Dropsonde Scientist

Flight ID 20170824H2 **Mission ID** 1309A

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)

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Flight ID 20170824H2 Flight Director M. Holmes Takeoff from Lakeland at 1435 UTC

Mission ID 1309A AVAPS Operators McAlister Recovery at Lakeland at 2222 UTC

Drop #	Sonde ID #	Time (UTC)	Lat (°N)	Lon (°W)	Surface Pressure (mb)	Wind closest to surface dir/spd (kts) m/s	hgt (m)	BT SST (°C)	Eye, Eyewall, Rainband (direction)	Comments	Ob #
1	143254091	163930	25.73	-92.34	1007.5	95.5, 14.1	10	BT fail		1st inbound endpoint	02
2	160625130	170742	24.32	-93.54	980	117.8, 6	12	—	center	center ← had to manually add 'CENTER' to comments	04
3	163525083	173539	22.93	-94.4C	1005.1	311.7, 8	12	30.4		1st outbound endpoint	06
4	143245037	175825	22.94	-92.69	1004.8	195.4, 10.1	10	BT fail		2nd inbound endpoint	08
5	160625054	182400	24.44	-93.69	977.4	33.4, 5.2	10	—	Center	center drop #2	09
6	143255532	185015	25.99	-94.60	1006.1	39.3, 14.6	10	30.2		partial fast fall? winds were consistent	13
7	160625191	191844	24.58	-95.69	1004.9	352, 12.4	10	BT fail		3rd inbound endpoint	14
8	143425122	194436	24.64	-93.86	978.8	41.6, 2	10		center	center drop #3 — ~~data got inadvertently deleted at AVAPS station~~	17
9	142835112	201852	24.54	-91.53	1005.3	132, 14.7	12	BT questionable		BT reported questionable data	18

had to recover issue due to issue with closing sonde

KIS temp drop

Note: if at Station 2, do not click link on desktop to AVAPS_PRIMARY → doesn't work

Channel 12 BTs work, 14 doesn't → AOC only bring 12's on flight if they know this