Dropsonde Scientist

Flight ID 100811H1 **Storm** TD05 **Dropsonde Scientist** KLOTZ

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 often are required to be 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. — UPS was not working; replaced by AOC

_✓_ 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.   Brief the LPS on equipment status and turn in completed forms, dropwindsonde data tapes, DVDs, or CDs.
        [**Note:** all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]

_✓_ 4.   Debrief at the base of operations.

_✓_ 5.   Determine the status of future missions and notify MGOC as to where you can be contacted.

Storm **TD05**   Dropwindsonde Scientists **B. KLOTZ**   Page **1** of **2**

Flight ID **100811H1**   Flight Director **SEARS**   Takeoff from **MacDill** at **1959** UTC

Mission ID **WXWXATD05**   AVAPS Operators **SMITH, OLNEY**   Recovery at **MacDill** at **0141** 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											
1	100145057	203101	29.51	-83.46	1012.3	148/17	6.9	29.5			010
2	094645117	203920	29.51	-84.22	1011.3	131/12	7.5				013
3	094645022	205051	29.52	-85.30	1009.7	105/23	7.5	29.6			015
4	094735754	210137	29.52	-86.29	—						018
5	100145004	211214	29.51	-87.30	1008.7	033/08	6.1	29.8			020
6	094645108	212447	29.38	-88.35	1009.6	019/16	7.0			No rain but cloudy	023
7	094645078	214128	28.15	-88.31	1007.4	033/12	4.1			No rain	025
8	100145262	215258	27.24	-88.30	1007.2	229/04	5.4			No rain	027
9	100145032	220430	26.32	-88.30	1008.8	231/10	6.2			No rain	029
10	094735741	221039	26.00	-88.10	1009.1	238/08	6.4			Start of EB leg; scattered echoes	031
11	094735720	221958	26.05	-87.23	1009.3	233/16	6.5	29.9		Slow fall - erratic fall spd. ← No TDROP	
12	094735749	223021	26.01	-86.24	1010.5	215/14	6.4			Cloudy but no echoes	033
13	094635112	224100	26.00	-85.24	1010.4	210/23	6.3	29.2			035
14	095035194	225235	25.93	-84.22	1012.2	244/04	6.4			Cloudy; No rain	037
15	100145212	230106	26.04	-83.46	1011.8	192/14	6.1	28.7		Cloudy; No GPS echoes	039
16	094735069	231131	26.72	-83.29	1012.2	198/12	6.4				041

Storm **TD05**   Dropwindsonde Scientists **KLOTZ**   Page **2** of **2**

Flight ID **100811H1**   Flight Director **SEARS**   Takeoff from **MacDill** at **1959** UTC

Mission ID _____   AVAPS Operators **SMITH, OLNEY**   Recovery at **MacDill** at **0141** 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 #
X	17	094735724	277231						29.5		Cloudy, no echoes, No GPS	
✓	18	094735601	235057	28.22	-85.2	1009.1	154/12	5.8			Scattered echoes	044
✓	19	094645111	000145	28.21	-86.29	1008.2	188/21	10.1			Cloudy - no echoes	046
✓	20	100145040	001320	28.09	-87.31	1007.8	027/06	6.6			Cloudy - no echoes	048
X	21	094735491	002329	27.24	-87.28	—					Scattered echoes, No Sfc data	← No TDROP
✓	22	094635097	007445	26.36	-87.20	1009.5	230/19	5.7			Scattered echoes	050
✓	23	094645089	004413	26.37	-86.26	1010.2	186/14	6.4			Scattered echoes	051
✓	24	094735734	005432	26.37	-85.25	1011.5	205/06	6.2			Scattered echoes	053
✓	25	100145046	010403	26.40	-84.31	1012.4	159/16	6.0			Cloudy	055