Radar Scientist

Flight ID 110825I1   **Storm Name** Irene

Radar Scientist Reason   **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: _110825I1_

Radar Operators: _Reason_

Radar Technician: _Nacher_

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:

HRD Radar Event Log

Flight ID 110825I1 **Storm Name** Irene **Sheet** ____ **of** ____
Radar Scientist Reasor **Radar Technician** 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
		082300	Takeoff
1	Y	083400	Radar up
		soon after	Radar Recording start
		~140000	Radar Recording stop, resume
		153440	Landing

HRD Radar Problem Log

Flight ID **11082511** Storm Name **Irene** Sheet ____ of ____
Radar Scientist **Reason** 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)

2009AIRENE

FLIGHT ID: 110825I1 **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)
NW-SE	092920	102600	314	9.5	095631	2500	7612	245	5	132	134	H	Y	Y
DW	102730	104420												
E-W	104420	113515	321	18	111130	2518	7630			271	269		N	Y
DW	113715	114820												
SW-NE	114830	124500	320	10	121400	2526	7637						N	Y
DW	124600	130000												
N-S	130200	135700	330	11	132800	2537	7643			179	180		N	Y