Radar Scientist Form

(Updated 31 May 2019)

Flight ID 20190904H1 **Storm** Dorian

HRD Radar Scientist (Aircraft/Ground) Xuejin Zhang/ Gamache

AOC Radar Operator Mascaro

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.

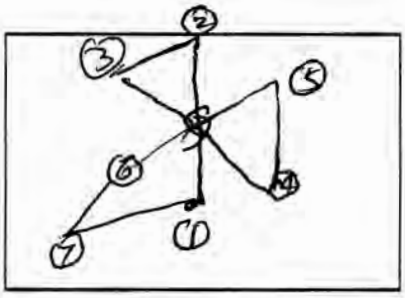
Indicate below any existing radar instrumentation issues, pre-flight radar repairs or other instrumentation issues (e.g., GPS swapout) that might impact radar data collection or analyses. If none, then simply write NONE below.

None
At the beginning. TDR not generate correct names of files.
After radar restart, all issues are resolved.

$ Pre-flight Setup <u>with</u> 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.

None

∮ 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)
1946	take off
2020	IP Leg 1
204350	9 Leg 1 (30.51, -79.73)
2055	outbound
2100	North eyewall (broad) (9 strong band to nw of 9
2122	EP of leg 1
2142	IP of leg 2 (turn just east of St. Simons Island)
~~2147~~	~~Eyewall 32~~
215330	eyewall started (FL max 102)
215610	eyewall ended
2201	Center
2208	RMW drop (eyewall started)
2227	1k dropesonde
2229	EP (regular dropsonde, BT) failed)
2236	Combo (dropsonde, BT)
2243	dropsonde, BT

∮ 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.

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time	Event
225040	Combo (failed BT)
2255	IP of leg 3
230930	midpoint dropsonde
2312	inner band; 2315, inner eyewall; RMW
231618	RMW
232245	Center
232806	RMW
232840	RMW
232900	RMW
233650	dropsonde
234156	dropsonde
234500	EP leg 3

descending
5000ft leg 4
235540 IP. back to center then start EBM in west EW
001855 OP. TK 270
Max 115 KT
IP TK90 leg 5
004245 RMW
004300 RMW
4350 RMW
4430 RMW edge

0044: 120kf

~~EOP~~

0052 OP (No Center passing?) TK 230

0102 EP

0108 IP Leg 6 TK 060

? RMW

? RMW

? RMW

~~0114 OP Leg 6 Orbit~~

~~0115~~ 0115 OP Leg 6 TK ~~230~~ 226

0135 EP leg 6