

Dropsonde Scientist

Flight ID 20190830H1 Storm DORIAN Mission ID _____

Dropsonde Scientists Brittany Dahn _____

AVAPS Operators Joe Greene _____

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.

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

24.20 N 09.40 W

Storm **DORIAN**
Mission ID **1705A**

Flight ID **20190330H1**
(exp. 0213A)

Dropsonde Scientist **Brittany Palm**
Dropsonde Scientist

AVAPS Operator **Joe Greene**
AVAPS Operator

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TEAL ctr:
241211
09 29W

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Long (°E/W)	Sfc Pressure (mb)	Wind closest to		SST (°C)	Eye/Eyewall, Rainband, etc,	Ob #
						Dir/Spd (deg/kt)	Hgt (m)			
✓ 1		1153	24.81	76.69	1011	360/24		-	-	1
Comments ch1 end flag launch thermo winds										
✓ 2		1204	24.54	70.00	1005	010/34		-	-	2
Comments ch2										
✓ 3		1210	24.38	69.66	992	005/71		-	EYEWALL	18
Comments ch3 RMW W/NW PAUL 315										
✓ 4		1212	24.34	69.58	984	355/62		-	EYEWALL	5
Comments ch4 RMW W/NW PAUL flag launch thermo 270 (should have been 315)										
✓ 5		1215	24.21	69.46	974	165/11		-	CENTER	3
Comments ch5 flag launch thermo + winds										
✓ 6		1227	23.79	68.68	1010	195/41		-	-	4
Comments ch6 mid flag launch winds										
✓ 7		1237	23.44	68.05	1013	180/82		-	-	6
Comments ch7 end flag launch winds										
✓ 8		1300	25.03	68.23	1013	130/25		-	-	7
Comments ch8 end set end t = 240.75 s, flag launch wind + th to be safe										
✓ 9		1312	24.70	68.94	1009	135/44		-	-	8
Comments ch9 mid combo flagged launch TH + wind, flagged wind < t = 821.3										
✓ 10		1318	24.44	69.30	998	125/77		-	EYEWALL	17
Comments ch10 RMW PAUL NE flagged launch TH 045										

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

Storm **DORIAN**
Mission ID

Flight ID **20190830-11**
(exp. 0213A)

Dropsonde Scientist
Dropsonde Scientist

AVAPS Operator
AVAPS Operator

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Drop #	Sonde ID	Time UTC	Lat (°N/S)	Long (°E/W)	Sfc Pressure (mb)	Wind closest to		SST (°C)	Eye/Eyewall, Rainband, etc.	Ob #
						Dir/Spd (deg/kt)	Hgt (m)			
✓ 11		1323	24.43	69.68	976	045/31		-	CENTER	9
Comments center flagged launch wind										
12	_____	1335	_____	_____	_____	_____	_____	_____	_____	_____
Comments mid - sat dropouts DNT										
✓ 13		1344	23.78	71.12	1012	335/22		-	-	10
Comments end, flagged winds t=10-11s, launch wind										
✓ 14		1403	23.19	69.82	1012	260/24		-	-	11
Comments end flagged launch wind, data before t=762.5s due to weird lat/lbn (launch lat/lbn ok)										
✓ 15		1411	23.77	69.80	1009	245/43		-	-	12
Comments mid combo, BT good. Flagged all data t < 12s - spike in dz/dt										
✓ 16		1422	24.48	69.78	975	175/06		-	CENTER	13
Comments center										
✓ 17		1425	24.71	69.79	987	035/01		-	EYEWALL	16
Comments Part RMW N 000										
✓ 18		1435	25.40	69.90	1011	085/39		-	-	14
Comments mid good										
✓ 19		1444	26.00	69.90	1013	085/26		-	-	15
Comments end flagged launch winds, set end t=242.25s										
✓ 20		1508	26.72	71.57	1015	070/16		-	-	19
Comments NWS GIV proxy										

