

REDESIGNING SUSTAINMENT TO BUILD COMBAT READINESS IN LSCO

Lessons from the Indo-Pacific

■ *By CSM Eduardo I. Carranza*

As the U.S. sharpens its focus on large-scale combat operations (LSCO) in the Indo-Pacific theater, shaped by strategic competition with China, it is presented with a unique set of challenges. LSCO readiness in this region demands more than lethality. It requires an adaptable sustainment architecture capable of surviving in dispersed, contested, and degraded conditions. China's military modernization, economic

coercion, and territorial assertiveness — especially in the South China Sea — are not only indicators of rising tension but direct threats to the logistics networks that underpin combat power.

Transformation in Contact 2.0, as defined in U.S. Training and Doctrine Command Pamphlet 525-3-1, The U.S. Army in Multi-Domain Operations, is the Army's commitment to adapt formations and capabilities during contact with peer

threats. Sustainment cannot wait for calm phases to modernize. It must evolve in stride with maneuver forces under fire.

Sustainment organizations play a pivotal role in shaping operational outcomes before the first round of fires. In an era defined by precision strike threats, information warfare, and political friction, the ability to sustain forward-deployed forces directly influences combat readiness and deterrence. This article examines

how China's rise impacts LSCO preparedness in the Indo-Pacific and recommends how U.S. Army sustainers can transform their posture to ensure survivability, agility, and operational reach in tomorrow's fight.

China's Rise and the Logistics Challenge

Over the past decade, China's official defense spending has increased by approximately 75%, rising from around \$150 billion in 2014 to over \$270 billion in 2024.

This sustained investment underscores Beijing's goal of fielding a force capable of countering U.S. power projection. Through the Belt and Road Initiative, China has also established a significant economic presence across Asia, Africa, and Latin America. While Chinese officials claim peaceful intent, their actions in the South China Sea suggest otherwise. The construction of artificial islands, military outposts, and the harassment of regional navies indicate a strategy focused

on dominating critical sea lanes and logistics corridors.

The South China Sea, through which more than 30% of global trade flows, is a linchpin of global logistics. Control of these waters provides economic leverage and the means to threaten U.S. and allied sustainment operations. In future LSCO scenarios, traditional hub-and-spoke logistics models would be at significant risk from precision fires, maritime interdiction, and

cyber attacks. This important fact requires that we rethink how we build and sustain combat readiness.

Sustainment in a Contested Indo-Pacific Battlespace

China's ambitions have forced a fundamental shift in how the U.S. envisions its sustainment operations. The old assumptions of stable bases, secure ports, and uncontested airlift no longer hold. Transformation in Contact 2.0 requires sustainment structures that can adapt in real time, survive in degraded environments, and support forces operating far from traditional logistical hubs. The adaptability of these structures must ensure the country's preparedness.

Sustainment Priorities for Transformation and Combat Readiness

To meet this challenge, sustainment transformation must prioritize dispersion, artificial intelligence (AI) and predictive logistics, ally and partner capacity, and resilient communications. We must break large hubs into smaller, mobile nodes. Data-driven tools can anticipate supply needs. Integrating logistics with Japan, Australia, and the Philippines enables shared sustainment loads and a broader operational reach. Secure, redundant communications systems ensure that units maintain command and control despite electronic warfare and cyber attacks.

Ideologically, China's motivations stem from a desire to reclaim historical dominance in the region. Nationalist narratives, particularly

the Century of Humiliation (mid-19th century to the mid-20th century), justify expansionist policies and inform the People's Liberation Army's operational posture. These motivations result in an adversary focused on shaping the operational environment to their advantage by denying access, sowing doubt among regional partners, and targeting sustainment infrastructure. For logisticians, the battlefield begins well before the enemy fires the first shot.

Taiwan: The Ultimate Sustainment Test

Taiwan remains a flashpoint in U.S.-China relations. It represents both a symbolic and strategic threshold. If hostilities were to break out, Taiwan would become the most demanding logistics challenge in recent history. Forward-deployed forces would require agile resupply under constant surveillance and potential missile attacks. Cyber disruption, space-based interference, and disinformation campaigns would further complicate the process of sustainment. Taiwan is the only issue that could realistically escalate into a major power conflict.

Meeting that challenge will require rapid force projection through prepositioned equipment, maritime and aerial resupply via low-signature platforms, and reliance on commercial and host-nation capabilities for flexibility and scale.

During previous moments of strategic tension, such as U.S. support to Taiwan during early Cold

War confrontations, rapid strategic mobility and resilient supply lines were central to deterrence. For example, the 1958 Taiwan Strait Crisis highlighted the crucial role of logistics in supporting allies under threat. In the modern context, sustaining joint forces across the first island chain, a strategic arc stretching from the Kuril Islands north to Borneo in the south, will demand greater creativity, technology integration, and multinational cooperation. This geographical reference is essential to understanding the strategic challenges in the Indo-Pacific region.

Additionally, Operation Desert Storm offers a clear historical example. Prepositioned materiel in Saudi Arabia enabled the U.S. to build combat power rapidly. Sealift and airlift ensured continuous flow even under potential Scud missile threats. Similarly, during Operation Iraqi Freedom, commercial logistics partnerships expanded throughput, moving vast volumes of fuel and ammunition to forward units.

In a future LSCO against China, these lessons will be even more critical across the vast Indo-Pacific region. Host-nation agreements, resilient commercial shipping, and joint force sealift will underpin the ability to sustain maneuver forces scattered across island chains.

Redesigning Sustainment to Counter Economic and Political Coercion

China's rise is not limited to military advancements. Its dominance over global supply chains, rare earth

materials, and international lending institutions gives it considerable coercive power. This economic influence directly affects the material landscape in which the U.S. military operates. China is an investor and a power broker in many regions, such as central and southern Africa. Perceptions of Chinese engagement vary widely, creating opportunities for the U.S. to strengthen relationships through logistical support missions that align with humanitarian needs and capacity-building efforts.

Sustainment in this context becomes a tool of strategic competition. Delivering supplies, building host-nation logistics capacity, and operating transparently can reinforce trust with partners and allies. This reality is particularly critical in the Indo-Pacific, where nations may be reluctant to side openly with either superpower but are more likely to support those who contribute to regional stability.

Strategic Recommendations

To prepare for sustainment operations in this evolving environment, the Army must do the following:

- Develop agile sustainment task forces designed for rapid deployment and modular support. These formations must be able to scale based on mission variables and operate in decentralized environments, without waiting for established static infrastructure.
- Expand Army prepositioned stocks (APS) across dispersed island chains to reduce

dependency on a few vulnerable locations. Placing APS in the Philippines, Palau, and northern Australia could offer rapid access to equipment and materiel during a crisis.

- Invest in sealift, unmanned logistics platforms, and aerial resupply technologies to bypass chokepoints and damaged infrastructure. Small-watercraft logistics, vertical takeoff drones, and autonomous vehicles must supplement traditional systems.
- Institutionalize logistics wargaming to test real-world scenarios where degraded communication and mobility exist. Lessons from exercises like Talisman Sabre, Cobra Gold, and Defender Pacific can help validate sustainment concepts under stress.
- Create formal agreements for host-nation support, including warehouse access, local contracting, and mutual logistics interoperability. Sustaining success depends on relationships built long before conflict begins. Agreements must focus on real-time access, not just diplomatic frameworks.
- Modernize sustainment information systems to integrate securely and efficiently with joint, interagency, and multinational partners. Global Combat Support System-Army and similar platforms must evolve to incorporate coalition-level visibility and AI-powered decision tools.
- Expand the role of sustainers in multidomain operations.

Logisticians must be trained and empowered to operate across cyber, space, and information domains, not just in physical space. Sustainers must understand how logistics actions affect the tempo of information warfare and deterrence.

Conclusion

The rise of China and the contested nature of the Indo-Pacific require a new paradigm for sustainment. Transformation in Contact 2.0 is not an abstract vision, but an urgent necessity. As great power competition intensifies, logistics must be treated as a critical warfighting capability. China's strategy of targeting logistical vulnerabilities makes it clear that our ability to sustain the fight will determine our ability to win it.

The Army can maintain the initiative by redesigning sustainment organizations to operate effectively in contested, dispersed, and politically sensitive environments. Today's logisticians must be more than suppliers. They must be planners, innovators, and leaders in strategic competition.

CSM Eduardo I. Carranza currently serves as the command sergeant major for the 4th Brigade Support Battalion, 410th Regiment, 4th Cavalry Multi-Functional Training Brigade, First Army Division East. He previously served as the detachment sergeant major for 953rd Theater Petroleum Center, Fort Bragg, North Carolina, and Petroleum and Water Department sergeant major, Fort Lee, Virginia. He is a graduate of the Sergeants Major Academy resident course Class 70. He has a master's degree in defense and strategic studies from the University of Texas at El Paso.