# 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.
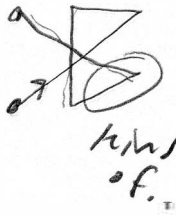
In-Flight

____ 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:

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	CPA 141350	24 22 24.34	56 07 56.17	60	60	245	5	✓
143643											
145643	153800	270	5	152143	24.34	56.37	180	180	245	5	✓
153900		270	5	163625	24.39	56.48			245	5	✓
162300	165800										