Radar Scientist

Flight ID 20161005I2 **Storm** Matthew

Radar Scientist Evan Kalina **Radar Technician** Dana Naeher

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.

315 135
45 225
180 0

In-Flight

✓ 1. Monitor the Tail Doppler Radar function regularly, using the real-time TA display, to make sure the Doppler radar is scanning and working normally.

✓ 2. Once at the IP, request that the tilt be adjusted to remove sea clutter.

✓ 3. Request that the LF radar is set to full scan (non-sector mode) for first Figure 4.

✓ 4. 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 Belly (LF) scan radar data files to thumb drive.

✓ 3. Download all tar'd (TA) radar data files to thumb drive.

✓ 4. Brief the LPS on equipment status and turn in completed forms and thumb drives to the LPS.

✓ 5. Debrief at the base of operations.

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

HRD Radar Scientist Check List

Flight ID: 20161005I2

Aircraft Number: N43RF

Radar Scientist: Evan Kalina

Radar Technician: Dana Naeher

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

Radar Computer ↑

Lower Fuselage (LF) Antenna ↑

Tail (TA) Antenna ↑

Radar Post flight Summary

Significant down time:

Radar LF none

Radar TA none

Other Problems:

none to speak of

HRD Radar Event Log

Flight ID 20161005I2 **Storm** Matthew

Radar Scientist Evan Kalina **Radar Technician** Dana Naeher

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

Time (HHMMSS)	Event
201000	Eyewall is comma shaped, open NW
213000	Eyewall now circular, open SW

Doppler Wind parameters

Flight ID: 20161005I2	Doppler flight-leg notes (for use in automatic QC and analysis)	Scientist: Evan Kalina

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)
195230	204530			201608	22° 32' 33"	75° 34' 7"	120°	120°			Y
210930	215630			213654	22°42'41"	75°39'59"	245°	240°			Y
221300	225200			222730	22°48'43"	75°45'17"	360°	360°			Y