions.
- The centralization of logistics planning functions and a parallel effort to increase efficiency by organizing along functional rather than commodity lines.
- The application of civilian business processes and just-in-time delivery principles, coupled with the elimination of large stocks of spares.
- Competitive sourcing and privatization initiatives that replace traditional military logistics support with support from the private business sector.

Logistics and Warfare

General Matthew B. Ridgway, of World War II fame, once observed, “What throws you in combat is rarely the fact that your tactical scheme was wrong ... but that you failed to think through the hard cold facts of logistics.” Logistics is the key element in warfare, more so in the 21st century than ever before. Success on the modern battlefield is dictated by how well the commander manages available logistical support. Victories by the United States in major wars (and several minor wars or conflicts) in the 20th century are linked more directly to the ability to mobilize and bring to bear economic and industrial power than any level of strategic or tactical design. The Gulf War and operations to liberate Iraq further illustrate this point. Long before the Allied offensive could start, professional logisticians had to gather and transport men and materiel and provide for the sustained flow of supplies and equipment that throughout history has made possible the conduct of war. Commanders and their staffs inventoried their stocks, assessed the kind and quantities of equipment and supplies required for operations in the severe desert climate, and coordinated their movement plans with national and international logistics networks. “*The first victory in the Persian Gulf War was getting the forces there and making*

certain they had what they required to fight [Emphasis added]. Then and only then, would commanders initiate offensive operations.”⁴ The same may be said of lightning quick victory in Iraq, although without the massive stockpile of inventory seen during the Gulf War.

In 1904, Secretary of War Elihu Root warned, “Our trouble will never be in raising soldiers. Our trouble will always be the limit of possibility in transporting, clothing, arming, feeding, and caring for our soldiers....”⁵ Unfortunately, the historical tendency of both the political and military leadership to neglect logistics activities in peacetime and expand and improve them hastily once conflict has broken out may not be so possible in the future as it has been in the past. A declining industrial base, flat or declining defense budgets, force drawdowns, and base closures have all contributed to eliminating or restricting the infrastructure that made rapid expansion possible. Regardless, modern warfare demands huge quantities of fuel, ammunition, food, clothing, and equipment. All these commodities must be produced, purchased, transported, and distributed to military forces. And of course, the means to do this must be sustained.

The End of Brute Force Logistics

The end of the Cold War and experience gained from the conflicts in Grenada, Panama, and the Persian Gulf essentially brought the era of *brute force* logistics to a close. The traditional practice of using massive quantities of troops and large stockpiles of supplies available in theater to engage sizable hostile forces is obsolete. Additionally, extensive buildup time and lengthy resupply and repair pipelines to sustain forces are unrealistic. The focus of logistics has now shifted toward rapid movement of small, independent force packages to employ precise combat power anywhere in the world. The rapid changes in political dynamics of the world powers, domestic fiscal constraints, and technological advances have rendered the Cold War military strategy and preparation ill-equipped to handle 21st century missions, requirements, and demands.

Logistics Challenges

The US role in the post-Cold War world has changed dramatically. Although currently heavily involved in the Global War on Terrorism, military forces are no longer dedicated solely

to deterring aggression but must respond to and support homeland defense and humanitarian missions. From peacekeeping to feeding starving nations, to conducting counterdrug operations, the military continues to adapt to evolving missions. Logistics infrastructure and processes must evolve continuously to support the new spectrum of demands. The keys to supporting both combat and peacetime operations successfully are robust, responsive, and flexible logistics systems.

Decreases in funding and the drawdown of the US military in the 1990s drove new approaches to logistics support and refinement of the military logistics systems. These fiscal constraints dictated that the military reduce infrastructure, maintain a smaller amount of inventory and fewer personnel, and find ways to reduce costs without degrading mission capability.

Reduced budgets impact weapons modernization programs in several ways. As dollars decrease, fewer systems can be developed, which increases the importance of decisions made in the acquisition process. The process must develop the most lethal systems while emphasizing reliability and supportability. Therefore, logistics considerations play a more important role than ever in the design, production, and fielding of new systems. Logistics capabilities for supporting future forces require systems to be *smarter* and require less maintenance.

Notes

1. George C. Thorpe, *Pure Logistics*, Washington DC: National Defense University Press, 87, xi.
2. Alan Gropman, ed, *The Big L: American Logistics in World War II*, Washington DC: National Defense University Press, 97, xiii.
3. Charles R. Shrader, *US Military Logistics, 1607-1991, A Research Guide*, New York: Greenwood Press, 92, 3.
4. *Ibid.*
4. Shrader, 9.

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notable quotes

Focused Logistics comes from the idea that in the past spare parts were relatively inexpensive, but transportation to move them was expensive or in short supply. The way we overcame this problem was simple. Before beginning any major military operation, we would move forward a massive stockpile of spare parts, equipment, and munitions. If we consumed all those materials in the stockpiles, that was all well and good. If we did not, we would end up giving them away or pushing them into the ocean because it was more expensive to move them back to the United States than it was to destroy them in the field.

—Gen Ronald R. Fogleman, USAF