Radar Scientist

Flight ID 13031 **Storm** Karen **Radar Scientist** Hazelton / Sellwood

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: 20131003H1

Aircraft Number: N9AA42

Radar Scientist: Hazelton / Sellwood

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 2100 F/AST (Y/N) Rotation Rate ____ RPM

Sweeps/File 1 Record 2nd Trip (Y/N) (Circle appropriate status)

Radar Post flight Summary

Significant down time:

Radar LF _____

Radar TA _____

Other Problems:

To 1805

HRD Radar Event Log

Flight ID 20131003H1 **Aircraft** N42RF
Radar Scientist Hazelton / Sellwood **Radar Technician** _____

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

Time (HHMMSS)	Event
184200	start radar
194300	start of leg 1
200600	Center Fix 1
202600	End leg 1, Begin Downwind 1
205545	End Downwind 1, Start Leg 2
212315	Center Fix 2
214800	End Leg 2, Begin Downwind 2
220630	End Downwind 2, start Leg 3
223100	Center Fix 3
225500	End Leg 3, Begin Downwind 3
232800	End Downwind 3, Start Leg 4
235100	center Fix 4
241450	End Leg 4
012500	Radar Ended

Doppler Wind parameters

Flight ID: 131003H1	Doppler flight-leg notes (for use in automatic QC and analysis)	Scientist: Sellwood/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)
194300	202600/ 205545	330	10	200600	23° 13'	88° 28	180°	180°	245	5	Y
205600	214800/ 220630	329	8	212315	23° 22'	88° 34'	270°	268°			
220630	225500/ 232800	330	8	223100	23° 29'	88° 44'	45°	47°	245	5	
232800	001450	316	9	235100	23° 38'	88° 51'	134°	135°			