Radar Scientist

Flight ID __1Ø11Ø3H1__   Storm Name __TD Tomas__

Radar Scientist __P. Leason__   Radar Technician __B. Peek__

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

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

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

_PR_ 3.   Select the operational mode for radar system(s) after consultation with the LPS. _2/00 F/A_

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

In-Flight

Confirm flight ID w/ radar tech   (2Ø1Ø11Ø3H1)

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

_PR_ 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.

_PR_ 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: __101103H1__

Radar Operators: __P. Reasor__

Radar Technician: __B. Peek__

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	↓	↑		

NA   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 101103HI **Storm Name** Tomas **Sheet** ___ **of** ___

Radar Scientist P. Reason **Radar Technician** D. Peek

LF RPM 10 **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
		202930	Take off from Tampa
		~2050	Start Radar
		~2300	Restart Radar
		2444	LF display → Problem ?
		2448	LF problem resolved
			Note : ~10000ft during pass 1
		2528	LF stuck
		2524	LF unstuck
		~0420	Bring radar down

HRD Radar Problem Log

Flight ID 101103H1   **Storm Name** Tomas   **Sheet** ____ **of** ____

Radar Scientist P. Reason   **Radar Technician** B. Peek

(Include times of when recording ended and was restarted)

Tape #	Time (HHMMSS)	Problem

330 @ 5kt   15.3 75 circon   40nm = 166.5km   ATCF 21

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

FLIGHT ID: 101103 H1   **Scientist:** P. 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	2356	2435	330	5	241100	15 28	75 00	196	4	180	180	TS	Y	Y
"DW"	243630	250450			25300	15 17	75 11					u		
E-W	250700 251000	254800	330	5	25300	15 17	75 12	u	u	260	270	u	N	Y
W-E	255200	263000	330	5	260850	15 17	75 20	u	u			u	N	