

1984 0911 I2. CLDPHY

E.2 Cloud Physics Scientist (On Board)

Goldenberg
G. Diane
FIT 840911 I

The on-board cloud physics scientist is responsible for cloud physics data collection on his or her assigned aircraft. Detailed operation procedures are contained in the cloud physics kit supplied for each aircraft. General procedures follow. (Check off and initial.)

E.2.1 Preflight

- ☒ 1. Determine status of cloud physics instrumentation systems and report to on-board lead project scientist.
- ☒ 2. Confirm mission selection and pattern selection from on-board lead project scientist (LPS).
- ☒ 3. Select mode of instrument operation as determined by HRD cloud physics scientist.
- ☒ 4. Complete appropriate instrumentation preflight checklists as supplied in cloud physics operator's kit.

E.2.2 In-Flight

- ☒ 1. Operate instruments as specified in cloud physics operator's kit and as directed by HRD cloud physics scientist, unless superseded by directions from on-board LPS.

E.2.3 Postflight

- ☒ 1. Complete summary checklist forms and all other list forms.
- ☒ 2. Brief 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, such as formvar film, foil, etc., and turn these data sets in to the flight director, who will arrange delivery as follows:
 - a. Outside of Miami - to HRD operations center.
 - b. In Miami - to UAO DQAG offices.
- ☒ 4. Debrief as necessary at operations center.
- ☒ 5. Determine status of future missions and notify operations center as to where you can be contacted.

Goldenberg

Cloud Physics Project Scientist Operational Checklist

DATE Sept 11, 1984

AIRCRAFT 43 RF

FLIGHT 840911I

A.

INSTRUMENT STATUS AND PERFORMANCE

	PreFlight	InFlight	PostFlight	Remarks	Data Units Collected
Johnson-Williams	✓	✓			
Nimbrometer	Not Inst				
Lyman Alpha	NA				
U. V.	NA				
dewpoint	NA				
Formvar	NA				
Knollenberg					
Raindrop	✓	✓			
Cloud Droplet	✓	✓			
FSSP	✓	✓			
Data System	✓	✓			
& Displays	✓	✓			
Ice Particle Counter	NA				
Mee	NA				
ERT	NA				
CO ₂ Radiometer	✓	✓			
Microwave Radiometer	NA	NA			
Aerosol	NA				
Filters					
Bulk-Water					
INC					
CCN					

B.

REMARKS

Had occasional problems with tape switching (Auto)
but seems alright now -

Flight at 5000 ft.

7 tapes used -

DATE Sep. 11, 1984

FLIGHT 840911I

OPERATOR Goldenberg

2-D Knollenberg Data Tape Log

Includes inner & "outer"
eye walls only

Tape #	EOF #	Time On	Time Off	Comments
1	1	2123	2136	North eye wall (from South)
"	2	2244	2256	Penetration from East
2	1	2256	2304	" " " " West wall
"	2	2344	2345	
3	1	2345	2359	penetration from East - (main eye wall at 2350)
				(& back out the East at 2356)
4	1	2359	~0003	outer wall (Problems with Tape drive #2 So some extra EOF's)
"	2	0109	0117	Penetration from ESE (Hdg. 290°) (outer band at 0112)
5	1	0117	0134	Inner eye at 0119 & to the E again
6	1	0134	0134	(negligible)
	2	0234	0247	Last penetration (from East)
7	1	0247	0305	out at 180 Hdg. (eye wall at 0247 (outer band at 0253)

(outer
eye at
0240)

DATE _____ FLIGHT _____ OPERATOR _____

Formvar Log

[illegible]