

Focused Logistics in 2010—A Civil Sector Force Multiplier for the Operational Commander

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The demise of the Cold War, reallocation of fiscal resources, and the kinds of joint future coalition warfare or operations the United States expects to conduct during the 21st century require innovative and creative thinking by America's military leaders. Recently, the Chairman of the Joint Chiefs of Staff issued *Joint Vision 2010* (JV 2010), a document that provides a conceptual framework for America's Armed Forces to think about the future.¹ The premise of JV 2010 is that joint military interoperability, coupled with a strong technological underpinning, will be a key tenet in conducting military operations in the 21st century. The JV 2010 document identifies four new operational concepts requisite in the conduct of future military operations. These concepts are Dominant Maneuver, Precision Engagement, Full-Dimension Protection, and Focused Logistics.²

Historical Foundation

The use of civilian contractors and reliance upon the civil sector in the support of war efforts are rooted in history. During the Revolutionary War, much of the land transport was provided through the contract system of hiring teams and drivers.³ This is one of the earliest recorded examples of civil sector support to an operational commander. In another example, during the Mexican War of 1850, General Jessup, the Quartermaster General, relied heavily upon private transportation throughout the entire war effort.⁴ Prior to World War II, the US military routinely relied on the private sector for much of its support. Former Secretary of the Air Force Sheila Widnal noted:

Lest you think this is a new phenomenon, let me take you back to the era before World War II when private support was standard. It was only during the Cold War when we realized the huge buildup of government operations that we came to think of government support as the norm.⁵

Further, Clausewitz recognized the need for civil sector involvement in the sustainment of forces when he described the ability of the warfighting soldier to *live off* households or the community during battle.⁶

However, the role of logistics in waging war has evolved from the simple requirements of the American Revolutionary War soldier to the complicated and costly logistics requirements of today's modern warrior and machines.⁷

Rear Admiral Henry E. Eccles clearly recognized the need for significant civil sector involvement in his seminal work, *Command Logistics*, when he stated:

We should remember that since the amount of logistics support available to any commander is limited, the commander who utilizes his limited resources most efficiently will have the greatest freedom of action and combat capability.⁸

Efficient use of limited resources in today's environment strongly dictates active and viable involvement of the civil sector with the operational warfighting commander. Thorpe clearly recognizes this fact when he states, "... preparation for war is not complete until the laboring man is prepared for war."⁹

The technological underpinnings of JV 2010 and the Focused Logistics operational concept rely predominantly upon the flow of information back to the operational commander. Sophisticated, technologically advanced computer and information systems are required to not only provide the necessary command and control of the warfighting forces but also identify and ascertain availability of provisions and supplies during combat and noncombat operations (military operations other than war [MOOTW]). Morgenstern recognized this need for the operational commander when he stated:

... the deeper analyses of the problems of military logistics will show that the most difficult and most important aspects lie in the field of information and in the flow of messages and papers.¹⁰

Technology available in the civil sector allows improved means of communication and opportunities for new organizational arrangements.¹¹ These organizational arrangements allow for greater managerial control and improved planning by the operational commander.¹²

Civil Sector Involvement with Military Operations

Civil sector involvement in future military operations as envisioned by JV 2010 is primarily through civilian contractors who do work formerly done by organic military personnel. This concept is called outsourcing, which is defined as the transfer of a function previously performed in house to an outside provider.¹³ Competition by the government with the private sector in performing services that are not inherently governmental in nature has been expressly prohibited since the middle of the Eisenhower administration. *Bureau of the Budget Bulletin 55-4* expressly prohibits such functions:

The federal government will not start or carry on any commercial activity to provide a service or product for its own use if such product or service can be procured from private enterprise through ordinary business channels.¹⁴

Current acquisition policy contained in *Federal Acquisition Circular 90-29* confirms the same basic position:

It is the policy of the Government to ... rely generally on private, commercial sources for supplies and services, if certain criteria are met while recognizing that some functions are inherently governmental and must be performed by Government personnel ...¹⁵

Many studies have investigated the outsourcing process and identified various factors that result in successful outsourcing contracts.^{16,17,18,19,20} As government enters the 21st century, many senior leaders strongly advocate the use of methods and models that are successfully employed in the private sector but have not been applied extensively in a nonprofit environment such as defense. The presumption of efficiency in the private sector is challenged less forcefully, but the challenges rely on theories of noncompetitive markets, examples of malfeasance by contractors, and concerns for

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equity when private firms profit from provision of public services.^{21,22,23,24} New, innovative methods and *out-of-the-box* thinking are required more than at any time previously in order to achieve the defense mission with the fiscal resources allocated. Creativity and innovation are the keys in today's resource-constrained environment.²⁵

These precepts are diametrical to the function of a governmental bureaucracy, especially that of the Department of Defense. As the largest bureaucracy in the federal government, change and innovation are not ideas or concepts that are easily embraced by entrenched government bureaucrats. Carnes Lord perhaps best described the dynamics of bureaucracy in his book, *The President and National Security* when he stated:

Perhaps the most powerful factor determining bureaucratic behavior is the instinct of organizational self-preservation. Like all other forms of life, bureaucracies tend to pursue survival before all other goals. Also like other forms of life, they tend to be resourceful in adapting to their environment. Bureaucratic entities are, as a result, notoriously difficult to kill off, even after their original reason for being has disappeared. Organizational survival is inseparably bound up in organizational identity.²⁶

Warfighting *CINCDOMs* represent the best of a long-entrenched bureaucracy. Organizational support paradigms, structures, and frameworks not familiar to the operational commander are inevitable in improving efficiency of operations. JV 2010's *Focused Logistics* operational objective mandates logistics done in a new manner and relies on civilian contractors to provide that support—a tall order for any warfighter to swallow, let alone implement. However, with no organic military resources to rely upon, the civil sector will become paramount in the successful accomplishment of the military operation.

Operational Logistics in the 21st Century

The support provided to the warfighting commander in chief (CINC) is composed of the four pillars identified in Figure 1. The foundation of the entire support structure is civil sector support. As used in this context, various contractors supporting the operational CINC are identified in Table 1.

Commercial contractors may include such well-known US companies as Brown and Root, Boeing Services, and Holmes and Narver—companies that have offices and headquarters in the United States and make a primary business of providing military base infrastructure support and contracted assistance to the American Government overseas. Conversely, foreign commercial contractors could also be successfully employed to provide support to the operational warfighter and may be essential if American contractors are unavailable or unable to perform the tasks required. Third World national contractors may also be employed, as is the case in Southwest Asia where many Third World nationals from countries such as India, the Philippines, and Pakistan are employed to do labor-intensive work.

In each case cited, relationships must be forged that will vary based on the type of contractor. Religious, racial, ethnic, and gender differences are all elements that must be considered by the CINC when determining how the contractor will be used. The CINC's civil affairs staff is absolutely critical in ensuring optimum civil sector support.

The civil affairs staff comprises the next *layer* on the CINC support matrix. This staff possesses the capabilities to not only understand the culture, ethnicity, and religion of the region in which the warfighting CINC is operating but also work with the local native population in obtaining support necessary for the CINC to either conduct MOOTW or warfighting operations. The foundation of

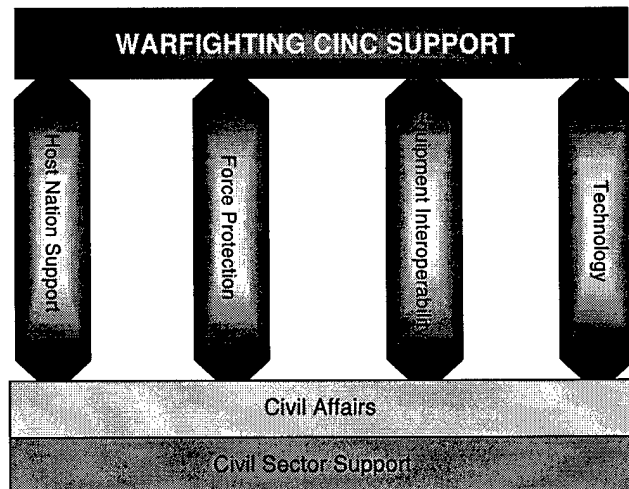


Figure 1—Operational Logistics Pillars

CINC support is composed of both civil sector elements and civil affairs staff amalgamated to obtain any required necessary support.

The four pillars of CINC support are integral to JV 2010's Focused Logistics concept. Coupled with the civil sector and civil affairs support, these pillars provide the integral structure for proper execution of the warfighting CINC's overall objective.

Contractor Type	Location
Commercial	International
Organic, indigent to hostile region	Host nation/nation where hostilities are transpiring
Third World Nationals	Worldwide, Third World Countries

Table 1. Contractor Types and Locations

Host Nation Support

Host nation support will become increasingly critical in the 21st century as we rely upon the civil sector and warfighting coalition partners for much of our warfighting support in both armed conflict and MOOTW operations. With the light, agile, tailored-to-task, readily deployable forces of the future, host nation support will be vital in ensuring that American fighting forces can effectively prosecute any action.²⁷ This host nation support can take the form of supplies, roads, aircraft, aircraft fuel, seaports, piers, overflight and landing rights, and information connectivity into the host nation communications infrastructure. Military civil affairs personnel with specific language skills representative of the region in which the operation or conflict is transpiring will be increasingly vital to the CINC. These native-speaking people will provide the operational commander with insight and understanding.

Force Protection

The most significant command responsibility is the protection of one's troops before, during, and after the hostility period. Nothing is more paramount in this regard than troop or civilian contractor protection. The strong reliance on civil sector support will necessitate that force protection be constant and vigilant throughout the hostility period. Manning augmentation of military protection forces by civil sector contractor personnel is used to protect buildings, equipment,

and vehicles of American combat personnel. The various types of contractors defined in Table 1 can be used for this task. The warfighting CINC must be able to critically assess the risk of using the different types of contractors for the various mission elements. Significant here is the fact that contract personnel from Third World countries may be providing the bulk of the security for American equipment or administrative facilities. This is indeed a distinct paradigm shift from the Cold War era. However, with force reductions, troop drawdowns, and the need to outsource support infrastructure, warfighters will be used in combat operations exclusively. No longer will organic military personnel perform various support functions. Critical to success in the force protection arena is trust between the contractor and the American soldier. This trust may take a long time to earn but a short time to destroy. The CINC must spend significant time and energy ensuring a strong trust develops between the fighting forces and the civilian support contractor personnel.

Equipment Interoperability

The third tenet of the warfighting CINC's support is equipment interoperability. During the Cold War, equipment interoperability specifications for the North Atlantic Treaty Organization (NATO) were common for all member countries. Equipment interoperability is vital in the 21st century where coalitions will be formed to prosecute many of the actions in which the United States may be involved.

The warfighting environment of the 21st century involves both American military forces and coalition forces of other nations. As the United States draws down its overseas force structure and transitions to an expeditionary force based in the continental United States, reliance on the support infrastructure of our coalition partners will be even greater than now. When the height of the Cold War involved equipment interoperability according to standards of NATO, equipment interoperability was much less an issue than it might be in the future. Military personnel were normally responsible for repair, operation, and maintenance of equipment, accompanied by a long logistics support tail that provided parts for any maintenance discrepancy. The Focused Logistics portion of JV 2010 relies heavily upon civil sector support in the theater of operations, generally with support provided by the host nation in which the conflict is being conducted. Significant problems are envisioned by this approach.

The strong reliance that JV 2010 places upon commercial equipment, processes, and procedures strongly dictates that American, European, and Third World equipment have compatibility and interconnectivity. However, this interconnectivity will probably be impossible to obtain. There are not only different standards of operation and sizes of equipment but also differences in such simple things as power sources or the control panel operating language. Interconnectivity becomes an even greater issue when concerned about metric and standard type threads and equipment measurements. Strong reliance upon the civil sector, in theater, may result in failure to rapidly obtain the necessary spare parts to ensure strong equipment viability.

A solution to this problem may be the use of commercial, international equipment instead of military unique or specific hardware. The reduction in support infrastructure and support tail and the use of commercial contractors may diminish many interoperability issues. Civil sector dominance will become increasingly vital to ensuring global coalition equipment interoperability.

Technology

Technology and information science-based civil sector support provide the infrastructure for the operational commander of the 21st century. Commercial technology exploitation has successfully been tested by the Defense Logistics Agency. These technologies include

the Automated Manifest System, in which the manifests of a shipment are contained within a laser card that can be scanned at all points within the delivery cycle, providing up-to-the-minute status of the commodity destined for the battlefield. electronic commerce/electronic data interchange—the use of *paperless* transactions for procurement, ordering, delivery, and payment of supplies—is routinely used throughout the world. Premium Service, an analogous service to Federal Expresses' overnight package delivery, has been used in peacetime operations in the continental United States (CONUS). Dedicated truck support is also being successfully used to deliver repair parts to and from the repair depot to the base of utilization. Most of these technologies are currently CONUS based, with plans to use each in a worldwide contingency.²⁸

Each technology described previously will only be as viable as the supporting infrastructure the military has in place. These technologies change rapidly, to the degree that many different software versions or releases may be on the battlefield at the same time. This will become and remain a significant issue for the operational commander. Martin van Creveld recognized the importance of technology when he cited:²⁹

The shorter the war, the greater the importance of weapons and weapons systems. The longer it is, the greater the role of military activities other than fighting, pure and simple, and the greater the role of technologies that impinge on these activities or govern them.

Technology will dominate the concerns of the operational commander in the future. With the many *technology driven* systems that are currently being fielded, a homogeneous system integration of the various technological types will be essential to successful operational battlefield success. Van Creveld recognized systems homogeneity when he identified:

No weapon has ever won a war on its own and without support, clearly some integration is required. On the other hand, there exists a point beyond which integration, regardless of whether it was brought about by the strength of the opposition or by the inherent nature of technology itself will lead to diminishing returns.³⁰

Information warfare and the prevention of information systems disruption must be a real concern of the operational commander's J6. Viruses, *Trojan Horses*, and other data-related disruption agents must be continuously expected with the great dependence upon high-technology information systems. The ability of the enemy to penetrate and disrupt one of the technologically based information systems poses additional security issues. If the enemy is able to successfully remove a space-based asset or its communication up or down link, the operational commander will have no access back to his higher headquarters or other command and control facilities. Contamination or enemy infiltration of the commercial sector support systems may prevent them from providing the operational commander with the required computer systems support. This continues to be an increasingly major concern when relying upon civil sector support.

Conclusions and Recommendations

Will Focused Logistics as envisioned by JV 2010 provide the robust wartime logistics support required by the operational commander? The evidence presented so far is inconclusive; however, it does suggest that JV 2010 is *not in touch* with reality.

The DoD/military culture is conservative, risk averse, and not prone to risk taking. Further, entrenched bureaucracies are highly resistant to change for a variety of reasons. Risk taking will have to

be encouraged if vital civil sector support, as envisioned by JV 2010, is to become a true reality. Large-scale exercises both in CONUS and overseas must be dedicated to the support doctrine espoused by JV 2010 and the Focused Logistics objective. Systems failures must be expeditiously remedied and improvements made. Pilot studies of various sizes, using JV 2010 Focused Logistics concepts and ideas, should be immediately implemented to identify shortfalls and failures. Careful analysis of each pilot study will identify changes required to optimize JV 2010 tenets and objectives. These lessons learned will be vital to all operational commanders, regardless of the theater of operation.

The strong degree of technological dependency envisioned by JV 2010 will not be possible until some *umbrella* architectures are developed for many of the disparate logistics technologies. These *umbrella* architectures must be international in nature and scope, as our dependence upon coalition warfare strongly dictates the United States will most probably use coalition warfare in all hostile engagements.

Contractor force protection, both physical and electronic computer systems, must be carefully planned in critical detail. This is a *knotty* question, for not only must the contractor personnel be protected but also the equipment, supplies, and computer information systems. New concepts must be developed to make this a reality. These concepts must be successfully integrated with operational coalition combat forces, a matter that defies any easy solution.

The JV 2010 Focused Logistics objective is based upon some lofty and highly optimistic technological assumptions that are pervasive throughout the Focused Logistics objective. The DoD Computer-Aided Logistics Support initiative is now approximately 15 years old, but still no unitary international standard or discrete systems architecture has been successfully developed for all combat forces worldwide. Without careful monitoring of JV 2010's Focused Logistics objective, the same problems could plague this idea as well, leaving the operational commander without any real logistics support provided by the civil sector.

Cultural changes and paradigm shifts will be required if JV 2010 and civil sector logistics are to become a true reality.

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Prejudice against innovation is a typical characteristic of an Officer Corps which has grown up in a well-tried and proven system.

—Field Marshal Erwin Rommel

INTERNET DOCUMENT INFORMATION FORM

- A. Report Title: Focused Logistics in 2010 – A Civil Sector Force Multiplier for the Operational Commander**
- B. DATE Report Downloaded From the Internet: OCTOBER 18, 1999**
- C. Report's Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #): DEPARTMENT OF THE AIR FORCE,
AIR FORCE JOURNAL OF LOGISTICS
501 WARD STREET
GUNTER ANNEX
MAXWELL AFB, AL 36114-3236**
- D. Currently Applicable Classification Level: Unclassified**
- E. Distribution Statement A: Approved for Public Release**
- F. The foregoing information was compiled and provided by:
DTIC-OCA Initials: __PM__ Preparation Date OCTOBER 18, 1999**

The foregoing information should exactly correspond to the Title, Report Number, and the Date on the accompanying report document. If there are mismatches, or other questions, contact the above OCA Representative for resolution.

19991022 036