

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.

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Doppler Radar Scientist Check List

Flight ID 90830T1#
Aircraft # 43
Operators Dodge, Burpee
Radar Tech. Goldstein

Number of digital magnetic tapes on board enough (at least 23)

Number of tape labels on board enough

Component systems up and checked:

| | | | |
|-------|-------|----------|------------|
| MARS | _____ | Computer | _____ |
| DMTR1 | _____ | DMTR2 | _____ |
| LF | _____ | R/T# | <u>123</u> |
| TA | _____ | R/T# | <u>204</u> |

Time correction between radar time and digital time _____

Radar Postflight Summary

Number of digital tapes used:

| | |
|-------|----------|
| DMTR1 | <u>2</u> |
| DMTR2 | <u>2</u> |

Significant down time:

| | | | |
|--------|-------|----------|-------|
| DMTR 1 | _____ | Radar LF | _____ |
| DMTR 2 | _____ | Radar TA | _____ |

Other problems:

noise in TK started 2008

Tape 1-1 stuck at unload - finally got out - then
next tape wouldn't write.

2050 - SYSTEM BACK UP

NOTE TAPE SEQUENCE:

1-1, 2-1, 2-2, 1-2

AL G. found loose
BNC for TAIL'S.
Tightened it and
noise was gone.

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HRD Radar Down-Time Log

Operator RodgerSheet 1 of

| Item | Time Down (HHMMSS) | Time Up (HHMMSS) | Problem |
|------|-----------------------|---------------------|---------|
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Item List: DMTR1, DMTR2, COMP, MARS, LF, TA.

Flight 90830I1 Aircraft 43 Operator Dodge, Bupee Sheet 1 of

[illegible]