



February 26, 2025

The Honorable Brian Babin
United States House of Representatives
Committee on Science, Space, and Technology
2321 Rayburn HOB
Washington, DC 20515

The Honorable Zoe Lofgren
United States House of Representatives
Committee on Science, Space, and Technology
2321 Rayburn HOB
Washington, DC 20515

The Honorable Mike Haridopolos
United States House of Representatives
Space and Aeronautics Subcommittee
2321 Rayburn HOB
Washington, DC 20515

The Honorable Valerie Foushee
United States House of Representatives
Space and Aeronautics Subcommittee
2321 Rayburn HOB
Washington, DC 20515

Dear Chairman Babin, Ranking Member Lofgren, Subcommittee Chairman Haridopolos, and Ranking Member Foushee,

On behalf of the over 40 members of the Coalition for Deep Space Exploration (CDSE), we are providing the following letter to be included as part of the record for the House Committee on Science, Space, and Technology's Space and Aeronautics Subcommittee Hearing entitled "Step by Step: The Artemis Program and NASA's Path to Human Exploration of the Moon, Mars, and Beyond". CDSE is pleased that this Committee is highlighting the step-by-step nature of exploration that will maintain the leadership of the United States in space.

CDSE is the only industry organization representing the companies directly associated with NASA's Artemis program. From small businesses and suppliers nationwide, to the prime companies that integrate and assemble them all to make the Artemis missions possible, each plays a critical step in making human exploration possible.

The Moon is not a detour on the path to the human exploration of deep space. It is the essential next step in expanding humanity's reach into the solar system. For the United States to maintain its leadership in human space exploration, prioritizing the Moon is both strategic and necessary. If years of planning by NASA and its partners in industry and across the globe for Artemis are abandoned in favor of an immediate pivot to Mars, there will be a direct impact on the very industry that NASA relies upon to accomplish its goals. The country will also surrender the Moon to our adversaries giving them the power to establish dominance, set the rules, and dictate the future of lunar exploration and resource utilization, leaving the U.S. at a severe disadvantage.

The next step in human exploration is the Moon, and doing so will enable a future where the exploration of Mars can be achievable.

Step by step is a fitting description of NASA's approach to returning to the Moon and preparing for the eventual human exploration of Mars. It encompasses not only the logical and rational progression of human exploration but also the expansion of our country's influence on this planet as we move beyond our Earthly bonds. Most people will never leave this planet, yet it is these same people who will make our return to the Moon and eventually Mars possible.

Establishing a permanent presence on the Moon will require regular and reliable transport of crews and supplies to develop the infrastructure in cis-lunar orbit and on the lunar surface, including habitats, power generation, and vehicles necessary to explore and discover. The flight-proven Space Launch System and Orion spacecraft are currently being assembled at the Kennedy Space Center to support the upcoming Artemis II mission preparing to carry astronauts back to cis-lunar space for the first time in 50 years. After that mission, the next step will be a crewed landing on the Moon. The flight hardware for that mission, Artemis III, and for subsequent Artemis missions is already in production.

The full transit system will soon be in place, including the Human Landing System still in development and test, and NASA's trailblazing activities will pave the way for future commercial interests as they recognize opportunities. We have seen this scenario play out with the ISS playing a role as the catalyst for LEO development of commercial capabilities. Extending this model to the Moon will naturally lead to the human exploration of Mars. The creativity and drive of our space industry will undoubtedly expand our capabilities and leadership as we explore and live on the Moon.

NASA's plan for Artemis draws upon the talents and capabilities of the space industry nurtured over decades. Over that time, talent developed by NASA and within the industry has brought new companies and technologies to life, enabling the continued leadership of the United States in space. Today, NASA's \$8 billion annual investment in NASA's Moon to Mars activities returns over \$24 billion in economic output representing a three-to-one ratio of dollars invested to economic benefit. Returning to the Moon has allowed for the resurrection of the industrial supplier, catalyzed reinvestment in technical workers of all skill sets, and has modernized supply chain infrastructure. It allows the industrial base to continue its efforts of supporting exploration but also turning the development of those skills and capabilities into applications across the economy.

However, we are not alone in recognizing that the next step in exploration is the Moon. China has set its sights on human exploration and is steadily making progress toward its own lunar aspirations to land humans on the moon by 2030.

The expansion of space activities by China could gradually undermine the national security, economic strength, and global influence that the United States has long maintained through its leadership in space. Only by initially sending astronauts to the Moon for establishment of a permanent presence with a logistics hub for exploration of Mars and beyond will the United

States remain the preeminent space power, safeguarding its national security at the lunar high ground and ensuring standards for peaceful exploration, scientific research, and use of lunar resources, in accordance with international law.

If the United States is to ignore China's rise in the space domain and its interests in the Moon and pivot to Mars, the country will cede what is seen as the most natural next step in exploration. In an era where space dominance translates to geopolitical power, failing to secure a leadership position on the Moon could mean losing ground not just in space exploration, but in global diplomacy, security, and economic competitiveness for decades to come.

Humans have always been explorers, drawn to unknown frontiers and the United States has led the world in space because exploration is a part of our national character. It is in our nature as a country to discover what is beyond the horizon.

For humanity's next steps into space, the next adventure lies not in another flags and footprints endeavor, but in establishing an ongoing presence on the Moon. It will serve as the next training ground for exploring Mars and extending humanity's reach into the solar system.

Chairman Babin stated in a House Science, Space and Technology Committee hearing by the Subcommittee on Space and Aeronautics hearing on Sept 18, 2019, "Returning to the Moon does not have to mean delaying a mission to Mars. On the contrary, it is a logical step that enables exploration of the red planet and beyond."

The truth of that statement 5 years ago has not changed.

Sincerely,

A handwritten signature in blue ink that reads "Allen Cutler". The signature is written in a cursive, flowing style.

Allen Cutler
President and CEO
Coalition for Deep Space Exploration