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.

Many clear-air updates, appeared to overheat at least once. Precip probe appeared to work quite well

Form E-3
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Cloud Physics Project Scientist Operational Check List

Date _Aug 27, 1990_   Aircraft _N43RF_   Flight ID _90082711_

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:

Formvar Log

Date _____   Flight _____   Operator_____

Roll #	Time On	Time Off	Frame Count at Start	Comments

2–D Knollenberg Data Tape Log

Date **Aug 27, 1990**   Flight **900827 I1**   Operator **GAMACHE**

Tape #	EOF #	Time On	Time Off	Comments
1		152148	152700	T/O 1330 GMT Start in West-side RB
2		1527	c.1537	stopped c.1529 in eye restart 1532
3		1537	15415	
4		154145	154345	
5		154345	155430	154440 - 154500 off 154600 - 154110
6		155430	160000	
7		160000	160930	1601 off 1605 back on
8		160930	161508	
9		161508	162035	
10		162035	162610	
11		162610	163140	
12		163140	163555	Some sort of comp. glitch
13		163555	173705	164030 -- stopped working —getting restart 173600 — sloppy
14		173705	174240	
15		174240	174755	
16		174820	175400	
17		175400	175900	
18		175900	180500	
19		18____	1810 ??	
20		184945	185440	
21		185440	190005	26 - 1921 - 1927
22		190005	190540	27 - 1929 - 193410
23		190500	1911	28 - 19346 - 193940
24		1916	1916	29 - 193940 - 194427 (stopped 194427)
25		1916	1921	