Radar Scientist

Flight ID 09082012 **Storm Name** Bill

Radar Scientist S. Murillo **Radar Technician** Terry Lynch

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: 090820I1

Radar Operators: Murillo

Radar Technician: T. Lynch

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 see event log

DAT drives ↑ Radar TA see event log

Other Problems:

radars were very spotty thought the flight

HRD Radar Event Log

Flight ID 090820I1 **Storm Name** Bill Sheet 1 of 1
Radar Scientist S. Munn **Radar Technician** T. Lynch

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
		074053	take off from Barbados
		080020	radar recording started
		091930	LF & TA restart both froze
			TA radar is very noisy expected
		1033 - 1037	radar down, restart
		1039	radar down again
		1127	radar down again, they took the boards out and are investigating the problem
			radar was out for the last leg of the flight.
		144633	landed back in Barbados

Doppler Wind parameters

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

FLIGHT ID: 090820I1 **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)
090647	100351	305	17	0936	21°39'	60°36	196	4	358	1°	1st time H 2nd time TS	N	Y
103030	112600	302	16	1056	21°56'	60°53'	196	4	120	121	1st time H 2nd time TS	N	Y
115010					22°10'	61'			239				