National Aeronautics and Space Administration

X-PRESS

ARMSTRONG FLIGHT RESEARCH CENTER

Edwards, California, May 2025

NASA Calibrates Second Probe for X-59 Testing

NASA test pilot Nils Larson inspects the agency's F-15D research aircraft at NASA's Armstrong Flight Research Center in Edwards, California, ahead of a calibration flight for a newly installed near-field shock-sensing probe. Mounted on the F-15D, the probe is designed to measure shock waves generated by the X-59 quiet supersonic aircraft during flight. The data will help researchers better understand how shock waves behave in close proximity to the aircraft, supporting NASA's Quesst mission to enable quiet supersonic flight over land.

NASA/Steve Freeman

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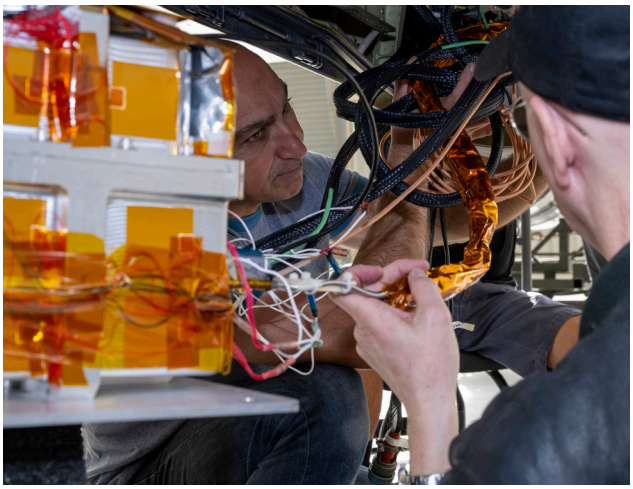

NASA/Genaro Vavuris

Flying high above the clouds and moon-gazing may sound like a scene from a timeless romance, but NASA did just that in the name of Earth science. In March, pilots took the agency's ER-2 science aircraft on a series of night flights over NASA Armstrong as the Moon increased in visible size.

The Airborne Lunar Spectral Irradiance, or air-LUSI, mission observed the Moon at different phases and measured the sunlight reflected by the lunar surface. This information enabled scientists to use the Moon as a calibration for Earth-observing sensors.

NASA Studies Wind Effects and Aircraft Tracking

NASA/Genaro Vavuris

NASA engineers began using a network of ground sensors in March to collect data from an experimental air taxi to evaluate how to safely integrate such vehicles into airspace above cities – in all kinds of weather.

Researchers will use the campaign to help improve tools to assist with collision avoidance and landing operations and ensure safe and efficient air taxi operations in various weather conditions.

For years, NASA has looked at how wind shaped by terrain, including buildings in urban areas, can affect new types of aircraft. The latest test, which is gathering data from a Joby Aviation demonstrator aircraft, looks at another kind of wind – that which is generated by the aircraft themselves.