Dropsonde Scientist

Flight ID 20210927H1 **Storm** Sam **Mission ID** 06/8A

Dropsonde Scientists Jun Zhang _____

AVAPS Operators Mac - _____

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 (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 Ht (m)	SST (°C)	Eye/Eyewall, Rainband, etc.	Ob #
1	10225	2104	16.798	57.393	1012	02009				01
Comments	HRD SAP overpass									
2	10036	2143	16.066	54.162	1010	34028				02
Comments	W-IP combo									
3	20373	2152	16.172	53.556	1005	34033				03
Comments	W-MID									
4	50311	2158	16.265	53.126	994	31073				04
Comments	W-RMW1									
5	11157	2202	16.328	52.865	970	30574				05
Comments	W-RMW2									
6	10216	2203	16.342	52.808	959	30546				06
Comments	W-RMW3									
7	40280	2205	16.386	52.677	957	12527				07
Comments	Center combo fix, level WS=8.7 kt									
8	20371	2208	16.455	52.445	980	11082				08
Comments	E-RMW1									
9	10567	2209	16.465	52.408	983	10570				09
Comments	E-RMW2									
10	30224	2211	16.484	52.314	992	11067				10
Comments	E-RMW3									

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Mission ID

Flight ID 20210927H1 (exp. 0213A)
Dropsonde Scientist J. Zhang
Dropsonde Scientist
AVAPS Operator
AVAPS Operator

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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	40696	2248	16.624	51.8006	1006	12543				11
Comments	E - MID PT									
12	30374	2229	16.824	51.047	1010	13026				12
Comments	E - End PT combo									
13	30331	2254	16.131	52.199	1011	07021				13
Comments	NE - IP combo									
14	40571	2306	17.345	52.501	1006	06053				14
Comments	NE - MID ?									
15	40675	2315	16.76	52.717	985	05585				15
Comments	NE - RMW1 - second eyewall				(982)	~~07122~~ 1111				
16	30524	2316	16.701	52.736	~~955~~					16
Comments	NE - RMW2 - corrected unclear hit surface									
17	50603	2317	16.641	52.755	974	05108				17
Comments	NE - RMW3									
18	40695	2320	16.443	52.826	956	22507				18 Center
Comments	CENTER #2 8** (2542kt) - flow;									
19	30377	232405	16.205	52.902	980	24103				19
Comments	SW - RMW1									
20	30332	232406	16.205	52.902	980	23598				20
Comments	SW - RMW2									

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Dropsonde Scientist Jun Zheng
Dropsonde Scientist
AVAPS Operator
AVAPS Operator
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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 #
21	40708	232421	16.189	52.907	982	24591				21
Comments	SW - RMW3									
22	40701	2335	15.444	53.195	1007	25531				22
Comments	SW - MID P									
23	40674	2346	14.803	53.445	1012	30018				23
Comments	SW - END P combo									
24	50396	0009	15.25	51.821	1011	22525				24
Comments	SE - IP combo									
25	41008	0021	15.858	52.382	1007	20033				25
Comments	SE - MID P									
26	30370	002942	16.29	52.763	983	18573				26
Comments	SE - RMW1									
27	30367	003005	16.314	52.78	979	18101	—			27
Comments	SE - RMW2									
28	40758	00301	16.319	52.784	980	18094				28
Comments	SE - RMW3									
29	30372	0033	16.514	52.946	957	28004				29
Comments	CENTER #3 — flag = 20kt on sonde - hit 1.4 kt lower									
30	50460	003734	16.714	53.114	977	33594				30
Comments	NW - RMW1									

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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 #
31	03735	003735	16.716	53.115	977	34596				31
Comments	NW - RMW 2									
32	10995	0038	16.762	53.156	981	34587				32
Comments	NW - RMW 3									
33	50795	0046	17.173	53.576	1005	00540				33
Comments	NW - MID									
34	30152	0059	17.90	54.049	1012	02028				34
Comments	NW - END PT combo									
35	10034	0113	18.714	54.753	1013	01023				35
Comments	Combo for GW module									
36	50130	0142	17.799	54.815	1010	02516				36
Comments	Last Drop Combo for pre-ocean condition									
Comments										
Comments										
Comments										
Comments										

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