# Radar Scientist Form

**(Updated 31 May 2019)**

**Flight ID** 20190905H2 **Storm** Dorian

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

**AOC Radar Operator** "Mac" Michael McAlister

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.

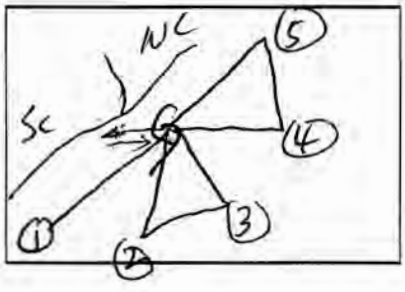
Indicate below any existing radar instrumentation issues, pre-flight radar repairs or other instrumentation issues (e.g., GPS swapout) that might impact radar data collection or analyses. If none, then simply write NONE below.

None

## $ Pre-flight Setup <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) |
|---|---|
| 1950 | take off |
| | TK 60° to center, TK 180° from center 115 nm, Then |
| | downwind to a point 105 nm ESE. TK 300 from center |
| | then 060 to a point along the coast of NC 105 nm |
| | from cent. Then we will return to center to begin |
| | ocean wind module, 8000 ft pressure height. |
| 2049 | descending |
| 205509 | IP (dropsonde) TK 60 |
| 210806 | MP (regular sonde, mini sonde) |
| 2122 | § (orbiting in center ~~in~~ about 11 mins for two loops) |
| 2133 | OP (leg 1. TK 180) |
| 214730 | MP (Leg 1. combo) → (reg fail. backup sonde) mini good. backup good |
| 214915 | |
| 220230 | EP Leg 1 |

## ∮ 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

222630 Drop combo
2227 IP leg 2 Tk 300

2239 MP Leg 2 combo
225335 Center Leg 2 Tk 60
2258 RMW drop combo
230730 drop combo
2320 drop combo
2321 EP leg 2
~~2322 IP Lt~~
2337 drop (single drop)
2338 IP TK 200 Leg 3
234915 Center. Tk 270 Leg 3
first Leg of ocean winds (add ~~analysis of~~ Paul's composite,
2357 EP Tk 90 ~~Leg 3~~ / leg 4 beginning
000015 drop 2 RMW
0007 Center Tk 243
0016 EP TK 080 Leg 4 / leg 5
0024 center Tk 236.
0033 EP Leg 5/leg 6 TK 070
0043 center Leg 6 Tk 270
0100 EP Leg 6 TK 95 / leg 7

0110 9 leg 7
Tk 249
Then Tk
0121 EP Leg 7
0127 IP Leg 8
Tk 90
0130 9
0143 EP Leg 8