Radar Scientist

Flight ID __181009H1__   Storm __Michael__

Radar Scientist __Hazelton__   Radar Technician __Richards__

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 status of equipment and report results to 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 check list.

In-Flight

✓ 1.   Monitor the Tail Doppler Radar function regularly, using the real-time TA display, to make sure the Doppler radar is scanning and working normally.

✓ 2.   Once at the IP, request that the tilt be adjusted to remove sea clutter.

✓ 3.   Request that the LF radar is set to full scan (non-sector mode) for first Figure 4.

✓ 4.   Maintain the Doppler Wind Parameter form as well as a written commentary in the Radar Event Log of event times, such as ending and restarting of radar recording. Also document any equipment problems or changes in R/T, INE, or signal status.

Post flight

✓ 1.   Complete the summary checklist and all other appropriate forms.

✓ 2.   Download all Belly (LF) scan radar data files to thumb drive.

✓ 3.   ~~Download all tar'd (TA) radar data files to thumb drive.~~

✓ 4.   Brief the LPS on equipment status and turn in completed forms and thumb drives to the LPS.

✓ 5.   Debrief at the base of operations.

✓ 6.   Determine the status of future missions and notify HFP Director as to where you can be contacted.

HRD Radar Scientist Check List

Flight ID: ~~180018~~ 181009H1

Aircraft Number: NOAA42

Radar Scientist: Huzelbn

Radar Technician: Richards

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

Radar Computer _____↑_____

Lower Fuselage (LF) Antenna ___↑_____

Tail (TA) Antenna _____↑_____

Radar Post flight Summary

Significant down time:

    Radar LF _____——_____

    Radar TA _____——_____

Other Problems:

HRD Radar Event Log

Flight ID __181009H1__   Storm __Michael__

Radar Scientist __Hazelton__   Radar Technician __Richards__

(Include down time and times of when recording ended and was restarted)

Time (HHMMSS)	Event
075000	Takeoff
083030	First Inbound Leg
091130	ⓖ First Center Fix
094013	Outbound leg ended, downwind leg
101456	Started second inbound
104020	Second center fix
110530	Outbound leg ended, downwind leg
112100	Started third inbound
114128	Third Center Fix
120941	Outbound leg end, downwind
124325	Started fourth inbound
131300	Fourth center fix
134345	outbound leg ended, started downwind
140130	Started inward leg
142400	Last center fix
142700	started outband
145200	End of outband

← ✳ 0921 Accidentally used Instead of 0941

→ CB module

→ CB

→ CB

→ CB

Doppler Wind parameters

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

Scientist: Hazelton

Leg Start Time	Leg End Time	Storm Motion		Center Fix			Inbound	Outbound	Max Radius (km)	Horz. Res (km)	Sent ?
				Time	Latitude	Longitude					
HHMMSS	HHMMSS	Degrees	Knots	HHMMSS	(Deg/Min)	(Deg/Min)	track	track	Default = 245	Default = 5	(Y/N)
083830	094013			091130	24°9'	85°~~59'~~	180	180			
~~094013~~							45*	45*			
101456	110530			104020	24°15'	86°6'	270	270			
110530							135*	135*			
112100	120841			114120	24°33'	86°9'	45*	45*			
~~120841~~	~~124325~~						270*	270*			
124325	134345			131300	24°40'	86°8'	135	~~135/135~~			
134375	140130						0 ~~180~~*	~~90~~*			
140130	142400			142400	24°55'	86°17'	270	~~270~~			
142700 ~~142900~~	145200			142900	24°55'	86°17°		45			

Side annotations (left margin): DW, DW, DW, DW, In only, Out only