

## Dropsonde Scientist

Flight ID 20170905H1

Mission ID \_\_\_\_\_

Dropsonde Scientists Sellwood

AVAPS Operators Underwood

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 IKMA Dropwindsonde Scientists Sellwood Page 1 of       
 Flight ID 2017050517 Flight Director Holmes Takeoff from BGT at 754 UTC  
 Mission ID 071A AVAPS Operators Underwood Recovery at BGT at 1400 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	091458.1	914	1571	5542	1055.4	160/35 10	X		IP good	2
2	094534.2	943	1666	5731	931.6	46/10 30	X		Center	3
3	100740.3	1008	1748	5857	1053.2	35/48 32	X		end 1st leg (mid 5)	6
4	104412.4	1046	1531	5849	1054.4	250/35 10	X		start leg 2	8
5	111104.1	1111	1671	5770	950	200/10 10	X		Center	9
6	114035.2	1140	1825	5683	1057	108/35 12	X		end leg 2 (wind in mid)	11
7	120206.3	1202	1839	5842	1086.5	65/40 10	X		start leg 3	13
8	123122.4	1231	1670	5788	920.8	195/27 10	X		Center	14
9	130536.1	1305	1455	5732	1009.0	201/25 10	X		had drop early 2003	15

step 2 removed lowest winds -> sm/s ramp up