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

Opening Statement

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

Subcommittee on Space and Aeronautics Hearing:

Keeping Our Sights on Mars: A Review of

NASA's Deep Space Exploration Programs and Lunar Proposal

May 8, 2019

Good afternoon and welcome. I'd like to extend a special welcome to our witnesses. Thank you for being here.

Today, we're examining NASA's deep space exploration programs—the capabilities and plans that will enable Americans to go beyond our low-Earth orbit neighborhood and into deep space.

Successive NASA Authorization Acts have authorized a stepping-stone approach to human exploration, with the most recent—the NASA Transition Authorization Act of 2017—establishing Mars as the long-term goal. The law also directed NASA to prepare a Human Exploration Roadmap. In hearings from the last Congress to the present, Members of the Subcommittee and Full Committee have repeatedly asked for this Roadmap, only to receive in response a high-level strategy that was delivered over a year and a half late. I refer to this Roadmap, because as the Authorizing Committee, it is our responsibility to the American taxpayers to ensure that human space exploration plans and budget requests are based on sound analyses and clear goals and objectives. We support NASA and we want it to succeed.

So I am concerned that as we prepare to reauthorize NASA again, we have many unanswered questions about the future of our nation's human space exploration program:

- How and when will we get to Mars?
- What technologies and systems are needed to get us there?
- What are the interim destinations and precursor missions that scientists and engineers have determined to be the most effective means to get us there?
- What is the future of the International Space Station and what are the priorities for it to enable an eventual Mars mission? How long should it be operated, and what will follow it in low-Earth orbit?

Mars is the horizon goal and I want Americans to be the first to set foot on the Red Planet. But make no mistake about it. There's an elephant in the room, and it's the Moon.

In the absence of an integrated Roadmap, the Administration has decided that the Moon is the place to go with humans, that we should go there sustainably, and be there permanently, though not necessarily with humans. And, as of just 6 weeks ago, the Vice President said we need to get there fast—in 5 rather than 9 years. While I can't argue with the desire to invigorate our human exploration efforts and find near-term milestones to demonstrate success, the lack of planning evident so far, is no way to run our nation's human space exploration program. The 2024 missive left NASA in a tizzy—scrambling to develop a plan and hastening to pull together a budget amendment that still have not been delivered to Congress; and, upending groundwork with international partners on future exploration goals.

What are the primary goals and objectives for going to the Moon? Are they geopolitical, scientific, commercial, or as risk-reduction efforts for an eventual Mars mission? On which goal is NASA basing its architecture and mission decisions? Simply saying "yes" to all of them is not an adequate way to determine priorities. And how will we get there by 2024? NASA's solution? Get the private sector to do it and do it fast. Whether or not that will be through cost-plus or firm-fixed-price contracts, which are not typically used for development projects, whether or not contracts would involve cost-sharing and what level of NASA oversight would be involved have not been made clear.

While public-private partnerships have a role to play, their use in human spaceflight programs has not yet been demonstrated. Commercial crew providers were awarded contracts in 2014 with an initial plan for certification by 2017. It's 2019 and while they're making good progress, we're still hitch-hiking with the Russians to low-Earth orbit. Not only that, under those contracts, it's the companies, not NASA, that decide what information to make public should something go wrong. Spaceflight is risky, and things do go wrong.

Let me be clear. I support America's robust, growing, and innovative space industry. A United States human space exploration program that leads the world should be leveraging private sector innovation. The question is how.

At present, we have a White House directive to land humans on the Moon in 5 years, but no plan or no budget details on how to do so, and no integrated Human Exploration Roadmap laying out how we can best achieve the horizon goal—Mars. In essence, we're flying blind.

I'll close with this thought. I believe all of us—Republicans and Democrats alike—share the goal of a successful and ambitious human space exploration program that enables the United States, in concert with international partners, to explore destinations in deep space such as the Moon and Mars. Such ambitious civil space goals are not only inspiring but essential to enabling discovery, providing benefits to society, and sustaining U.S. leadership in the peaceful uses of outer space. The Space Exploration Initiative of 1989 and the 2004 Vision for Space Exploration were unfulfilled attempts at achieving deep space exploration goals to go to the Moon and Mars. Will our efforts this time be an opportunity lost or an opportunity gained? If they are to be an opportunity gained, we will need an integrated and stable plan, adequate and sustained resources, and a commitment that transcends political party and election timelines to get us there.

Thank you.