

## **Daily Flight Planning and Operations Schedule**

The following flight planning and operations activities will be carried out for each flight of the G-1 and King Air aircraft. These activities are listed separately from preparation of scientific instruments, for which a similar schedule is being developed.

### **Day prior to flight**

4PM – Weather briefing. Forecast to focus on

- cloud formation: yes/no
- Timing for convection to start: before or after 12PM CDT
- Degree of convection: shallow or deep
- 850mb wind direction over Oklahoma City: key sector

Chief Scientist to lead preliminary discussions on timing and flight plan for day of flight

### **Day of flight**

7AM – Weather briefing. Same focus as above

Finalize timing and flight plan.

If 10AM take-off

move aircraft out of hangar as soon as possible

doors to aircraft close at 9:45AM

Return to Ponca City ~ 2PM (depending on mission)

Afternoon: review observations, plan for next day

If 2PM take-off

move aircraft out of hangar late morning

doors to aircraft close at 1:45PM

Return to Ponca City ~6PM (depending on mission)

Evening: review observations, plan for next day.

### **Post flight analysis**

Within 4 hours after the return of each flight, chief scientist needs to have time series of at least the following measurements.

- a. Altitude
- b. potential temperature, equivalent potential temperature
- c. water (liquid and vapor).
- d. sulfate and organic loading from AMS
- e. Scattering and aerosol absorption (from both CVI and Isokinetic inlets)
- f. CO, SO<sub>2</sub>.
- g. Aerosol number density.