

19980919H1-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

- 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.
- 2. Maintain a written commentary in the radar logbook of tape and event times, such as the start and end times of F/AST legs. Also document any equipment problems or changes in R/T, INE, or signal status.

### 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 Field Ground 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.

Hi,  
Neal :)

### Doppler Radar Scientist Check List

Flight ID: 980919H1  
Aircraft Number: N42RF  
Doppler Radar Operators: GAMACHE  
Radar Technician: BARR/ROLES  
Number of digital magnetic tapes on board: 6 + 2 for today's flight

Component Systems Status:

MARS <input checked="" type="checkbox"/>	Computer _____
DAT1 <input checked="" type="checkbox"/>	DAT2 _____
LF <input checked="" type="checkbox"/>	R/T Serial # <u>102</u>
TA <input checked="" type="checkbox"/>	R/T Serial # <u>202/123</u>

Time correction between radar time and digital time: RADAR IS 1.5 SECS AHEAD OF DATA SYSTEM

### Radar Postflight Summary

Number of digital tapes used: DAT1 1  
DAT2 \_\_\_\_\_

Significant down time:

DAT1 _____	Radar LF _____
DAT2 _____	Radar TA _____

Other Problems:

HRD Radar Tape Log

Flight 980919H1 Aircraft N42RF Operator GAMACHE Sheet 1 of       
 LF RPM     1     TA RPM     1    

(Include start and end times of DATs, as well as times of F/AST legs and any changes of radar equipment status)

Tape #	F/AST On?	Event Time (HHMMSS)	Event
		175220	T/O at GRANTLEY ADAMS
DIT1	Y	180205	2100/1400
		193905	RADAR DOWN
		195050	RADAR UP
		1957	Strong cells to our south
		225646	RADAR COMING UP FROM BEING DOWN
		225730	RECORDING RESTARTED
		235830	SINGLE PRF 2100 5' PER JAMES REQUEST
		002018	LEFT TURN TRACK 180° NW OF
			EYEWALL VERY VISIBL
			PARALLEL ON 1ST PASS
		005730	2100/1400 ON 3RD PASS 10,000 FT
			SEE WHICH UNFOLDS BETTER
			IN STRONG STORM
		012250	<del>END</del> RETURNING TO FLIGHT LEVEL
		0208	END RECORDING





