Dropsonde Scientist

Flight ID 20190918I1 **Storm** AL16/NESTOR **Mission ID** 0516A

Dropsonde Scientists ZAWISLAK

AVAPS Operators PATEL / WARWICKE

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 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
- ☐ 3. 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 Field Program Director as to where you can be contacted.

NOAA P-3 GPS Dropwindsonde Scientist Log (revised March 2019)

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Mission ID 05CA (exp. 0213A) Dropsonde Scientist AVAPS Operator

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Long (°E/W)	Sfc Pressure (mb)	Wind closest to Dir/Spd (deg/kt)	Wind closest to Hgt (m)	SST (°C)	Eye/Eyewall, Rainband,etc,	Ob #
1	19262061O	004158	29.17	85.62	1004.7	090/44	10		IP	01
Comments	IP ON 060° TO NE → INBOUND TO CIR1, NEAR PRECIP					Good Drop				
2	19254069 4	005510	28.74	86.47	1002.5	104/32	10		MP	02
Comments	MIDPOINT ON INBOUND 060° → BETTER WX				Good DROP					
3	152325011	005536	28.73	86.50	1003.6	98/16	12		MP	—
Comments	MIDPOINT ON INBOUND 060° → MINI SONDE					Good Drop				
4	19262059 7	010820	28.19	87.37	1000.0	101/76	10		CENTER	03
Comments	"CENTER" #1 → WEIRE HIGH, SO BASED ON AF FIX → CALLED IT A CIR → PRETTY Good								HDR TO AFTER REMOVE SPIKES	
5	19281033 0	012106	27.65	88.30	1000.3	359/12	10		MP	04
Comments	MIDPOINT OUTBOUND 240° ON 1ST PASS. Good WX					Good Drop				
6	19254069 3	013123	27.22	89.04	1002.0	339/24	10		EP	05
Comments	EYEPOINT ON 240° ON 1ST PASS. CLEAR BELOW				Good DROP					
7	19262060 4	015737	26.86	87.03	1000.3	219/28	10		IP	06
Comments	IP FOR NEXT INBOUND ON 180° AZI TO NORTH, PRETTY CLEAR, MAYBE SHALLOW CLDS							Good Drop		
8	~~19262060 4~~	~~015737~~	~~26.86~~	~~87.03~~	~~1000.3~~	~~219/28~~				
Comments										
8	19254092 3	020845	27.70	87.03	999.4	191/14	10		MP	07
Comments	Good DROP. ACTUAL 999! AND IT WAS A MIDPOINT INBOUND ON 180° ▼ (NO CTR ON THIS PASS)									
9	19262064 82	023321	29.52	86.97	1003.5	72/34	10			08
Comments	MIDPOINT OUTBOUND ON 360° – JUST OUTSIDE OF STRONG BAND					Good DROP				

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Storm AL16 / NESTOR Flight ID 20190919 H1 Dropsonde Scientist ZAWISLAK AVAPS Operator PATEL / WORMMEE Page# 2 OF 2

Mission ID 0516A (exp. 0213A) Dropsonde Scientist AVAPS Operator

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Long (°E/W)	Sfc Pressure (mb)	Wind closest to		SST (°C)	Eye/Eyewall, Rainband,etc,	Ob #
						Dir/Spd (deg/kt)	Hgt (m)			
10	19281026B	024230	30.17	87.03	1006.1	74 / 30	10		EP	09
Comments	ENDPOINT OF OUTBOUND TO NORTH ON 360°. CLOSE TO COAST. GOOD DROP. NOT MUCH WX AROUND HAD TO REMOVE EXPONENTIAL NOISE AT LOW ALTITUDES									
11	19254090G	030410	29.58	88.34	1004.4	029 / 38	10		IP	10
Comments	INITIAL POINT FOR INBOUND ON 300° FOR 3'. GOOD DROP, BUT DEF. SEEING CONVECTIVE INCREASE									
12	19262066F	013744	29.08	87.44	1001.1	057 / 38	10		MP	11
Comments	MIDPOINT INBOUND ON 300° → PRETTY STRONG, BUT NOT BELOW.									
13	19205007G	034054	28.49	85.74	1001.7	125 / 38	10		MP	12
Comments	MIDPOINT OUTBOUND ON 120° → PRETTY CLEAR, GOOD DROP									
14	19275026D	034933	28.52	84.99	1003.5	130 / 50	10		OP	13
Comments	STARTING CLOSE TO RAINBAND > LOOKS PRETTY SEVERE EP OF 120° AND FINAL PASS									
Comments										
Comments										
Comments										
Comments										
Comments										