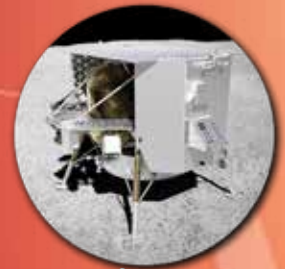


THE ROAD TO THE MOON GOES THROUGH OHIO

NASA's Artemis program is going back to the Moon for scientific discovery that will benefit all humankind. NASA Glenn's workforce of over 3,000 researchers, engineers, scientists, and administrative staff is working to develop and test technology that will support astronauts when they land and work on the Moon. From testing spacecraft before flight, to developing the power and propulsion systems for long-term human exploration—the road to the Moon goes through Ohio.



SOLAR POWER GENERATION
Glenn scientists designed and built a solar cell technology experiment that will launch to the Moon on a lunar lander.



WI-FI ON THE MOON
As NASA develops a Wi-Fi communications network for astronauts working on the Moon, Glenn experts and community leaders examined ways to use the same approach to address digital inequality in underserved Cleveland neighborhoods.



POWER SUPPLY
Glenn and the Department of Energy are working with industry to develop and demonstrate a fission surface power system that could provide reliable, safe electrical power to live and work on the Moon and Mars.



SUSTAINING ASTRONAUTS
Glenn researchers are developing methods to use the Moon's resources to produce water, fuel, and other supplies to sustain astronauts during long-duration missions.

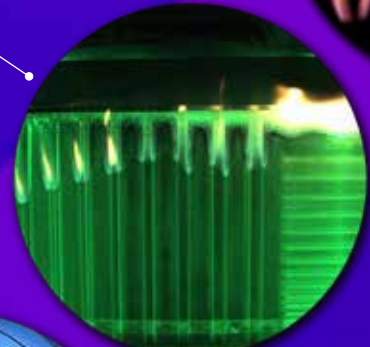
MAINTAINING SPACECRAFT SYSTEMS
The Flow Boiling and Condensation Experiment is testing ways to remove heat buildup on spacecraft so its systems can function properly.



FIRE EXPERIMENTS
NASA experts will learn how flames ignite on solid surfaces in space through the Solid Fuel Ignition Extinction (SoFIE) experiments on the space station that will help determine materials and designs for spacesuits, cabins, and habitats.



FIRE SAFETY STUDY
A series of Spacecraft Fire Safety Experiments, called Saffire, have been designed by Glenn researchers to understand how fire behaves in microgravity. These investigations will help keep astronauts safe on long-duration missions.



GATEWAY
Glenn's expertise in electric propulsion is being put to work on the Power and Propulsion Element (PPE) for Gateway, an orbiting spaceship that will provide essential support for long-term human exploration on and around the Moon.



ORION
The Space Environments Complex (SEC) at NASA's Neil A. Armstrong Test Facility in Sandusky, Ohio, houses the world's largest space environment simulation facilities. There, engineers tested the Orion spacecraft and other components for Artemis I to confirm each could withstand the stressors of launch and the harsh environments of space.



LUNAR ROVER TESTING
NASA's VIPER rover was put through a series of mobility tests in our Simulated Lunar Operations Laboratory (SLOPE Lab). This mobile robot will search the Moon's South Pole for water ice and other resources supporting our goal of a long-term presence on the Moon.



OHIO BUSINESS
Every state in America has made a contribution to the success of NASA's Artemis program, with companies hard at work on innovations that will help establish a sustainable human presence on the Moon.

Here in Ohio, 63 companies* support essential work to help NASA on a variety of missions to the Moon, Mars, and beyond. This work is critical to Ohio's space economy and supports job growth for a highly skilled workforce.

*2020–2021