19890915H1_ CL DPHY

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 onboard lead project scientist (LPS).
- 2. Confirm mission and pattern selection from the on-board LPS.
- 3. Select mode of instrument operation as determined by the HRD/CPS.
- 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Operate instruments as specified in the cloud physics operator's kit and as directed by the HRD/CPS, unless superseded by directions from the on-board LPS.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 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.]

- 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.

cloud physics data system Tsecond ahead of aircraft data system.

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Cloud Physics Project Scientist Operational Check List

Date 15 SEPT 89

Aircraft NOAA42

Flight ID 890915H

A. Instrument Status and Performance:

System	Pre-Flight	In-Flight	Downtime	# of Tapes
Johnson-Williams				4
PMS probes:				2
2D-P	?	?		
2D-C	~	V		
FSSP	V	V		
Data System	V	~		
Displays	V	V		
Formvar	NA			
Nimbiometer	NA	X		
CO ₂ Radiometer	~	V		

Β. Remarks:

all data collection terminoted in the eye for following the first eyewall penetration - due to airoraft mechanical profilms.

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2-D Knollenberg Data Tape Log

Date 15 SEPT 1989 Flight 890915H Operator BURPEE

Tape #	EOF #	Time On	Time Off	Comments
1		170545	3	outer band 1500 ft.
				switched to 5 rate between
				bands
2		?		stopped taking data
				during the first eyewall
				penetration - lost
			6	lengine # 3 and
				deices boot on #4
and planet				
7				
	1			
	-			
	- And The			

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Date		Flight		Operator	
Roll #	Time On	Time Off	Frame Count at Start	Comments	
	1				
		2. 18			
an an an			New Street		
				1	
			2		
	, i i i i i i i i i i i i i i i i i i i		1	r r	

Formvar Log