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 realtime TDR display, to make sure the Doppler radar is scanning and working normally.
2. 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 Tail (TA) radar data files to thumb drive.
3. Brief the LPS on equipment status and turn in completed forms and thumb drives to the LPS.
4. Debrief at the base of operations.
5. Determine the status of future missions and notify HFP Director as to where you can be contacted.
HRD Radar Scientist Check List

Flight ID: 20140826H1
Aircraft Number: N42RF
Radar Scientist: Markes
Radar Technician: Lynch/Bozko

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

- Radar Computer
- Lower Fuselage (LF) Antenna
- Tail (TA) Antenna

Time correction between LF radar time and digital time: __

TA Radar Parameters:

- Single/Dual PRF 2102
- Fast (Y/N) Rotation Rate 10 RPM
- Sweeps/File
- Record 2nd Trip (Y/N) (Circle appropriate status)

Radar Post flight Summary

Significant down time:

- Radar LF
- Radar TA

Other Problems:
<table>
<thead>
<tr>
<th>Time (HHMMSS)</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>0808-0840</td>
<td>Display dropped out (stopped updating) twice as we went through eyewall. Not sure if data was lost.</td>
</tr>
<tr>
<td>0816-</td>
<td>Large array of ship, farm/ram. Earl of G.</td>
</tr>
</tbody>
</table>

HRD Radar Event Log

Flight ID: 20140826H1, Aircraft: N42RF
Radar Scientist: Mark, Radar Technician: Lynch / Bosco
<table>
<thead>
<tr>
<th>Flight ID: 20140826H1</th>
<th>Doppler flight-leg notes (for use in automatic QC and analysis)</th>
<th>Scientist: Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leg Start Time</td>
<td>Leg End Time</td>
<td>Storm Motion</td>
</tr>
<tr>
<td>HHMMSS</td>
<td>HHMMSS</td>
<td>Degrees</td>
</tr>
<tr>
<td>0731</td>
<td>0829</td>
<td>010</td>
</tr>
<tr>
<td>0829</td>
<td>0855</td>
<td>010</td>
</tr>
<tr>
<td>0855</td>
<td>0956</td>
<td>010</td>
</tr>
<tr>
<td>0956</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
- Hurricane downwind
- Downwind leg due to bad data
- glitch at 1016
- data caused 3rd analysis to fail
- So, we started at 1034 - so no downwind leg in 3rd analysis