

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.

RAB

CapE - II

Date AUG 07 1991

Flight 910807I

Operator RAB

[illegible]

Cloud Physics Project Scientist Operational Check List

Date 8/07/91 Aircraft 43 RF Flight ID 910807II

A. Instrument Status and Performance:

System	Pre-Flight	In-Flight	Downtime	# of Tapes
Johnson-Williams	✓			
PMS probes:	.			
2D-P	✓	OK		
2D-C	✓	OK		
FSSP		NO GOOD		
Data System	✓	✓		
Recorder	✓	✓		
Formvar	✓	more or less	high cloud passes missed.	
DRI Charge Probe	Noisy	✓		
DRI Field Mills	✓	✓		
King Probe	✓	✓		

B. Remarks:

Formvar Log

Date AUG 07 1991

Flight 910807F

Operator R.A. BLACK

Roll #	Time On	Time Off	Frame Count at Start	Comments
1	192100	174676	9	2 events at start 1721 spd. 1
	201540	202100		1100 2 events spd. 4
				3850 2 events, spd 1
			4676	jam or break
	reset count →		11	2 events 201545 spd. 1
			700	2 events spd. 4
			~2800	201735 2 event spd. 1
			~5000	201956 auto off spd. 1
			5150	211220 spd. 1
			5700 6000	spd 4 2 marks 211309
			7800	2 events, 211422 new old near MIA
			9100	2 events spd. 6
			11500	2 event spd. 4
			12,700	2 events spd. 4 pass 2211720
			15,400	spd 6 2 event 211830
			17,1800	spd 1 2 events
			18,900	1 event 212100
			19,900	spd. 4 2 events 202250
			23000	spd. 1 2 events
			23,900	spd 4 2 mks. 212530

~~262100~~
25,900 2 event auto off 212700