Lead Project Scientist

Storm or Project: [redacted]  Experiment name: RAN
Flight ID: 2016092421  Mission ID: [redacted]

Preflight

1. Participate in general mission briefing.
2. Determine specific mission and flight requirements for assigned aircraft.
3. Determine from AOC flight director/meteorologist whether aircraft has operational fix responsibility and the mission designation.
4. Contact HRD members of crew to:
   a. Assure availability for mission.
   b. Review field program safety checklist
   c. Arrange ground transportation schedule when deployed.
   d. Determine equipment status.
5. Meet with AOC flight director and navigator at least 3 hours before take-off for initial briefing.
6. Meet with AOC flight crew at least 2 hours before take-off for crew briefing. Provide copies of flight requirements and provide a formal briefing for the flight director, navigator, and pilots.
7. Report status of aircraft, systems, necessary on-board supplies and crews to MGOC in Miami.
8. Before take-off, brief the on-board GPS dropsonde operator on times and positions of drop times.
9. Make sure each HRD flight crew member has a life vest.
10. Perform a headset operation check with all HRD flight crew members. Make sure everyone can hear and speak using the headset.

In-Flight

1. Confirm from AOC flight director that satellite data link is operative (information).
2. Confirm camera mode of operation.
3. Confirm data recording rate.
4. Complete Lead Project Scientist Form.
5. Check in with the flight director to make sure the mission is going as planned (i.e. turns are made when they are supposed to be made).

Post flight

1. Debrief scientific crew.
2. Gather completed forms for mission and turn in to data manager at HRD.
3. Obtain a copy of the 10-s flight listing from the AOC flight director. Turn in with completed forms.
4. Obtain a copy of the radar DAT tapes. Turn in with completed forms.
5. Obtain a copy of serial flight data on thumb drive. Turn in with completed forms.
[Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]
6. Report landing time, aircraft, crew, and mission status along with supplies (tapes, etc.) remaining aboard the aircraft to MGOC.
7. Determine next mission status, if any, and brief crews as necessary.
8. Notify MGOC as to where you can be contacted and arrange for any further coordination required.
Lead Project Scientist Check List

Storm or Project: KARM  Experiment name: 2XPH

Flight ID: 2016092401  Mission ID:

A. Participants:

<table>
<thead>
<tr>
<th>Function</th>
<th>Participant</th>
<th>Function</th>
<th>Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Project Scientist</td>
<td>Jin-Zhang</td>
<td>Flight Director</td>
<td>Rich Honeycut</td>
</tr>
<tr>
<td>Radar/Workstation</td>
<td>Mike</td>
<td>Pilots</td>
<td>Chris</td>
</tr>
<tr>
<td>Cloud Physics</td>
<td></td>
<td>Navigator</td>
<td></td>
</tr>
<tr>
<td>Dropwindsonde</td>
<td>Britney Bahl</td>
<td>Systems Engineer</td>
<td>12ete</td>
</tr>
<tr>
<td>AXBT/AXCP</td>
<td></td>
<td>Data Technician</td>
<td></td>
</tr>
<tr>
<td>Photographer/Observer/s/Guests</td>
<td></td>
<td>Electronics Technician</td>
<td></td>
</tr>
</tbody>
</table>

B. Take-off and Landing Times and Locations:

Take-Off: 05:30 UTC  Location: TX

Landing: _______ UTC  Location: _______

Number of Eye Penetrations: _______

C. Past and Forecast Storm Locations:

<table>
<thead>
<tr>
<th>Date/Time</th>
<th>Latitude</th>
<th>Longitude</th>
<th>MSLP</th>
<th>Maximum Wind</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

D. Mission Briefing:
# Lead Project Scientist Event Log

**Date** 2016/4/24  **Flight ID** 2016042421  **LPS** Jun Zhang

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Position</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>05:35</td>
<td>take off</td>
<td></td>
<td></td>
</tr>
<tr>
<td>07:55</td>
<td>IP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>08:02</td>
<td>Center</td>
<td>3 P 43 4L 64 2604</td>
<td>IR sonde may have prob</td>
</tr>
<tr>
<td>08:31</td>
<td>2 - end pen</td>
<td></td>
<td>IR sond combo good sound</td>
</tr>
<tr>
<td>08:53</td>
<td>Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09:02</td>
<td>3 - end pen</td>
<td></td>
<td>IR sond 137 combo</td>
</tr>
<tr>
<td>09:31</td>
<td>4 - end Rodal Leg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09:35</td>
<td>Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:16</td>
<td>5 - end Rodal Leg</td>
<td></td>
<td>IR sond 137 combo</td>
</tr>
<tr>
<td>10:40</td>
<td>6 - end ponis</td>
<td></td>
<td>combo released</td>
</tr>
<tr>
<td>10:50</td>
<td>center</td>
<td></td>
<td>turning east</td>
</tr>
<tr>
<td>11:00</td>
<td>running ball wound</td>
<td></td>
<td></td>
</tr>
<tr>
<td>08:02</td>
<td>1 - mod ponis sonde</td>
<td></td>
<td></td>
</tr>
<tr>
<td>08:21</td>
<td>2 - mod ponis sonde</td>
<td></td>
<td></td>
</tr>
<tr>
<td>08:31</td>
<td>IR sonde</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09:23</td>
<td>3 - mod ponis sonde</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09:41</td>
<td>4 - mod ponis sonde</td>
<td></td>
<td>30 ft surface 46kt + highere</td>
</tr>
<tr>
<td>10:02</td>
<td>5 - mod ponis sonde</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:41</td>
<td>6 - mod ponis sonde</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>