

19940820II-CLDPHY

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.

Akerson
details in log book

Form E-3
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Cloud Physics Project Scientist Operational Check List

Date 8/20/94 Aircraft N43RF Flight ID 940820I

A. Instrument Status and Performance:

System	Pre-Flight	In-Flight	Downtime	# of Tapes
Johnson-Williams				
PMS probes:	✓			
2D-P				
2D-C				
FSSP				
Data System				
Recorder				
Formvar				
DRI Charge Probe				
DRI Field Mills				
King Probe				

B. Remarks: Details in log book

Very many Precip probe. Precip frequently stopped updating, cloud only sometimes. Multiple restart. 1 tape

9/6/201

Abasco

- 17:22:00 Take-off
- 17:27 Turn on equipment
- 17:30 Began recording
- ~ 19:35 Recording begins again. Unknown if problems are solved. Enters area of storm center. Radar echoes weak and almost all to N.
- 19:42 Prep stopped recording. Updates intermittent after noon
- 19:46 Closest to center, in clear. Updates of both becomes intermittent
- 20:07 out to try to restart
- 20:09 Begin recording. Only cloud working, and intermittent.
- 20:42 End of leg. Turn left.
- 21:30 Turn for inbound leg
- 22:17 Far SW of center. Reflectivity > 40 dBZ S of center.
- 23:16 Turn to upward leg
- 23:53 Turn for inbound leg
- 00:20 Turned off and res. by Probes in clear area (didn't ask for this)
- 00:21 Resumed
- 00:33 Stopped recording in connection. Restarted in clear.
- 01:00 Paused closest to center.
- 02:28 Turned off recorder