Radar Scientist

Flight ID 18101011 **Storm** Michael

Radar Scientist Hazelton **Radar Technician** _____

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: 181010H1

Aircraft Number: NOAA 42

Radar Scientist: Hazelton

Radar Technician: _____

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: TA down at 1407-1408

2.1

HRD Radar Event Log

Flight ID 18101OH1 **Storm** Michael

Radar Scientist Hazelton **Radar Technician** _____

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

Time (HHMMSS)	Event
082300	Takeoff
092333	Started inbound from N
094900	Center Fix
101725	Started Downwind
105250	Started inbound from E
114430	started Downwind
11655	Center Fix
11[illegible]830	Inbound from SW
123030	Center Fix
124500	End of Leg, ~~Holding Pattern~~ Downwind leg
125500	Holding pattern
132130	Inbound from NW
134230	Center Fix
135911	Heading Change
141200	End of downwind

Doppler Wind parameters

Flight ID: [redacted] 181010H1

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)
	093323	101725			094900	28° 33'	86° [redacted]48'	180	180			
DW	101725	105250				[illegible]		045	045			
	[redacted]0350	114430			111655	28° 44'	86° 22'	270	270			
DW	114430	115930				[redacted]	[illegible]	135	135			
	115930	124500			123050	29° 4'	86° 17'	045	045			
DW	124500	125500						315	315			
*	125500	132130						Holding	Pattern			
	132130	[redacted]135911			134230	29° 14'	86° 8'	135	135			
DW	135911											