



U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON
SCIENCE, SPACE, & TECHNOLOGY

Opening Statement

Chairwoman Kendra Horn (D-OK)
of the Subcommittee on Space and Aeronautics

Subcommittee on Space and Aeronautics:
*A Review of NASA's Plans for the International Space Station and Future Low
Earth Orbit*

Wednesday, July 10, 2019

Good morning, and welcome to our distinguished panel of witnesses. I appreciate your being here, and I look forward to our discussion.

For nearly twenty years, the International Space Station has expanded our understanding of what it means to live and work in space. Our investments in the ISS have enabled scientific research, development, and technology demonstrations from DNA sequencing to advanced technology for water purification, now used worldwide.

More importantly, we haven't done it alone. The ISS is a shining example of international cooperation as well as innovative relationships for transportation services and expanded partner users of the ISS National laboratory.

I want to acknowledge the NASA, international, and commercial partners who continue to ensure the safe and productive operation of the ISS. As the Aerospace Safety Advisory Panel noted, the ISS Program deals with "the challenges of operating in the space environment in such a way as to make it seem 'normal' business."

However, there is nothing normal about human spaceflight. Aging spacesuits and delays in the availability of U.S. commercial crew transportation services are just a few of the risks that need to be addressed.

In addition to dealing with these and other near term challenges involved in sustaining the ISS, we must also look to what lies ahead.

While NASA has affirmed the integrity of the ISS structure through at least 2028, the lifetime of the laboratory is finite. What will come next? How will NASA and the nation ensure that the objectives for the ISS are sustained following the end of ISS operations, whenever that occurs? What are the steps that need to occur such that we can have confidence in avoiding a gap between the ISS and a future low Earth orbit facility?

NASA's International Space Station Transition Report identifies options, including "transitioning the ISS platform to private industry, augmenting it with privately developed modules, combining portions of the ISS with a new private platform, or deploying a new free-flying platform and de-orbiting the ISS".

I'm looking forward to learning more about these, and any other approaches, because when and how we transition NASA's activities in low Earth orbit from the ISS to an alternative platform or operating model is critical.

NASA has made clear its plans to transition from a government-owned and operated ISS "to a regime where NASA is one of many customers purchasing services from a LEO non-governmental human space flight enterprise."

This leaves a number of important and urgent questions that must be addressed.

- Who are those other customers? What does NASA's vision mean?
- In terms of NASA's commercial LEO development plan, what is the value proposition for the U.S. taxpayer?
- What level of investment is the private sector willing to make?
- Are NASA's planned investments in stimulating commercial market demand and supply in LEO going to ensure a smooth transition and prevent a gap in NASA's ISS and low Earth orbit activities?

The challenge here is the balance of risk and reward. Under this plan the commercial entities aren't the ones assuming the bulk of the risk, that falls to NASA yet the potential benefits to the Government and taxpayer are uncertain at best. The question is what the U.S. taxpayer will be on the hook to fund. With no near-term market other than NASA, there is a real question about the cost to the U.S. taxpayer.

NASA currently pays more than \$3 billion a year to operate the ISS. On top of that, NASA plans to fund the development of one or more commercial space stations, subsidize commercial activity on the ISS, and purchase services from future commercial space stations.

Will this plan save NASA money that it can apply to its Moon program, or will it end up costing NASA more, not less, over the next decade? I look forward to getting the details.

NASA's plan, may result in impacts on the ISS research and technology development that is needed to enable human exploration of the Moon and Mars and more.

We also need to understand the potential implications of the plan for the ISS international partnership on which NASA intends to build its future human exploration plans?

In closing, the low-Earth orbit and microgravity environment may in time support a viable commercial market. NASA has already taken initiatives to support commercial space through its development of commercial cargo services, commercial crew capabilities, and enabling research and development in low Earth orbit. While NASA's interest in finding innovative approaches to stimulating a commercial market in low Earth orbit are well intended, we need to be responsible with the taxpayers' investment in the ISS as a national and international asset, and we need to carefully consider how we ensure a successful transition of our ISS activities going forward.