

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. *leave in plane in labeled box in cloud physics station*  
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.

9A099 - 1270000991  
AUG 27 1990

Doppler Radar Scientist Check List

Flight ID 900827I1  
Aircraft # NOAA 43  
Operators M. Black  
Radar Tech. Al Goldstein

Number of digital magnetic tapes on board Many Boxes  
Number of tape labels on board ~100

Component systems up and checked:

MARS ✓ Computer ✓  
DMTR1 ✓ DMTR2 ✓  
LF ✓ R/T# 123  
TA ✓ R/T# 204

Time correction between radar time and digital time \_\_\_\_\_

Radar Postflight Summary

Number of digital tapes used: DMTR1 \_\_\_\_\_  
DMTR2 \_\_\_\_\_

Significant down time: \* whole system 1725-1756

DMTR 1 ✓ Radar LF ✓  
DMTR 2 ✓ Radar TA ✓

~~Other problems:~~ \* screens did not update,  
TA file switched to sump2  
many error messages  
would write pieces of LF to screen  
no tail on screen  
stopped recording by itself  
- stopped radar program - rebooted  
system seems OK



