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 Operate the system(s) as specified in the operator's manual and as directed by the HRD/DRS, unless superseded by directions from the on-board LPS or as required for aircraft safety as determined by the OAO flight director or aircraft commander.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

- ☒ 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 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.

91009-1 120000PM

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Doppler Radar Scientist Check List

Flight ID 89080511
Aircraft # N43RF
Operators GAMACHE
Radar Tech. SCHRICKER / LYNCH

Number of digital magnetic tapes on board 40

Number of tape labels on board ENOUGH

Component systems up and checked:

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

Time correction between radar time and digital time Radar clock 1 1/2 seconds ahead of Aircraft data system.

Radar Postflight Summary

Number of digital tapes used:

DMTR1 3
DMTR2 3

Significant recorder down time:

DMTR 1
DMTR 2

Radar LF 1915-1950
Radar TA 1915-1950 } Actually:
Data System

Other problems:

Flight 890805II Aircraft N43RF Operator Gamache Sheet 1 of 1

[illegible]

HRD Radar Down-Time Log

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Operator Gamache

Sheet 1 of 1

Item	Time Down	Time Up	Problem
1	1915	1950	RADAR DATA SYSTEM PROBLEM TRIPPED AC CIRCUIT BREAKER

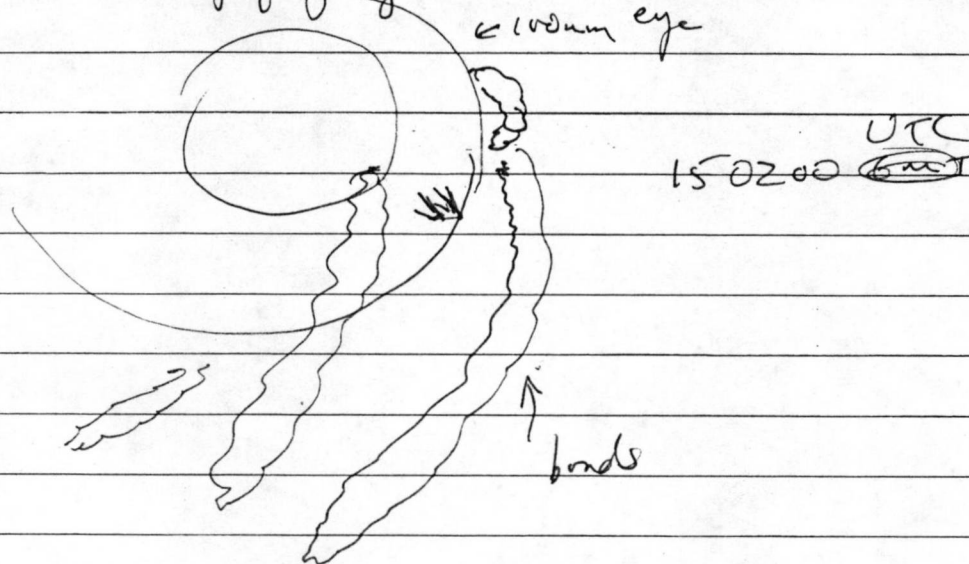
Item List: DMTR1, DMTR2, COMP, RDSC, LF, TA, DSC1, DSC2.

890805 I1

Radar/Doppler operator: Gamache
Radar Engineers: Schricker/Lynch.

Was flying the Energetics experiment in Hurricane
Dean ("the wean") today. This is the outer
M.P. Powell
named it

aircraft, so we're not in the 500 much.
Presently flying ESE
← 100nm eye



1915 Had a Radar Data System Error. Radar Down for 35 min. until 1950.
2030 This has been fairly boring from a reflectivity
& Doppler point of view. We're too far away
from storm center.

