1309AIRENE

Radar Scientist

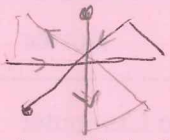
Flight ID 110824H1 **Storm Name** Irene

Radar Scientist Reasor **Radar Technician** Naeher

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: 110824H1

Radar Operators: Reasor

Radar Technician: Naeher

Number of DAT tapes on board: 1

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

Device	Pre-flight	In-flight	Post-flight	R/T Serial #
Radar Computer	↓	↑		[redacted]
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:

HRD Radar Event Log

Flight ID 110824H1 **Storm Name** Irene **Sheet** ____ **of** ____
Radar Scientist Reasor **Radar Technician** Nacher

LF RPM ______________ TA RPM 10

(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
1		081400	Takeoff
		~083000	Radar up
		~162500	Landing

HRD Radar Problem Log

Flight ID 110824H1 **Storm Name** Irene Sheet ____ of ____
Radar Scientist Reasor **Radar Technician** Naeher

(Include times of when recording ended and was restarted)

Tape #	Time (HHMMSS)	Problem

Doppler Wind parameters

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

FLIGHT ID: 110824H1 **Scientist:** Reasor

	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)
N-S	102445	110930	311	10	104627	2150	7314	245	5	171	180	H	N	
DW	110930	112240						↓	↓			↓	↓	
SE-NW	112410	120545	318	9	1144	2157	7320			316	315			
DW	120710	121820												
W-E	121935	130720	313	10	1242	2206	7328			89	85			
DW	130830	1321												
NE-SW	1321	140610	311	12	1344	2216	7340			227	224			