

Eleven Mi-17 helicopters from 309<sup>th</sup> Aerospace Maintenance and Regeneration Group on Davis-Monthan Air Force Base, in Tucson, Arizona, are placed on flight line in preparation for transport to Ukraine, April 22, 2022 (U.S. Air Force/Kristine Legate)

# **Engines of Chaos** Counterlogistics in Competition

By the 2023-A Class of the Advanced Logistics Readiness Officer Course<sup>1</sup>

S. success at the operational level of war has led to a blossoming of competition in domains below the level of open hostility. The 2023 Joint Concept for Competing (JCC) points out that our adversaries seek to "win without fighting" and that the joint force is at risk of "losing without fighting."<sup>2</sup> The JCC attempts to reorient the joint force to better compete below the level of high-intensity conflict.

The JCC defines *strategic competition* as "a persistent and long-term struggle that occurs between two or more adversaries seeking to pursue incompatible interests without necessarily engaging in armed conflict with each other."<sup>3</sup> It prods the joint force to find "areas of competitive advantage" and to steer the contest toward those advantages.<sup>4</sup> U.S. advantages in economics and logistics are an opportunity for effective competition by using an approach we refer to as counterlogistics, which, as defined here, is the process of degrading, denying, and disrupting an adversary's logistics capabilities in competition. To address the gaps identified by the JCC, the joint force must develop counterlogistics as a capability to disrupt adversary aims below the level of armed conflict.

Deliberate supply chain disruption, market manipulation, industrial espionage, and even sabotage are now common tools of competition against the joint logistics enterprise (JLENT). The weaponization of these techniques necessitates a response that goes beyond merely protecting joint force logistics vulnerabilities. The warfare in peer competition is a supply chain duel where industrial bases and distribution networks compete for limited resources. Failure in competition could lead to the collapse of a credible deterrent logistics posture. To stave off failure "without fighting," the JLENT will need to





### **Competition Scenario**

Open-source reporting identifies an adversary's naval exercise. Based on a J2 [intelligence] collection effort, the fleet ports of call are uncovered beforehand. Using background information from the theater posture plan and theater logistics plan, a red cell in the combatant command's J4 [logistics] has identified two logistics vulnerabilities of that port based on prior site surveys and strategic planning.

The first vulnerability is a lack of material handling equipment both at the port and in the surrounding area. The red cell quickly identifies a list of companies that provide much of the equipment and operators. The logistics services have already been booked by forward elements of the adversary fleet. Just before the exercise, the red cell submits a higher bid for those same services and successfully requisitions the limited capacity to keep it idle or "busy elsewhere" during the exercise. The fleet is forced either to pay a higher cost to restore services or to operate with limited support.

Perhaps more mischievously, the red cell also identifies fuel as another limitation in that area of operations. As the adversary seeks to purchase fuel contracts, members of the red cell inflate the price of local fuel by submitting competing bids. Members also purchase other nearby fuel supplies in the region to deny its use during the exercise. Again, the adversary is forced into the "horns of a dilemma" by choosing between paying significantly higher costs for operations or curtailing the exercise for lack of logistics. These small injections of chaos prevent the fleet from carrying out the full agenda of the exercise, and it returns home without success. The red cell eventually resells the fuel contracts to allies and partners for use in friendly operations and recovers some of the cost of the purchase. Valuable information on the adversary and local logistics conditions is also uncovered for future use.

protect its own vulnerabilities while probing the adversary for logistics weakness that can be exploited.

### **Family of Fires**

The term *red logistics* is growing in popularity in Western defense circles. It reflects an effort by the logistics community to find and exploit an adversary's logistics vulnerabilities. These efforts are useful but have not been codified clearly in joint doctrine beneath the level of high-intensity conflict. A useful counterlogistics concept serves as a bridge between sustainment and the effects created by joint fires.

U.S. joint doctrine, as it relates to targeting enemy logistics, resides almost entirely in the "conventional" domain specifically in the joint function of fires.<sup>5</sup> The guideline in current Joint Publication (JP) 3-03, *Joint Interdiction*, is focused on "diverting, disrupting, degrading, and destroying" an adversary's fielded forces and assets through mostly kinetic means.<sup>6</sup> Logistics interdiction is the cornerstone of many kinetic campaigns, but as the JCC points out, competition has moved into a less-kinetic dimension.

The ability to disrupt an adversary without kinetic attack is a potentially useful tool in competition. The JCC defines the *competitive space* as a mix of geographic, cognitive, domain, and thematic groups.<sup>7</sup> Logistics has equities in most of these groups with a heavy emphasis on the ability to physically project force on a global scale. Creative application of counterlogistics could play a role in posturing a theater by expanding the power of the JLENT in key regions. Counterlogistics could be used in conjunction with other competitive approaches to disrupt adversary objectives. Chaos in a system can breed more chaos; logisticians know this best.

## **Effects: Denial and Posture**

Counterlogistics seeks to achieve two effects. The first inflicts higher friction on an adversary, as other fires concepts are meant to do. The JCC refers to this as "imposing 'drag' on an adversary's systems."8 Logistics friction will most likely take the form of denial, disruption, and degradation of sustainment processes. This imposition of friction will remain nonkinetic but still targeted at vulnerable portions of adversary logistics. Adversary systems will need to be assessed for vulnerability using a similar targeting process already established in JP 3-03. Undoubtedly, as is the case with targeting any complex system, effects will often be difficult to measure. Counterlogistics is not a perfect weapon, but it does offer a new option for exploiting vulnerability consistent with the JCC approach. Injections of chaos into adversary logistics operations have the potential to create drag and increase the cost of their overall capability for operations.

The second counterlogistics effect is a marginal and incremental increase in friendly logistics posture. Most of the JLENT will remain focused on sustaining the joint force, already a monumental task. However, the current phase of competition will require some portions of the JLENT to reorient toward exploiting adversary vulnerability. For example, the Joint Concept for Contested Logistics requires the JLENT to posture for sustainment of distributed operations.9 As the joint force spreads out, it will inevitably be in competition for limited resources in many geographic regions. Access to infrastructure and sustainment services is key terrain, especially in the Pacific theater. Counterlogistics has the potential both to deny that key terrain to the adversary and to add it to the JLENT network of options. Improvement in theater posture could emerge from a deeper involvement in logistics capacity at key nodes needed for distributed operations.

### Weaponizing Supply Chains

The current structure of logistics in the Department of Defense (DOD) is ill-positioned for competition below

the threshold of war. Almost without exception, the major DOD logistics communities are constrained to an internal enterprise focus. For example, in January 2023, U.S. Transportation Command (USTRANSCOM) was made responsible for bulk fuel management and delivery for DOD. According to the Defense Logistics Agency (DLA), in 2022, DOD purchased about 2 percent of the global market share of aviation fuel.<sup>10</sup> But it can only purchase what it needs; is cannot purchase "extra." What if USTRANSCOM could purchase a small additional percentage of the global market share with the stipulation that those purchases serve to "deny" that market share to an adversary at critical moments? This is a form of economic competition focused on the adversary, and there are limited DOD structures in place to carry it out. The market share denial approach is applicable across many supply chains and could even augment the U.S. and its allies' share of logistics capacity in some cases. Current approaches to sustainment and joint fires do not have the ability to deny logistics capability to an enemy without bombing them.

Counterlogistics also has potential to create military deception. Logistics often precedes military operations, as most intelligence organizations understand. Counterlogistics can create the illusion of future operations by making it appear that logistics preparations are under way for a certain area. Current JLENT structures are focused on securing or concealing information, not on deliberate deception. Counterlogistics gives the joint force commander a tool for creating operational maneuvers.

Operational contracting support (OCS), one of the core logistics functions in the joint force, stands to change the most under counterlogistics. OCS, like the DLA example, does not purchase services to deny them to an adversary. Expanding the use of OCS is perhaps the most direct link between U.S. economic advantages and joint force effects in competition. Counterlogistics OCS could take the form of blanket purchasing of goods and services at key points, or it could expand the use of the large contracting companies in strategic locations. This is an aggressive application of concepts already covered in JP 1-06, Financial Management in Joint Operations, such as counterthreat finance.<sup>11</sup> Counterthreat finance is often used against the financial networks of nonstate actors but could also play an important role in competition through counterlogistics. OCS as part of counterlogistics could be used to expand the footprint of joint logistics in such a way that it is inconvenient to the enemy. This approach is frequently employed against the JLENT, and it should respond in kind. The targeted use of this logistics core function could result in growing U.S. logistics capacity while denying it to an enemy at key times and locations.

A potential challenge to the DOD counterlogistics approach is that it could mimic techniques more often associated with U.S. intelligence agencies. Market disruption, for example, is often an unintended consequence of U.S. involvement in both military and humanitarian operations. Turning market disruption into a deliberate consequence veers into lanes more frequently traversed by other governmental agencies. However, it is likely that only DOD can achieve the scale of counterlogistics necessary to create global effects in support of national objectives. A robust interagency process would be needed to prevent operational fratricide while capitalizing on unique capabilities in other agencies.

Counterlogistics breaks new ground for DOD and can cover the doctrinal no-man's-land between fires and sustainment that currently exists. This gives the joint force the ability to use its own supply chain power to compete more aggressively. Counterlogistics is a creative expansion of JLENT functions and should be codified in joint doctrine and practice.

#### New Friends, Old Friends and a Foot in the Door

Success in counterlogistics requires close cooperation with allies and partners, both new and old. One key advantage to logistics overall, and counterlogistics specifically, is that it could enable



Marine Corps Lance Corporal Tara McNiff, left, helicopter crew chief, and Corporal Kyle Shendler, expeditionary fuel technician with 8<sup>th</sup> Engineer Support Battalion, Combat Logistics Regiment 27, 2<sup>nd</sup> Marine Logistics Group, refuel CH-53E Super Stallion during bulk refuel operations on Marine Corps Air Station New River, North Carolina, December 12, 2023 (U.S. Marine Corps/Meshaq Hylton)

regional interaction that is less provocative than stationing combat forces in a region. For example, the expansion of logistics capacity itself enjoys more support among partner nations than the stationing of permanent combat forces. Logistics can go places right now where a carrier strike group cannot.

Key allies, such as Australia, Japan, Singapore, and South Korea, already partner closely with the joint force in most areas, including logistics. Partnering to carry out counterlogistics could help solidify these relationships around common goals. It could also add the critical regional expertise of the partner to any operations. Unity of effort builds momentum, and counterlogistics could link partners together to compete against an adversary. More important, counterlogistics, and the potential investments it brings, could be used to build trust with more reluctant partners. The tools of counterlogistics that are inherently disruptive to an adversary could simultaneously be constructive to a

potential ally. Use of infrastructure and logistics services as part of a counterlogistics campaign would leave behind regional resources, contacts, and knowledge that could enable future partnership and security cooperation. Politically, it is often easier for a reluctant partner to associate with the more "benign" aspects of U.S. power, such as the use and expansion of logistics capability.

Current joint force partnership efforts seem to revolve around large multinational exercises. This is certainly valuable for diplomatic signaling and deterrence, but deeper partnership is possible through logistics. Counterlogistics, as the vanguard of a larger effort, has the potential to be more persistent and enduring than annual or biannual exercises that currently form the core of many U.S. partner efforts. Partnering on logistics and eventually counterlogistics carries less political risk for many partners. Security cooperation and the logistics that underpins those relationships are well understood within the JLENT; using them

for counterlogistics is merely an expansion of those connections. This presents an opportunity to create the primary effects of counterlogistics by inflicting friction on an adversary and improving the friendly logistics posture.

In one sense, counterlogistics is a form of economic competition that a joint force commander could wield to improve relationships at the expense of an adversary. Often, mere presence in an area, even if imperfect from a military perspective, is enough to complicate the thinking of an adversary.

### **Proposed Structure**

Counterlogistics as a capability should likely reside, at least initially, within the J4 community to achieve effects at scale. Placed there, counterlogistics efforts would support global and theater campaign objectives, just like any other fires function. Direct connection with the other J4 functions is crucial to denying capability to the adversary and simultaneously integrating it into friendly forces. Structurally, the team would mimic other targeting operations while staying connected to current logistics operations and priorities. A small team with minds for creating mischief and chaos could quickly complicate an adversary's operations in key geographic areas.

The Joint Chiefs of Staff (JCS) J4 would need to develop overarching guidance for employment of counterlogistics and serve as the global integrator of counterlogistics effects. Other key players in the counterlogistics ecosystem would be DLA, the combatant commands, and the Service component sustainment organizations. An example of the JCS integrating function would be global guidance that restricts targeting adversary nuclear weapons and medical supply chains. Conversely, if the adversary's energy supply chains are vulnerable, the JCS could coordinate action to create effects across theaters. The JCS could also coordinate the overarching analysis and targeting efforts of the Services, so the adversary could be challenged in multiple theaters at once.

The command and control mechanisms that bind the JLENT are complex, and no single entity controls them. The creation of logistics effects and management of unintended consequences can only be achieved by a community of organizations operating in an ecosystem. At times, global coordination will be needed to achieve a counterlogistics effect, and perhaps at other times, more local authority will be all that is needed. In other words, yoking counterlogistics too tightly limits the full advantage of the approach. In an ecosystem, the links to other elements of the system are more important than the hierarchical links to the echelon above. Counterlogistics will need to rely on partnerships to succeed rather than on directive control.

Each Service will need to develop a nascent counterlogistics capability, likely residing somewhere in its respective logistics and acquisition communities (G4, N4, A4). The combatant commands could follow in their respective J4s. DLA and USTRANSCOM are also key global players in the counterlogistics ecosystem and will need to be prime members of any effort. Active and aggressive counterlogistics cells in these strategic players are perhaps the most critical component to enabling effects in the JLENT. The combined strength of the logistics ecosystem is a U.S. asset; counterlogistics seeks to use that considerable capability to hurt an adversary during key moments of competition. This is military competition with dollars, not missiles.

In conjunction with development of preliminary guidance at the JCS level and above, a combatant command J4 could be tasked to create a counterlogistics cell to test the concept. U.S. Indo-Pacific Command is a potential candidate for initial implementation because it is experiencing the most acute peer competition. Initial experiments should likely focus on effects that are relatively easy to measure. For example, the cost of energy in key regions is well known. If an adversary is forced to pay a higher cost than the market based on counterlogistics efforts, it can be validated quickly. It is perhaps less important to determine detailed guidelines than it is to begin experimentation and allow the capability to develop organically. As the capability matures, counterlogistics could be accepted as an effective nonkinetic competition tool aligned with the JCC.

As the JCC points out, adversary actions below the level of high-intensity warfare have created the need for change in the joint force. This provides the impetus for using the power of the JLENT for counterlogistics. The United States enjoys robust access to a global network of allies and partners and retains a global edge in economic competitiveness relative to the primary threats listed in the National Defense Strategy. Counterlogistics is a form of economic competition, and such tools are rare in the joint force. Further experimentation with counterlogistics could lead to useful approaches to competing. The last 20 years of joint force employment were defined by irregular warfare and counterinsurgency. The new era of competition for the joint force will be defined by a global contest for logistics superiority and the credible deterrence it provides for the Nation. JFQ

#### Notes

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<sup>2</sup> Joint Concept for Competing (Washington, DC: The Joint Staff, February 10, 2023), https://s3.documentcloud.org/ documents/23698400/20230213-jointconcept-for-competing-signed.pdf.

<sup>3</sup> Joint Concept for Competing, 1.

<sup>4</sup> Joint Concept for Competing, 18.

<sup>5</sup> Joint Publication (JP) 3-0, *Joint Campaigns and Operations* (Washington, DC: The Joint Staff, 2022); JP 3-03, *Joint Interdiction* (Washington, DC: The Joint Staff, 2016), https://www.jcs.mil/Portals/36/ Documents/Doctrine/pubs/jp3\_03.pdf.

<sup>6</sup> JP 3-03.

<sup>7</sup> Joint Concept for Competing, 13.

<sup>8</sup> Joint Concept for Competing, 12.

<sup>9</sup> Joint Concept for Contested Logistics 1.0 (Washington, DC: The Joint Staff, 2021).

<sup>10</sup> Defense Logistics Agency [DLA] Energy Fiscal Year 2022 Fact Book (Washington, DC: DLA, 2022), https://www.dla. mil/Portals/104/Documents/Energy/ Publications/DLAEnergyFactBook2022\_2.pdf ?ver=dReEo7LZOSg8Boyaor3DOg%3d%3d.

<sup>11</sup> JP 1-06, *Financial Management in Joint Operations* (Washington, DC: The Joint Staff, 2016), https://www.jcs.mil/Portals/36/ Documents/Doctrine/pubs/jp1\_06pa. pdf?vcr=2018-02-08-091410-513.