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From the Editor

The national economies of the world require strategic resources to prosper. But they also need strategic resources to survive. Likewise, the armed forces of the world are dependent on strategic resources for the technology in their weapons systems, vehicles, communication, satellites, and many other requirements. Countries have become concerned about two key facts. One is their growing dependence on strategic resources for economic wellness and national security. The second is the efforts by great powers to control access to strategic resources both for defensive national purposes and to be able to restrict access to foreign competitors.

The new Donald J. Trump administration has made strategic resources an even more important issue. From pursuing a deal for Ukraine's strategic resources to demanding control of Greenland's strategic resources, Trump has brought unprecedented attention to the role of strategic resources in U.S. national security and the global competition for them. This issue of JAMS examines timely questions about strategic resources and national security.

The strategic resources most often discussed are critical materials. The Energy Act of 2020 defines critical materials as "a material or mineral that serves an essential function in the manufacturing of a product and has a high risk of a supply disruption, such that a shortage of such a material or mineral would have significant consequences for United States economic or national security."¹ The Department of the Interior created a list of 50 elements it identifies as critical minerals.² To make the issue more challenging, the Department of Defense produced a list of 45 elements it identifies as strategic materials.³

The federal government has been involved in strategic resources since it created the Bureau of Mines in 1910.⁴ This bureau was closed in 1996 and some have called for it to be renewed.⁵ The United States took a more comprehensive approach to strategic resources with the Strategic and Critical Materials Stock Piling Act of 1939.⁶ This played an important role in managing strategic resources to produce the massive U.S. war arsenal during World War II. The next big step, the Defense Production Act of 1950, was a result of another war,

this time in Korea.⁷ This legislation had lasting results for managing strategic resources during the Cold War.

The Trump administration has declared that “[c]ritical minerals, including rare earth elements, are essential for national security and economic resilience.”⁸ Even during the limited time this administration has been in office, it has made U.S. dependence on strategic materials a top priority. The Trump administration is particularly concerned that, “[t]he United States remains heavily dependent on foreign sources, particularly adversarial nations, for these essential materials, exposing the economy and defense sector to supply chain disruptions and economic coercion.” Trump has gone so far as to issue an executive order about strategic resources that invoked the 1950 Defense Production Act.⁹

The articles in this issue provide new research and analysis on the critical issue of strategic resources. Although, the United States has incrementally improved its management of strategic resources, vulnerabilities remain and much more needs to be done. The articles that follow also show that the problem is bigger and more complex than many believe.

Bert Chapman provides a valuable foundation for addressing the continuing challenges of strategic resources. His article, “Recent U.S. Government Policy Literature on Critical and Strategic Minerals,” helps update the reader on the different approaches the U.S. government has taken to improve its management of strategic resources. This highlights one of the biggest impediments to tackling the issues of strategic resources: the lack of one unified and cohesive U.S. approach. Instead, the United States has multiple and sometimes competing approaches, with various agencies, such as the Departments of Defense, Commerce, Energy, Interior, and State playing important roles in the U.S. management of strategic resources. Chapman also makes recommendations for improving the U.S. response to these problems.

Gregg Etter takes a more comprehensive look at strategic resources by examining the problems of food security and how it has been weaponized by great powers. He focuses on the often-overlooked case of the Holodomor. The Holodomor was a major example of weaponizing food security through a man-made famine imposed on Ukraine by the Soviet Union. Millions of Ukrainians lost their lives during the brutal effort by Moscow to use famine to strengthen its control over Ukraine and its other valuable strategic resources.

This issue of JAMS also examines how other major actors such as China and the European Union (EU) are increasing their efforts to better manage strategic resources. In their work, “The Winds of Change: How China’s Focus on Rare Earth Minerals Reshapes the World,” Kevin Johnston and Ian Murphy provide valuable information and analysis of how China, the greatest competitor to the United States, is mixing the economic and security elements of strategic resources. An essential ingredient for improving the U.S. approach to strategic

resources is an accurate understanding of the differences in how China deals with the issues of strategic resources. Johnston and Murphy offer recommendations for how the United States can respond better to China's comprehensive, aggressive, and longer-term efforts for strategic resources.

In contrast, Gleb Trufanov analyzes the efforts of an ally, instead of a competitor, the European Union. He also expands assumptions about strategic resources by asking the reader to consider media security as one of the fields of competition between great powers. His article, "The European Integration as a Strategic Source for the Ukrainian Democratic Media and the EU in Countering Russian Propaganda," examines the value of media security both to the EU and the conflict in Ukraine. Trufanov also identifies ways to improve EU-Ukraine cooperation in media security.

Major Philip Murphy addresses a key vulnerability in the U.S. management of strategic resources—China's current dominance of the international value chain for lithium batteries. Lithium batteries are essential parts of advanced technology in both the civilian and military sectors. Over the years, China saw them as a higher priority than the United States and developed a near monopoly over access to the components in the global supply chain for lithium batteries. His research, "Power Play: Charging Up Strategic Competition over Lithium Battery Value Chains," draws attention to this major challenge to the U.S. economy and military forces.

Finally, Michael Cecire highlights one of the biggest elements of the U.S. government's approach to strategic resources. As mentioned earlier, the Defense Production Act has had both historical and recent importance in how the United States improves its management of strategic resources. In "Reauthorizing the Defense Production Act in the Era of Defense Mobilization and Supply-Side Industrial Policy," Cecire focuses on the continuing value of the Defense Production Act as one of the most influential tools for managing strategic resources. He also points out policy options for how the United States can use the Defense Production Act to better tackle the challenges of strategic resources.

All of the articles presented make this an important issue of the *Journal of Advanced Military Studies* because they tackle one of the most important challenges to national security and the U.S. economy. They remind us of how the United States has wrestled with these issues and the continuing vulnerabilities to materials so essential to our security and economic needs. Fortunately, they also identify options and recommendations for how the United States can better manage strategic resources now and in the future.

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Endnotes

1. “Energy Act of 2020,” Department of Energy, 21 December 2020.
2. “U.S. Geological Survey Releases 2022 List of Critical Minerals,” press release, USGC, 22 February 2022.
3. “Materials of Interest,” Defense Logistics Agency, accessed 23 April 2025.
4. “1910—Bureau of Mines Created,” Department of Labor, accessed 23 April 2025.
5. Gracelin Baskaran, “Seven Recommendations for the New Administration and Congress: Building U.S. Critical Minerals Security,” Center for International Studies, 14 November 2024.
6. The Strategic and Critical Materials Stock Piling Act of 1939 (50 U.S.C. § 98) (7 June 1939).
7. The Defense Production Act (DPA) of 1950 (P.L. 81-774, 50 U.S.C. §§4501) (8 September 1950).
8. “Fact Sheet: President Donald J. Trump Ensures National Security and Economic Resilience Through Section 232 Actions on Processed Critical Minerals and Derivative Products,” White House, 15 April 2025.
9. “Immediate Measures to Increase American Mineral Production,” executive orders, White House, 25 March 2025.