

Ranking Member Frank Lucas Full Committee Hearing Statement "The Legacy of Apollo"

July 16, 2019

In 1969, driven by curiosity, ambition, and an innate urge to explore, Americans landed on the Moon. Doing so at the height of the Cold War helped establish our country's technological supremacy and gave us a fundamental edge over the Soviet Union. The Apollo program's success was far from certain, but our nation set to achieve the bold goal nevertheless. As Neil Armstrong remarked upon return, the nation staked its reputation on the mission. What resulted was perhaps the greatest achievement of any organization. This week we celebrate the 50th anniversary of that achievement. This celebration should be accompanied by a renewed resolve to return to the Moon.

Our reasons for returning to the Moon today are even stronger than they were fifty years ago. Going back to the Moon isn't a symbolic effort: we need an American presence there to keep us at the forefront of technological development, power our missions to Mars, and ensure American values explore the next frontier in space.

The technological innovations that come from human exploration of the Moon have direct practical applications here on Earth. Technology developed by NASA is now used in everything from infant formula to cell phones. We have precise robotic surgical capabilities and safer flights from deicing chemicals because of NASA innovations. Developing the technology necessary to establish a human presence on the Moon will have untold applications in the future. For example, significant portions of the Apollo Command and Service Module were built in my home state of Oklahoma. The integrated circuit chips contained in the service module went on to spark the information age. Technological advancements from future lunar exploration could be just as impactful.

Direct study is also critical from a purely scientific perspective. The Moon can give us a wealth of information about our Sun, our Solar System, and our planet, giving us a better idea of our place in the universe. The Moon also has exciting potential resources, including rare earth elements and platinum group metals, Helium-3, and, most importantly, water ice which can be converted to fuel to propel future exploration.

With all these benefits, the question isn't whether humans will return to the Moon; the question is whether the United States will lead in that effort. We're facing increased international competition and we can no longer take American leadership in space for granted. China has been vocal about plans to establish a human base on the moon. Unlike the U.S., which has a civilian agency overseeing space exploration, China's program is managed by the People's Liberation Army.

There are very real reasons to be concerned about China having an advantage over the U.S. from the technological innovations and resource development that will come from returning to the Moon. More importantly, explorers take with them their national values and establish a precedent for future activities. I would hope that the Moon, and all of the cosmos, will be explored with the principles of freedom and liberty.

Returning to the Moon won't be easy, however. We are in the process of developing the technological capabilities we will need. Reaching the Moon requires rockets far more powerful than those used to reach the International Space Station (ISS). The Space Launch System (SLS) will be the most powerful rocket built. In concert with the Orion spacecraft, a state-of-the-art crew capsule, SLS will allow us to travel to the Moon and, eventually, beyond.

We also need to make progress on new technologies which aren't yet fully funded or developed. The spacesuits we currently use for extravehicular activity outside the ISS do not have the capabilities required for use on the Moon. We need to engineer new suits that are compatible with multiple mission requirements. And, of course, we need lunar landers capable of carrying humans. NASA is working with commercial partners to develop these vehicles.

Beyond the technological innovation, however, a return to the Moon requires steadfast and consistent support. It requires a true national commitment—one that doesn't change year after year, or with political swings. For too long U.S. space exploration has been plagued by a lack of both a vision and a long-term commitment to see ideas through to execution.

I believe we now have most of the pieces in place to make a return to the Moon possible. Our President and Vice President have a bold goal. NASA has proposed an initial plan that is budget neutral, technically feasible, and makes a down payment to send Americans to the Moon by 2024 without jeopardizing other critical missions.

To paraphrase Walter Cronkite, the world bore witness to man's resolve in 1969. A man's dream and a nation's pledge were fulfilled. The lunar age had begun. Its time to renew that legacy and rekindle that resolve.