Radar Scientist

Flight ID_____ **Storm**_____ **Radar Scientist**_____

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: _____

Aircraft Number: _____

Radar Scientist: _____

Radar Technician: _____

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)

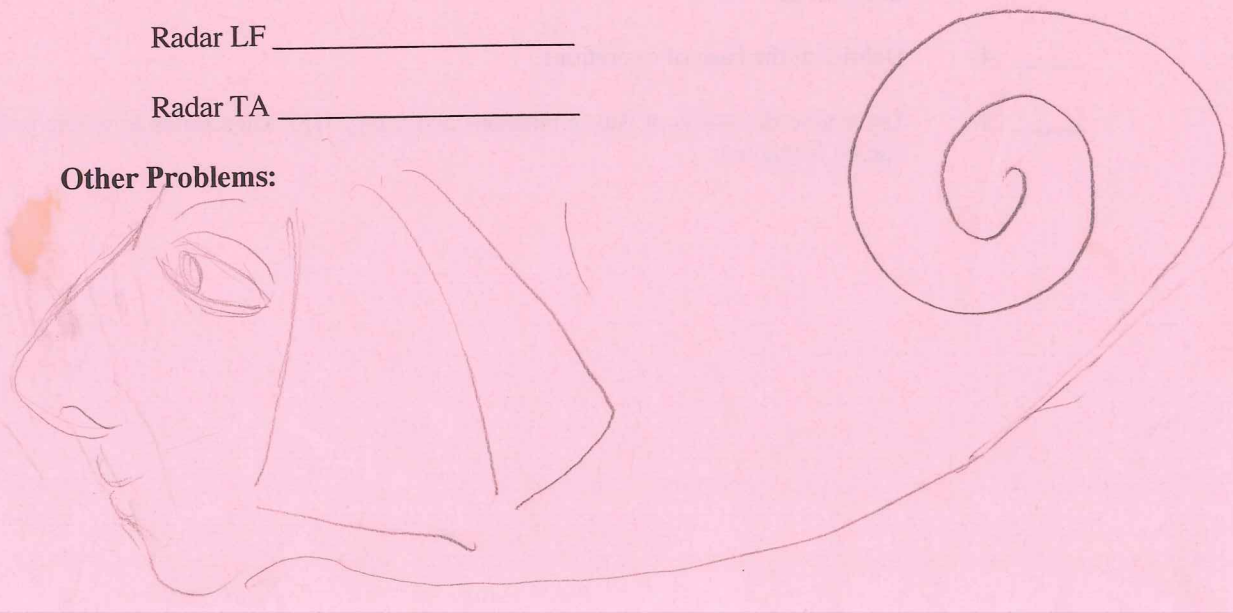
Radar Post flight Summary

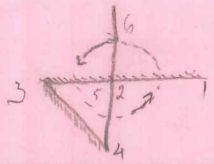
Significant down time:

Radar LF _____

Radar TA _____

Other Problems:





	start	mid	end in-out	end downwind
A1 (1-4)	204642		20:58	8/44/10
A2 (4-6)				X
A3 (6-1)		X		

center 2245 N 9600 W
center 2248 9602

end = last end 3D
x s start = 1 min before mid
x end 1 min after mid

Doppler Wind parameters

Flight ID: 20130915I1	Doppler flight-leg notes (for use in automatic QC and analysis)	Scientist: Vukicevic

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)
~~20:32:00~~ 205439 in	21:04:48						270	270			
21:04:48 out	21:22:09	290	5								
A1 21:2243 downwind	21:44:13										
21:44:13 in	~~2218 04~~						360	360			
A2 2218 04 out	22h055										
~~[illegible]~~							0	0			
A3 230018	23:47:57										
	~225234										
1/2 time	52/2=26										
	23										

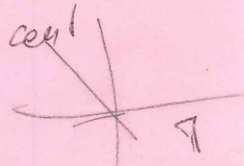
drop 1 / 40 kt 28 sst

drop 2 eyewall 275ST 992mb 20 m/s

drop 3 eye / sst 27.3 986.7 27.2 J

22 hr 4 95 99 W

drop 4 eyewall mid-first-run dry 5 combo 6 combo



second center

2218 04 time

60 kt surface eyewall 987.01 1.3 m/s

2248 9602

Center 3