Radar Scientist

Flight ID 110824 #2   **Storm Name** Hurr. Irene

Radar Scientist LORSOLO   **Radar Technician** BOSKO

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

_✓_ 1. Determine the status of equipment and report results to the lead project scientist (LPS).

_✓_ 2. Confirm mission and pattern selection from the LPS.

_✓_ 3. Select the operational mode for radar system(s) after consultation with the LPS.

_✓_ 4. Complete the appropriate preflight calibrations and check lists as specified in the radar operator's manual.

In-Flight

_____ 1. Remind the AOC data technician to start the radar capture files.

_____ 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.

_____ 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

_____ 1. Complete the summary checklists and all other appropriate forms.

_____ 2. Obtain from the AOC data technician all radar tapes and give him a thumbnail drive to download the radar capture files.

_____ 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.]

_____ 4. Debrief at the base of operations.

_____ 5. Determine the status of future missions and notify MGOC as to where you can be contacted.

HRD Radar Scientist Check List

Flight ID: _____

Radar Operators: _____

Radar Technician: _____

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:

Mission Aborted due to engine problem
A short module for radar processing was
completed. Plane flew wing leveled.

HRD Radar Event Log

Flight ID_____ Storm Name _____ Sheet ____ of ____

Radar Scientist _____ Radar Technician_____

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
		2014	Take-off. Time
	✓	2030	Start recording
			IP - Start of 1st leg.
			lat , long.
			Center
			Storm mot°
			lat
			long.
			End Penetral° / End downwind
			Mission Aborted
			Plane (wings) leveled
			up- and downwind 30 km
			legs over flat sea s/c
			with light winds

HRD Radar Problem Log

Flight ID_____ Storm Name _____ Sheet ____ of ____
Radar Scientist _____ Radar Technician_____

(Include times of when recording ended and was restarted)

Tape #	Time (HHMMSS)	Problem	
	2240	Start Module Track : 240 heading : 240 WD : ~60° True air speed 220 kt.	Downwind leg
		Press alt : 1697 m. Radar alt : 5900 ~ lat = 27° 23' ~ long = 83°	
	2246	WD : ~75° Track : 75°	upwind leg.
	2250	End Module	