

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

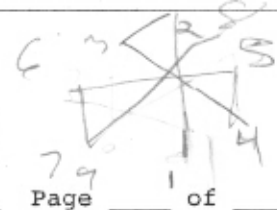
1. Operate the system as specified in the operator's manual.
2. Ensure the AOC flight director is aware of upcoming drops.
3. Ensure the AVAPS operator has determined that the dropsonde is (or is not) transmitting a good signal. Recommend if a backup dropsonde should be launched in case of failure.
4. 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.



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



Storm Irene Dropwindsonde Scientists Sellwood Page 1 of 1

Flight ID 11082601 Flight Director Pamiano Takeoff from MacDill at 807 UTC

Mission ID 2609A IRENE AVAPS Operators Sam Sanci Recovery at MacDill at 1538 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	102815087	907	2779	7730	994.0	238/68 11.0			IP	10
2	102815082	912	2817	7730	998.5	255/56 9.3			RB (S)	12
3	102815155	919	2864	7730	975.3	227/62 3.0			MID	13
4	102815286	926	2915	7730	959.2	227/60 7.4			EW (S) bad str height	14
5	102815163	931	2951	7736	943.0	220/06 10.1			EYE	17
6	102135198	936	2983	7736	955.9	61/56 4.9			EW (N)	19
7	102815109	943	3033	7736	979.9	67/64 7.7			MID	20
8	102815072	958	3144	7734	997.7	55/39 8.8			END LEG 1	23
9	102315010	1014	3091	7873	995.2	31/52 6.2			Start leg 2 (end DWL)	26
10	102815140	1033	3020	7790	973.3	51/56 7.5			MID	29
11	102815294	1041	2985	7750	946.7	20/45 3.5			EW / NW	30
12	102815067	1044	2974	7731	943.4	17/18 4.5			EYE	33
13	102815315	1048	2955	7709	956.4	182/81 9.3			EW / SE	32
14	102815141	1059	29.2	7658	983.0	187/70 7.7			MID	35
15	102815281	1111	2866	7596	994.9	187/58 6.7			END LEG 2	39
16	102135217	1138	20.02	7536	995.4	140/49 7.5			Start LEG 3 (End DWL)	42
17	103515007	1151	2994	7629	981.9	147/70 10.1			MID	44

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

Storm Wene Dropwindsonde Scientists Sellwood Page ___ of ___
 Flight ID 11082611 Flight Director Dominic Takeoff from _____ at _____ UTC
 Mission ID 2605A AVAPS Operators Sam Suter 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	103515023	1201	29.97	76.92	958.2	148/66	8.3			EW / W	47
19	103515350	1206	30.7	77.34	946.3	141/4	6.5			EYE	48
20	103515346	1215	30.07	78.04	972.1	339/60	15.8			EW/E (lost telemetry middle of drop)	50
21	102815290	1232	29.97	79.32	992.4	7/56	8.9			END LEG 3	53
22	103455110	1246	29.13	78.66	991.7	326/39	6.3			START LEG 4 (cont'd)	56
23	103515314	1257	29.65	78.05	979.7	294/49	9.4			MID	57
24	102025117	1310	30.32	77.38	946.1	174/4	6.1			EYE	59
26	102525114	1316	30.61	77.02	963.0	119/87	10.1			EW / NE	61
27	102125088									MID NLD	X
28	102125105	1325	31.02	76.52	984.9	116/52				MID backspin	63
25	103515075	1314	30.50	77.16						EW Fast Fall	X
29	101715143	1335	31.51	75.94	995.6	107/64	7.6			END LEG 4	65

not putting EW in comment 25 Fast Fall
 102125088 27 NLD

Dropsonde Scientist

Flight ID _____ **Storm** _____

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 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

- _____ 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, 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.

