‘N2UW’: University of Wyoming Research Aircraft Facility
Scientific Payload Configuration Modeling and PI-Instrument Support

Example ISO and cross-section of cabin with Facility-designed rack and instrument highlights

1. **Solar Occultation Flux (SOF) Spectrometer** for Volkamer, CU as part of BB-FLUX18
   - UW modeled, developed and certified the internal and external aircraft mounting for the instrument as part of the deployment on the aircraft.
   - Image Courtesy of Natalie Kille, PhD., UWKA Research Scientist

2. **HOLODEC** installation on the King Air for validation testing as part of the IDEAS-12 campaign to prove new instruments and installations on the King Air
   - Image Courtesy of Matt Beals, MTU

3. **CASI** multi-spectral imager instrument and installation support for UWyo Geology and Geophysics PI Carl Legleiter.
   - UW developed and certified the mounting plate, internal and external aircraft mounting to use a NADIR port.
   - Image Courtesy of Brandon Overstreet

4. **TRANS2Am-21/22** user-supplied instrument racking and installation support for PI Emily Fisher (CSU). UW developed and certified the racking, internal and external aircraft mounting for the instruments as part of the deployment on the aircraft.
   - Image Courtesy of Austin Morgan, UWKA Engineer

5. **3-Display Scientific Workstation** for Facility and user instrument interaction and data display using 3 FHD displays. UW developed, fabricated and certified the display and internal aircraft mounting.
   - Image Courtesy of Austin Morgan, UWKA Engineer

6. **Nevzorov TWC/IWC** instrument interface, analysis and mounting developed by UW-ME students as a capstone project, mentored by UWKA Engineer Nick Mahon.
   - Image Courtesy of UW-ME Nevzorov Probe Team ‘23

Top View – Cabin Layout

Side View – Cabin Layout