

Dropsonde Scientist

Flight ID 20210929172 Storm Sam Mission ID 1218A

Dropsonde Scientists Jun Zhang

AVAPS Operators Mac toe

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

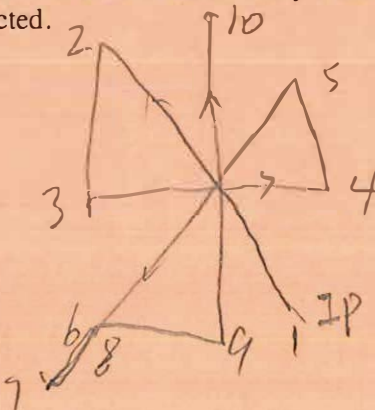
- 1. Determine the status of the AVAPS and workstation. Report results to the LPS.
- 2. Confirm the mission and pattern selection with the LPS and assure that enough dropsondes are on board the aircraft.
- 3. Modify the flight pattern or drop locations if requested by AOC to accommodate changes in storm 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.



7-8 -> GW module

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

Storm SAM
Mission ID/218A

Flight ID 20210920-2
(exp. 0213A)

Dropsonde Scientist Jun 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		SST (C)	Eye/Eyewall, Rainband, etc,	Ob #
						Dir/Spd (deg/kt)	Hgt (m)			
1 ✓	-2003	2112	19.006	56.454	1008	16533	10			01
Comments	IP									
2 -	40350	2124	19.473	57.13	1001	19546	10			02
Comments	SE MID P									
3 ✓	21031	2132	19.863	57.533	972	19605	10			03
Comments	SE RMW									
4 ✓	40324	2137	20.119	57.731	943	16508	10			04
Comments	CENTER									
5 ✓	31145	2141	20.344	57.965	968	-	10			05
Comments	SW RMW down ends OA - 400m not hit surface									
6 -	11661	2155	20.978	58.624	1005	02553	10			06
Comments	SW MID									
7 ✓	50287	2204	21.443	59.111	1009	05036	10			07
Comments	SW END P									
8 ✓	20764	2224	20.209	59.734	1009	34327	10			08
Comments	W-IP - 2nd pass									
9 ✓	50961	2237	20.198	58.775	1002	34049	10			09
Comments	W-MID P									
10 ✓	50236	2245	20.19	58.199	967	28114	10			10
Comments	W-RMW			58.6 m/s						

2021092941

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Storm *SAM*
Mission ID *12184*

Flight ID *2021092942*
(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		SST (C)	Eye/Eyewall, Rainband, etc.	Ob #	
						Dir/Spd (deg/kt)	Hgt (m)				
<i>11</i> ✓	<i>50251</i>	<i>2249</i>	<i>20.232</i>	<i>57.902</i>	<i>943</i>	<i>130</i>	<i>10</i>			<i>11</i>	
Comments	<i>Center 2nd</i>										
<i>12</i> ✓	<i>40384</i>	<i>2254</i>	<i>20.248</i>	<i>57.578</i>	<i>970</i>	<i>130</i>	<i>81</i>	<i>10</i>		<i>eyewall</i>	<i>12</i>
Comments	<i>E - RMW</i>										
<i>13</i> ✓	<i>50248</i>	<i>2306</i>	<i>20.267</i>	<i>56.719</i>	<i>1006</i>	<i>135</i>	<i>60</i>	<i>10</i>			<i>13</i>
Comments	<i>E - MID P</i>										
<i>14</i> ✓	<i>40655</i>	<i>2317</i>	<i>20.383</i>	<i>55.958</i>	<i>1010</i>	<i>140</i>	<i>38</i>	<i>10</i>			<i>14</i>
Comments	<i>E - END P</i>										
<i>15</i>	<i>50949</i>	<i>2336</i>	<i>21.592</i>	<i>56.683</i>	<i>1010</i>	<i>100</i>	<i>43</i>	<i>10</i>			<i>15</i>
Comments	<i>NE - IP 3rd pass</i>										
<i>16</i> ✓	<i>20798</i>	<i>2349</i>	<i>20.977</i>	<i>57.369</i>	<i>1002</i>	<i>090</i>	<i>53</i>	<i>10</i>			<i>16</i>
Comments	<i>NE - MID P</i>										
<i>17</i> ✓	<i>40406</i>	<i>2359</i>	<i>20.494</i>	<i>57.887</i>	<i>954</i>	<i>071</i>	<i>27</i>	<i>10</i>			<i>17</i>
Comments	<i>NE - RMW.1</i>										
<i>18</i> ✓	<i>50263</i>	<i>2350</i>	<i>20.493</i>	<i>57.888</i>	<i>957</i>	<i>071</i>	<i>28</i>	<i>10</i>			<i>18</i>
Comments	<i>NE - RMW.2</i>										
<i>19</i> ✓	<i>40404</i>	<i>2359</i>	<i>20.492</i>	<i>57.889</i>	<i>955</i>	<i>081</i>	<i>14</i>	<i>10</i>			<i>19</i>
Comments	<i>NE - RMW.3</i>										
<i>20</i>	<i>50373</i>	<i>0002</i>	<i>20.341</i>	<i>58.032</i>	<i>943</i>	<i>200</i>	<i>08</i>	<i>10</i>			<i>20</i>
Comments	<i>Center 3rd</i>										

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Storm SAM
Mission ID 1218A

Flight ID 2021092942
(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		SST (C)	Eye/Eyewall, Rainband, etc.	Obs #
						Dir/Spd (deg/kt)	Hgt (m)			
21 ✓	50290	0007	20.122	58.250	938	26607	10			21
Comments	SW RMW									
22 ✓	50289	0018	19.603	58.802	1004	28541	10			22
Comments	SW MID P									
23 ✓	50240	0029	19.067	59.384	1008	355/26	10			23
Comments	SW END P									
24 ✓	50260	0122	19.046	58.254	1008	24031	10			24
Comments	S-IF									
25		0024								Bad sonde
Comments	S-MID P No launch detected									
✓ 26	50262	0140	20.248	58.249	965	20589	10			25
Comments	S-RMW									
27	40383	015224	20.781	58.191	969	120kt	80			26
Comments	N-RMW - no center, with updraft or downdraft bad pump									
28	11062	015254	20.82	58.207	972	04107	10			27
Comments	N-RMW 2									
29		0112								
Comments	N-MID P - no launch detected. Bad sonde									
30		0207								28
Comments	N-END Last report ✓									