

**Dropsonde Scientist**

**Flight ID** 10082951 **Storm** H. 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**

CEL  
CEL  
CEL  
CEL  
CEL

1. Determine the status of the AVAPS and HAPS or 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**

CEL  
CEL  
CEL  
CEL  
CEL

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**

CEL  
CEL  
CEL

1. Complete Dropwindsonde Scientist Log.
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.]
4. Debrief at the base of operations.
5. Determine the status of future missions and notify MGOC as to where you can be contacted.

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All sent w/ train off by 12 Hrs - "

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

Storm H. Earl Dropwindsonde Scientists P. Leighton / Murillo / Cione Page 1 of 1  
 Flight ID 100829L Flight Director Sears / Flaherty Takeoff from Bobs at 1938 UTC  
 Mission ID NX07A Early AVAPS Operators Mascaro / Peck / Mueher Recovery at Bobs at 2621 UTC

Got distracted  
 for level  
 Reset  
 preflight

201137 →

9  
 21

910

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	094735564	203150	16 17	58 15	1005.1	201/15	7	-	SE	IP 12000 ft.	11
2	100155155	2040	16 45	58 45	1001.5	194/23	6	-	SE	midpoint leg 1	13
3	094735551	2058	17 39	59 16				-	Eye	No level detected QAD	-
4	110155208	2106	18 7	60 9	998.3	212/23	6	-	NW	midpoint leg 2	18
5	0947355145	2120	18 20	60 15	1000.5	192/22	9	-	NW	Endpoint leg 2	19
6	093736108	2145	16 32	60 38	1001.7	258/13	5	-	SW	start point leg 3	23
7	095335006	2152	16 55	60 15	999.4	218/15	4	-	SW	midpoint leg 3	25
8	093736110	2203	17 40	59 55	992.6	262/5	4	-	EYE		27
9	094735565	2208	17 51	59 11	985.8	67/30	6	-	NE Eyewall	leg 4	30
10	093736279	2229	18 54	58 49	1005.5	117/20	6	-	NE	Endpoint leg 4	34
11	095335008	2244	19 11	60 12	1004.5	81/22	11	-	N	start point leg 5	38
12	094735530	2302	18 12	60 17	991.4	61/32	6	-	Northern	(Start leg 6)	39
13	093736203	2314	17 21	60 05	982.4	201/18	10	-	S eyewall		42
14	095335030	2339	16 04	60 06	1005.0	222/15	7	-	S	End leg 6 later winds	46
15	100155143	2413	17 48	58 12	1005.7	162/16	11	-	E	Start leg 7	51
16	100145037	2426	17 45	60 12	997.6	160/19	2	-	E outer eyewall		54
17	095035147	2433	17 45	60 12	983.4	154/39	10	-	E eyewall		56
18	094735026	2439	17 45	60 32	969.6	296/33	10	-	Eye	in eye	57
19	093736094	2444	17 45	60 51	982	370/33	15	-	W Eyewall		58
20	094735551	2504	17 41	62 13	1003.4	235/E	27	-		End leg 8	63