Radar Scientist

Flight ID 20180903 HI   **Storm** TS Gordon

Radar Scientist Hazelton   **Radar Technician** Mike Mascaro

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: ___20180903 H 1___

Aircraft Number: ___~~N42~~ NOAA 42___

Radar Scientist: ___Hazelton___

Radar Technician: ___Mike M___

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 20180903 H1   **Storm** Gordon

Radar Scientist Hazelton   **Radar Technician** Mike Mascaro

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

Time (HHMMSS)	Event
202700	Takeoff
203500	Radar started Transmitting
205200	Started surveillance (Headed N→S)
212230	Turned to E surveillance
2156	Start butterfly, track 330
2220	center mark 26°29' 82°58'
2240	end of out bound leg
	begin circles
2315	end circles, return to pattern to begin downwind leg
2323	end mission, mechanical issue
2340	had an issue with radarsync → wasn't starting analyses even though ground submitted job file. Had to ctrl-c and rerun radarsync. That worked.

Doppler Wind parameters

Flight ID:			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)
*survilha 204400	212230						180	180	245	5	
*survilha 212230											