

Dropsonde Scientist

Flight ID 100903II 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

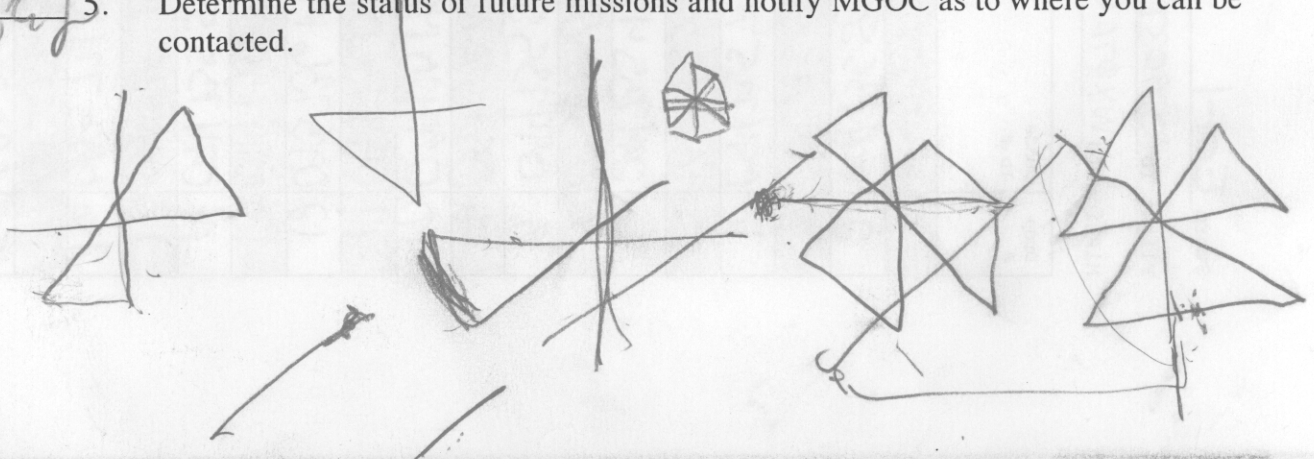
- PL 1. Determine the status of the AVAPS and HAPS or workstation. Report results to the LPS.
- PL 2. Confirm the mission and pattern selection with the LPS and assure that enough dropsondes are on board the aircraft.
- PL 3. Modify the flight pattern or drop locations if requested by AOC to accommodate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

In-Flight

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

Post flight

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



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

Storm Earl

Dropwindsonde Scientists Leighton / Mvillo / Rogers

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Flight ID 100903TI

Flight Director Flaherty

Takeoff from Richmond VA at 2000 UTC

Mission ID WX07A Ear¹⁴

AVAPS Operators Sam Swi / Peck / Naylor

Recovery at Richmond VA at 0710 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 #	
1	094735038	2113	3737	7010	986	216/39 7	-		IP start leg 1	?	
2	094735556	2127	3817	7117	960.2	161/48 6	-	SE	peak winds not really eyewall?	15	
3	094735001	2130	3820	7133	959.5	182/10 7	-	Eye	End leg 1 start leg 2	17	
4	094735705	2134	3830	7147	968.1	354/17 9.8	-	NE	Eye	18	
5	100145276	2137	3839	7157	973.1	311/11 14	-	NE	midpoint	21	
6	094735485	2156	3933	7301	992.9	349/35 5	-	NE	Endpoint End of leg 2	28	
7	095035068	2225	3722	7243	991.9	309/12 7	-	SW	start point of leg 3	29	
8	094735521	2245	3833	7118	960.3	277/29 7	-	SE	Eye	32	
9	094615082	2252	3856	7053	966.4	100/47 7.6	-	NE	Eye leg 4	34	
10	094120148	2313	4001	6940	989.1	115/43 8.2	-	NE	End of leg 4	37	
11	093736075	2328	4035	7058	991.7	52/25 6.1	-	N	start of leg 5	41	
12	093736197	2344	3932	7056	977.2	454/1 5.4	-	NE	Eye	43	
13	094120125	2401	3820	7056	972.5	289/58 9.5	-	SE	Eye?	47	
14	094735538	2409	3754	7048	981.8	240/56 5.3	-	S	End of leg 6	48	
15	094735105	2437	3912	6830	989.3	157/52 7.2	-	E	start of leg 7	55	
16	093736089	2458	3911	7009	964.7	134/66 7.4	-	E	"Eye"?	56	
17	093736210	2501	3907	7011	958.1	210/4 6.4	-	Eye	End leg 7 start leg 8	58	
18	093736286	2509	3909	7106	970.6	322/49 2.6	-	W	Eye	Accepted surface	62
19	093736154	2526	3902	7212	990.7	325/29 6.3	-	W	End of leg 8	?	
20	093736257	2559	3918	7127	984.2	240/54 7.8	-	Eye	100903il. xant	10	