Radar Scientist

Flight ID 20160802I1 **Storm** EARL **Radar Scientist** ALAKA

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: 20160802I1

Aircraft Number: 43

Radar Scientist: ALAKA

Radar Technician: DANA

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

Radar Computer Up ↑

Lower Fuselage (LF) Antenna Up ↑

Tail (TA) Antenna Up ↑

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:

1) Reflectivity KMZ issues on MTS

Doppler Wind parameters

Flight ID: 20160802I1	Doppler flight-leg notes (for use in automatic QC and analysis)	Scientist: ALAKA

Leg Start Time	Leg End Time	Storm Motion		Center Fix			Inbound track	Outbound track	Max Radius Default = 245	Horz. Res Default = 5	Sent ?
				Time	Latitude	Longitude					
HHMMSS	HHMMSS	Degrees	Knots	HHMMSS	(Deg/Min)	(Deg/Min)	Degrees	Degrees	(km)	(km)	(Y/N)
204845	213000	280	14	211000	16°10'	81°19'	160°	180°	245	5	
213000	215600	280	14				45°	—			
215600	223800	280	14	222030	16°18'	81°50'	270°	270°	245	5	