NSF/NCAR RESEARCH AIRCRAFT

**NSF/NCAR Gulfstream GV “HIAPER”**
- Capabilities: 51,000 feet, 10 hours endurance, and 6,000 nm range
- Areas of Research: chemistry and climate, chemical cycles, studies of the upper troposphere/lower stratosphere, air quality, and mesoscale weather

**NSF/NCAR C130 “Hercules”**
- Capabilities: 27,000 feet, ~10 hours endurance, and 2,900 nm range
- Areas of Research: atmospheric chemistry, climate studies, winter storms, aerosols, cloud physics, and air-sea interaction

End to End Science Support

- NSF Lower Atmosphere Observing Facilities are available to all qualified scientists from US universities, NCAR and US government agencies
- Competitive process driven by scientific merit, capabilities of a specific platform, scheduling and available funding (18-24 month process depending on complexity of campaign)

The Research Aviation Facility provides:
- Airborne instrument development
- Software development & data processing
- Aircraft maintenance & modifications
- Observational research
- Field support
- Project management
- Aircraft flight operations
- Airborne measurements

Upcoming Projects - 2024

**Cold Air Outbreak Experiment in the Sub-Arctic Region (CAESAR)** – C130
- February – April 2024
- Paquita Zuidema, University of Miami
- Bart Geerts, University of Wyoming
- Greg McFarquhar, University of Oklahoma

**Eclipse Observations with the Airborne Coronal Emission Surveyor (ACES)** – GV
- April 8, 2024
- Jenna Samra, Smithsonian Astrophysical Observatory

**Methane Emissions Quantification at scale using the MethaneAIR Imaging Spectrometer (MAIR-E)** – GV
- May – July 2024
- Steven Wofsy, Harvard
- Jonathan Franklin, Harvard

Contact Us

If you are unable to attend the FARE RAF facility tour, please contact us to arrange a visit.

Tours – raftours@ucar.edu
Pavel Romashkin – pavel@ucar.edu
Patrick Veres – pveres@ucar.edu

NCAR EOL Research Aviation Facility
10802 Airport Court
Broomfield, CO 80021