

Dropsonde Scientist

Flight ID 20140915.II Storm Edouard Dropsonde Scientist Jun Zhang

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.
- 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.

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

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 Flight ID 20140915J1 Flight Director Mike Holmes Takeoff from St Croix at 1140 UTC
 Mission ID W807A AVAPS Operators D. Samson Recovery at St Croix at 2045 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	14302	1430	28.3	5637	1006.8	29/38	12			IP SW - corner	17
2	145628	1453	28.8	5651	1005	4/38	12			IP NW - corner	19
3	150149	1501	27.7	5628	997	30/11	16	28.4		wid	20
4	150820	1508	27.3	5601	977	41/33	5.5		eyewall	eyewall NW	21
5	151223	1512	27.8	5572	964.6	5/19	2.4		eye		22
6	151649	1516	27.21	5536	978.3	37/18	10.6		eyewall	eyewall SE	23
7	152129	1524	26.97	5517	995	28/19	11			wid	24
8	153044	1530	26.5	5474	1005	22/20	12.6			turn	25
9	160730	1607	27.28	5500	1005	26/19	10.2			turn	26
10	161646	1616	28.05	5515	995.7	30.5/19	9.8			wid	27
11	162740	1627	27.58	5505	973.1	45/13	11.3			eyewall	28
12	163434	1634	27.74	5575	971.7	58/12	19.6			eyewall -	29
13	164044	1646	27.75	5544	973	42/10	30			eyewall	30
14	171729	1727	27.83	5561	982.4	408/10	8.5				31
15	172430	1728	27.9	5548	977.2	33/10	11.7				32
16	175619	1756	27.96	5595	974	42/75	7.8				33
17	180439	1800	27.15	5609	967	35/10	12.2			wid	34

(55.27, 27.13) - possible center location

