

19930928I1-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.

Cloud Physics Project Scientist Operational Check List

Date 9/28/93 Aircraft 43 Flight ID 930928I

A. Instrument Status and Performance:

System	Pre-Flight	In-Flight	Downtime	# of Tapes
Johnson-Williams				
PMS probes:				
2D-P - G	✓	good		
2D-C - G	✓	good		
FSSP <i>NEW</i>	✓	good		
Data System	✓	"		1 DAT
Recorder	✓	"		
Formvar	UP	DIDN'T USE		
DRI Charge Probe	UP	DIDN'T USE		
DRI Field Mills	UP	OK		
King Probe	UP	"		

B. Remarks:

created file 930928I.2DG on HU93 directory
~ 5 min of anvil prep.

charge test done w/ HVPS

DID NOT RECORD Q-PROBE

Flight aborted pre-maturely.

SEA color balance
shift on LHS of display

OTHER NOTES
(charge test) in log
book.

Formvar Log

Date _____ Flight _____ Operator _____

[illegible]

2-D Knollenberg Data Tape Log

Date _____ Flight _____ Operator _____

[illegible]

OCEAN - CU TYPE N43RF 28 Sept. 93

Q-Probe high-pass filter set T/O 1630Z

P 679 mb TAS 238 ~~0~~ IAS 200 T+6°C
Chase test 163740 started fiddling w/Q-PROBE

165420 HVPS ON 165854 HVPS zero on L & R pain
PWR off 170130
HVPS ON 1703:00

170530 start upper & lower pain tests

170630 HVPS off

170830 HVPS ON

171300 HVPS off

171510 HVPS ON

171800 HVPS off

Flight aborted because of problem in #4 engine.

~1735 M200 ON 930928 J.2DG (a file) is an anvil just
at 0°C
1740 file off.