

## Dropsonde Scientist

Flight ID 12082842 Storm ISAAC Dropsonde Scientist Bucci

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 20120828H2 Flight Director Jessica Williams Takeoff from JAX at 1942 UTC  
 Mission ID 3309A AVAPS Operators Steve Paul Recovery at MacDill at 0400 UTC

Drop #	Sonde ID #	Time (UTC)	Lat (°N)	Lon (°W)	Surface Pressure (mb)	Wind closest to surface		BT SST (°C)	Eye, Eyewall, Rainband (direction)	Comments	Ob #
						dir/spd (kt)	hgt (m)				
✓ 1	20120828	205827	30.05	-88.02	999.5	100/40	7.3		NE	on shore 88 W	
✓ 2	20120828	210303	30.07	-88.47	998.1	85/37	13.2		NE	on shore mid to pt 2	
✓ 3	20120828	210736	30.06	-88.92	996.9	60/41	7.0		NE	on shore 2nd mid	
✓ 4	20120828	210917	30.06	-89.09	996.6	55/51	8.8		NE	just b4 pt 2	05
✓ 5	20120828	214740	29.56	-89.31	997.0	45/56	9.0		N		07
✓ 6	20120828	220004	28.77	-89.06	970.5	150/5	8.4		EYE	center	08
✓ 7	20120828	220835	29.18	-88.57	983.5	105/60	7.1		NE	pt 3a. mx wnd - <sup>big wind</sup> drop off	10
✓ 8	20120828	221958	29.76	-88.03	997.9	105/40	8.7		NE	NWS 3a	
✓ 9	20120828	222355	29.78	-88.40	995.0	100/42	12.5		NE	mid 3a-3b	
✓ 10	20120828	222757	29.80	-88.80	993.3	85/50	8.8		NE	mid II 3a-3b	
✓ 11	20120828	223101	29.80	-89.11	992.1	55/40	11.2		N	NWS 3b	
✓ 12	20120828	224423	28.91	-89.12	970.7	190/24	9.3		EYE	center	
✓ 13	20120828	225203	28.88	-89.65	977.0	10/31	9.3		W	mid I to pt 4	
✓ 14	20120828	225850	28.87	-90.22	986.9	335/62	13.1		W	mid II to pt 4	
✓ 15	20120828	230344	28.87	-90.63	992.6	325/49	7.2		W	mid III to pt 4	
✓ 16	20120828	230759	28.71	-90.85	995.6	340/43	9.4		W	end pt 4 - partial fast fill	
✓ 17	20120828	232018	27.81	-90.53	995.8	300/48	9.1		SW	end pt 5	

All wind speeds are in kts

pt 7 3008 8930  
 ctr 29 11  
 89 30

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

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 Flight ID 20120828HZ Flight Director Jessica Williams Takeoff from JAX at 1942 UTC  
 Mission ID 3309 A AVAPS Operators Steve Paul Recovery at MacDill at      UTC

340 9  
 295 17  
 230 17

Drop #	Sonde ID #	Time (UTC)	Lat (°N)	Lon (°W)	Surface Pressure (mb)	Wind closest to surface dir/spd hgt (kt) (m)	BT SST (°C)	Eye, Eyewall, Rainband (direction)	Comments	Ob #
✓	18a	20120828	233533	28.528	89.761	979.6	320/39kt	7.8	pt 5 mid - back up (good)	X
X	18	20120828	233609	29.558	89.723				pt 5 mid - late launch det. backed up	X
✓	19	20120829	000053	29.734	88.773	991.8	075/58kt	7.7	ctr-6 mid	
✓	20	20120829	000929	30.062	88.291	998.6	095/47	7.4	pt. 6 no pt 7 (land)	
✓	21	20120829	004237	28.837	89.684	967.2	320/09kt	7.8	ctr.	31
✓	22	20120829	005428	27.976	89.69	991.1	260/45	13.3	S ctr-6 mid 1	34
✓	23	20120829	010259	27.391	89.679	996.0	260/42	8.1	S ctr - mid 2 to pt 8	35
✓	24	20120829	010947	27.177	89.424	997.0	240/39	7.6	S end pt 8	36
✓	25	20120829	011836	27.539	88.725	996.8	205/38	7.5	SE mid	
✓	26	20120829	012105	27.657	88.542	996.8	205/31	16.3	SE end pt 9	
✓	27	20120829	013256	28.237	89.153	986.8	235/49	7.5	SE mid I → ctr	42
✓	28	20120829	014219	28.656	89.643	969.5	260/36	9.1	SE mid II → ctr	43
✓	29	20120829	015352	29.169	89.963	977.2	30/47	9.2	NW b4 pt 10 (land)	46
✓	30	20120829	021624	28.162	90.57	993.3	300/44	7.8	SW pt 11	47
X	31a	20120829	020055						SW kaplan sonde / RMW (bad)	
✓	31	20120829	023415	28.907	89.618	966.1	260/12	8.0	center	48
✓	32	20120829	025122	28.956	88.315	995.7	160/47	8.9	mid	49
✓	33	20120829	030125	28.915	87.581	1001.3	155/37	7.3	end pt 13	50

bad sonde  
 came back  
 after good  
 sonde launch