National Science Foundation Lower Atmosphere Observing Facilities

Linnea Avallone

LAOF Program Director

NSF Division of Atmospheric and Geospace Sciences GEO/AGS





• C130Q

Current Fleet



Gulfstream G-V









Current Fleet - Utilization

Approved flight hours in FY16

- C130 <u>20 hours</u> in support of Airborne Research Instrumentation Test Opportunity (ARISTO)
- G-V about <u>136 hours</u> in support of O₂/N₂ Ratio and CO₂ Airborne Southern Ocean Study (ORCAS)
- Wyoming King Air <u>50 hours</u> in support Multifunction Airborne Raman Lidar (MARLi) test campaign



Current Fleet - Utilization

Approved and requested flight hours in FY17 and beyond

- C130 <u>80 hours</u> under review
- G-V about <u>20 hours</u> in support of imaging of the Aug 2017 solar eclipse; <u>350 hours</u> under review
- Wyoming King Air <u>96 hours</u> in support of Seeded and Natural Orographic Winter Clouds: the Idaho Experiment (SNOWIE)



Status of A-10 Storm Penetration Aircraft

- NPS involvement will end in Sept 2016
- NPS subcontractor, Zivko Aeronautics, will ready the aircraft for ferry
- Currently working with NCAR and NASA AFRC to develop a plan to complete modifications
- Timeline pushed into future about one year
- Negotiating MOAs with USAF, ANG for support
- Will be competing the operations/maintenance of A-10 following modifications



Completed Projects



- G-V; 15 Jan 28 Feb 2016; based in Punta Arenas, Chile
- Trace gases, JPL PRISM





ORCAS

The O₂/N₂ Ratio and CO₂ Airborne Southern Ocean Study



