

19790912 H1-CLD

-105-

CLOUD PHYSICS LOG

## Form I-2 Cloud Physics Project Scientist Operational CHECKLIST

M. Powell  
DATE Sept. 12 1979AIRCRAFT 42RFFLIGHT 790912H

## A. INSTRUMENT STATUS AND PERFORMANCE

|                            | PreFlight | InFlight | PostFlight | Remarks | Data Units Collected |
|----------------------------|-----------|----------|------------|---------|----------------------|
| Johnson Williams           | ✓         | ✓        | ✓          |         |                      |
| Nimbliometer               | NO        | NO       | ✓          |         |                      |
| Lyman Alpha                | ✓         | ✓        | ✓          |         |                      |
| U. V.                      | ✓         | ✓        | ✓          |         |                      |
| dewpoint                   | ✓         | ✓        | ✓          |         |                      |
| Foil Impactor              | ✓         | ✓        | ✓          |         |                      |
| Formvar                    | ✓         | ✓        | ✓          |         |                      |
| Knollenberg                | ✓         | ✓        | ✓          |         |                      |
| Raindrop                   | ✓         | ✓        | ✓          |         |                      |
| Cloud Droplet              | ✓         | ✓        | ✓          |         |                      |
| FSSP                       | ✓         | ✓        | ✓          |         |                      |
| Data System                | ✓         | ✓        | ✓          |         |                      |
| & Displays                 | ✓         | ✓        | ✓          |         |                      |
| Ice Particle Counter       | ✓         | ✓        | ✓          |         |                      |
| Mee                        | ✓         | ✓        | ✓          |         |                      |
| ERT                        | ✓         | ✓        | ✓          |         |                      |
| CO <sub>2</sub> Radiometer | ✓         | ✓        | ✓          |         |                      |
| Microwave Radiometer       | ✓         | ✓        | ✓          |         |                      |
| Aerosol                    | ✓         | ✓        | ✓          |         |                      |
| Filters                    | ✓         | ✓        | ✓          |         |                      |
| Bulk Water                 | ✓         | ✓        | ✓          |         |                      |
| INC                        | ✓         | ✓        | ✓          |         |                      |
| CCN                        | ✓         | ✓        | ✓          |         |                      |

B.

Paul Corner on board

REMARKS

Tape drive problem would rewind completely after auto rewind stopped.

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FOIL MARKED AT SLOT AND COUNTER ZEROED.

OPERATOR *M. Powell*

[illegible]

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MARK Powell

~0435 takeoff

percentage on selected word set at 69%

~0500 Probe B on FSSP not up, appears OK checked by P. Lerner

0533 descending to 1500 ft - some lightning flashes observed

053530 tape 1 started

0539 AF 955 mb 106 kts south side 10,000 ft (probably)

054816 foil on 25 mi. eye or radar

0553 tape 1 will finish during 1<sup>st</sup> penetration will change  
tapes in eye

0555 tape stopped with no auto rewind B1

0616 got tape 1 rewound finally

0621 tape 2 started

highest gust seen during 1<sup>st</sup> penetration  $64.8 \text{ m s}^{-1} \approx 128 \text{ kts}$

0634 turning in for 2<sup>nd</sup> penetration

0643 will run foil for 2<sup>nd</sup> penetration just before eyewall

0655 tape 2 out

0703 penetration pretty rough winds over  $20 \text{ m s}^{-1}$   
cant rewind tape fully will get after next penetration  
will stagger tapes to be sure to get penetrations

0716 rising to 5000 ft

0733 tape 3 will be setup for 3<sup>rd</sup> penetration

0735 making turn for next penetration at 5000 ft heading south

0747 tape 3 on

0758 tape 3 done

0803 tape 4 started in eye

0835 turning in for next penetration

0902 100 kts but no eyewall S side

0904 stopped tape 4

0910 tape 4 wouldnt rewind so put on record to finish + auto Rewind  
hopefully

0916 tape 4 rewinding

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- 0921 tape 5 started  
0933 turn to 270  
1003 tape 5 done  
1011 tape 6 started  
1018 descending to 1500' to later hit 26°N and go east dropping  
BTB and overflying buoy  
1021 at 575M  
105830 over buoy 26.00 85.86  
1061100 tape 6 done  
1110 start tape 7  
1141 tape 7 done  
1148 start tape 8 climbing to 5000ft  
- 1157 thought tape was running away so reformatted system  
1203 starting in for penetration  
1204 tape 8 done  
1209 tape 9 started  
1223 tape 9 done  
1231 tape 10 started - recurrent problem after tape rewinds  
most of the way it doesn't finish rewinding  
you have to play with the switches to get it to finish  
rewinding  
1242 tape 10 done  
1246 tape 11 started  
1250 climbing to leave storm  
1305 tape 11 done last tape done since in clear outside storm