Radar Scientist

Flight ID 20161005I **Storm** Matthew

Radar Scientist Hui Christophersen / John Gamache **Radar Technician** Mascar

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 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: 20161005I1

Aircraft Number: N0AA43

Radar Scientist: Christophersen / Gamache

Radar Technician: _____

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:

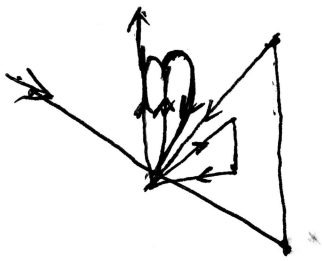
Radar LF _____

Radar TA _____

Other Problems:

There were twice power outage during 1215Z to 1238Z.

actual track:



HRD Radar Event Log

Flight ID 20161005I1 **Storm** Matthew

Radar Scientist Christophersen/Ganeche **Radar Technician** Mascar

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

Time (HHMMSS)	Event
0702	Plane takes off
0807	plane loiters for ~40 min due to mechanic issue
0955	center drop
1025	end point drop
1113	max wind drop (two drops)
1143	high wind drop
1215-1238	radar power out, data may be questionable.

Mission ID: WC14A

Doppler Wind parameters

Flight ID: 20161005I1

Doppler flight-leg notes (for use in automatic QC and analysis)

Scientist: Christopherson | Ganache

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)
093001	103341	350	8	095432	21°14'	74°39'	120°	120°	175		Y
1058	1115						240°	~~240°~~			Y
1118	1131			1118	21°38'	74°~~46~~'	~~270°~~ 270°	70°			
1136	~~1149~~ 1222			1147	21°36'	74°~~49~~'	210°	30°			
~~1147~~	~~1222 1306~~ 1319							~~0°~~			Y
1241	1306				21°51°	74°54' ~~74°38'~~		0°			

point change small radial legs