Form J-2 Cloud Physics Project Scientist Operational Checklist

DATE 800805 AIRCRAFT 42RF FLIGHT 1

A. INSTRUMENT STATUS AND PERFORMANCE

	PreFlight	InFlight	PostFlight	Remarks	Data Units Collected
Johnson Williams	OK				
Nimbiometer	—				
Lyman Alpha	—				
U. V.	—				
dewpoint	—				
Foil Impactor	OK	iced-down 12:15 GMT			
Formvar	—				
Knollenberg					
Raindrop	OK	OK			
Cloud Droplet	OK	icing problem			
FSSP	OK	OK			
Data System	OK				
& Displays	OK				
Ice Particle Counter	—				
Mee	—				
ERT	—				
CO_2 Radiometer	OK				
Microwave Radiometer	O.K				
Aerosol					
Filters	—				
Bulk Water	—				
INC	—				
CCN	—				

B. REMARKS

Tape drive unit on @ 0612 foil ran out to 56" for taste. ZEROED @ 104"
icing seems to be a problem w/ 2-DC: may be the de-icer isn't operating properly.

Tape drive unit has bad record switch

SERIAL # KNOLLENBERGS

20-P - 03
20-C - 01
FSSP - 08

PMS LOG

DATA SYSTEM 800805

ON 0545 OFF

APPARENTLY TIME USED IS STANDARD NOT Z

TAPE ON OFF

EOF TIMES	NOTES
RECORD ON	
0652:30 EOF 0658	depolarizer signal is sporadic
0701 TAPE 2	
070645 EOF = END #2	
7091 1 71209 = EOF	
71718 → ON 7:~~00~~ 1845 OFF = EOT #3	7:18 much graupel & approaching eyewall
#4	
72344 EOF 726	
7:3040 EOF 7:30:40	AC will miss rainband, eyewall
7:0032 EOT 7:35	Tape recording is continuous.
7:37 #5 on	
EOT ~ 7:45	
750	many Ø size particles
	lost 2-DC at 7:50
750 tape 6 on	7:58 2D-C back on - maybe iced
0800 off EOT	
tape 7 on 0813	on way in to eye
EOT 8:23	
#8 8:25:24	
EOT 833	
8:38 tape #9	2D-C out
8:43 ON	2D-C in
EOF 8:49	
tape #10	
901 = ON EOF @ 9:05	
ON 9:06 EOF @ 9:1109	

PMS LOG

DATA SYSTEM 800805H1 P. 2

ON OFF

TAPE ON OFF

EOF TIMES	NOTES
#11	
9:13:44 #11 on	
9:18:40 EOF	in eye ~ 9:18:00
9:27 30 ON	2-DC off - iced
9:30 EOT	
#12	
9 32 35 ON	no 2-DC
9:39:23 EOF	
9:40.40 ON	20C back ON LINE
EOT 9:42:07	
#13	
ON 9:5100	20C is on also.
9.55 - much supercooled H_2O in eyewall in midst of 1st rainband.	
9:56 EOT	
#14	
1009 13 ON	thought turned in eye 20-C out
10:10:50 off EOF	
10:13 ON	in eyewall, 20-C out
1017:10 EOT	in 1st rainband.
#15	
10:3100 ON	begin 1st rainband penetration,
10:34 30 off EOF	end 1st rainband.
10:35:40 ON	eyewall
10:37:30 EOT	
16 10:40.30 ON → tape screwed up. rewound, 20C out	

PMS LOG

DATA SYSTEM 800805 P.3

ON OFF

TAPE ON OFF

EOF TIMES	NOTES
TAPE 16	
ON 10:47 55	2DC out again, heading for convective towers in the eye again.
EOF 10:54:45	
ON 10 55:40	2D-C back on again.
10:58 00 EOT	between rainband + eyewall
10:59:30 ON	in rainband #1
EOT 11:01:30	
#17	
ON 11:14 07	inside 1st rainband. 20-C still on
EOF 11 16:30	
ON 11 20:06	near eyewall
EOF 11 22:39	inside eye, heading for convective turret.
ON 11 24:40 - heading into turret	
EOF 11:30 2-DC out 25:40	
#18	
ON 11 35 23 20C out	
11 36 30 20C recovery	in eyewall
EOT 11 42 00	in 1st rainband.
#19	
ON 11 44 30	in rainband
EOF 11 48 40	in a turn at the end of a leg
ON 11 59 00	heading back. this is for data in outer edges of storm.
EOF 12 00 45	EOT imminent,
#20	
ON 12 03 50	approach rainband #1
EOT 12 09 15	in eye wall
#21	
ON 12 24 00	in big cell in eye

PMS LOG

DATA SYSTEM

ON OFF

TAPE ON OFF

EOF TIMES

NOTES

#21 EOF 122600
ON 122748
EOT 123200
#22
ON 124813
EOT 125320
#23
ON 125538
EOF 125653
ON 130339
EOF 130600 - off
#24
ON 131400
EOT 131920
25
ON 132145
EOT 132650
#26
ON 133000
EOT 133512
#27
ON 133725
EOT 134220
#28
ON 134436
EOT 134949
#29
ON 135157
EOT 140633

in eye 2-0C ON & OK
in eyewall
outside 1st rainband

in eye wall

in eyewall again

in rainband pass = DAS updates continuously
tape end

continue rainband pass

in eye @ ~ 1354
through eyewall.

PMS LOG

DATA SYSTEM PMS TIME IS 1.0 SEC SLOW FROM A/C DAS

ON OFF

TAPE ON OFF

EOF TIMES	NOTES
#30	
ON 141025	rainband.
EOF 141237	
ON 142030	the last rainband
EOF 142353	Can't rewind anymore
ON 142509	
EOT 142548	
#31	new rainband pass @ 10K ft.
ON 143021	
EOF 143356	
ON 143507	2-DC out 1837
EOF 144003	decent to 1500'
ON 144300	2-DP also crapped out
EOT 1444	

FOIL SAMPLER

DATE 900805 FLIGHT 1 STORM ALLEN PAGE 1

FOIL MARKED AT SLOT AND COUNTER ZEROED. counter reads 104 when zeroed

OPERATOR BLACK

TRANSPORT DIGITAL TIME (GMT)		COUNTER (INCHES)	
ON	OFF	ON	OFF
>05	7:06		313
7 21 11	11 22 40		819
114232	11 43		1023
122200	foil down		

TRANSPORT DIGITAL TIME (GMT)		COUNTER (INCHES)	
ON	OFF	ON	OFF