

19980830H1 - FDIR

Hurricane Danielle XCDX

Flight #8 H980830

<u>Sensor or system</u>	<u>Number or Name</u>
INE	2
Accelerometer	2
Temperature Probe	2
Dew Point Probe	1
Altitude (for vertical wind)	RA-159
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO2989.CON

Notes:

The radar altimeter (RA159) had a spike at takeoff and was replaced by RA232 from 1855:01-1858:33. Several spikes in RA159 were removed and patched throughout the flight (0138:30-0139:00, 0442:00-0443:00 (2), and 0454:30-0455:00). A spike also occurred at landing and RA159 was set to zero (0502:48-0506:00).

Dynamic attack pressure (DAP) and dynamic slip pressure (DBP) had over-exaggerated readings due to possible leak in line during and shortly after times of precipitation. During these times frames, both DAP and DBP were replaced by PQF1 (dynamic pressure) with the appropriate offset. DAP replacements: 2022:30-2110:41 offset (-1.3), 0009:10-0110:12 offset (-1.3) and 0253:01-0400:05 offset (-1.2). DBP replacements: 2027:00-2048:05 offset (+4.9), 2053:15-2124:00 offset (+4.9), 0000:00-0109:30 offset (+5.0) and 0253:30-0346:25 offset (+4.7).

Dewpoint (DW1) may be erroneous due to possible sensor freezing 2042:30-2055:00 and 0001:00-0006:00. Dewpoint (DW1) exceeded ambient temperature (AT2) several times due to heavy precipitation.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1013.2	1014.1
Corrected tower pressure	1015.2	1015.2

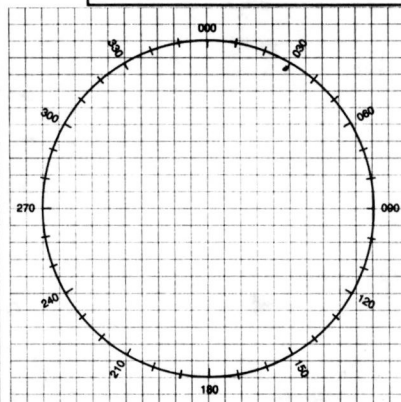
The aircraft INE positions were renavigated with respect to GPS.

SPECIAL NOTE!!! Locations 80, 81 and 82 of record five on the standard tape contain vertical ground, vertical air and vertical speeds, respectively, computed using Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

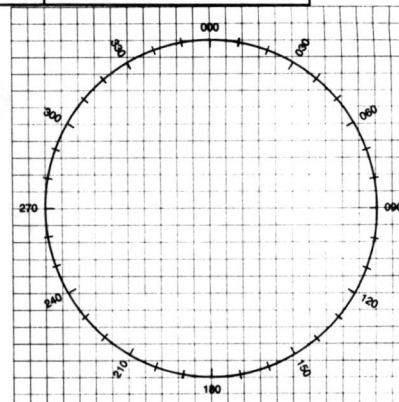
Flight Meteorologist: Stan Czyzyk, (813) 828-3310 ext. 3086

CLEARANCES			
FREQ	ALT	HDG	OTHER
			KLING 5 32N 74W A7
			32N 71W A7 32N 77W
			A7 28N 74W 5 2330N 71W
			A7 2730N 6830W A7 28N 74W
			A7 2730N 7040W 2711N
			MARLIN

MISSION LOG



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POSITION REPORT

1. POSITION
2. TIME
3. ALTITUDE
4. NEXT POSITION
5. ETA
6. NEXT POSITION

TRANSMIT
FREQUENC
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UHF/VOK
243.0

MAYDAY
THIS IS N

- POSITIK

- HEADIN

- AT ____

- FLIGHT
WE ARE

- WE ARE
- NATURAL

- ASSIST

- PILOT II

- WE HAVE

TIME	FIX TYPE	POSITION	INS 1 POSITION	K ERR	INS 2 POSITION	K ERR	MH	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIS
1846																		
1852																		
1857																		
1930	F/M1	2438.5 7922.2	2438.3 7922.1	+1.2 +1.1	2438.3 7922.2	+1.2 0			143	42	139	281	269	17	17K	270		
2025		2522.6 7534.9	2522.2 7534.2	+1.4 +1.7	2522.3 7534.4	+1.3 +1.5			028	312	031	270	295	19	15K	267		
2102		2741.6 7358.7	2740.7 7357.8	+1.9 +1.9	2740.8 7358.8	+1.8 -1												
2105		2747.8 7403.9	2746.8 7403.0	+1.0 +1.9	2746.9 7404.1	+1.9 -1.2			040	106	030	258	134	36	15K	256		
2154		3040.9 7202.8	3039.0 7200.8	+1.9 +2.0	3039.1 7202.6	+1.8 +1.2			036	62	030	283	147	24	15K	274		
2230		3208.6 7227.1	3205.8 7225.6	+2.8 +1.5	3206.6 7227.7	+2.0 -1.6			270	12	269	275	145	1	15K	273		
2316		3212.2 7639.7	3209.7 7637.4	+2.5 +2.3	3209.5 7639.5	+2.7 +1.2			268	12	267	279	087	6	15K	273		
2354		3014.5 7556.3	3010.7 7555.3	+3.8 +1.0	3011.6 7557.1	+2.9 -1.8			145	412	149	275	056	25	15K	275		
0031		2756.6 7415.1	2752.3 7414.5	+4.3 +1.6	2753.0 7415.9	+3.6 -1.8			148	62	142	274	275	30	15K	250		
0111		2523.4 7233.2	2517.7 7233.3	+5.7 -1	2519.3 7234.5	+4.1 -1.3			153	52	148	266	246	17	15K	265		
0143		2513.1 7112.7	2506.9 7113.8	+6.2 -1.1	2508.6 7114.6	+4.5 -1.9			032	12	031	285	214	18	15K	267		
0215		2737.0 6949.8	2725.0 6949.8	+12.0 0	2727.1 6951.1	+14.9 -1.3			032	42	028	296	173	26	15K	276		
0248		2815.4 7140.5	2807.7 7141.8	+7.7 -1.3	2810.1 7143.2	+5.3 -2.7			262	812	270	291	151	43	15K	272		
0319		2810.6 7419.3	2803.3 7420.5	+7.3 -1.2	2805.0 7421.4	+5.6 -2.1			274	52	269	256	358	40	15K	270		
0350		2811.7 7657.1	2804.1 7653.1	+7.6 -1.0	2805.9 7654.7	+5.8 -2.6			277	62	271	269	004	25	15K	270		

0312

7810 N

2100

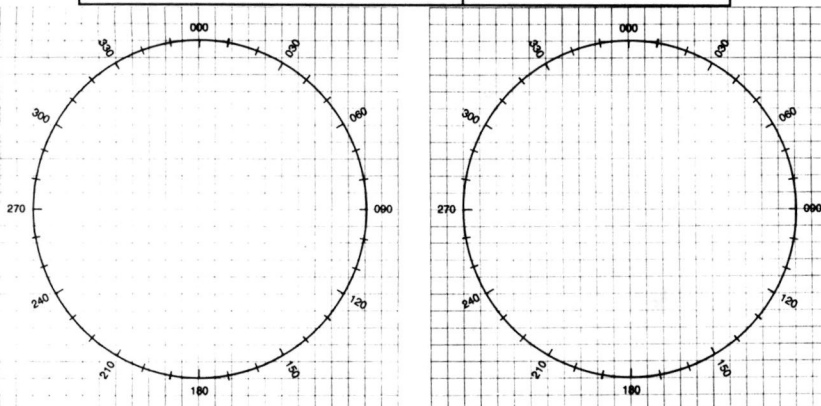
— 225 —

2752 N

1120 7804

MISSION LOG

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POSITION REPORT

1. POSITION
2. TIME
3. ALTITUDE
4. NEXT POSITION
5. ETA
6. NEXT POSITION

EMERGENCY MESSAGE

TRANSMIT THE FOLLOWING MESSAGE TO ANY AGENCY ON THE AIR-GROUND FREQUENCY IN USE. IF UNABLE TO ESTABLISH COMMS, ATTEMPT CONTACT ON ANY OF THE FOLLOWING EMERGENCY FREQUENCIES:

UHF/VOICE 243.0 VHF/VOICE 121.5 MF/VOICE 2182 KHZ HF/CW 8364 KHZ MF/CW 500 KHZ

MAYDAY, MAYDAY, MAYDAY

THIS IS NOAA ____, NOAA ____, NOAA ____

- POSITION _____ N / S
E / W AT _____ Z

- HEADING _____ TRUE/MAG

- AT _____ KTS TRUE/INDICATED

- FLIGHT LEVEL OR ALTITUDE _____

- WE ARE A P-3 AIRCRAFT WITH _____ SOULS ON BOARD

- NATURE OF EMERGENCY

- ASSISTANCE DESIRED

- PILOT INTENTIONS

- WE HAVE _____ ENDURANCE REMAINING

POSITION	K ERR	INS 2 POSITION	K ERR	MH	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS
																		END STAN BLOCK OUT TAKE OFF
38.3	+1.2	2438.3	+1.2															
22.1	+1.1	7822.2	0			143	42	139	281	269	17	17K	270					
22.2	+1.4	2522.3	+1.3															
34.2	+1.7	7534.4	+1.5			028	312	031	270	295	19	15K	267					
40.7	+1.9	2740.8	+1.8															FLIGHT LEVEL
57.8	+1.9	7358.8	-1															
16.8	+1.0	2746.9	+1.9															SURFACE
47.0	+1.9	7404.1	-1.2			040	106	030	258	130	36	15K	256					
39.0	+1.9	3039.1	+1.8															
00.8	+2.0	7202.6	+1.2			036	62	030	283	147	24	15K	274					
05.8	+2.8	3206.6	+2.0															
25.6	+1.5	7227.7	-1.6			270	12	269	275	145	1	15K	273					
09.7	+2.5	3209.5	+2.7															
37.4	+2.3	7639.5	+1.2			268	12	267	279	087	6	15K	273					
10.7	+3.8	3011.6	+2.9															
13.3	+1.0	7557.1	-1.8			145	412	149	275	056	25	15K	275					
52.3	+4.3	2753.0	+3.6															
14.5	+1.6	7415.9	-1.8			148	62	142	274	275	30	15K	250					
17.7	+5.7	2519.3	+4.1															
33.3	-1.1	7234.5	-1.3			153	52	148	266	246	17	15K	265					
06.9	+6.2	2508.6	+4.5															
13.8	-1.1	7114.6	-1.9			032	12	031	285	214	18	15K	267					
15.0	+7.0	2737.1	+4.9															
19.8	0	6956.1	-1.3			032	42	028	296	173	26	15K	276					
07.7	+7.7	2810.1	+5.3															
41.8	-1.3	7143.2	-2.7			262	812	270	291	151	43	15K	272					
11.2	-1.3	2502.0	+5.6															
11.2	-1.3	7421.4	-2.1			274	52	269	256	358	40	15K	270					
04.1	+7.6	2805.9	+5.8															
53.1	-1.0	7654.7	-2.6			277	62	271	269	004	25	15K	270					

[illegible]

U.S. DEPT. COMM./NORAD/OAO - DATA SECTION WORK FORM NO.1 OAOWF1 FILE

FLT ID: 980830H	FM: KOPF	TO: KOPF
FLT NO: 98-073	BLK IN: 0506Z	ATA: 0503Z
ETD: 1900Z	BLK OUT: 1850Z	RTD: 1858Z
ETE: 0400Z	BLK TIME: 10.16 10.3	FLT TIME: 10.05 10.1
SPONSOR ORG: HRO	PROGRAM:	PURPOSE: XCDX Hura. Danick

OAO PERSONNEL

AC PHILIPPSBORN, R ✓	SYS ENG McMILLAN, S ✓
CP KENVY, P / OMARA, T ✓	DATA SYS
NAV RATHBUN, D ✓	RADAR SMITH, J ✓
FE TORREY, R ✓	DT/ODW BARR, J ✓
RADIO ROGERS, M ✓	CLD PHYS
FD C2424K, S ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
WILLOUGHBY, H ✓	PI	HRO
FEVER, S ✓	SCIENTIST	"
DODGE, P ✓	"	"
ABERSON, S ✓	"	"
MATOMARR, S ✓	"	"
LAWRENCE, J ✓	"	PSU
MONTES DE OCA, F ✓	"	U of Houston
		CARLH

PROPOSED/ACTUAL MISSION/REMARKS (RECCO, FIXES, STORM, PENET, NHOP #)
 FUSE BLOWN IN THE PRE-AMP. FIXED 2015Z (DRAPSONDE)
 2047Z

6 27.44N 74 01W 5 0031Z 27 56N 74 14W
 TT3 COOL AGAIN 5 0319 28 10.6 74 19W

3 PENETRATIONS

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO.2 OROWF2

FLT ID: 980830H

TIME OFF: 1858Z

TIME ON: 0503Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1013.2	29.98	1014.1	29.98

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES	2	
FAST FLT LVL TAPES		
RADAR TAPES		
DOPPLER TAPES		
ODW CASSETTES		
HARD COPIES	1	
AXBT	15	
AXCP		
ODW		
GPS	24	

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

1 BT LOST ON TAKEOFF

9808304

TIME	LOT	CON	TK	NO	TA	TD	WD	WS	PA	GA	PS	SP	REMARKS
193620	2437	7820	139	143	-2.9	-8.0	269	17.5	5185	5481	527.0	1008.9	LEVEL 117K
1951	2327	7707	119	122	-0.4	-3.3	275	19.1	4607	4871	569.1	1011.7	LEVEL 15K
195459	2322	7650	29	27	-0.5	-9.1	260	18.2	4609	4874	561.0	1013.1	DROP #1 BAD
195630	2328	7646	30	28	-0.8								DROP #2 BAD
195845	2338	7640											BT1
200736	2413	7619											DROP #3 (TEST)
201728	2452	7555											DROP #4
201835	2456	7552											BT2
203916	2615	7500											DROP #5
204002	2619	7458											BT3
													DROP #6 EYE
213118	2912	7303	30	40	0.9	-2.0	125	37.8	4753	4822	571.7	1008.9	SURE. DROP #7 EYE
213205	2915	7301											DROP #8
215389	3040	7203	33	38	0.9	-8.6	143	23.5	4574	4856	571.8	1013.1	BT4
215413	3043	7201											DROP #9
221555	3209	7109	280	279	0.2	-9.1	140	16.8	4573	4868	571.9	1015.4	BT5
21624	3209	7112											DROP #10
232500	3206	7719	139	139	2.2	-24.5	67	5.0	4571	4851	571.8	1010.2	BT6
232535	3204	7717											DROP #11
235359	3015	7556	149	145	0.4	-11.0	51	23.1	4571	4843	571.9	1012.1	BT7
235437	3012	7555											DROP #12
200928	2916	7514	146	140	0.7	-0.9	62	32.5	4571	4824	571.8	1008.6	BT8
201020	2913	7512											DROP #13
005431	2628	7317	151	160	-0.5	-0.4	260	39.7	4580	4830	571.2	1011.2	BT9
005515	2625	7315											DROP #14
011612	2504	7220	150	153	1.1	-16.2	227	13.0	4574	4866	571.7	1013.9	BT10
012954	2419	7144	26	27	0.5	-16.5	191	9.3	4573	4869	571.8	1015.6	DROP #15
013044	2422	7142											DROP #16
022440	2813	6935	277	272	-0.4	-3.7	163	30.5	4574	4877	571.6	1017.1	BT11
222540	2814	6939											DROP #17
023555	2815	7033	270	264	-0.7	-7.8	157	33.8	4573	4861	571.7	1016.5	BT12
224645	2815	7131											DROP #18
025728	2815	7228	271	266	1.0	0.3	147	32.0	4575	4819	571.1	1007.2	BT13
2303													DROP #19
031950	2809	7420											RAIN 3KMS
231955													DROP #20
234235	2809	7613	275	283	0.6	-1.8	14	31.2	4578	4830	571.4	1008.1	DROP #21
235322	2812	7709											DROP #22
040428	2812	7807	272	275	0.4	-9.5	40	11.0	4570	4844	571.9	1011.9	BT14
042228	2812	7940											DROP #23
242230	2812	7941											DROP #24
													BT15