

Dropsonde Scientist

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 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. 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

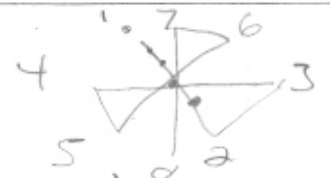
1. Operate the system as specified in the operator's manual.
2. Ensure the AOC flight director is aware of upcoming drops.
3. Ensure the AVAPS operator has determined that the dropsonde is (or is not) transmitting a good signal. Recommend if a backup dropsonde should be launched in case of failure.
4. 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.
3. Hand-carry all dropwindsonde data tapes or CDs as follows:
 - a. Outside of Miami-to the LPS or PI.
 - b. In Miami-to AOML/HRD.[Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]
4. Debrief at the MGOc or the hotel during a deployment.
5. Determine the status of future missions and notify MGOc as to where you can be contacted.

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10



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

Storm Irene Dropwindsonde Scientists Sellwoode Page 18 of 2

Flight ID 11082511 Flight Director Damiano Takeoff from MacDill at 823 UTC

Mission ID 2009A Irene AVAPS Operators San Souci Recovery at MacDill at 1534 UTC

Drop #	Sonde ID #	Time (UTC)	Lat (°N)	Lon (°W)	Surface Pressure (mb)	Wind closest to surface dir/spd (kt)	hgt (m)	BT SST (°C)	Eye, Eyewall, Rainband (direction)	Comments	Obs #
1	103125010	929	2612	7759	997.7	43/29	5.3			453 463 569 648	69
2	102815298										
3	102115976	950	2523	7658	990.9	64/62	6.9				64
4	102145049	955	2502	7630	953.9						51
5	102150410	956	2499	7618	950.8	213/8	7.0				71
7	102525260	1003	2472	7588	973.2	182/78	8.6				11
6	102325078	958									71
8	102315056	1010	2440	7555	987.4	188/62	5.9				12
9	103115465	1019	2403	7516		172/68	27.2				14
10	103115472	1027	2385	7482	996.8	179/52	22.0				16
11	103115466	1044	2525	7440	999.8	124/41	6.6				19
12	103125066	1054	2525	7525	985.4	126/47	5.8				21
13	101015184	1101	2525	7576	978.0	146/74	8.6				23
14	103115421	1106	2525	7613	961.2	149/56	5.6				25
15	103125067	1111	2531	7649	950.9	88/6	6.8				27
16	103115391	1117	2530	7696	969.1	338/83	4.4				28
17	102815117	1127	2530	7771	992.8	92/41	7.5				31



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



875

Storm Irene Dropwindsonde Scientists Selwoode Page 2 of 2

Flight ID 11082511 Flight Director Damiano Takeoff from _____ at _____ UTC

Mission ID 2009A AVAPS Operators San Smeri Recovery at _____ at _____ UTC

Drop #	Sonde ID #	Time (UTC)	Lat (°N)	Lon (°W)	Surface Pressure (mb)	Wind closest to surface dir/spd hgt (kt) (m)	BT SST (°C)	Eye, Eyewall, Rainband (direction)	Comments	Ob #
18	102525101	1136	25.20	78.38	997.6	338/25 6.0			25203.8 27.231 1219	32
19	102525200	1149	2930	7814	998.4	321/25 6.5			END LEG 2	36
20	101015082	1204	2496	7739	986.0	316/49 7.4			START LEG 3 (END DNL)	40
21	102815139	1218	2542	7660	951.3	228/8 6.4			MID (EW SW?)	44
22	101015083	1223	2566	7632	—	134/109 NA			ETE	45
23	10252580	1232	2607	7586	987.0	110/70 5.5			EW SE	48
24	102815153	1246	2668	7535	997.2	92/25 12.0			MID	49
25	102135219	1301	2722	7674	998.9	64/57 6.2			END LEG 3	54
26	102815200	1315	2642	7673	985.1	61/70 7.8			LEG 4 (end DNL)	55
27	102815301	1317	2628	7673	—	53/66 —			MID	58
28	102145119	1327	2561	7672	951.6	96/0 5.9			EW / N had temp drop	58
29	102815283	1334	2518	7671	970.3	237/60 7.2			ETE	59
30	102815136	1343	2466	7671	989.7	229/54 9.1			EW / S	62
31	103125080	1351	2385	7677	—	253/43 750.5			MID	68
									END LEG 4	