

Hurricane 1998

Hurricane Bonnie Air/Sea Interaction

Flight #5 980824H

<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:

Radar altimeter (RA159) had a spike at takeoff (1834:20-1834:35) and was replaced by RA232. RA159 had a spike at landing and was set to zero 0314:31-0317:00.

Total temperature (TT2) had a dropout and was replaced by TT1 with an offset of 0.45 from 2048:25-2049:25. TT2 had another dropout at 2125:34-2126:35 and was replaced by TT1 with an offset of 1.0.

Dynamic slip (DBP) and dynamic attack pressures (DAP) were unstable during precipitation, due to probable water in the line. These parameters were replaced by dynamic pressure (PQF1) during with appropriate offsets. DBP was replaced by PQF1 from 2013:15-2034:50 with an offset of 4.7, 2046:50-2212:58 with an offset of 4.8, 2258:10-2331:51 with an offset of 4.7, 2343:15-0013:15 with an offset of 6.0, and 0016:22-0023:54 with an offset of 5.1. DAP was replaced by PQF1 from 2040:23-2213:23 with an offset of -1.4 and from 0013:20-0126:33 with an offset of -1.2.

Dewpoint temperature (DW1) exceeded ambient temperature (AT2) several times due to heavy precipitation.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1011.4	1013.2
Corrected tower pressure	1010.5	1011.5

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

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

FLT ID: 980824H	FM: KMCF	TO: KMCF
FLT NO: 98070	BLK IN: 0323Z	ATA: 0315Z
ETD: 1800Z	BLK OUT: 1821Z	RTD: 1834Z
ETE: 0330Z	BLK TIME: 9.02 9.0	FLT TIME: 8.41 8.7
SPONSOR ORG: HRO	PROGRAM: RESEARCH	PURPOSE: AIR-SEA INTERACTION

OAO PERSONNEL

AC PHILIPPSBORN, R ✓	SYS ENG MCMILLAN, S ✓
CP OMARA, T ✓ / TAGGART, B ✓	DATA SYS
NAV ROTHBUN, D ✓	RADAR BARR, J ✓
FE BAST, G	BT/ODW DELGADO, J ✓
RADIO ROGERS, M ✓	CLD PHYS
FD C2424K, S ✓	DOPPLER WINTER D ✓

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
MARKS, F ✓	P.I.	HRO
BLACK, M ✓	SCIENTIST	HRO
CLONE, J ✓	"	HRO
LEIGHTON ✓	"	HRO
ABERSON ✓	"	HRO
GOLDENBERG ✓	"	HRO
CLOVER, G ✓	"	HRO
		AOC

PROPOSED/ACTUAL MISSION/REMARKS (RECCO, FIXES, STORM, PENET, NHOP #)

1-MIN DATA (NOT 30 SEC)

TEAL33 AFTER 23Z OUT OF BLOXT @ 10K

2-HALF RECCOS

MEASURE PSM + PSM 4.5 MB OFF @ 17K PEAK + PSM 2.5 MB OFF

9 2040Z 9 2201Z 9 2315Z 9 0009Z 9 0119Z

TT3 OF B4 1-2°C

IN 2 BETTER

(5)

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO.2 OAOWF2

FLT ID: 980824H

TIME OFF: 1834Z

TIME ON: 0315Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1011.4	29.92	1010.5	29.87

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES	2	
FAST FLT LVL TAPES		
RADAR TAPES		
DOPPLER TAPES		
ODW CASSETTES		
HARD COPIES	1	
AXDT	15	1 BAD
AXCP		
ODW		
GPS	28	19 XMIT

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

[illegible]

REMARKS	

2645
7254

2210	2633	120/125	2716
	7253		

2210	2633	120/125	2716
	7253		

2210	2633	120/125	2716
	7253		

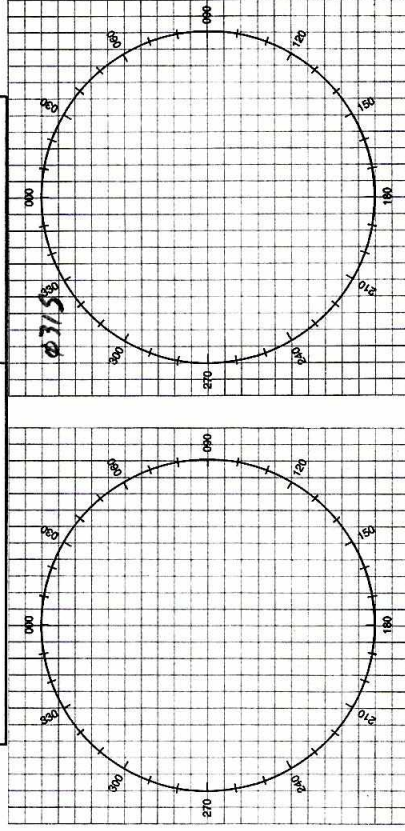
CLEARANCES				
FREQ	ALT	HDG	OTHER	
6420	2000		DET LAL DET VRA DET	
			AAACO DET CLETE DET	
			26 N 73 W	
			DET CLETE DET AAACO	
			DET VRA DET LAL	
			DET MILNE	

TIME	FIX TYPE	POSITION	INS 1 POSITION	K ERR	INS 2 POS
1817					
1821					
1834					
1908	FMI	2719.3 8007.5	2718.8 8007.2	+5 +3	2711.8 8007.5
1951		2707.3 7623.1	2705.5 7622.2	+1.8 +1.9	2700.0 7622.2
2030		2650.2 7329.0	2646.9 7328.6	+3.3 +1.4	2646.9 7328.6
2040	S	2618.6 7252.0	2615.0 7251.7	+3.6 +1.3	2611.2 7251.7
2123		2653.7 7143.4	2648.8 7142.9	+4.9 +1.5	2653.7 7143.4
2200		2651.8 7230.1	2646.2 7229.9	+5.6 +1.2	2660.0 7230.1
2206	S	2630.8 7252.6	2625.0 7252.5	+5.8 +1.1	2625.0 7252.5
2315	S	2642.0 7254.3	2634.7 7254.5	+7.3 -1.2	2660.0 7254.3
0009	S	2643.5 7255.7	2635.0 7256.7	+8.5 -1.0	2660.0 7255.7
0036		2658.2 7115.2	2648.9 7116.9	+9.3 -1.7	2660.0 7115.2
0119	S	2659.7 7257.8			
0153		2654.9 7540.7	2645.4 7543.6	+9.5 -2.9	2655.5 7543.6
0315		2751.7	2742.3	+9.4	2751.7
0323		8230.6	8234.3	-3.7	8233.0
			10		

[illegible]

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

MAYDAY, MAYDAY, MAYDAY

THIS IS NOAA _____, NOAA _____, NOAA _____

- POSITION **N / S**

- HEADING	TRUE/MAG
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-AT _____ KTS TRUE/INDICATED

- FLIGHT LEVEL OR ALTITUDE _____

**- WE ARE A P-3 AIRCRAFT WITH
NATURE OF EMERGENCY**

- NATURE OF EMERGENCY
- ASSISTANCE DESIRED

- PILOT INTENTIONS

- WE HAVE _____ ENDURANCE REMAINING _____