

E.3 Cloud Physics Scientist (On-Board)

The on-board cloud physics scientist (CPS) is responsible for cloud physics data collection on his/her assigned aircraft. Detailed operational procedures are contained in the cloud physics kit supplied for each aircraft. General procedures follow. (Check off and initial).

E.3.1 Preflight

- ☒ 1. Determine status of cloud physics instrumentation systems and report to the on-board lead project scientist (LPS).
- ☒ 2. Confirm mission and pattern selection from the on-board LPS.
- ☒ 3. Select mode of instrument operation.
- ☒ 4. Complete appropriate instrumentation preflight check lists as supplied in the cloud physics operator's kit.

E.3.2 In-Flight

- ☒ 1. Operate instruments as specified in the cloud physics operator's kit and as directed by the on-board LPS.

E.3.3 Postflight

- ☒ 1. Complete summary check list forms and all other appropriate forms.
- ☒ 2. Brief the on-board LPS on equipment status and turn in completed check sheets to the LPS.
- ☒ 3. Take cloud physics data tapes and other data forms and turn these data sets in as follows:
 - a. Outside of Miami - to the HRD operations center (FGOC).
 - b. In Miami - to AOML/HRD. [Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]
- ☒ 4. Debrief as necessary at the appropriate operations center (i.e., FGOC or MGOC).
- ☒ 5. Determine the status of future missions and notify the appropriate operations center (FGOC or MGOC) as to where you can be contacted.

Cloud Physics Project Scientist Operational Check List

AUG 30 1990

Date AUG 30 1990

Aircraft N42

Flight ID 9008304

A. Instrument Status and Performance:

| System | Pre-Flight | In-Flight | Downtime | # of Tapes |
|------------------|------------|-----------------|----------|------------|
| Johnson-Williams | ✓ | ✓ | | |
| PMS probes: | | | | 8 |
| 2D-P | N/A | | | |
| 2D-C | ✓ | as usual | | |
| FSSP | ✓ | " | | |
| Data System | ✓ | " | | |
| Recorder | ✓ (one) | " | | |
| Formvar | N/A | | | |
| DRI Charge Probe | " | upper is flaky. | | |
| DRI Field Mills | " | | | |
| King Probe | down | | | |

B. Remarks:

King probe is down. As usual, 2D-C is mostly noise. 202244 - end diode volts .2 + .3V
Storm has a beautiful eye. End diode voltages are quite variable max #32 1.1V min .23V
max #1 0.6V min 0.21V

Formvar Log

Date _____ Flight _____ Operator _____

[illegible]

2-D Knollenberg Data Tape Log

Date AUG 30 1990

Flight 900830H

Operator R. A. BLACK

[illegible]