**Dropsonde Scientist**

**Flight ID** 20190912h2 **Storm** Dorian **Mission ID** 3405A

**Dropsonde Scientists** Schwood

**AVAPS Operators** Mac / Todd R.

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 are often 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 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. Download all raw and processed AVAPS files to thumbdrive
- ☐ 3. Brief the LPS on equipment status and turn in completed forms and thumbdrive.
- ☐ 4. Debrief at the base of operations.
- ☐ 5. Determine the status of future missions and notify Field Program Director as to where you can be contacted.

Take off 2005 UTC

Land 0049 UTC

# NOAA P-3 GPS Dropwindsonde Scientist Log (revised March 2019)

Storm 2019 0912H1 Flight ID 340SA Dropsonde Scientist Sellwood AVAPS Operator mac

Mission ID (exp. 0213A) Dropsonde Scientist AVAPS Operator Tuck R Page# 1

| Drop # | Sonde ID | Time UTC | Lat (°N/S) | Long (°E/W) | Sfc Pressure (mb) | Wind closest to Dir/Spd (deg/kt) | Wind closest to Hgt (m) | SST (°C) | Eye/Eyewall, Rainband, etc. | Ob # |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 19105043 1 | 2045 | 26.8 | 79.40 | 997 | 325/37 | 10 | | mid(W) | 2 |
| Comments | LLD | | | | | | | | | |
| 2 | 18513 0872 | 2116 | 26.86 | 7745 | 996 | 125/53 | 12 | | mid (E) | 3 |
| Comments | end at 208.75 | | | | | | | | | |
| 3 | 19101 0445 | 2127 | 2686 | 7671 | 1004 | 135/32 | 10 | | EP(W) | 4 |
| Comments | end 230.75 sct drop at ~ 730mb | | | | | | | | | |
| 4 | 18513 0148 | 2153 | 28.37 | 7825 | 1003 | 85/38 | 10 | | EP(N) | 6 |
| Comments | drop 1 minute before turn LLD ff for 24 secs | | | | | | | | | |
| 5 | 18333 1059 | 2207 | 2764 | 7835 | 994 | 75/61 | 12 | | mid (N) | 7 |
| Comments | end 235.5 | | | | | | | | | |
| 6 | 18513 0?6 | 2217 | 2708 | 78.39 | 953 | 65/83 | 10 | | EW(N) | 8 |
| Comments | possible fast fall (100 seconds removed winds to be safe | | | | | | | | | |
| 7 | 18475 0712 | 2231 | 2614 | 78.39 | 990 | 235/55 | 10 | | mid (S) | 9 |
| Comments | good | | | | | | | | | |
| 8 | 19105 0414 | 2243 | 2542 | 78.39 | 1001 | 230/39 | 10 | | EP(S) | 11 |
| Comments | end 239.50 | | | | | | | | | |
| 9 | 18833 21167 | 2258 | 26.07 | 7749 | 1000 | 200/50 | 10 | | EP(SE) | 12 |
| Comments | | | | | | | | | | |
| 10 | 18332 1076 | 2304 | 26.42 | 7779 | 993 | 184/30 | 14 | | mid (SE) | 13 |
| Comments | | | | | | | | | | |

IP over land at 2034 26.47 - 80.11 (deg,min) # m/s

Centers 2034 2219

# NOAA P-3 GPS Dropwindsonde Scientist Log (revised March 2019)

Storm 20190902H2 Flight ID 3405A Dropsonde Scientist Sellwood AVAPS Operator Todd K Page# 2
Mission ID (exp. 0213A) Dorian Dropsonde Scientist AVAPS Operator Mac

| Drop # | Sonde ID | Time UTC | Lat (°N/S) | Long (°E/W) | Sfc Pressure (mb) | Wind closest to Dir/Spd (deg/kt) | Wind closest to Hgt (m) | SST (°C) | EyeEyewall, Rainband,etc, | Ob # |
|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 18333102b | 2328 | 2745 | 7905 | 996 | 15/43 | 12 | | mid N(W) | 14 |
| Comments | end 232.75 | | | | | | | | | |
| 12 | 18475058l | 2338 | 27.95 | 7962 | 1003 | 25/34 | 12 | | EP (NW) | 15 |
| Comments | end 237.75 | | | | | | | | | |
| 13 | 18333104 3 | 0005 | 26.17 | 7921 | 999 | 285/41 | 12 | | EP (SW) | 17 |
| Comments | radially inward of track EP to avoid convection end 229.25 | | | | | | | | | |
| 14 | 185130112 | 0010 | 2641 | 7895 | 990 | 280/74 | 12 | | mid (SW) | 18 |
| Comments | goal | | | | | | | | | |
| 15 | 19105042y | 0021 | 2686 | 7856 | 946 | 05/05 | 10 | | Center | 19 |
| Comments | eyeleel 190.0 | | | | | | | | | |
| 16 | 183320978 | 0032 | 2739 | 7776 | 993 | X | X | | mid (NE) X | |
| Comments | Fast fall bucked up | | | | | | | | | |
| 17 | 19102040497 | 0033 | 2743 | 7772 | 996 | 260/18 | 12 | | mid (NE) | 20 |
| Comments | end 218.50 | | | | | | | | | |
| 18 | 185130644 | 0043 | 2792 | 7719 | 1004 | 110/37 | 10 | | EP (NE) | 21 |
| Comments | end 232 75 | | | | | | | | | |
| 19 | 19101040b | 119 | 2636 | 7793 | 989 | 190/57 | 10 | | module | 22 |
| Comments | start 5m circle end 229.50 ~135° | | | | | | | | | |
| 20 | 185130109 | 124 | 2671 | 7765 | | 139/24* | 14 | | module | 23 |
| Comments | 30° CCW ~105° | | | | | | | | | |

ERC? module out wind max Dvrd

* M/S

# NOAA P-3 GPS Dropwindsonde Scientist Log (revised March 2019)

Storm
Mission ID

Flight ID
(exp. 0213A)

Dropsonde Scientist
Dropsonde Scientist

AVAPS Operator
AVAPS Operator

Page#

| Drop # | Sonde ID | Time UTC | Lat (°N/S) | Long (°E/W) | Sfc Pressure (mb) | Wind closest to Dir/Spd (deg/kt) | Wind closest to Hgt (m) | SST (°C) | Eye/Eyewall, Rainband, etc. | Ob # |
|---|---|---|---|---|---|---|---|---|---|---|
| 21 | 19104512 | 129 | 2707 | 77.66 | 991 | 110/60 | 10 | | | 24 |
| Comments | 30° ccw ~ 75° | | | | | | | | | |
| 22 | 18513026 | 132 | 2736 | 7785 | 993 | 95/64 | 10 | | | 25 |
| Comments | 30° ccw ~ 45° end 227.50 | | | | | | | | | |
| 23 | 18513045 | 136 | 2751 | 78.20 | 993 | 71/33* | 22 | | | 26 |
| Comments | 30° ccw ~ 15° end 2195.0 | | | | | | | | | |
| 24 | 19040484 | 140 | 2752 | 7856 | 993 | 60/70 | 10 | | | 27 |
| Comments | 30° ccw ~ 345° | | | | | | | | | |
| 25 | 19104513 | 145 | 2733 | 7891 | 990 | 45/62 | 10 | | | 28 |
| Comments | turn inbound 315° | | | | | | | | | |
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| Comments | | | | | | | | | | |
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| Comments | | | | | | | | | | |

* m/s