Dropsonde Scientist

| Flight ID_   | StormDropsonde Scientist  |  |  |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|--|--|
| The lead project scientist (LPS) on the P3 is responsible for determining the distribution   |   |  |  |  |  |  |  |  |  |  |
| patterns fo  | or 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  |   |  |  |  |  |  |  |  |  |  |
| 1.   | Complete Dropwindsonde Scientist Log.   |  |  |  |  |  |  |  |  |  |
| 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.]  |  |  |  |  |  |  |  |  |  |
| 4.   | Debrief at the base of operations.  |  |  |  |  |  |  |  |  |  |
| 5.   | Determine the status of future missions and notify MGOC as to where you can be contacted.   |  |  |  |  |  |  |  |  |  |

## N42/3RF HRD GPS Dropwindsonde Scientist Log (Revised 5/2002)

| storm Genesis Dropwindsonde Scientists Jun Zhang Page / or |                       |  |  |  |                     |  |                  |  |  | = _1_   |
|--|-----------------------|--|--|--|---------------------|--|------------------|--|--|---------|
| Flight   | ID 20180927H1         | Flight Director Seams  |  |  |                     |  |                  | T:   | akeoff from Liberta at 130   | OTC     |
| Missio   | n ID WBWXF<br>Genesis | AVAPS O  | AVAPS Operators Mac  |  |                     |  |                  |  | ecovery at at  | UTC     |
| Drop<br>#  | Sonde<br>ID #         | Time<br>(UTC)  | Lat<br>(°N)  | Lon<br>(°W)  | Surface<br>Pressure | Wind closest<br>to surface   | BT.<br>SST       | Eye,<br>Eyewall,   | Comments   | Ob<br># |
|  |                       |  |  | _  | (mb)                | dir/spd hgt (kt(m/5) (m)   |                  | Rainband (direction)   |  |         |
|  | 122225066             | 1449   | 12-49  | 94.50  | 1009.3              | 95/161 10  |                  |  | IR sould IP  | DI      |
| 2  | 163455113             | 1502   | 12.42  | 95.53  | 1010.0              | 71/14.8 10   |                  |  |  | 02      |
| 3  | 163025043             | 1515   | 12.50  | 96.50  | 1009.4              | 68/115 10  |                  |  |  | 03      |
| 4  | 122225078             | 1528   | 12.50  | 97.49  | 1010.               | 57/7.2 10  |                  |  | IR soude   | 04      |
| 5  | 163615065             | CROSS CONTRACTOR CONTR | LINESPERSONS SELECTIONS  | CONCERNATION OF STREET   | 1009.5              | THE RESERVE OF THE PROPERTY AND THE PROPERTY OF  | <b>)</b>         |  |  | 05      |
| 6  | 184545036             | 1604   |  |  | 1008.9              |  |                  |  | fast full no ent   |         |
| 7  | 164625174             | 16-8   | Control of Company of the Control of Control | TO THE REPORT OF THE PARTY OF T | 10093               | CONTRACTOR AND A MARKET AND A CONTRACTOR |                  |  |  | 06      |
| 8  | 1222225062            | -1618  | 9.50   | 97.5   | 1008.8              | 28757 10   |                  |  | IR Sonde   | 07      |
| 9  | 163025040             | 1632   | 9.49   | 96.5   | 1009.1              | 260/85 1   |                  |  |  | 08      |
| 10   | 164625189             | 1633   | 9.49   | 96.43  | 10=8.7              | 260/7.610  | ,                |  |  | 09      |
| 11   | 164575111             | 1645   | 9.50   | 95.5   | 1000 8              | 214/12 1   | 2                |  | The second of th | 10      |
| 12   | 1222225075            | 1650   | 9.51   | 94.5   | 1008.2              | 201/6810   |                  |  | IR sorde   | 11      |
| 13   | 163025057             | 1713   | 1050   | 94.5   | 1009.2              | 63/46 11   |                  |  |  | 1/2     |
| 124  | 163255019             | 1726   | 11.48  |  |                     | 114/72 16  | >                |  |  | 13      |
| 15   | 164015187             | 1739   | 115  | 955  | 1009.1              | 90/10/10   | <b>期的</b> 在海绵的原始 |  | The Allegander of the consequent of the property of the consequence of | 14      |
| 16   | 163255047             | 1752   | 11.5   | 9645   | 1058.6              | 49/92/10   | >                |  |  | 15      |
| +7   | 1542/5/18             | 1806   | 10.5   |  | 1007-9              |  |                  |  |  | 16      |
| 18   | 164015164             | 1818   | 1105   | 95.63  | 1008.2              | 15/1/27 10   |                  | CONTROL OF THE PROPERTY OF THE | en gestimband spacific de de rissus a sissup roue de la comparativa el comparativo ros dificion vecamente de r   | 117     |