Dear Chairwoman Horn and Ranking Member Babin,

H.R. 5666 is an ambitious piece of legislation that demonstrates a commitment by the House of Representatives to NASA and to a bold space science and exploration program. Many of the provisions in the legislation align with The Planetary Society’s stated principles for human spaceflight, notably:

- retaining Mars as the ultimate goal for humans in space;
- pursuing a stepwise program to Mars that can include the Moon, with publicized milestones and a long-term budget;
- prioritizing research on the ISS that supports deep space exploration;
- directed technology research in support of Moon and Mars exploration;
- and engaging international and private sector partners to build a broad coalition of support for these efforts.

However, our overriding principle is that humans should once again voyage beyond low-Earth orbit. We believe that NASA’s current program of record, Artemis, has established considerable momentum towards achieving this objective. We are concerned that H.R. 5666, as written, could undermine this and thus disrupt and delay a planned return of U.S. astronauts to deep space.

The Planetary Society believes that NASA should be granted the flexibility to best implement Artemis in a manner that best serves the nation's interests in space. While we do not know if public-private partnerships will be successful in every domain, we do know that classic contracting methods for developing crewed exploration vehicles have repeatedly failed to meet cost and schedule milestones since the Apollo era. Competitively engaging both new and existing companies as partners in exploration is an experiment, but an experiment worth conducting. To that end, we recommend that the committee remove the provisions restricting activities and limiting competition for exploration capabilities.
We wish to endorse H.R. 5666’s strong science provisions. We welcome the policies that would establish a more robust planetary defense effort, ensure the development of WFIRST, and to critically evaluate the launch vehicle selection for Europa Clipper.

And though we welcome the supportive language for Mars Sample Return, we believe that the time has come to actively pursue it. We believe key items of the strategy requested in the legislation have already been addressed:

- NASA has outlined a “lean” sample return strategy that constrains cost by leveraging the use of existing and upcoming telecommunications and surface assets at Mars.
- Significant development work has prepared key technologies to enable sample return.
- International partners stand ready to participate. In November, ESA member nations approved a major partnership for a joint sample return mission with NASA.
- In FY 2020, the White House requested, and Congress provided, over $100 million to initiate a Mars Sample Return mission for possible launch as early as 2026.
- The FY 2020 presidential budget request included a five-year run-out for future Mars missions, and further detail is likely in the FY 2021 PBR.

In order for a cost-effective sample return program to work, NASA must proceed with the next mission before existing assets inevitably age and cease operations. We believe that NASA, its partners, and the science community have the right strategy and are ready to go. We look forward to working with the committee to formally authorize the implementation of Mars Sample Return.

We wish to thank you and your staff, as well as the rest of the members of the House Science Committee, for this important work on H.R. 5666. While we are encouraged to see broad consensus on human spaceflight activities, we still need to find agreement on near-term priorities in a manner that minimizes programmatic disruption and uncertainty. The Planetary Society and its Board of Directors, staff, and more than 50,000 members around the world look forward to engaging in this effort with you and your colleagues.

Sincerely,

Bill Nye
CEO
The Planetary Society

Dr. Jim Bell
President
The Planetary Society