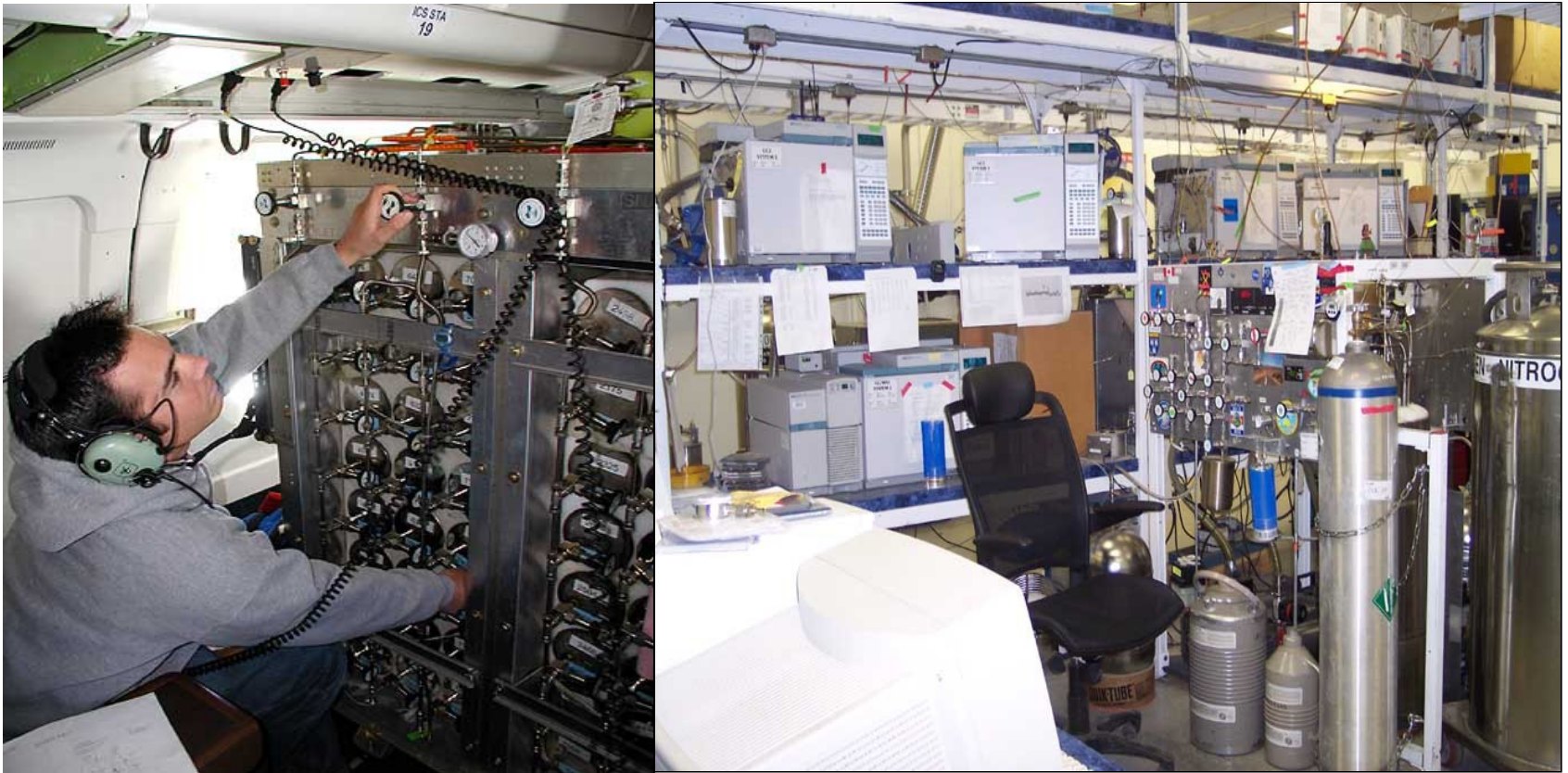


UC-Irvine Whole Air Sampler (WAS)



- Up to 168 whole air samples collected per flight in previously evacuated 2-L stainless steel canisters (arranged in 7 groups of 24 “snakes”).
 - Average for 8 hr flight is 1 sample every 3 minutes
 - Adjusted according to sampling priorities and on request.
 - For example: 1 per 1.5 mins during spirals and every 4 mins during horizontal legs.
- Metal bellows pump fills to about 40 psi.
 - Filling time is approximately 1 minute.

UC-Irvine Whole Air Sampler (WAS)

Operational Requirements:

- Slow spiral (1kft/min) if higher resolution sampling is desired
- “Heads Up” if someone is seeing anything interesting in real time
- Need to stage canisters at suitcase destination
- Need time to switch out canisters between flights

Back at the lab more than 60 trace gases will be identified and quantified for each sample. Including C2-C10 NMHCs, C1-C2 halocarbons, C1-C5 alkyl nitrates, and selected sulfur compounds