

**Dropsonde Scientist**

Flight ID 20161005 IZ

Mission ID WD14A Matthew

Dropsonde Scientists Kelly

AVAPS Operators Steven Paul

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)

Storm Matthew Dropwindsonde Scientists Kelly Page      of       
 Flight ID 2016100512 Flight Director JESS Takeoff from MacDill at 18:15 UTC  
 Mission ID      AVAPS Operators Paul Recovery at MacDill at      UTC

Drop #	Sonde ID #	Time (UTC)	Lat (°N)	Lon (°W)	Surface Pressure (mb)	Wind closest to surface dir/spd (kt)	hgt (m)	BT SST (°C)	Eye, Eyewall, Rainband (direction)	Comments	Ob #
①	142725066	19:51	2310	773	1001	350/21			rainband	reg sonde (NW) IP	
②	142845012	20:02	2253"	7628"	999	30/26		29.3		IR sonde / BT (NW) MP	
③	142845022	20:16	2231"	7532"	962	312/9			center	reg sonde	
④	132235266	20:34	2155"	7454"	1001	160/47		25.7		IR sonde / BT <sub>fail</sub> (SE) MP	
⑤	142745218	20:45	2135	7356	1006	165/40				reg sonde (SE) EP	
⑥	142745126	21:09	2324	7356	1005	150/42	18.5			reg sonde (NE) EP	
⑦	132225014	21:21	235"	7440"	998	135/47		28.8		IR sonde / BT (NE) MP	
⑧	142725070	21:37	2242	7539	963	185/6			center	reg sonde	
⑨	132235172	21:49	2220	7623	996	320/31		22		IR sonde / BT (SW) MP	
⑩	143215117	21:56	22	7649	1000	300/27				reg sonde (SW) EP	
⑪	132335148	22:27	2253	7544	963	175/11		30.3	center	IR sonde / BT	
⑫	142845012	22:52	2431	7315	1004	30/62			maxwind	reg sonde	
⑬	143245051	23:13	2351	7615	991	10/60				reg sonde	