

# PECAN

## NOAA P-3 Aircraft Component



Pls:

D. P. Jorgensen, NSSL, T. J. Schuur, NSSL

C. L. Ziegler, NSSL, R. M. Rauber, U. Ill.

B. F. Jewett, U. Ill., G. M. McFarquhar, U. Ill.

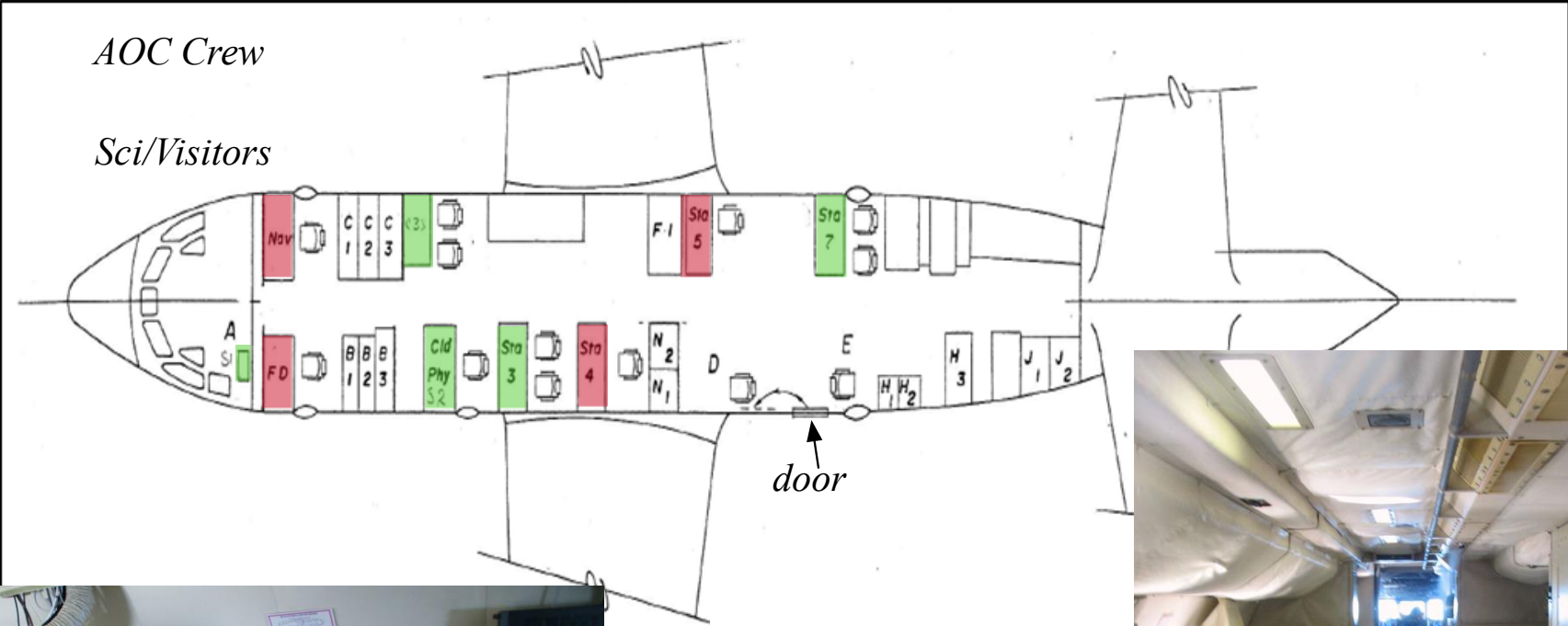
# P-3 Logistics

- Duration: 27 days starting ~15 June 2015
- Base of Operations: Salina, KS
- Flight Hours: 75 (research) + ~10 ferry (~10 IOPs of 7.5 hrs each)
- Domain: PECAN Domain – first choice in conjunction with surface instruments – then look outside
- P-3 configuration: “As is” for hurricane deployments (tail Doppler radar; cloud physics probes; no dropsondes)
- Constraints:
  - One P-3 (N42RF) laid up in 2015 for wing replacement.
  - NHC has right to “recall” P-3 for *significant* landfall hurricane (e.g., Agnes 1972)

# P-3 Operational Constraints

- 7 “up” days mandates a “down” day
- 3 consecutive max missions mandates a “down” day
- 50 hr inspection mandates a “no-fly” day, which is an “up” day
- ~24 hr notice of an “up or down” day. If “up” specify approximate takeoff time
- ~3 hrs before takeoff specify tentative flight plan
- ~1.0 hrs before takeoff “go” decision affirmed (aircraft fueled)  
– once fueled *must go*
- 16 hour crew duty day (3 hr preflight + 1 hr post flight + 9 hr mission) – 3 hr max TO delay before end of max mission impacted
- Fuel for max mission (9 hrs) – *must* fly for 6 before landing getting down to landing weight

# Scientific Seats



# Typical P-3 Staffing

- On the P-3:
  - Chief Scientist & Assist. Chief Scientist/Radar Operator
  - Cloud Physics Scientists (3)
  - Scientists/Observers (3) or Press or Other Visitors
- At the Ops Center in Hays or Salina:
  - PI for next day decision (“UP” or “DOWN”) – *Rauber or other UI PI*
  - Coordinator during mission (real-time comms) – *Jose Meitin*

# Other Issues

- Crew required safety training (online)
- Mobile radar & PISA positions displayed on the P-3?
- P-3 tracks to the field vehicles?