

Dropsonde Scientist

Flight ID 090818I7

Mission ID WX03ABILL

Dropsonde Scientists Sellwood

AVAPS Operators Smith

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. 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.

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

Storm BILL Dropwindsonde Scientists Sellwood Page 1 of
 Flight ID 090819IT Flight Director Damiano Takeoff from Barbados at 0738 UTC
 Mission ID WX03A AVAPS Operators Smith Recovery at Barbados at 1517 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	072719045	0843	16.17	56.83	1003.9	na			no winds (did not transmit)	X
2	083259137	0855	16.80	56.31	1001.2	298/33 7.5			good	12 ✓ S1
3	073019111	0908	17.44	55.63	989.0	298/50 5.4			good	14
4	091849272	0916	17.81	55.18	957.9	281/45 9.6		EWSW	ragged conv approx eye wall	16
5	084439048	0919	17.92	55.07	953.1	230/08 4.0		Eye	good	17
6	084419164	0924	18.23	54.76	964.4	0910/116 9.9		EW NE	eye wall solid on his side	23
7	091459006	0947	19.24	54.00	1003.1	109/50 5.0			end of radar leg	25 ✓ E1
8	072649043	1017	19.12	56.53	1000.8	034/35 5.1		EW N	start leg 2	27 ✓ S2
9	084919213	1036	18.22	55.57	M/a	352/109 M/a		EW NW	scattered strong cells did not extend to eye	30
10	084919252	1046	17.79	55.08	973.9	203/87 8.5		EW SE	no deep conv	33
11	091849086	1106	17.13	54.11	1000.3	170/47 7.6			fairly dry above 900 mb	34 ✓ E2
12	084419071	1120	18.28	54.00	999.2	124/49 7.0			start radar leg	38 ✓ S3
13	091519012	1135	18.27	55.05	M/a	129/115 10.4		EW E	good	46
14	084919247	1141	18.22	55.45	952.1	211/12 6.5		Eye	good (missed eye?)	53
15	083259196	1146	18.22	55.86	971.5	323/85 9.9		EW W	good	46
16	083259044	1209	18.11	57.32	1002.5	332/33 8.9			good	48 ✓ E3
17	084419020	1238	16.74	55.55	1001.4	218/39 9.5			good (start leg 4)	53 ✓ S4

