

**Dropsonde Scientist**

Flight ID 100902II Storm Earl Dropsonde Scientist P. Leighton

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**

- Pat 1. Determine the status of the AVAPS and HAPS or workstation. Report results to the LPS.
- Pat 2. Confirm the mission and pattern selection with the LPS and assure that enough dropsondes are on board the aircraft.
- Pat 3. Modify the flight pattern or drop locations if requested by AOC to accommodate changes in storm location or closeness to land.
- Pat 4. Complete the appropriate preflight set-up and checklists.

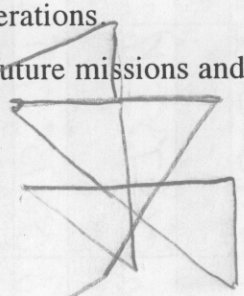
**In-Flight**

- Pat 1. Operate the system as specified in the operator's manual.
- Pat 2. Ensure the AOC flight director is aware of upcoming drops.
- Pat 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.
- Pat 4. Report the transmission of each drop and fill in the Dropwindsonde Scientist Log.

**Post flight**

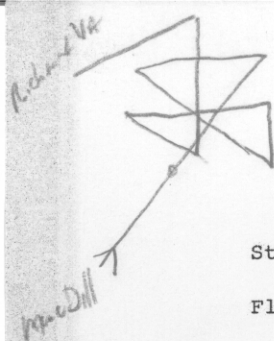
- Pat 1. Complete Dropwindsonde Scientist Log.
- Pat 2. Brief the LPS on equipment status and turn in completed forms, dropwindsonde data tapes, DVDs, or CDs.  
[Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]
- Pat 4. Debrief at the base of operations
- Pat 5. Determine the status of future missions and notify MGOC as to where you can be contacted.

Richmond, VA



Max Hill AFB

8/23/02



Land 2753

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

Storm Earl Dropwindsonde Scientists Paul Leighton / S. Murillo / R. Rogers Page 1 of 44  
 Flight ID 100902I1 Flight Director Paul Flaherty Takeoff from MacDill at 2006 UTC  
 Mission ID WX07A Earl11 AVAPS Operators Bobby Peck / San Souci / Naeher Recovery at R. Runne VA at 2753 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 #
1	094735311	2136	3107	7636	1008.6	297/114	10	-	SW	IP start leg 1	16
2	095035219	2156	3207	7512	966.5 968.8	264/107	2168	-	SW	eyewall	19
3	100155012	2204	3233	7453	947.2 948	252/116	12	-	Eye	End leg 1 start leg 2	21
4	094355056	2211	3257	7436	946	101 436 122/170	518	-	NE	eyewall started early not sent	-
5	094735289	2228	3353	7330	957.6	112 108	7	-		End of leg 2	27
6	094735718	2258	3346	7621	9000.1	71/35	9	-	NW	start leg 3	32
7	094615012	2314	3306	7517	971.6 972	346/70	10	-	NW	eyewall	36
8	094735719	2327	3226	7418	970.7 968	187/60	?	-	SE	eyewall	-
9	094735738	2346	3141	7315	1000.7 1001.5	147/67	8	-	SE	end part leg 4	42
10	094735462	2404	3310	7248	969.4 1000.3	157/52	8	-	E	start leg 5	44
11	100145257	2422	3312	7403	968.2	138/85	4	-	E	eyewall	47
12	094735093	2437	3309	7512	967.1	210/44 274/83	10 132	-	W	eyewall leg 6	49
13	094736092	2458	3300	7633	998.6	355/35	6	-	W	end leg 6	57
14	094355165	2527	3155	7433	998.2	234/39	7	-	S	start leg 7	59
15	100145277	2539	3300	7433	970.7	21/61	5	-	SE	eyewall	61
16	094735729	2548	3336	7436	958.9	203/8	6	-	Eye	start leg 8	62
17	094735360	2566	3406	7436	970.2	62/91	17	-	NE	eyewall	64
18	094735489	2615	3518	7430	999.4	92/37	6	-		End of leg 8	69
19	100145296	2635	3410	7436	965.9			-	NE	eyewall extra pen...	71