19870930H1_CLOUD

E.2 Cloud Physics Scientist (On Board)

The on-board cloud physics scientist is responsible for cloud physics data collection on his 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).



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Operate instruments as specified in cloud physics operator's kit and as directed by HRD cloud physics scientist, unless superseded by directions from on-board LPS.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

- 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 RFC RSG 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.

Page 1 of 3					
Cloud Phys	sics Project Sci	entist Operat 42 RF	tional Checkli	SOT PPI	30# 1
A.	INSTRUMENT ST	ATUS AND PERF	FORMANCE		1
	PreFlight	InFlight	PostFlight	Remarks	Data Units Collected
Johnson-Williams Nimbiometer	0K	OF			
Lyman Alpha U. V. dewpoint					
Foil Impactor					
Formvar	ok				2 ROLLS
Knollenberg Raindrop Cloud Droplet	ok?		·		
FSSP Data System & Displays	<u> </u> 	2D-C OUT			7 TAPES
Ice Particle Counter Mee ERT			•		
CO ₂ Radiometer	ok				
Microwave Radiometer Aerosol Filters Bulk-Water	ək				
CCN			\		

Β.

REMARKS

2D-c record went out mid-flight,

Al Jawi thinks problem is in DAS

DATE Sept 30'87

FLIGHT 870930H OPERATOR R. BLACK

2-D Knollenberg Data Tape Log

Tape #	EOF #	Time On	Time Off	Comments
1		175929	182900	clear ain 5 rote FSSP range 1
2		182909	185059	181310 cld 3 paso 2
3		185109	191224	190150 in eld
4		191229		1907 41 end pass
5			200800	191000 2D-C is plaky
6		2.	202549	200 DISPLAY is load.
2		202850	204114	T192330 mitched chamelo on -
				2-D as test. clock note had began
				of it. A channel is bad.
				2D-C DISPLAY + RECORD
				BAD

DATE_____FLIGHT____

OPERATOR____

Formvar Log

ROLL #	TIME ON	TIME OFF	FRAME COUNT AT START	COMMENTS
		No. 19		
has All				
•				
·				

前

DATE Sept 30 87 FLIGHT 870930H OPERATOR R. BLACK P.1

Formvar Log

ROLL #	TIME ON	TIME OFF	FRAME COUNT AT START	COMMENTS
1	180040		10*	001
	180125		700	op. 4 thick .5
	1802.00		1700	2 marks mined cloud
	1805			cld 2 paso 1
	180600	A 1807	4000	auto off 2 mik
	180907		4751	Id 3 pass 1 (4900 2 miks) op.
	180920		-3000	janned
			~ 10000	repaired add this to later from counts
	182847		70	2 miles. del 5 passi
	183030		1150	opd. 4 zmk
	183100		1930	aute off 2 mk end poss
	183323		271500	2pd. 1 2 mk@ 28000
	183353		3000	z mko.
			4400	aut off 2mile.
	183715		5,174	//
			5460	2 nik op. 4
	183820		6500	2 m/k auto off
	184044		356	zmk on
·	184124		7800	ZNK spd 4

* 18 frames run of before T.O. as a test.

DATE

FLIGHT

OPERATOR_

2-D Knollenberg Data Tape Log

Tape #	EOF #	Time On	Time Off	Comments
			1000000	
			19822 Pr.	
	1.25		- Statistics	

DATE 87093	DH FLIGHT	870930H	OPERATOR	R. BLACK
			R2	

Formvar	Log	

ROLL #	TIME ON	TIME OFF	FRAME COUNT AT START	COMMENTS
1	184214		9000	auto off end pass
	184500		9937	
	184525		10,200	zmk
	184630		12,800	spd. 12mk
	184830		14,200	auts off
	185000		14,608	Dod. 1
			15500	2001 15,700 2 events
	185340		17,300	2 mk spd 4
	185400		18,360	auts off
			12108	spd. 4
	185800		19.300	film broke
2			18	cld 6 spd 1
	195930		144 D	2 mentro
	200443		4500	aute off 4700 2 mks
	2006070			on spal 1 ssoo 2 mks
	2007 30			spd. 2 6600 2mt
	200750			auto off sevents Rat 7100
	201148		9900	spd 2 on
	201253		9100	spd. 1 zmlk

DATE

FLIGHT

OPERATOR___

2-D Knollenberg Data Tape Log

Tape #	EOF #	Time On	Time Off	Comments
			100 M	
	E			
11.8				
10612 11 3				

DATE lept 30 87 FLIGHT 870930H OPERATOR R. BLACK P. 3

Formvar Log

ROLL #	TIME ON	TIME OFF	FRAME COUNT AT START	COMMENTS
2	201350			2 events 9100
4			10350	2 mbs spd-1
(1	121736		12700	spd. 2
			14500	spd. 6
			B15900	spd 6 to spd 2
			16,750	2001 Zevents
	202028	-		auto off Zevents
			17 902	UD
	202508	18000		zevents spd. 6
		2390000	24500	auto off 2 mks.
	203210		24786	2 mbes spd. 1
			25400	2 mle spd 6
	203409		29170	2 mbs
	203437		30,500	anto off
			31404	last frome count.
				V

DATE

FLIGHT

OPERATOR

2-D Knollenberg Data Tape Log

Tape #	EOF #	Time On	Time Off	Comments
				1