Radar Scientist

Flight ID 20150827I1 **Storm** ERIKA **Radar Scientist** Klotz

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: 20150827I1

Aircraft Number: NOAA 43

Radar Scientist: Klotz

Radar Technician: Mascaro

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

Radar Post flight Summary

Significant down time:

Radar LF _____

Radar TA _____

Other Problems:

HRD Radar Event Log

Flight ID 2015082711 **Aircraft** NOAA 43
Radar Scientist Klotz **Radar Technician** Mascaro

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

Time (HHMMSS)	Event
0425 Z	Radar turned on (LF delayed several min)
1130 Z	Radars off
	archive on SanDisk thumb drive

Doppler Wind parameters

14 min gap in HDOBs, at 0640z

archive on

Flight ID: 20150827I1				Doppler flight-leg notes (for use in automatic QC and analysis)				Scientist: Klotz			

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)
0519	0607	280	14	054239	16°/32'	60°40'	360°	90°	245	5	Y
0607	XS 0710 3D	280	14	0630	16°/30'	60°55'	180°	260°	245	5	Y
0712	XS:0759 3D:0815	280	14	0735	16°/32'	64°10°	90°	90°	245	5	Y
0815	XS:0853 3D:0925	280	14	0839	16°/34'	61°30'	235°	235°	245	5	Y
0925	XS:1003	280	14	0944	16°/34'	61°20'	310°	310°	245	5	Y
1004	XS:	280	14	1030	16°/15'	61°53'	150°	150°	245	5	