

**Radar Scientist**

Flight ID 100828I1 Storm Name TS Earl

Radar Scientist S. Murillo Radar Technician Dana Naehar

The on-board radar scientist is responsible for data collection from all radar systems on his/her assigned aircraft. Detailed operational procedures and checklists are contained in the operator's manual. General supplementary procedures follow. (Check off or initial.)

**Preflight**

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

**In-Flight**

- 84 1. Remind the AOC data technician to start the radar capture files.
- 84 2. Operate the system(s) as specified in the operator's manual and as directed by the LPS or as required for aircraft safety as determined by the AOC flight director or aircraft commander.
- 84 3. Maintain the Radar Scientist's form as well as 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.

**Post flight**

- 84 1. Complete the summary checklists and all other appropriate forms.
- 84 2. Obtain from the AOC data technician all radar tapes and give him a thumbnail drive to download the radar capture files.
- 84 3. Brief the LPS on equipment status and turn in completed forms, the thumbnail drive, and all radar tapes to the LPS. [Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]
- 84 4. Debrief at the base of operations.
- 84 5. Determine the status of future missions and notify MGOC as to where you can be contacted.

### HRD Radar Scientist Check List

Flight ID: 100828I1

Radar Operators: S. Murillo

Radar Technician: Dana Naehar

Number of DAT tapes on board: \_\_\_\_\_

Component Systems Status (Up ↑, Down ↓, Not Available N/A, Not Used O):

Device	Pre-flight	In-flight	Post-flight	R/T Serial #
Radar Computer	↓	↑↑		
DAT drives	↓	↑		
Lower Fuselage antenna	↓	↑		
Tail Antenna	↓	↑		

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

#### Radar Post flight Summary

Number of DAT tapes used: \_\_\_\_\_

Significant down time:

Radar Computer \_\_\_\_\_ Radar LF \_\_\_\_\_

DAT drives \_\_\_\_\_ Radar TA \_\_\_\_\_

**Other Problems:**

54.0 18.00

### HRD Radar Event Log

Flight ID 10082811 Storm Name TS. Earl Sheet 1 of       
Radar Scientist S. Munilo Radar Technician Dana Nacher

LF RPM                      TA RPM                     

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

Tape #	F/AST On?	Event Time (HHMMSS)	Event
			43 French antenna
		194807	take off from Barbados
		195558	radar on
		200517	setting radar parameters
		210110	reached IP
			deviated some connection
		211018	back on track heading north
		2130	center
		2155	radar down / back up refresh screen
		215616	turned
		222910	turned to the west 90°
		225101	center 16° 29" 54° 19"
		031710	landed

↑  
↓  
→

16.5 54.2 280 @ 20 kts 21 z

# Doppler Wind parameters

Doppler flight-leg notes (for use in automatic QC and analysis)

FLIGHT ID: 100828I1

Scientist: S. Muriilo

Leg Start Time	Leg End Time	Storm Motion		Center Fix			Max Radius (km)	Horz. Res (km)	Inbound track	Outbound track	ja?	Angle check?	Sent?
				Time	Latitude	Longitude							
HHMMSS	HHMMSS	Degrees	Knots	HHMMSS	(Deg/Min)	(Deg/Min)	49/98/147/196	1/2/3/4	Azimuth (deg)	Azimuth (deg)	H/TS	(Y/N)	(Y/N)
210111	2156	275	17	2130	16°28"	54°5"			10	0	TS	Y	Y
2156	222759								228°	218°			
222759	232115	273	9	2251	16°29" 18	54°19"			92°	60°	TS	N	Y
232115	233959								330°				
234001	002611	273	12	0046	16°34" 16° 8"	54°35" 54° 7"			224	196	TS	N	Y
002611	005601								90°	90°			
005601	015509	268	13	01317	16.31	54.59			314	317°			N
015509	024310								215	214			

Down wind

up wind