

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.

900930I-1108POOPPI

Doppler Radar Scientist Check List

Flight ID 900930I
Aircraft # 43RF
Operators Marks / Burpee
Radar Tech. Lynch

Number of digital magnetic tapes on board 212

Number of tape labels on board 750

Component systems up and checked:

MARS FM Computer FM
DMTR1 FM DMTR2 FM
LF FM R/T# 103M
TA FM R/T# 204

Time correction between radar time and digital time _____

Radar Postflight Summary

Number of digital tapes used: DMTR1 4
DMTR2 3

Significant down time:

DMTR 1 204655-205610 ← my fault took off wrong tape
Radar LF none
DMTR 2 none Radar TA none

Other problems:

TA reflectivity seems low
Check Tape 2-3 to compare with
LF

SEP 30 1990

HRD Radar Down-Time Log

Operator Markes/Burpee

Sheet 1 of 1

Item	Time Down (HHMMSS)	Time Up (HHMMSS)	Problem
1-1			none

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

HRD Radar Tape Log

Flight 900930I Aircraft 43RF Operator MARKS Sheet 1 of 1

Tape #	Time On (HHMMSS)	Time Off (HHMMSS)	Comments (see Radar Notebook)
1-1	163745	174416	164250 FAST $\pm 18.3^\circ$ off band ON
2-1	174417	183655	just S of W end of Cuba
1-2	184030	~195130	tape swap was delayed because
2-2	~195130	204655	MD #1 was online (supposed to happen at 195130)
1-3	205610	215404	all FAST (good band) restarted
2-3	215404	~2232	tape after I forgot and rewound tape
1-4	~2232	234000	FAST in strat circ. off at end of pattern W of Cuba, East of Cancun climbing out

best FAST along band

see log for good times

happened at 195130