The Paradox of Power

15 JULY 2026

Neele Seifert



A Guest Contribution by CRESCENT Research Center

The problem facing the Pentagon today is no longer confined solely to the battlefield, but also to what comes before and after it. The recent war against Iran, added to years of military support of Ukraine, has revealed a reality far more complex than what is often captured in official statements and public briefings. The issue is increasingly framed in defense policy analysis not as whether the United States can project military power, but how sustainably it can maintain high-intensity operations over time.

According to assessments by defense-oriented think tanks such as the Center for Strategic and International Studies (CSIS), sustained demand for precision-guided munitions and air-defense interceptors – particularly in the context of Ukraine and broader regional contingencies – has placed measurable pressure on U.S. stockpiles and production timelines. While precise depletion percentages are not publicly confirmed across all systems, CSIS and similar institutions have repeatedly warned of significant strain on inventory levels and limited surge production capacity for key munitions categories, including Patriot interceptors and artillery shells.

When the Ukraine conflict is incorporated into this broader picture, multiple defense analyses suggest that the United States have drawn down substantial inventories of systems such as Javelin anti-tank missiles and Stinger air-defense missiles, alongside large-scale expenditure of 155 mm artillery ammunition. U.S. defense officials have in various statements acknowledged concerns about **near-term replenishment timelines and industrial bottlenecks**, particularly for high-demand systems. However, the central challenge is not solely consumption, but replenishment and this is where the second major complication emerges: China.

At the core of much most advanced military equipment are materials derived from rare earth elements, a sector in which China plays a dominant role in global processing and refining capacity. According to multiple industry and government assessments, China is responsible for the majority of global rare earth refining output, particularly in heavy rare earth separation and magnet production. For example, the Tomahawk missiles, Patriot PAC-3 interceptors, and JASSM-class missiles are widely understood to rely on advanced magnetic and electronic components that incorporate rare earth materials such as samarium, neodymium, dysprosium, and terbium. While system-level material breakdowns are not fully disclosed in public sources due to classification, U.S. Department of War supply-chain reviews have consistently identified these materials as **critical inputs for guidance, propulsion control, and avionics subsystems.**

Similarly, the Lockheed Martin F-35 Lightning II, the crown jewel of American military industry has been cited in U.S. defense supply-chain reporting as containing roughly several hundred pounds of rare-earth materials used in radar, electronic warfare, and propulsion systems, the materials derived from same elements currently subject to Chinese export restrictions. This means that the reproduction of these systems – or even their maintenance – has become increasingly influenced by supply chains in which China plays a major role.

This dominance did not emerge suddenly. Since the 1990s, China has developed a leading position in rare earth refining through sustained industrial policy, vertical integration, and control of complex separation technologies. Contemporary policy analyses note that Beijing continues to reinforce this position through regulatory tools, including export licensing regimes and tighter oversight of strategic mineral flows.

In parallel, the United States has moved to reduce exposure to concentrated supply chains through legislative and industrial policy measures. Under the Defense Federal Acquisition Regulation Supplement (DFARS) and related National Defense Authorization Act (NDAA) provisions, the U.S. Department of Defense has progressively restricted reliance on certain adversary-origin critical materials in defense procurement.

These measures are being implemented through phased timelines and transitional compliance periods extending into the late 2020s, reflecting the time required to reconfigure complex industrial supply chains. How-

ever, policy analysts generally note that global refining capacity for several rare earth elements remains heavily concentrated outside the United States, with China retaining a dominant position.

Meanwhile, China has introduced and expanded export control frameworks on selected rare earth elements and associated processing technologies in recent years, particularly targeting strategic materials and advanced magnet technologies. These measures are widely interpreted in policy literature as part of a broader trend toward resource securitization in global supply chains.

Taken together, these developments highlight a structural tension: U.S. legislation aimed at strengthening strategic independence as part of national security is advancing against an industrial system that remains heavily shaped in part by China's position in global refining and processing. As a result, Washington faces significant challenges in rebuilding and sustaining its defense industrial base without at least some reliance on China-linked supply chains, even as strategic competition between the two countries continues.

In this context, high-level engagements between the United States and China often reflect broader strategic importance of critical supply chains, including rare earth minerals. While these materials are not always the central focus of formal agendas, they remain an important underlying issue in broader discussions on trade, technology, and security. U.S. officials have repeatedly emphasized the importance of securing stable access to critical materials essential for advanced manufacturing and defense production. In this sense, U.S. military readiness is increasingly influenced by the resilience of global supply chains, which are themselves shaped in part by the broader state of U.S.–China economic and geopolitical relations.

This having said, the United States has pursued diversification strategies through allied and partner-based supply chains. One of the key actors in this effort is Lynas Rare Earths, an Australian company operating major processing facilities in Malaysia. Lynas has begun expanding its downstream processing capabilities, including production of certain heavy rare earth compounds such as samarium-based materials, though industry sources describe these capabilities as emerging rather than fully mature at industrial scale. These developments are supported through U.S. defense supply-chain initiatives and procurement agreements, in coordination with Australian and Japanese partners. Additional investments are underway in rare earth refining projects in the United States and Brazil, though most remain in early stages and will require years to significantly reduce external dependence.

The challenge facing the United States is therefore increasingly structural, reflecting limitations in its defense industrial base under conditions of sustained demand. While the U.S. retains the ability to project military power rapidly, prolonged periods of attrition place significant pressure on munitions stockpiles and production capacity. These constraints are com-

pounded by the global nature of supply chains, including areas where China plays a significant role in the processing of certain critical materials.

In this sense, a paradox emerges: the United States remains a global military superpower with unmatched operational reach, yet its ability to sustain extended high-intensity conflict depends increasingly on rebuilding industrial capacity and strengthening supply-chain resilience across multiple partners. This has made industrial production and supply-chain security central considerations in long-term strategic planning.

About the contributor: CRESCENT Research Center is an independent think tank founded in 2023 and based in Baku, dedicated to advancing comprehensive analysis of political, economic, and security issues shaping the Middle East and its global relations. The center conducts research, organizes events, publishes reports, and fosters dialogue and cooperation among policymakers, media, academic institutions, and civil society to address the region's most pressing challenges and opportunities. "CRESCENT" specializes in conflict resolution, regional integration, energy and environmental issues, and the preservation of cultural and religious diversity. Through a growing network of partnerships across and beyond the Middle East, the center is committed to promoting peace, justice, and mutual respect in the region and internationally.

EPIS