

OPENING STATEMENT
Ranking Member Ami Bera (D-CA)
of the Subcommittee on Space

House Committee on Science, Space, and Technology
“America’s Human Presence in Low-Earth Orbit”
May 17, 2018

Good morning, and thank you, Mr. Chairman, for holding this hearing on *“America’s Human Presence in Low-Earth Orbit.”* I’d also like to welcome our witnesses, and I look forward to your testimony.

Since the assembly completion of the ISS in 2011, Station crews have been able to focus on using the ISS to test innovative technologies, and carry out the necessary research to support human exploration beyond low Earth orbit.

Congress twice supported extending ISS operations, the first time until 2020, and then again through 2024. Those extensions have helped demonstrate the benefits of the ISS for science and commercial opportunities, including enabling research that may one day improve, prolong, and even save the lives of people here on Earth. As a medical doctor, that is an exciting prospect.

Indeed, the ISS is performing research on how microgravity causes changes in organisms ranging from viruses and bacteria to humans, including altered gene expression and DNA regulation, and changes in cellular function and physiology. Spaceflight-induced health conditions may serve as a model for understanding the impact of conditions here on Earth, such as aging, osteoporosis, and wound healing.

We may be closer to making important discoveries sooner than you think. For example, researchers working for the Department of Defense are using the ISS to investigate the effect of microgravity on wound healing. DOD’s investigation is directed at injury repair and how microgravity alters new blood vessel development, which is a key component of wound and tissue repair. I need not tell you that if successful, this would be a game-changer.

That is why I am passionate about ensuring that future microgravity research in space be sustained and that a transition from the ISS to alternative platforms, whenever it may occur, be accomplished smoothly and cost-effectively.

Last year, the Space Subcommittee held a hearing on the ISS. We started to discuss whether or not to extend the ISS beyond 2024, and what role NASA should have in low Earth orbit once ISS operations cease. Today, we will focus on the ISS Transition Plan, which Congress asked for in the 2017 NASA Transition Authorization Act and NASA delivered in late March 2018, almost 4 months late. I hope that our witnesses will engage the Committee in a robust discussion of the critical indicators we might use to gauge the readiness of the commercial market to support a private orbital platform by 2025.

In addition, I look forward to hearing about the essential ISS R&D needed to enable deep space human space exploration and basic research, as prioritized by the decadal survey research. And, let us not forget,

Mr. Chairman, that a critical question regarding the future of the ISS and what follows is how the highly-successful International Partnership established under the ISS might continue.

It is clear that decisions we make on how we will operate in low Earth orbit moving forward will have profound consequences.

I look forward to hearing from NASA on its proposed strategy and next steps for moving forward, as well as from the other witnesses on their reactions to NASA's ISS Transition Plan. Thank you, and I yield back.