# Radar Scientist

Flight ID 20180909/H1 **Storm** TS Florence

Radar Scientist Reason **Radar Technician** 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.
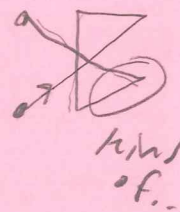
In-Flight

_✓_ 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.

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

_na_ 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.

_na_ 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: 20180909H1

Aircraft Number: N42

Radar Scientist: Reasor

Radar Technician: Mascaro

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

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Radar Scientist ReasoR **Radar Technician** Mascaro

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

Time (HHMMSS)	Event

Doppler Wind parameters

Flight ID: 20180909H1		Doppler flight-leg notes (for use in automatic QC and analysis)			Scientist: Reasor				

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)
135043	143443	270	5	CMA 141350	2422 24.34	5607 56.17	60	60	245	5	✓
143643											
145643	153800	270	5	152143	24.34	56.37	180	180	245	5	✓
153800		270	5	163625	24.39	56.48			245	5	✓
162300	165800										