

## Dropsonde Scientist

Flight ID 0609 A Storm ISAAC Dropsonde Scientist Bucca

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 dropsonde workstation. Report 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 dropsonde data to a thumbdrive.
- 2. Brief the LPS on equipment status and turn in completed forms and thumbdrives
- 4. Debrief at the base of operations.
- 5. Determine the status of future missions and notify HFP Director as to where you can be contacted.

N42/3RF HRD GPS Dropwindsonde Scientist Log (Revised 5/2002)

Storm ISAAC Dropwindsonde Scientists Lisa Bucci Page 1 of 2  
 Flight ID 120823H1 Flight Director Ian Sears Takeoff from BGI at 8:00 UTC  
 Mission ID 0609A AVAPS Operators Steve Paul Recovery at \_\_\_\_\_ at \_\_\_\_\_ UTC

Drop #	Sonde ID #	Time (UTC)	Lat (°N)	Lon (°W)	Surface Pressure (mb)	Wind closest to surface dir/spd hgt (100)m/s (m)	BT SST (°C)	Eye, Eyewall, Rainband (direction)	Comments	Ob #
✓ 1	D20120823-085485	8:54	13.50	-62.80	1008	1.7 8.2		SE	end	03 (1)
✓ 2	D20120823-090644	9:06	14.10	-63.41	1007	10.9 7.4		SE	mid pt	04 (2)
✓ 3	D20120823-092613	9:26:13	14.71	-64.37	1005.5	12.7 9.0		NW	center (of convection) - mid pt	05 (3)
✓ 4	D20120823-094153	9:41:53	15.5	-65.02	1003.9	9.6/7.8 11.4		NW	end - dry 850	08 (4)
✓ 5	D20120823-095912	9:59:12	14.32	-65.40	1005.4	13.8/21.5 7.2		W	end	09
✓ 6	D20120823-101237	10:12:37	14.33	-64.45	1006.1	12.5/21.2 8.3		W	mid - slight upper wind shift	10
✓ 7	D20120823-105323	10:53:23	14.33	-63.0	1013.3	10.1/16.4		E	mid-convection	11
✓ 8	D20120823-110537	11:05:37	14.42	-62.2	1000.8	11.6/16.8 8.3		E	end	13
✓ 9	D20120823-112419	11:24:19	15.55	-63.02	1009.1	17.3/27.4 8.0		NE	end	15
✓ 10	D20120823-113641	11:36:41	14.94	-63.6	1007.9	9.7/18.5 8.0		NE	mid	16
✓ 11	D20120823-120304	12:03:04	13.67	-64.90	1008.3	13.1/22.5 7.3		SW	mid-	17
✓ 12	D20120823-121547	12:15:47	13.04	-65.41	1009.7	5.6/20.9 12.9		SW	end - dry	19
✓ 13	D20120823-123050	12:30:50	12.69	-64.47	1009.6	9.2/19.3 7.9		S	end - dry 800 mb	20
✓ 14	D20120823-124148	12:41:48	13.49	-64.48	1009.0	11.1/23.3 7.3		S	mid - dry layer	21
✓ 15	D20120823-130523	13:05:23	15.23	-64.49	1007.5	18.4/19.6 8.1		N	mid	23
✓ 16	D20120823-131756	13:17:56	16.11	-64.59	1006.2	16.2/14.5 7.5		N	end	
✓ 17	D20120823-132401	13:24:01	15.99	-64.99	1004.7	11.9/8.5 8.2		N	mid	26

