Radar Scientist

Flight ID 140804H1 **Storm** Hurr Bertha **Radar Scientist** Rogers

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 realtime TDR display, to make sure the Doppler radar is scanning and working normally.

____ 2. 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 Tail (TA) radar data files to thumb drive.

____ 3. Brief the LPS on equipment status and turn in completed forms and thumb drives to the LPS.

____ 4. Debrief at the base of operations.

____ 5. Determine the status of future missions and notify HFP Director as to where you can be contacted.

HRD Radar Scientist Check List

Flight ID: 14080411

Aircraft Number: N42RF

Radar Scientist: Rogers

Radar Technician: Bosko

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

Radar Computer ↑

Lower Fuselage (LF) Antenna ↑

Tail (TA) Antenna ↑

Time correction between LF radar time and digital time: ___

TA Radar Parameters:

(Single/Dual) PRF _____ F/AST (Y/N) Rotation Rate ____ RPM

Sweeps/File _____ Record 2nd Trip (Y/N) (Circle appropriate status)

Radar Post flight Summary

Significant down time:

Radar LF _____

Radar TA _____

Other Problems:

RL1

HRD Radar Event Log

Flight ID______________ **Aircraft** ______________
Radar Scientist __________________**Radar Technician**__________________

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

Time (HHMMSS)	Event
1919	start inbound leg

(eyewall SE) drop 232600 NLD drop 233745 (mid pf SE) 28.1
drop 232645 drop 234611 (eyewall SE)

Doppler Wind parameters

Flight ID:				Doppler flight-leg notes (for use in automatic QC and analysis)				Scientist: Rogers				
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)	
RA 191900	200956	(nav) 360	(nav) 15	194750	29°09′	73°34′	0	0				
DW 200956	204208											
RA 204300	213055	(nav) 003	(nav) 18	210712	29°33′	73°32′	90	90				
DW	215105											
RA 215200	225115	(nav) 008	(nav) 18	2228	29°58′	73°29′	225	225				
DW	232240											
RA 232600	001303	(nav) 008	(nav) 20	235017	30°26′	73°24′	315	315				

2219
2227