Radar Scientist

Flight ID 100902I1 **Storm Name** Earl

Radar Scientist S. Murillo **Radar Technician** Dana Nagher

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

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

SM 2. Confirm mission and pattern selection from the LPS.

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

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

In-Flight

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

SM 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.

SM 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

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

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

SM 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.]

SM 4. Debrief at the base of operations.

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

HRD Radar Scientist Check List

Flight ID: 100902I1

Radar Operators: S. Murillo

Radar Technician: Dana Naeher

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	↓	↑	↓	[redacted]
DAT drives	↓	↑	↓	[redacted]
Lower Fuselage antenna	↓	↑	↓	
Tail Antenna	↓	↑	↓	

Time correction between radar time and digital time: _____

Radar Post flight Summary

Number of DAT tapes used: 1

Significant down time:

Radar Computer _____ Radar LF _____

DAT drives _____ Radar TA _____

Other Problems:

HRD Radar Event Log

Flight ID 09090211 **Storm Name** Earl Sheet ____ of ____
Radar Scientist S. Murillo **Radar Technician** Dana Naeher

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
		200635	takeoff from MacDill
		202148	radar on
		213612	at IP
		2156	eyewall (SW)
		2204	center
		221104	eyewall (NE)
		222850	turning toward the west
		225728	turning towards the SE
		231444	eyewall (NW)
		232110	center
		232737	eyewall (SE)
		234606	turning
		235040	coming down to 7k
		235810	sector scan
		002230	eyewall (E)
		0030	center
		003637	eyewall (W)
		005755	turning
		021425	turning
		033621	stopped recording
		035317	landed in Richmond, VA

2134 013945 eyewall 235110 eyewall

Doppler Wind parameters

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

FLIGHT ID: 100902I1 **Scientist:** S. Murillo

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)
213612	222620	10°	16	220410	32°34"	74°52"	245	5	155	46	H	N	Y
222850	224750 (2343)								267				
225728	234606	014°	16	2321	32°55"	74°44"	245	5	135°	135°	H	N	Y
235120	235910								25°				
000416 (2404)	005755	019°	18	0030	33°14"	74°41"	245	5	270°	277°	H	N	Y
005755	011439 (2514)								125°				
012458 (2524)	021330 (2613)	009°	17	014844	33°34"	74°36"	245	5	0°	0°	H	N	Y
021330 (2613)	024342	007	17	0240	33°.2	74°07"	245	5°	0°				

P. Chaos flight leg