

Dropsonde Scientist

Flight ID 20170825H2

Mission ID 1809A Harvey

Dropsonde Scientists B. Klotz

AVAPS Operators McAlister

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 are often 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. Download all raw and processed AVAPS files to thumbdrive
2. Brief the LPS on equipment status and turn in completed forms and thumbdrive.
4. Debrief at the base of operations.
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 Hurricane Harvey Dropwindsonde Scientists B. Klotz Page 1 of 1
 Flight ID 20170825H2 Flight Director Mike Holmes Takeoff from Lakeland at 1401 UTC
 Mission ID 1809A AVAPS Operators McAlister Recovery at Lakeland at 2317 UTC

Drop #	Sonde ID #	Time (UTC)	Lat (°N)	Lon (°W)	Surface Pressure (mb)	Wind closest to surface dir/spd hgt (m)	BT SST (°C)	Eye, Eyewall, Rainband (direction)	Comments	Ob #
1	143255535	163611	28.27	-96.24	1002.9	478, 24.9 10			bl endpoint (N-E storm)	02
2	162655041	165318	27.16	-96.26	1096.1	5.7, 42.9 10	fail		Max wind (N) eyewall	04
3		165400	27.10	-96.26	962.6	2.5, 52.6 10			backup maxwind	05
4	144635062	165639	26.92	-96.24	946.7	250, 8.7 10			center	06
5	144535111	165943	26.69	-96.24	972.3	—		fact fail	maxwind (S) - did not transmit	
6	160625060	171805	25.47	-96.25	1004.4	249, 16.6 10	30.1		endpoint (S) - BT erratic did not see	07
7	160625199	174839	27.03	-94.40	1005.5	162, 18.3 12	29.8		endpoint (E)	09
8	144635054	181400	26.99	-96.22	960.1	—			maxwind (ESE)	10
9	143325078	181649	27.14	-96.35	944.4	377, 3 10			center	11
10	143215075	181854	27.15	-96.51	959.8	319, 44 12	BT fail		maxwind (W), 4/RT	13
11	144635064	182444	27.15	-96.95	991.0	323, 26 10			Endpoint (W) - wind not gen.	14
12	160215006	185701	27.07	-96.34	955.7	211, 42 10			maxwind (S)	15
13	142615121	190126	27.35	-96.19	965.1	84, 46 12			maxwind (ENE)	16
14	140145157	191429	27.48	-96.35	961.2	46, 37 10			maxwind → not sure of winds → don't transmit → at low levels low fall speeds	
15	143335042	191518	27.92	-96.37	955	—			maxwind (NE)	17
16	142835052	192335	27.45	-96.32	960.3	—			maxwind (N) - corrected NEMA P	18
17	141225043	200933	27.54	-96.37	953.5	44, 51 10			maxwind (NE)	19

18 142615018 200922 27.40 -96.23 963.4 —
 19 141235003 202727 27.58 -96.36 955.1 68, 51 10
 20 141225059 203821 27.62 -96.42 957.8 —

maxwind (E) → early launch → didn't process
 maxwind (NE) 20
 maxwind (NE) 21

- FRD folder
 ↓
 - corrected NEMA P