THE COALITION FOR DEEP SPACE EXPLORATION

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Coalition for Deep Space Exploration

before the

United States Senate Committee on Commerce, Science, and Transportation
Full Committee Hearing

"There's a Bad Moon on the Rise:
Why Congress and NASA Must Thwart China in the Space Race"

September 3, 2025

Chairman Cruz, Ranking Member Cantwell, and distinguished Members of the Committee.

Thank you for the invitation to testify before the Committee, and for your consistent bipartisan support of NASA. That support has been critical to the progress we have made toward returning American astronauts to the Moon and building a sustained lunar presence. The most recent example is the funding for NASA in the reconciliation bill that supports facilities and activities from Earth to Mars, including funds for the Artemis IV and V missions.

The Coalition for Deep Space Exploration represents companies of all sizes across the United States, from small business suppliers to prime contractors that constitute the critical supply chain that enables our national space policy of leadership in space. For nearly a decade, this organization has been a resource and an advocate for industry as the country has embarked on the goal of returning to the Moon and eventually expanding our human exploration horizons onto Mars.

Artemis

Artemis is more than a space program. It is a statement of American leadership to the rest of the world. It ensures that the United States, and not our competitors and adversaries, sets the rules for lunar exploration, resource utilization, and governance.

Without a successful Artemis program, we risk ceding the Moon to China, a nation working diligently to land before we return and establish control over key lunar regions and resources.

Their intent is clear. Their progress is real. And time is not on our side. This is a race the United States cannot afford to lose.

China

China's capabilities in space cannot be underestimated, whether in their activities orbiting Earth or their ambitious lunar program. For example, the Long March rocket is so named to signal China's persistence in achieving its national goals in space and underscores its unfaltering intent to be the new world leader in space.

Recent tests of their lunar infrastructure demonstrate the systematic process they are following to accomplish a crewed landing on the Moon. In June, China conducted a test of its crew vehicle launch abort system. In August, the Long March 10 rocket successfully conducted a static test fire, paving the way for a test launch, and China also conducted a simulated takeoff and landing of its two-person lunar lander.[1] These are the hallmarks of a space program that is progressing towards its goals.

The United States currently holds advantages with the Space Launch System (SLS), Orion, Gateway development, Exploration Ground Systems processing, and other essential elements of the Artemis architecture. Our launch and crew vehicles have successfully flown an uncrewed test mission to the Moon and are poised to fly again with astronauts on board next year. China, on the other hand, is making steady, notable progress with its Lanyue lander, already testing its design for capabilities needed to land on the lunar surface.

Current Status of Artemis

To be very clear: the country that lands on the Moon first will shape the rules of engagement in space for decades to come. That leadership must come from the United States.

The Artemis program has received strong bipartisan support across Administrations and Congresses, and it is already delivering results. Artemis II is preparing for its crewed launch next year, but the work does not stop there. There is hardware being built today for Artemis III and continuing all the way through Artemis IX. Factories are running, hardware is being manufactured, and thousands of Americans in every state are at work to make this campaign successful.

The opportunity to win the race is there, but we need every element to execute to prevent China from landing the next astronauts on the Moon. The current Artemis architecture is making strong progress, but the technical challenges that remain to be overcome to land on the surface cannot be ignored. Congress must keep a watchful eye on how that effort progresses if we are to win.

Additionally, the United States is leading a coalition of 56 partner nations, and growing, under the Artemis Accords. A global community, initiated under President Trump's first term,

[1] https://www.space.com/astronomy/moon/china-is-making-serious-progress-in-its-goal-to-land-astronauts-on-the-moon-by-2030

supporting a set of principles for peaceful, sustainable, and cooperative civil space exploration from the Moon to Mars and beyond.

Every tool at the country's disposal must come to bear if we are to be successful. However, we need those tools to be available. The proposed Fiscal Year 2026 budget, with its vision of cancelling programs, has caused companies to question whether their role in supplying Artemis will continue. Industry wants a stable and predictable environment so that planning and investments can be maximized. However, the uncertainty injected into the Artemis program about its future has upended those plans. These actions are particularly destructive to the smaller companies that NASA and its partners rely on for their missions and could put them in financial jeopardy. Proactive actions limiting work on Artemis ahead of Congressional action are crippling our capability to produce the hardware needed for missions for Artemis IV and beyond. Turning off the existing means for continuing our lunar program when no replacement exists will not position us to beat China.

The Economic Return of Artemis

The rewards of advancing our lunar program extend beyond beating China. Artemis is an economic engine here at home. For every dollar invested, three dollars flow back into our economy, supporting advanced manufacturing, creating high-quality jobs, and driving innovation that benefits Americans in their daily lives. In the most recent NASA Economic Impact Report, NASA's Moon to Mars activities generated more than $23.8 billion in total economic output and supported an estimated 96,479 jobs nationwide, stemming directly from $7.7 billion in Moon to Mars program spending.[2]

Supporting Artemis to beat China creates stronger communities, a stronger industrial base, and a stronger America. This race is not just about the Moon, it is about economic growth, global competitiveness, and national security.

NASA's history shows that space exploration is inseparable from national security, as demonstrated by Apollo's technological advances, workforce development, and its symbolic power in uniting the nation and projecting U.S. leadership. Today, with renewed competition from China, the same principle holds: government must lead when missions are high-risk, capital-intensive, and at low technology readiness levels. Commercial services become viable only after the government has de-risked the fundamentals by ensuring infrastructure, standards, and industrial base continuity. For Moon and Mars exploration, government leadership is not anti-commercial but pro-market, retiring risks that open the doors to industry. It has happened time and again across industrial sectors and is occurring today in the space sector.

NASA Authorization

Congress can strengthen our national capabilities with a strong NASA authorization bill. That bill should reaffirm our commitment to the current plan, with improvements as necessary. It should continue the direction for lunar exploration found in the President's Space Policy Directive-1,

[2] https://www.nasa.gov/wp-content/uploads/2024/10/final-fy23-nasa-ecomomic-impact-report.pdf

which calls for the United States to lead the return of humans to the Moon for long-term exploration and utilization, followed by human missions to Mars.

To underscore our commitment to exploring the Moon and the need for stability in the Artemis program by maintaining a regular mission launch cadence, Section 10812 of the CHIPS and Science Act (Public Law 117-167), included the following provision:

> "After the first crewed lunar landing of the Administration's Moon to Mars activities, the Administrator shall, to the extent practicable, seek to carry out a flight rate of 2 integrated Space Launch System and Orion crew vehicle missions annually until the lunar activities needed to enable a human mission to Mars are completed so as to maintain the critical human spaceflight production and operations skills necessary for the safety of human spaceflight activities in deep space."[3]

Current law recognizes that the current architecture and a regular flight cadence are the path from our exploration of the Moon to exploring Mars. NASA's plan as part of the Fiscal Year 2025 budget included annual launches of SLS and Orion after Artemis IV. It highlights that the stability a regular mission cadence creates also benefits our space industry. Injecting uncertainty at this juncture invites unnecessary concern and distracts NASA and its partners from what they should be focused on: a successful Artemis campaign.

A new multi-year authorization bill will provide the additional certainty needed to keep NASA focused and our workforce, our partners, and our allies aligned.

Great strides are being made from lessons learned after Artemis I. NASA could realize even greater efficiencies and cost reductions by:

- Cutting unnecessary requirements that are not safety critical. With the success of the Artemis I mission, both NASA and industry have found ways to do the same activities in an efficient manner that cuts time and reduces cost. This is being done within the confines of the current contracts. A provision allowing even greater flexibility to cut red tape will enable benefits to cost and schedule to become even greater.
- Requiring a study of a phased approach to commercial services for future missions to further drive down costs. It should direct NASA to map out a phased approach to transition to a fixed price model for the Artemis program, including potential services contract approaches.
- Ensuring that decision-making at NASA centers and industry sites is available when the work is happening, increasing efficiency. To meet production schedules, NASA's industry partners may need to run operations outside the traditional Monday-Friday 9 to 5, yet work can grind to a halt when a decision needs to be made outside regular business hours. Delays of a day or hours add up over time and contribute to needless loss of schedule margin. If NASA and industry are working together on a unified goal, they should be able to count on each other to be there when it counts.

[3] https://www.congress.gov/117/plaws/publ167/PLAW-117publ167.pdf

These steps will make Artemis more agile, more efficient, and more sustainable, while keeping the United States on track to lead in deep space exploration. But passing a bill on its own will not be sufficient; Congress must hold NASA accountable for implementing current law and adhering to the direction in any legislation signed into law.

Conclusion

The progress we have made is invaluable. The investments you have supported are paying off. The industrial base is ready and capable. The international partnerships are real and growing in number. And the next generation, the Artemis generation, is being inspired.

If we lose momentum now, that progress will not be easily regained. But when successful, Artemis will deliver historic achievements that secure America's leadership for generations.

We must not falter.

With your continued support, Artemis will secure our place on the Moon before China, strengthen our economy here at home, and keep America strong.

Thank you for your time, your attention, and for your commitment to Artemis, NASA, and America's leadership in space. The Coalition for Deep Space Exploration looks forward to working together with the Committee on a bipartisan basis to ensure we are successful in thwarting China and showing what true leaders in space can accomplish.