

**Dropsonde Scientist**

Flight ID 20190904H1 Storm Dorian Mission ID 4405A

Dropsonde Scientists Sellwood

AVAPS Operators Todd R Mike Mac

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.

18 sondes transmitted

18 emc

+ 5 IR

+ 11 mesdis

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34 total

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

Storm *Porian* Flight ID *4405A*  
 Mission ID *20190004* (exp. 0213A)

Dropsonde Scientist *Sellwood* AVAPS Operator *Mac*  
 Dropsonde Scientist *Todd* 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.	Obs #
						Dir/Spd (deg/kt)	Hgt (m)			
1	182840475	2021	29.07	80.00	1002	242/25*	13		IP (S)	2
Comments <i>934.50 end ELD</i>										
2	132355092	2027	29.48	79.99	997	240/50	10	27.5	BL (S)	X
Comments <i>BT Combo w/IR sonde no RH</i>										
3	185120872	2033	29.85	79.94	985	205/61	10		MID (S)	3
Comments <i>good</i>										
4	185120850	2036	30.06	79.89	974	200/76	10		RMW (S)	4
Comments <i>good</i>										
5	191020563	210006	30.87	79.75	965	55/75	10		RMW (N)	6
Comments <i>good</i>										
6	185120853	210050	30.92	79.74	968	45/89	10		(RMW) no sd is	X
Comments										
7	182610176	2102	31.02	79.74	974	45/82	10		(RMW) no sd is	X
Comments										
8	185120859	2108	31.41	79.74	991	50/47	10		MID (N)	7
Comments										
9	182520041	2121	32.25	79.74	1004	45/53	10		EP (N)	8
Comments										
10	191050410	2141	31.32	81.00	1000	05/40	10		EP (NW)	9
Comments										

*2043 center time no drop  
 AM/S*

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						Dir/Spd (deg/kt)	Hgt (m)			
11	191050399	2147	3104	8065	993	355/67	10		MID(NW)	10
Comments unflegg .7 m/s error wind to get sfc wind										
12	185120646	2156	3077	8010	968	330/68	10		RMW(NW)	11
Comments unflegg .7 m/s wind to get surface (last 4)										
13	112535048	2201	3061	7974	959	100/05	10	27.9	Center	X
Comments ① IR / BT ① Combo										
14	182430151	2208	3010	7927	969	183/37*	15		RMW(SE)	12
Comments end 210.00										
15	183321028	2227	2980	7809	1002	208/25*	30	Bad	ENP(SE)	13
Comments ① ① BT Combo end 249.50										
16	132545017	2236	3036	7788	1002	00/17*	10	28.5	BL(NE)	X
Comments ① IR / BT Combo										
17	112535121	2243	3092	7797	1002	140/40	10	27.9	END(NE)	X
Comments ① IR / BT Combo										
18	18335105	2250	3155	7799	1003	125/40	10	Bad	END(NE)	X
Comments ① IR / BT Combo IR SST 28.1										
19	183320799	2257	3159	7804	1001	120/45	10		END(NE)	15
Comments LED removed front leg data										
20	185130880	2309	3119	7885	991	125/50	12		MID(NE)	16
Comments end 286.75										

\* m/s

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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)			
21	185130863	2316	3096	7932	970	110	89	10	Rmw(NE)	17
Comments										
22	184030709	2322	30.68	79.70	959	240	05	10	Center	18
Comments end 251.25										
23	185130696	2328	30.48	80.07	969	295	103	12	Rmw(SW)	19
Comments end 254.25										
24	185120864	2328	30.47	80.09	970	302	62	260	needs (Nmax)	X
Comments end 252.50										
25	185130161	2328	30.45	80.13	974	300	97	100	needs (Nmax)	X
Comments										
26	184030512	2337	30.18	80.67	997	315	63	12	MID(SW)	21
Comments end 293.25										
27	183140454	2342	30.02	81.00	1001	280	37	10	END(SW)	22
Comments										
28	185140456	0042	30.59	80.19	976	352	56*	13	needs	X
29	185130875	0043	30.60	80.15	975	300	96	10	needs	X
30	185130882	0043	30.61	80.10	968	300	100	10	needs	X
31	185130647	0044	30.61	80.06	n/a	315	61*	297	needs Rmw	X
32	185130110	0106	30.50	80.06	976	300	95	10	needs	X
33	185130881	108	30.54	79.99	969	300	96	12	needs	X
34	191050238	108	30.57	79.94	967	286	53*	14	needs (Rmw)	X

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MISSION PLAN: DORIAN

Prepared by the Hurricane Research Division File: current1.ftk

Aircraft: N42RF Proposed takeoff: 05/0000Z

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DROP LOCATIONS

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#	LAT	LON	RAD/AZM	TIME
	(d m)	(d m)	(nm/dg)	(h:mm)
1S	28 57	80 00	105/180	0:24
2S	32 27	80 00	105/360	1:17
3S	31 35	81 46	105/300	1:44
4S	29 50	78 15	105/120	2:37
5S	31 35	78 14	105/060	3:04
6S	29 42	81 59	120/240	4:01

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