

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.

Doppler Radar Scientist Check List

Flight ID 910818H1
Aircraft # N42RF
Operators Cristo, Dorst & Gamache
Radar Tech. Jim Roles

Number of digital magnetic tapes on board 20

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>S/N 102</u>
TA	<u>✓</u>	R/T#	<u>S/N 101</u>

switched to
propety #
42671

Time correction between radar time and digital time Radar clock 2secs ahead

Radar Postflight Summary

Number of digital tapes used:	DMTR1	<u>2</u>
	DMTR2	<u>2</u>

Significant down time:

DMTR 1	<u>None</u>	Radar LF	<u>0334-034</u>
DMTR 2	<u>None</u>	Radar TA	<u>0334-0341</u>

Other problems:

Before R/T change, TA transmitter was intermittently off. New R/T changed this, however radar seemed somewhat less sensitive afterward.

Both LF and TA may have been showing too low reflectivity throughout flight

HRD Radar Tape Log

Flight 910818H Aircraft N42RF Operator Dorst Gamache Sheet 1 of 1

[illegible]

HRD Radar Down-Time Log

Operator Garnache

Sheet 1 of 1

Item	Time Down (HHMMSS)	Time Up (HHMMSS)	Problem
LF TA	0334	0341	Radaris outstand by a R/T change was made

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