

Dropsonde Scientist

Flight ID 20082841 Storm Isaac Dropsonde Scientist Sellwood / m. Clark

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

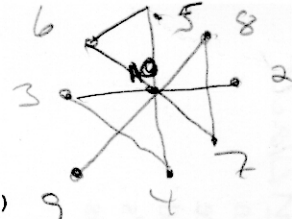
- 1. Operate the system as specified in the operator's manual.
- 2. Ensure the AOC flight director is aware of upcoming drops.
- 3. Ensure the AVAPS operator has determined that the dropsonde is (or is not) transmitting a good signal. Recommend if a backup dropsonde should be launched in case of failure.
- 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.

LF:0800 TOR: 812

- ① 300/101KT3
- ② 325/121KT3



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

Storm Isaac Dropwindsonde Scientists Sellwood / mBlack Page 1 of
 Flight ID 20120828H1 Flight Director Sears Takeoff from Jax at 746 UTC
 Mission ID 0930L AVAPS Operators Olney / Quiles Recovery at Jax at 1604 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		908	2742	8635	999	160/42			IP (BT) start leg 1	3 (270)
2		920	2741	8724	989	170/62			MID	4
3		930	2748	8790	977	190/15			EYE (BT)	5
4		931	2752	8800	978	235/10			CTR	6
5		939	2752	8857	984	345/35	30.4		EWW (CTD)	8
6		944	2752	8899	989	335/36			MID	10
7		959	2742	8796	998	325/41	29.8		END (BT) start DW leg 1	11 (127)
X	1033								END DW leg 1	X
8		1037	2595	8798	999	225/41	30.4		START leg 2 (BT)	12 (360)
9		1049	2684	8800	995	245/38			MID	15
10		1057	2740	8799	982	240/39	X		EWS (CTD)	16
11		1114	2854	8815	989	65/54	28.4		EWW (BT)	19
12		1122	2911	8814	996	090/52			MID (CP)	17
13		1128	2946	8819	999	85/48			END leg 2	18 (254)
X	1144								END DW leg 2	X
14		1146	2915	8971	1000	10/40			Start leg 3	25 (131)
15		1158	2859	8904	991	20/43			MID	26

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

Storm Isaac Dropwindsonde Scientists Sellwood / m Black Page 2 of
 Flight ID 2012 0930H1 Flight Director Sears Takeoff from Can at 746 UTC
 Mission ID 0930L AVAPS Operators Olney / Quiles Recovery at Jax at 1604 UTC

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 #
16		1208	2807	8855	980	20/21			EW/NW (CTD)	27
17		1217	2777	8799	981	180/42			EWSE (CTD)	28 (135)
18	sent by IAN	1225	2736	8754					EWSE (MID)	20
19		1226	2736	8754	989	180/54			EWSE	29 (354)
20		1241	2689	8689	1001	190/50			END 3 (BT)	30 (356)
X	1310								END on leg 3	X
21		1312	2931	8711	1002	125/40			Start leg 04 (BT)	31
22		1324	2875	8773	993	260/44			MID	32
23		1333	2828	8824	981	100/39			EWNE (CP)	33
24		1339	2801	8853	977	185/08			CTR (CTD)	24
25		1343	2781	8875					EWSE (DT)	(225)
26		1348	2755	8904	987	290/47			MID (CP)	35
27		1351	2740	8920	991	295/33			MID leg 4	36
X	1404								END leg 4	
29		1408	2692	8997	999	290/43			Start leg 5	38 (145)
30		1420	2747	8936	991	290/37			EWSE	39
31		1431	2795	8878	978	310/48			CTR	40
33		1448	2814	8760	989	135/65			MID	42
34		1502	2833	8661	1002	150/45			LAST end leg 5	43
		1358	2710	8953	996	290/42			end leg 4	37

missed drop 28

41 EWNE 4/55/151 982 8807 2802 5088 1442 2841 32