

BAE 146 Aircraft

RICO Schedule

RICO Participating Scientists

RICO Instrumentation

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Schedule

- Leave UK 4 January, first day of ops at RICO is 7 January
- 9-10 flights of 5 hours duration
- 2 four-hour flights on a day possible
- Could fly every day; will bring 3 pilots

Scientists & Crew

- Mike Smith (1st part of Jan)
- Jim McQuaid (last part of Jan)
- Peter Jonas (Jan)
- Phil Brown (Jan)
- Mike Pickering (Jan)
- Jason Lowenstein (PhD student- Jan)
- Postdoc (Jan)
- Alan Blyth (Dec 7-15, and 2 weeks in Jan)
- 11-12 crew members

Instrumentation

All as listed in the ops plan except the following:

- CDP-- miniature cloud droplet probe (DMT)
- CSIRO giant nuclei impactor
- SPEC 2D-S
- NERC Airborne Thematic Mapper
- FAGE Ho_x
- Some possibly not on for RICO:
 - AMS, ADA, CVI, HVPS

Updated Instrument List

- Aerosol Mass Spectrometer (probably)
- Airborne Droplet Analyzer (Phase-Doppler-- probably)
- CCN static diffusion chamber: samples taken from a grab sample are processed at different supersaturations
- CPI (probably)
- CVI-- only instrument located downstream of its intake is PCASP
- PCASP
- Fast-FSSP
- HVPS (maybe)

Updated Instrument List, contin.

- Johnson-Williams lwc
- Nezverov lwc/twc
- TWC (vapor + condensate; Lyman-alpha absorption)
- Volatile Aerosol Concentration and Composition
- 2DC and 2DP
- ARIES interferometer-- on aircraft but may not be operated during RICO
- AVAPS dropsonde
- Broad-band (pyranometers & pyrgeometers)
Radiometers
- DEIMOS-- on aircraft but may not be operated for RICO
- Navigation Weather radar

Updated Instrument List, contin.

- Fluorescence water vapor sensor
- General Eastern hygrometer
- Inertial Navigation Unit
- Integrating Nephelometer
- Particle Soot Absorption Photometer
- Radar Altimeter
- Rosemount temperatures (de-iced and not)
- SATCOM-H: may be available for internet access (instant messaging) but is currently operational for phone/fax

Updated Instrument List, contin.

- TECO O₃/SO₂/NO_x
- Turbulence probe
- Video camera, upward, downward, forward and rear-view (can record any 2 of 4 during flight)
- Small ice detector (SID-1): also useful for distinguishing between spherical and non-spherical micron-size aerosol
- DRI cloudscope: may provide some information on ultragiant hygroscopic aerosol particles