

Written Testimony from Steven Place, Senior Policy Advisor, AstroForge, Inc.
*Full Blast: Contrasting Momentum in the Space Mining Economy
to the Terrestrial Mining Regulatory Morass.*

Submitted to the Committee on Natural Resources
Subcommittee on Oversight and Investigations
U.S. House of Representatives
February 25, 2025

Tomorrow, at 7:15 PM Eastern time, AstroForge will launch the first privately funded deep space mission in history. This mission brings AstroForge one step closer to our goal of securing critical resources for America. This mission signifies what a small group of dedicated Americans can achieve when they set out to explore what's possible to improve the quality of life here on Earth.

As members of this Committee, you recognize that America's leadership in manufacturing, energy, and defense requires a reliable supply of raw resources. **We are here today to urge this Committee to recognize that asteroid mining must be part of America's mining future.**

Right now, 96% of Platinum Group Metals come from China, Russia, and South Africa.¹ Our daily modern lives rely on the capabilities enabled from these critical resources—smartphones, cars, and computers, all require Platinum Group Metals—and our supply is rapidly dwindling.² **We will run out if something does not change.** We currently have no viable solution to this problem other than going off world and looking to space for the solution. America should lead the way.

The good news? Earth is surrounded by ore-rich bodies, known as metallic asteroids. They contain an almost unlimited supply of the Platinum Group Metals. We know this because our planet is impacted by thousands of these asteroids every year, we just refer to them as meteorites. They contain the highest ore grades ever discovered, and the leading theory suggests that all known platinum group metal mines on Earth originated from ancient asteroid impacts.

This is not a secret. Our adversaries are well aware that the future of mineral security on Earth depends on the ability to secure these resources from space.³ We must be the first to develop this

¹ Cohen. A. (2022, January 13). China And Russia Make Critical Mineral Grabs in Africa While the U.S. Snoozes. *Forbes*. <https://www.forbes.com/sites/arielcohen/2022/01/13/china-and-russia-make-critical-mineral-grabs-in-africa-while-the-us-snoozes/?sh=55c9cacd6dc4>

² Schulte, R.F.. (2024). Mineral Commodity Summaries, January 2024. USGS. <https://pubs.usgs.gov/periodicals/mcs2024/mcs2024-platinum-group.pdf>

³ Aedan Yohannan, "China's Space Strategy Dwarfs U.S. Ambitions," *American Foreign Policy Council*, March 11, 2024 <https://www.afpc.org/publications/articles/chinas-space-strategy-dwarfs-u.s-ambitions>

technology and give our nation a lead in what will be the most significant shift in raw material sourcing in human history.

AstroForge's roadmap to make sure the United States leads the way is as follows: Our first mission in 2023 tested an early version of our refining technology in Low Earth Orbit. Tomorrow, our second mission will fly to a near-Earth asteroid and confirm the asteroid's metallic makeup.⁴ Our third mission, planned for 2026, will land on an asteroid and directly measure its ore concentration.

Upon completion of these three missions, AstroForge will manufacture a fleet of small autonomous spacecraft, each 200 kg in size, that can be launched on any available rocket. These spacecraft will travel to targeted asteroids, land on them, and will mine and refine the Platinum Group Metals on the surface of the asteroid. We will then transport these refined materials back to Earth to supply these necessary materials to drive our nation's industry and commerce.

Our five requests for this Committee to champion are as follows, recognizing that some of these will require collaboration with other Committees and regulatory bodies:

1. **Create a space resource consortium** to align private and public efforts and create a center of gravity to drive innovation and investment for space resources.
2. **Underwrite a price floor for offtake agreements** or become the offtaker of last resort for space resource companies to de-risk investments and provide pricing stability, as has been recommended for the terrestrial mining market.⁵ This is important, because at the end of the day we are competing against state-backed monopolies like China that dominate and manipulate spot-driven markets.
3. **Expand the Department of Energy's Loan Program** to include space-based critical mineral projects. The funding exists but currently applies only to terrestrial projects. A simple rule change could unlock breakthroughs and new sources of capital.
4. **Empower NASA to collaborate with commercial companies** on deep space missions. The success of NASA's CLPS missions show that commercial partnerships work. AstroForge could enable NASA to do more deep space missions at a much lower cost.
5. **Allow Commercial Deep Space companies to easily access NASA's Deep Space Network (DSN)**, communicating to spacecraft at long distances is very difficult using commercial technology, making the DSN more accessible would unlock a huge bottleneck.

⁴ See Appendix.

⁵ Ashley Zumwalt-Forbes, "Mining Financing Post," LinkedIn, February 15, 2025
https://www.linkedin.com/posts/ashleyzumwalt_mining-financing-infographic-activity-7295092955868999680-Q-5e?utm_source=share&utm_medium=member_ios&rcm=ACoAAALITNoBvvIQW1Ka-BqZj_VIInvhGwZe-kc

Future generations will look back on this moment as an inflection point for America's mineral independence. And this subcommittee has the chance to be remembered as the leaders who saw a glimpse of the future and decided to help forge it.

APPENDIX

Odin, lower right, attached to a Falcon 9 rocket on Intuitive Machines #2, for February 26, 2025, launch.

