

19911016I1-RADAR

E.5 Doppler Radar Scientist (On-Board)

The on-board Doppler radar scientist (DRS) is responsible for data collection from all radar systems on his/her assigned aircraft. Detailed operational procedures and check lists are contained in the operator's manual supplied to each operator. General supplementary procedures follow. (Check off and initial.)

E.5.1 Preflight

- _____ 1. Determine the status of equipment and report results to the on-board lead project scientist (LPS).
- _____ 2. Confirm mission and pattern selection from the on-board LPS.
- _____ 3. Select the operational mode for radar system(s) after consultation with the on-board LPS.
- _____ 4. Complete the appropriate preflight calibrations and check lists as specified in the radar operator's manual.

E.5.2 In-Flight

- _____ 1. Operate the system(s) as specified in the operator's manual and as directed by the on-board LPS or as required for aircraft safety as determined by the AOC flight director or aircraft commander.

E.5.3 Postflight

- _____ 1. Complete the summary check lists and all other appropriate check lists and forms.
- _____ 2. Brief the on-board LPS on equipment status and turn in completed forms to the LPS.
- _____ 3. Hand-carry all radar tapes and arrange delivery as follows:
 - a. Outside of Miami - to the HRD operations center (FGOC).
 - b. In Miami - to MGOC or to AOML/HRD. [Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]
- _____ 4. Debrief at the appropriate operations center (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.

Doppler Radar Scientist Check List

Flight ID _____

Aircraft # _____

Operators _____

Radar Tech. _____

Number of digital magnetic tapes on board _____

Number of tape labels on board _____

Component systems up and checked:

MARS _____

Computer _____

DMTR1 _____

DMTR2 _____

LF _____

R/T# _____

TA _____

R/T# _____

Time correction between radar time and digital time _____

Radar Postflight Summary

Number of digital tapes used:

DMTR1 _____

DMTR2 _____

Significant down time:

DMTR 1 _____

Radar LF _____

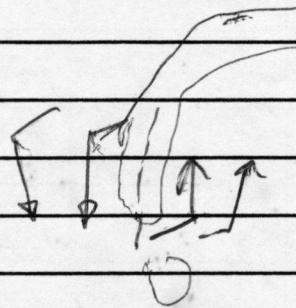
DMTR 2 _____

Radar TA _____

Other problems:

HRD Radar Tape Log *PABIAN*

| | | | | |
|-----|---|-------------------|-------------------|----------------------------|
| 1-1 | 1 | 024200 | 014050 | every 4 LP, every 2 TA |
| 2-1 | 2 | 014050 | 054100 | TA sweep every 18 S. |
| 1-2 | 3 | 054100 | 081000 | LP sweep every 2 min |
| 2-2 | 4 | 081000 | 093000 | only aft sweeps on tape! ? |
| | | | 0907 | *! |



lots of lightning
over climb

0406-0541

0542-0810

HRD Radar Down-Time Log

Operator _____

Sheet ____ of ____

| Item | Time Down (HHMMSS) | Time Up (HHMMSS) | Problem |
|------|-----------------------|---------------------|---------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Item List: DMTR1, DMTR2, COMP, MARS, LF, TA.