

Summary

Citizens' Space Agenda

WHO WE ARE: We are private U.S. citizens who have travelled to Washington, DC, on our own time and our own dime to advocate for a “Citizens’ Space Agenda.”

NON-PROFIT SPONSORING ORGANIZATIONS:

1. The “Citizens’ Space Agenda” is a project of the Alliance for Space Development, and is sponsored by the Space Frontier Foundation and the National Space Society.
2. It is supported by Students for the Exploration and Development of Space, Students on Capitol Hill, the Lifeboat Foundation, The Mars Foundation, The Mars Society, The Moon Society, The Space Development Steering Committee, The Space Tourism Society, Tea Party in Space, the Space Development Foundation, Space Renaissance USA, and the Waypaver Foundation.

OUR 2018 ISSUES:

1. Establish an Ultra Low Cost Access to Space (ULCATS) program based on public-private partnership and streamlined governmental policy and regulations
2. Ensure a gapless transition from ISS to private space stations in Low Earth Orbit (LEO), with NASA assisting with development and serving as an early customer
3. Enable cislunar development through a series of programs, such as:
 - A public-private partnership to develop and demonstrate re-usable lunar landers based in cislunar space
 - Setting a price that NASA will pay for commodities (water, etc.) at locations in cislunar space
 - Purchasing data on lunar resources (water, etc.) gathered by private companies

What is ULCATS?

- Ultra-Low Cost Access To Space (ULCATS) is a proposed national goal to transform the U.S. space launch industry to provide daily access to space at very low cost
 - No current launchers provide ULCATS although companies are working to develop it
 - This is about creating an industry, not a single system
- America's strategic interests demand that this be an American industry and activity
 - National Security – provides for efficient replacement of military space assets
 - Economic Security – Drastic reductions in launch costs open up new jobs and new industries worth billions
- These capabilities will revolutionize our relationship to space, inspiring Americans and demonstrate American leadership, worldwide.

- How can government help create an ULCATS industry?
 1. Encourage Technology Development— focusing on full reusability and lower operational costs
 2. Act as an Intelligent Customer – many government agencies could benefit from this industry, but most are not ready to be customers
 3. Growth Oriented Regulation – assure safe operation while avoiding onerous, unnecessary and duplicative regulations for re-usable launch vehicles
- This is a cross-cutting activity, and will involve multiple federal agencies (NASA, Air Force, DARPA, etc.). Our proposed ULCATS bill requires the Executive Branch to develop a plan that enables ULCATS (draft text is at www.allianceforspacedevelopment.org)
- **REQUEST: Will you be an original sponsor of the ULCATS Act?**

Ensure Gapless Transition from ISS to Private Commercial Stations in LEO

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- **BACKGROUND:** The U.S. invested tens of billions into the construction and operation of the International Space Station (ISS), and it is planned to operate until 2024.
 - The Space Station has emerged as a place to do world class science and commercial development
 - There currently is no enacted plan to ensure the U.S. does not lose this capability after 2024
- **NASA 2017 Transition Act:** In section 303 of this law, Congress required NASA to produce a transition report. The report is overdue.
- **NASA's budget request for FY19:** The administration has proposed \$150 M in FY19 for the LEO Commercial Development program and to end direct federal support for the ISS.
- **OUR CONCERN:** The discussions of ISS and LEO have largely focused on the hardware of ISS, such as extending ISS, privatizing ISS, or de-orbiting ISS.
 - **The United States focus should be on enabling commercial stations as soon as possible, and ensuring that we will continue to have LEO capabilities, even after we stop operating ISS.**

Ensure Gapless Transition from ISS to Private Commercial Stations in LEO

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- **Fully fund the proposed \$150M LEO Commercial Development** – This money should be used to fund public/private partnerships to develop commercial space stations and create new opportunities for commercial industry to provide services to the government.
- **Report Language:** We request the inclusion of House/Senate report language associated with the Commerce, Justice, Science and Appropriations bill that directs NASA to use the required transition report to develop a clear plan for a gapless transition from the ISS to commercial space stations. The report language should request the plan:
 - Ensure that the U.S. will continuously maintain its presence in LEO post-ISS
 - Prioritize activities at the ISS to enable the creation, development, deployment, and operation of commercial space stations
 - Require NASA to support multiple companies and activities to enable at least two commercial space stations to be operational by 2024
 - Require that NASA avoid competing with the private sector by discontinuing NASA services on the ISS that are offered by commercial platforms
 - Transition NASA and the ISS National Laboratory to using commercial stations
- **REQUEST– Will you support 2019 funding of at least \$150M for a gapless transition and requiring a responsive report on implementation plans?**

Why *Cislunar Development* is Critically Important

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- **The Time is Now:** On December 11, 2017, the President signed Space Policy Directive 1 (SPD1), which called for the United States to “**lead the return of humans to the Moon for long-term exploration and utilization**” while working with “**commercial and international partners.**”
- **Cislunar space includes:**
 - The area between the Earth and Moon including Earth orbit, Lunar surface, Lunar orbits, L-points, and resources brought to this area from asteroids
- **What is needed for effective Cislunar Development?**
 - A public-private partnership to develop, demonstrate, and deploy infrastructure for exploring and developing the cislunar space environment, including re-usable lunar landers and robot probes to characterize lunar water
 - Setting a price that NASA will pay for commodities (water, etc.) at locations in cislunar space
 - Purchasing data on lunar resources (water, etc.) gathered by private companies
- **Why Now is the Time for Cislunar Development:**
 - Companies are seriously pursuing asteroid and lunar mining
 - NASA has begun the process via NASA’s **Next Step** of developing a cislunar base in the vicinity of the Moon
 - The experience base of LEO COTS/CRS is available as a foundation
 - The actual and prospective near-term availability of vehicles for reaching cislunar space
 - Falcon Heavy, SLS/Orion, New Glenn, Vulcan

- **Benefits of Cislunar Development (CLD):**
 - **Economic Growth** — has the potential, as outlined by ULA, to support massive growth in the space economy.
 - **Civil Space** — Today, our national space agenda is struggling. With CLD, America has the opportunity to lead the way to the development of Lunar and asteroidal resources while building the foundation of an affordable journey to Mars.
 - **Imagination & Inspiration** — If Cislunar development leads to profitable companies mining the Moon and asteroids, the world will be inspired by American leadership, ingenuity, and entrepreneurship.
 - **American Leadership** — With the success of CLD, America has the potential to become the undisputed leader of the world in space well into the 21st Century, providing significant soft power benefits for American diplomacy and influence in the world. CLD is more affordable for international participants with more short term practical returns than efforts focused on more distant goals.
 - **Scientific leadership:** Developing lunar resources will enable a wide range of scientific investigations. Cislunar space is relatively accessible to educational institutions and international partners, allowing vast scope for U.S. leadership.
- **REQUEST - Support in the FY 2019 NASA Budget Request the following:**
 - **\$116M for a Public-Private Partnership (PPP) to develop Lunar Landers**
 - **\$218M for “Lunar Discovery” and work to ensure that the program funds robot probes to find Lunar water using OTAs, PPPs, Space Act Agreements as the contracting mechanisms**