

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

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

E.5.2 In-Flight

- NMD 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

- NMD 1. Complete the summary check lists and all other appropriate check lists and forms.
- NMD 2. Brief the on-board LPS on equipment status and turn in completed forms to the LPS.
- NMD 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.]
- NMD 4. Debrief at the appropriate operations center (FGOC or MGOC).
- NMD 5. Determine the status of future missions and notify the appropriate operations center (FGOC or MGOC) as to where you can be contacted.

SEP 27 1990

1400927II - R43RF

Doppler Radar Scientist Check List

Flight ID 900927II
Aircraft # N43RF
Operators DORST
Radar Tech. T. LYNCH

Number of digital magnetic tapes on board 14

Number of tape labels on board + OK

Component systems up and checked:

MARS	<u>✓</u>	Computer	<u>✓</u>
DMTR1	<u>✓</u>	DMTR2	<u>✓</u>
LF	<u>✓</u>	R/T#	<u>S/N 224</u>
TA	<u>✓</u>	R/T#	<u>S/N 204</u>

Time correction between radar time and digital time 0

Radar Postflight Summary

Number of digital tapes used: DMTR1 1
DMTR2 1

Significant down time:

DMTR 1	<u>-</u>	Radar LF	<u>-</u>
DMTR 2	<u>-</u>	Radar TA	<u>-</u>

Other problems: TA display would halt, tho' TA radar continued to function. It was necessary to restart the radar to make the display update.

SEP 27 1990

HRD Radar Down-Time Log

Operator DORST

Sheet 1 of 1

Item	Time Down (HHMMSS)	Time Up (HHMMSS)	Problem
TA display	203400	203445	TA display stopped. RESTARTED radar.

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

