

# Radarscientist Form

(Updated 31 May 2019)

Flight ID 190905H1 Storm Dorian

HRD Radar Scientist (Aircraft/Ground) Rogers & Reasor

AOC Radar Operator Lynch

The aircraft radar scientist is responsible for data collection from all radar systems on his/her assigned aircraft, working with the ground radar scientist to ensure successful transmission of all radar products from the aircraft in a timely manner, and contributing to mission science by communicating real-time radar products to the LPS. Specific responsibilities are detailed in the *Aircraft Radar Support Guide* located on the radar workstation desktop and in the flight bag.

## § Pre-flight Notes.

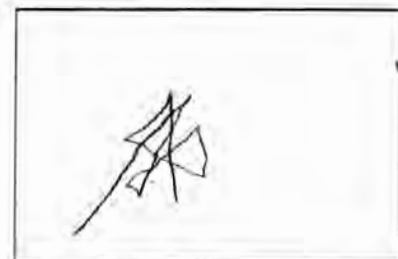
Indicate below any existing radar instrumentation issues, pre-flight radar repairs or other instrumentation issues (e.g., GPS swapout) that might impact radar data collection or analyses. If none, then simply write NONE below.

none

## § Pre-flight Setup with Ground Radar Scientist.

Preferably before the planeside briefing, establish Xchat communication with the ground radar scientist on #radar. Check off the following tasks.

- Communicate any pre-flight issues noted above.
- Confirm latest flight pattern. Sketch to the right.  
Indicate legs constituting proposed analyses.
- Go through Steps 1-3 of Aircraft Radar Support Guide.



### § In-flight Setup with Ground Radar Scientist.

After radar recording has begun, reestablish Xchat communication with the ground radar scientist on #radar. Check off the following tasks.

Go through Steps 4-7 of Aircraft Radar Support Guide.

Indicate below any issues identified during Steps 4-7, in particular any radar instrumentation issues evident in the radar displays. If none, then simply write NONE below.

<i>None</i>
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### § In-pattern Radar and Weather Event Log.

Indicate below any radar down times or significant weather observations that might be helpful for interpreting radar analyses (e.g., flight through sparse shallow convection).

Time (HHMMSS)	Event (Radar or Weather)

**§ End-of-Flight Shutdown with Ground Radar Scientist.**

Once the aircraft exits the system, reestablish Xchat communication with the ground radar scientist on #radar. Check off the following tasks.

- Go through "NEAR END OF FLIGHT" Steps 1-5 of Aircraft Radar Support Guide.

If you recorded 'N' for Analysis Sent at any point during the flight, please detail the situation below. If there are any other *mission-critical* issues pertaining to the radar systems not documented above, please note them here. If none, then simply write NONE below.

None

31.74 79.46 094333

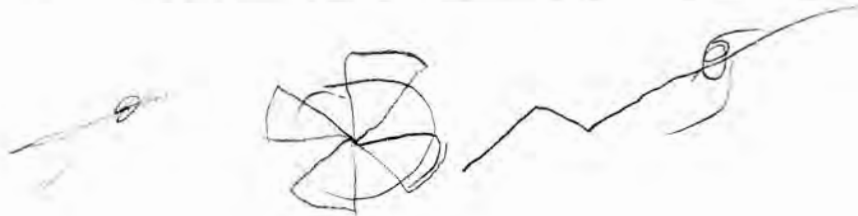
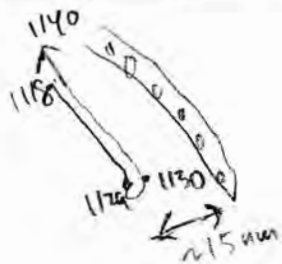
### Jobfile Parameters for Automated TDR Analysis

FLIGHT ID: 19090511				Aircraft Radar Scientist: Rogers									
Leg Start Time	Leg End Time	Storm Motion		Center Fix			Inbound Track	Outbound Track	Event Type	Max Radius if not 250 km	Horiz. spacing if not 2 km	Accept. for Graphics? (Y/N)	Analysis Sent? (Y/N)
				Time	Latitude	Longitude							
HHMMSS	HHMMSS	Deg	Kts	HHMMSS	Decimal Deg	Decimal Deg	Azimuth (deg)	Azimuth (deg)	IN/TS/H/MH				
091624	095703	010	6	094333	31.74	79.46	300	300	H				
DW	101655												
101910		010	6	→ messed up inbound leg, resetting									
103900	1118	010	6	1057	31.95	79.35	60	60	H				
1148	1226	010	6	1159	32.12	79.19	180	180	H				
1243	1258				1 <sup>st</sup> NES DIS inbound			320 track		32.25	79.2	12592	
1300	1308				1 <sup>st</sup> NES DIS outbound			125 track					
1312	1321				2 <sup>nd</sup> NES DIS inbound			260 track					
1323					2 <sup>nd</sup> NES DIS outbound								
off shore intense convection module													
1118	1129	upwind leg		start off shore intense convection module → upwind leg									
1130	1140			begin downwind leg									

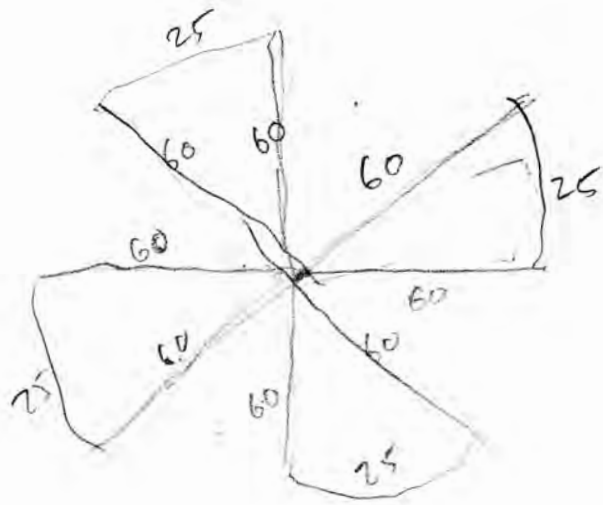
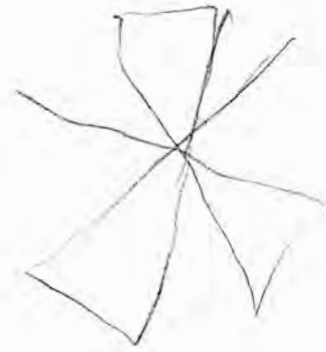
pass 1

pass 2

pass 3







$$\frac{\pi r}{8} \approx \frac{3 \times 60}{8} = \frac{180}{8} \approx 22.5 \text{ mm}$$

$$\frac{450 + 100}{4} = \frac{550}{4} \approx 137.5 \text{ mm} \\ \approx 2 \frac{1}{2} \text{ m}$$

$$\frac{460}{4} \approx 115 \approx 14.55 \text{ m, n}$$