19900828H1_CLDPHY

AUG 28 1990

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.

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Cloud Physics Project Scientist Operational Check List

Date AUG 28 1990 Aircraft 42RF Flight ID 900828H

A. Instrument Status and Performance:

System	Pre-Flight	In-Flight	Downtime	# of Tapes
Johnson-Williams	✓	✓		
PMS probes:				13
2D-P	N/A	N/A		
2D-C	✓	✓		
FSSP	✓	✓		
Data System	✓	✓		
Recorder	only 1	✓		
Formvar	N/A			
DRI Charge Probe	N/A			
DRI Field Mills	UP & DOWN ok	ok		
King Probe	N/A			

B. Remarks:

PMS system time = A/C TIME + 2 sec.
*Much electronic noise in all video displays this station

Formvar Log

Date ____________ Flight ____________ Operator ____________

Roll #	Time On	Time Off	Frame Count at Start	Comments

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2-D Knollenberg Data Tape Log

Date AUG 28 1990 Flight 900828H Operator R.A. BLACK

Tape #	EOF #	Time On	Time Off	Comments
1		181830	182425	IP & circling. light precip
2		184014	184706	start in E eyewall
3	1	184926	185946	T=+9 EOF 185149 orbit. 185625 back on
4	1	191302	191944	V. light precip SW of center 191550 eof 192147 on
5		192228	192805	
6		194430	195017	track NNE
7	1	195550	201542	in R.B. 195712 EOF 201030 on
8	1	202933	204612	Wayward 201526 eof 203319 204330 on
9	11	204830	205644	eof 204959 eof 205405
10	1	212533	213248	light rain 213032 eof (turn)
11	1	213518	214535	213738 eof
12	1	220750	221712	eof 220950
13	1	221927	224930	eof 222040 in turns on 224816

Most EOF in turns or clear air