Dropsonde Scientist

The lead project scientist (LPS) on the P3 is responsible for determining the distribution patterns for dropwindsonde releases. Predetermined desired data collection patterns are illustrated on the flight patterns. However, these patterns often are required to be altered because of clearance problems, etc. Operational procedures are contained in the operator's manual. On the G-IV the sole HRD person is designated the LPS. The following list contains more general supplementary procedures to be followed. (Check off or initial.)

Preflight

1. Determine the status of the AVAPS and HAPS or workstation. Report results to the LPS.

2. Confirm the mission and pattern selection with the LPS and assure that enough dropsondes are on board the aircraft.

3. Modify the flight pattern or drop locations if requested by AOC to accommodate changes in storm location or closeness to land.

4. Complete the appropriate preflight set-up and checklists.

In-Flight

1. Operate the system as specified in the operator's manual.

2. Ensure the AOC flight director is aware of upcoming drops.

3. Ensure the AVAPS operator has determined that the dropsonde is (or is not) transmitting a good signal. Recommend if a backup dropsonde should be launched in case of failure.

4. Report the transmission of each drop and fill in the Dropwindsonde Scientist Log.

Post flight


2. Brief the LPS on equipment status and turn in completed forms, dropwindsonde data tapes, DVDs, or CDs.
   [Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]

3. Debrief at the base of operations.

4. Determine the status of future missions and notify MGOC as to where you can be contacted.
<table>
<thead>
<tr>
<th>Drop #</th>
<th>Sonde ID #</th>
<th>Time (UTC)</th>
<th>Lat (°N)</th>
<th>Lon (°W)</th>
<th>Surface Pressure (mB)</th>
<th>Wind closest to surface dir/spd hgt (kt) (m)</th>
<th>SST (°C)</th>
<th>Eye, Eyewall, Rainband (direction)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>005862</td>
<td>00:58</td>
<td>32°25'31&quot;</td>
<td>72°40'6&quot;</td>
<td>1018.3</td>
<td>16 12 / turn E</td>
<td></td>
<td>784.7 mb</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>013143</td>
<td>01:31</td>
<td>32°29'7&quot;</td>
<td>72°26'4&quot;</td>
<td>1005.4</td>
<td>6 10 / CENTER</td>
<td></td>
<td>774.6 mb, wind change</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>015835</td>
<td>01:58</td>
<td>32°29'8&quot;</td>
<td>72°25'8&quot;</td>
<td>1024.3</td>
<td>10 59 / turn NW</td>
<td></td>
<td>Leg 1 End Point 782.3 mb</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>023155</td>
<td>02:31</td>
<td>34°10'1&quot;</td>
<td>74°21'8&quot;</td>
<td>1019.5</td>
<td>19 12 / turn S</td>
<td></td>
<td>Leg 2 Start, 783.5 mb</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>030113</td>
<td>03:01</td>
<td>32°21'2&quot;</td>
<td>74°23'3&quot;</td>
<td>1003.8</td>
<td>2 10 / Center</td>
<td></td>
<td>wind change, 777.0 mb</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>032840</td>
<td>03:29</td>
<td>30°28'6&quot;</td>
<td>74°26'4&quot;</td>
<td>1018.2</td>
<td>24 10 / turn SW</td>
<td></td>
<td>EP, 781.1 mb</td>
<td></td>
</tr>
</tbody>
</table>

RH was ~100% for long layers in 35-46. No crew said they're noticed this behavior in other cases, but didn't think it was an error.