19870730I1-CLOUD

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

NMD 1. Determine status of cloud physics instrumentation systems and report to the on-board Lead Project Scientist (LPS).

NMD 2. Confirm mission and pattern selection from the on-board LPS.

NMD 3. Select mode of instrument operation as determined by the HRD/CPS.

NMD 4. Complete appropriate instrumentation preflight checklists as supplied in the cloud physics operator's kit.

E.3.2 In-Flight

NMD 1. Operate instruments as specified in the cloud physics operator's kit and as directed by the HRD/CPS unless superseded by directions from the on-board LPS.

E.3.3 Postflight

NMD 1. Complete summary checklist forms and all other appropriate forms.

NMD 2. Brief the on-board LPS on equipment status and turn in completed check sheets to the LPS.

NMD 3. Take cloud physics data tapes and other data forms and turn these data sets in to the OAO/Flight Director, who will arrange delivery as follows:

a. Outside of Miami - to the HRD operations center (FGOC).
b. In Miami - to OAO/Science and Program Division. [Note: all data removed from the aircraft by HRD personnel should be cleared with the OAO/Flight Director.]

NMD 4. Debrief as necessary at the appropriate operations center (i.e., FGOC or MGOC).

NMD 5. Determine the status of future missions and notify the appropriate operations center (FGOC or MGOC) as to where you can be contacted.

Form E-3
Page 1 of 3

Cloud Physics Project Scientist Operational Checklist

Date 9/30/87 Aircraft 43 Flight ID 870930I1

A. INSTRUMENT STATUS AND PERFORMANCE

System	Preflight	Inflight	Downtime	# of Tapes
Johnson-Williams	↑	↑	↑	
PMS probes	↑	↑	↑	
2D-P	↓ ①	↓	↓	
2D-C	↑	↑	↑	7
FSSP	↑	↑	↑	
Data Sys	↑	② ↑	↑	
Displays	↑	③ ↑	↑	
Formvar	—	—	—	
Nimbiometer				
CO_2 Radiometer				

B. REMARKS

① PRECIP PROBE STILL DOWN

② TAPE DRIVE PROBS CONTINUE

③ SCREEN JUMPY

DATE 09/30/87 FLIGHT 870930I1 OPERATOR DORST

2-D Knollenberg Data Tape Log

Tape #	EOF #	Time On	Time Off	Comments
1	1	190330	191505	
2	1	191505	193006	
3	1	193000	194500	
4	1	194500	201550	
5	1	201550	203107	
6	1	203107	203700	DRIVE #2 acting up
7	1	204130	204858	

From E-3

DATE________________ FLIGHT________________ OPERATOR________________

Formvar Log

ROLL #	TIME ON	TIME OFF	FRAME COUNT AT START	COMMENTS