Dropsonde Scientist

Flight ID 20181009H1 **Storm** Michael **Dropsonde Scientist** Sellwood

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.

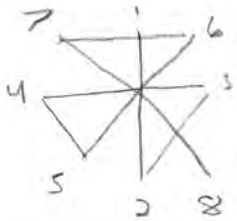
____ 3. Hand-carry all dropwindsonde data tapes or CDs as follows:

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.



N49RF HRD GPS Dropwindsonde Scientist Log (Revised 5/2002)

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Flight ID 0914A Flight Director Ian Sears Takeoff from Lakeland at 750 UTC

Mission ID 20181009H1 AVAPS Operators ___ Recovery at ___ at ___ UTC

Drop #	Sonde ID #	Time (UTC)	Lat (°N)	Lon (°W)	Surface Pressure (mb)	Wind closest to surface dir/spd (kt)	hgt (m)	DLM wind (kt)	Comments	Processed	SATCOM tries	Ob #
1	083852.1	838	2606	8574	1002.3	284/36	10		IP BT combo		3	
2	085147.2	851	2528	8574	998.4	085/35	10		Mid BT combo		4	
3	090601.3	905	2445	8579	941.8	91/100	300		EWN CP combo		5	
4	091137.4	911	2416	8598	972	240/6	13		Center CTD combo		6	
5	091625.1	916	2385	8600	979.2	225/59	10		RMW CP combo		9	
6	092208.2	922	2350	8601	991.7	230/49	10		Combo Mid (BT)		10	
7	094018.3	940	2240	8597	1001.6	230/8	10		END S		11	
8	101328.4	1013	2438	8415	1002.8	140/32	12		Combo BT ENDW		13	
9	102053.1	1020	2451	8567	996.2	140/44	10		MID Combo BT		14	
10	103512.2	1035	2451	8572	979	110/86	10		RMW CP Combo		15	
11	104013.3	1040	2442	8608	968	095/64	12		Center		16	
12	104416.4	1044	2441	8638	976	095/52	10		RMW CP Combo		17	
13	105654.1	1056	2443	8733	998.1	085/26	10		MID BT Combo		19	
14	110525.2	1105	2444	8797	1002.3	284/48	10		END W BT Combo		20	
15	112008.7	1120	2358	8733	999.8	285/61	10		END SW BT Combo		22	
16	113211.4	1132	2411	8667	991.8	285/40	10		mid BT Combo		23	
17	113539.1	1139	2444	8687	996.6	280/59	10		CP combo missed RMW		24	

14) removed junk at bottom of Sonde
1139 CP only no RMW drop

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

Storm ______ Dropwindsonde Scientists ______ Page ___ of ___

Flight ID ______ Flight Director ______ Takeoff from ______ at ______ UTC

Mission ID ______ AVAPS Operators ______ Recovery at ______ at ______ 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	Ob #
18	114044.2	1141	[illegible]		960.7	110/7	10			Center CTD combo	X
19	114558.3	1145	2475	8593	978.2	105/80	10			RMW	26
20	115436.4	1154	2515	8548	985.5	105/42	10			Mid BT Combo	27
21	120804.1	1208	2566	8468	1003.8	125/37	12			END NE BT Combo	28
22	124316.2	1243	2600	8756	1001.2	60/39	10			END NW BT Combo	[illegible]
23	125850.3	1258	2530	8691	985.5	40/39	10			Mid BT Combo	31
24	130916.9	1309	2480	8658	971.2	10/54	10			RMW CP Combo	32
25	131300.1	1312	2477	8613	966.4	145/10	10		E	Center	33
26	131718.2	1317	2463	8587	975.2	165/93	450		WSE	RMW CP Combo	34
27	132613.3	1326	2431	8541	995.8	180/54	10			MID	36
28	134328.4	1343	2457	8461	1004.2	180/35	10			END SE	37
29	141111.8	1411	2408	8540	996.4	130/24	12			Start CB EW	40
30	141713.3	1417	2500	8584	981.1	115/72	12			CB EW	41
31	142938.2	1429	2512	8605	972.5	55/99	450			RMW BT Combo	43
32	144436.1	1444	2584	8526	1001.3	110/41	10			END CB IR	X

18) CLD + junk at bottom + ASPEN issues could not transmit