

19890930II- 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

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

E.5.2 In-Flight

- MB 1. Operate the system(s) as specified in the operator's manual and as directed by the HRD/DRS, unless superseded by directions from the on-board LPS or as required for aircraft safety as determined by the OAO flight director or aircraft commander.

E.5.3 Postflight

- MB 1. Complete the summary check lists and all other appropriate check lists and forms.
- MB 2. Brief the on-board LPS on equipment status and turn in completed forms to the LPS.
- 3 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 OAO 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 890930I1
Aircraft # 43 Ocean Cumulus
Operators B. Wright M. Black
Radar Tech. Terry Lynch,

Number of digital magnetic tapes on board 10

Number of tape labels on board No HRD, ~20 OAO Labels

Component systems up and checked:

MARS	<u>✓</u>	Computer	<u>✓</u>
DMTR1	<u>✓</u>	DMTR2	<u>✓</u>
LF	<u>✓</u>	R/T#	<u>121 / changed ^{TD} 104m at 1820Z</u>
TA	<u>✓</u>	R/T#	<u>204</u>

Time correction between radar time and digital time Radar + 1 sec fast

Radar Postflight Summary

Number of digital tapes used:

DMTR1 1

DMTR2 1

Significant recorder down time:

DMTR 1 1754-1834 Radar LF X
DMTR 2 _____ Radar TA X

Other problems:

Specks of 24 dBZ
at ranges > 200 km
on LF

[illegible]

HRD Radar Down-Time Log

Operator R. Wright

Sheet ____ of ____

Item	Time Down	Time Up	Problem
LF	1254	1834	switched h/7s 121-104

Item List: DMTR1, DMTR2, COMP, RDSC, LF, TA, DSC1, DSC2.