

The Changing Character of Logistics

Formless logistics
by Maj Karl Eisenmann

Clausewitz noted the character of war is ever changing, and the last 30 years have brought significant change. Thus, it stands to reason that the character of military logistics must change as well. However, for the better half of the 20th century and early 21st century, sustainment operations in support of amphibious maneuver have not changed. A lack of recognition to change has allowed enemy capabilities to render current sustainment operations untenable. Exploitable vulnerabilities exist in the supply network as a result of the proliferation of ubiquitous sensors, long-range precision fires, and friendly dependence on information technology. These are

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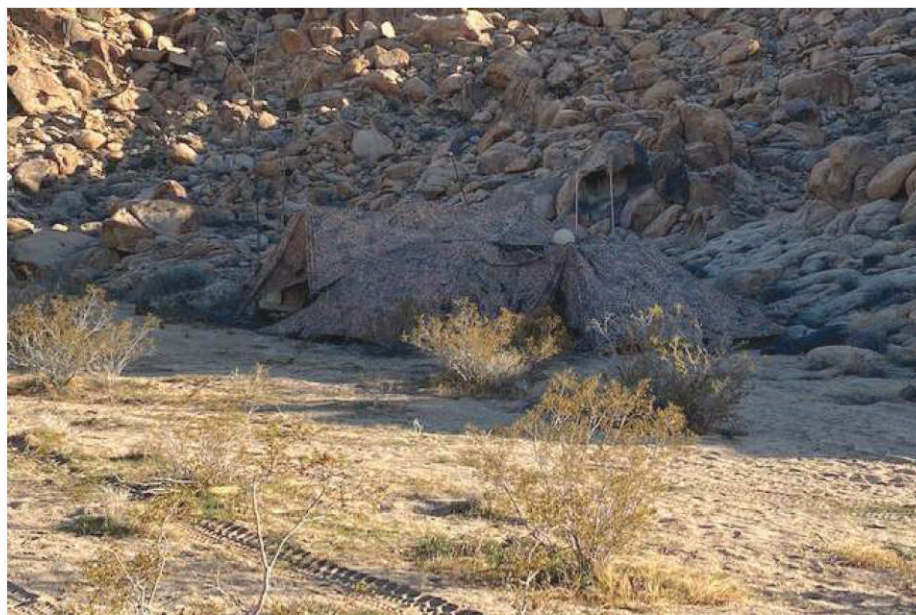
vulnerabilities that will exist regardless of geographic location, operating environment, or competitor. To truly reduce the vulnerabilities of the logistics network, naval logisticians require a new *modus operandi*. In the words of Sun Tzu, logisticians must become “extremely subtle even to the point of formlessness ... and extremely mysterious to the point of soundlessness.”¹

The naval force has relied on the same methods to sustain amphibious

operations for almost 80 years. While delivery and storage assets have advanced technologically, the methods remained relatively unchanged.² These methods were largely driven by economies of scale, material superiority, and dominance of multiple warfighting domains. As peer competitors continue to advance techniques and technologies that directly counter all three of those attributes, naval logisticians must seek new means of sustaining the force. They must embrace formlessness as means to avoid detection and target worthiness. Key aspects of formless logistics are area support, nebulous and ever-changing task organizations and command relationships, and deception.³

Embracing Formless Logistics

Area Support. Formless logistics is executed primarily by support to coalition forces in an area rather than more traditional direct or general support relationships. A logistician assigned an area support relationship provides sustainment to any unit passing through a designated logistics support area. These areas are determined by the physical network analysis, availability of hide sites, possible cache locations, and ability to generate throughput. Therefore, there is no need to align logistics support areas with larger AOs, so long as supported



Camouflage is critical element of formlessness. (Photo by LtCol John Soto, CLB-5, MWX 5-20.)

units understand the concept of support. In an area support construct, logisticians will maintain caches and infiltrate supplies from throughput nodes rather than executing point-to-point delivery. Supported units would retrieve supplies while moving from hide sites or receive supplies by secondary delivery assets, such as a drone launched from a vehicle.

Nebulous Force Employment. A nebulous force structure deprives the enemy of the ability to ascertain the force's disposition and composition and, more importantly, will confuse and create uncertainty. The nebulous logistics force changes composition frequently. This is accomplished by considering every delivery platform as an individual entity rather than part of a unit of employment. These assets are dynamically tasked to exactly meet demand as required or when it is most advantageous to the scheme of maneuver. Delivery assets would emerge from hide sites, resupply a cache or supported

unit, then proceed to new hide site. En route to a new hide site, delivery assets are tasked for follow on missions in anticipation of demand generated by data analysis based on consumption rate and the probable scheme of maneuver. This task may take the delivery asset to another logistician's support area. In this instance, a change of operational control is required.

By only uncovering those delivery assets that are required, Marines will keep those assets below the targeting threshold. By moving to a new hide site, the delivery asset is creating uncertainty by changing its geographic location and not establishing regular resupply routes. The enemy will be forced to search a large area, thereby decreasing the probability of detection and consuming enemy resources in a low probability search. Most importantly, it creates a rapidly changing situation.

Deception. Sun Tzu said, "All warfare is based on deception,"⁴ and his

wisdom applies uniformly to all war-fighting functions. To increase the survivability and probability of success of a formless logistics formation, deception is critical. The logistics deception plan must be nested with the greater information operation to change the enemy's perception or reinforce biases. At the lowest level, however, inside a formless logistics formations area of operation, logisticians must be equipped with and be trained to create low-cost decoys, integrate false resupply missions, and become masters of hiding in plain sight. Saturation movements, referring to the employment of all delivery assets simultaneously, are another key aspect of the logistics deception plan. Saturation movements aim to overwhelm the enemy's processing capabilities. This conceals the true nature of the mission and the main effort.

Different Delivery Methods. As discussed, area support is the future of sustainment operations. Area support

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Logisticians must balance target worthiness and effectiveness. (Photo by Cpl Miguel Rosales, 1st MARDIV, DVIDS.)

relies on different delivery methods than currently employed. Point-to-point delivery exposes the supported and supporting unit and should be avoided whenever possible. Instead, logisticians must rely on cleverly disguised and well-hidden caches on land and sea. The formless logistics formation would be responsible for maintaining those caches with stocks received from the sea base or other through-put method. Pre-positioned supplies emplaced by theater security missions

Risks and Shortfalls

Command and Control (C2). Logisticians are accustomed to exercising close control of forces. This is evident in the use of the convoy as the primary means of delivering supplies. Young logistics officers and staff NCOs maintain tight control of the convoy with a robust signal plan. This mentality has permeated through the entire community. New training and education must correct how the logistics community views and executes C2. This new pipeline must

abilities. To reduce the vulnerabilities of minimally required assets, logisticians must train and be equipped to exploit the period of darkness. Additionally, more emphasis must be placed on the use camouflage and other techniques to conceal positions and intentions.

Network Creation. Current logistics networks at the tactical level tend toward one-dimensional supply arcs. Generally, supplies flow point to point in large quantities. This reduces the networks complexity, and the large quantities of supplies are easily broken into smaller groups, which increases flexibility. The new network architecture in the formless logistics construct reduces flexibility in favor of survivability. Caches are vulnerable to pilferage if not properly concealed. These risks should be carefully weighed against detection and target worthiness.

Conclusion

Naval logisticians and the networks they establish are often cited as the force's critical vulnerability. For good reason this will not change because logistics forces are not trained or equipped to operate in a contested environment. Logisticians must find a new way to operate that reduces predictability and unnecessary exposure. Embracing formlessness and deception in all aspects of sustainment operations will substantially increase the logistician's ability to succeed.

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during foreign humanitarian assistance missions or by other government agencies will function as caches or serve as a sustainment method in the beginning stages of an operation. Dependence on these stocks is enabled by demand reduction in the force. Every Marine must understand what is truly required and embrace austere standards.

emphasize the decentralized nature of modern logistics C2 and teach logistics leaders how to manage disbursed forces without directly controlling them for long periods of time.

Force Protection. Dispersion and employing the minimum required delivery assets create force protection risk. Massing assets allows for easier protection; however, it also creates vulner-

Notes

1. Sun Tzu, *The Art of War*, (Oxford: Clarendon Press, 1964).
2. Aircraft and supplies delivered by them were a change from previous method.
3. Michael Kim and Charles Schultz, "Formless Warfare: Innovative Concept to Gather More Information, Analyze it Faster, and Strike Harder," *Small Wars Journal*, (March 2017), available at <https://smallwarsjournal.com>.
4. *The Art of War*.



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