Dropsonde Scientist

Flight ID 20190922H1 **Storm** Jerry **Mission ID** _____

Dropsonde Scientists Kelly Ryan

AVAPS Operators Greene _____

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)

Storm Jerry Flight ID 20190922H1 Dropsonde Scientist Kelly Ryan AVAPS Operator Greene Page# 1
Mission ID (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	1851307168	1545	24.41	65.78	1013	165/18	10 71 kt @ 880mb	—	end SE	
Comments	Saturated thru ~ 825mb then somewhat dry to surface; southerly winds thru column									
2	A9105043F	1600	25.29	66.05	1011	170/44	10	—	mid SE	
Comments	Column saturated (mostly) to surface; ~10 kt difference in wind speed near surface									
3	185140153	1624	26.49	67.11	1009	065/33	10	—	mid NW	
Comments	extremely uniform wind through column									
4	192041053	1633	27.09	67.40	1013	090/25	10	—	end NW	
Comments	fairly saturated									
5	185130822	1647	26.38	68.09	1011	020/15	10	—	end W	
Comments	obvious VWS between 800-950mb									
6	185050153	1657	26.33	67.40	1009	030/28	10	—	mid W	
Comments	uniform wind thru column; subsidence above 900mb									
7	190950414	1708	26.33	66.68	1002	090/44	10	—	NESDIS/center	
Comments	late launch detect; saturated 800-surf; subsidence thru 800									
8	190950393	1719	26.33	65.82	1010	150/44	10	—	mid E	
Comments	nearly saturated 800-900mb; obvious VWS									
9	185140164	1726	26.33	65.30	1014	160/34	10	—	end E	
Comments										
10	190950126	1743	26.43	66.48	1003	120/56	10	—	NESDIS/ center-ish (E)	
Comments	tons of shear (~30 kts), ESE tilt; column mostly saturated thru surf.									

estimated VWS 7kts SSE-ly

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Storm Isaias | Flight ID 20190922H1 | Dropsonde Scientist Kelly | AVAPS Operator Joe | Page# 2

Mission ID (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 #
11	185050637	1901	27.77	66.05	1013	100/26	10	—	end NE	
Comments	almost saturated in entire column; obvi VWS 800-surf.									
12	185130799	1915	26.98	66.48	1007	110/43	10	—	mid NE	
Comments	again, obvious tilt SE; very saturated									
13	185050641	1923	26.51	66.77	996	185/31	10	—	center (marked)	
Comments	beautiful center drop, subsidence thru ~875 mb									
14	191010395	1934	25.68	66.80	1008	215/35	10	—	mid S	
Comments	drier here (RH ~80's %) thru column.									
15	190950409	1944	24.99	66.79	1009	175/35	10	—	end S	
Comments	saturated below 850 mb, subsidence above; again lots of VWS									
Comments										
Comments										
Comments										
Comments										
Comments										