

FLT ID: N980823	FM: KOPF	TO: TXKF
FLT NO: 98-039	BLK IN: 0143Z	ATA: 0134Z
ETD: 1730Z	BLK OUT: 1714Z	ATD: 1724Z
ETE:	BLK TIME: 8:29	FLT TIME: 8:10
SPONSOR ORG: NHC	PROGRAM: 1700P. SURVEILLANCE	PURPOSE: H. BONNIE

DAO PERSONNEL

AC PLAYER ✓	SYS ENG HILL
CP MAXSON, McCANN, FINKE ✓	DATA SYS PRADAS-BERGNES
NAV	RADAR
FE KITSON	BT/ODW HORN BROOK
RADIO	CLD PHYS
FD DAMIANO ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/DAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
FRANKLIN	HAPS	HRD
WHITE ✓	PM	AOC
PREHOOA ✓	MEDIA	
MASON ✓	MEDIA	

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

2117Z noticed spread in DP temps

231300 cirrus above flt level @ (45K)

IRS2 quit at 174650Z and never came back

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

FLT ID: *N980823*TIME OFF: ~~101140~~ 1724Z

TIME ON: 0134Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1011.9	29.89	1016.4	30.05

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES

/

FAST FLT LVL TAPES

RADAR TAPES

DOPPLER TAPES

ODW CASSETTES

HARD COPIES

AXBT

AXCP

~~GPS~~ GPS~~31~~ 31

Sent 23 messages

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

G4 Hurricane Surveillance

Flight #03 N980823 (H. Bonnie)

<u>DATA TYPE</u>	<u>SENSOR or OPTION</u>
INE	VEW, VNS
Accelerometer	ACINS
Temperature Probe	AT2
Altitude (for vertical wind)	PALT
Static Pressure	PS1M
Dynamic Pressure	QC1M
Dewpoint Probe	DPRC

Notes:

There were no time gaps.

The IRS2 signal was lost at 174650Z did not return for the remainder of the flight.

Both dewpoint temperature sensors were balanced from 175930Z - 180700Z.
This action produced erroneous data during this time frame.

No dynamic corrections were applied to the measured static and dynamic pressures.
Thus wind direction and wind speed may not be representative of actual flight level conditions.

Dropsonde data and event switch information ARE NOT on the tape.

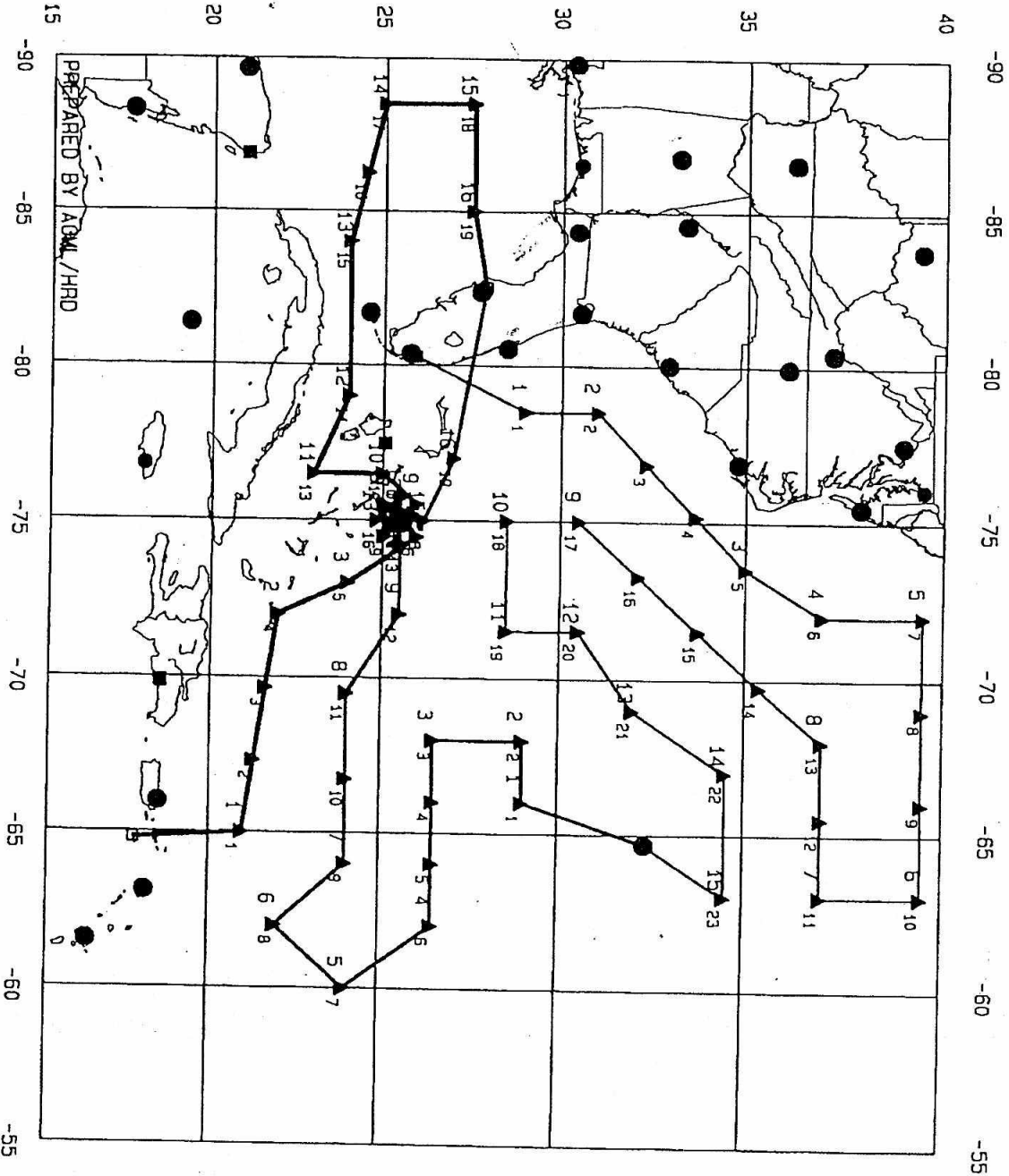
Downward spikes in radar altimeter data are a result of overflying land.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1011.9mb	1016.4mb
Corrected tower pressure	1011.6mb	1016.7mb

Flight Meteorologist: A. Barry Damiano, (813) 828-3310 ext. 3073

N980823

TIME	LAT	LONG	TRK	HD	WD	WS	TA	TD	PA	GA	PS	PK
173500	2621	7931	19	17	16	5	-2.6	-15.5	5390	5662	510	CLR 156.8
174700	2745	7859		CENTER OF RIDGE							315	
175851	2906	7830	0	0	327	4	-51.3	-62.7	11841	12454	2197	DROP 92.6
180430	2947	7830	0	0	324	4	-58.2		12568	13174	175.5	CLR 86.8
181100	3034	7830	0	354	340	5	-58.4	-72.4	12566	13166	175.5	THN CLD 88.6
181539	3107	7821	47	43	339	5	-58.9	-73.0	12570	13159	175.5	NO W DROP 88.4
181733	3117	7808	47	42	328	4	-58.4	-72.8	12566	13150	177.5	DROP 88.7
182300	3145	7733	47	43	342	5	-58.6	-72.8	12567	13146	175.6	CLR 87.6
182938	3220	7650	46	42	344	5	-58.7	-73.0	12564	13139	175.6	DROP 88.2
183800	3303	7557	47	44	314	7	-59.1	-72.6	12563	13133	175.6	CLR 87.8
184506	3340	7510	46	42	296	7	-58.4	-72.4	12562	13130	175.7	DROP 88.8
185700	3442	7353	46	45	235	2	-59.4	-72.1	12559	13131	175.7	CLR 89.0
190100	3504	7327	31	29	245	5	-59.8	-70.3	12558	13127	175.8	DROP 89.0
191200	3616	7234	32	27	270	13	-59.6	-66.9	12559	13116	175.8	CLR 88.7
191936	3707	7200	0	354	280	17	-59.9	-66.8	12558	13094	175.8	NO W DROP 88.7
192128	3719	7200	0	354	278	17	-60.2	-67	12560	13089	175.8	DROP 87.5
193500	3858	7200	0	353	273	24	-59.1	-67.7	12558	13062	175.9	CLR 87.7
193937	3930	7147	88	88	270	16	-59	-67.7	12558	13058	175.9	DROP 87.7
195559	3930	6900	90	85	301	21	-58.6	-71.1	12552	13039	176.0	NO W DROP 88.5
195755	3930	6840	90	85	301	22	-58.2	-71.4	12552	13039	176.0	DROP 88.6
201316	3930	6600	90	84	311	25	-59.7	-71.7	12547	13005	176.1	DROP 87.1
202100	3930	6440	90	84	309	31	-60.4	-67.2	12545	12995	176.2	CLR 88.0
203123	3916	6300	180	185	305	34	-57.8	-69.5	12541	12966	176.2	DROP 86.9
204947	3700	6316	271	273	301	28	-59.4	-71.4	12548	13039	176.1	DROP 87.4
210549	3700	6530	271	271	287	23	-59.1	-73.3	12547	13065	176.2	DROP 89.0
212458	3653	6808	221	225	296	21	-62.6	-70.7	13133	13677	160.4	DROP 80.6
214215	3523	6945	222	224	272	18	-62.9	-71.7	13122	13689	160.0	NO W DROP 80.4
214343	3515	6954	222	224	269	19	-62.3	-71.9	13123	13689	160.0	DROP 80.6
215500	3418	7055	221	222	244	18	-63.1	-72.6	13122	13708	159.9	CLR 79.9
220122	3345	7130	222	223	244	15	-63.4	-72.7	13122	13715	159.9	DROP 79.8
221300	3245	7235	222	222	242	12	-61.8	-72.4	13120	13729	160.0	CLR 81.2
222006	3208	7315	223	222	234	14	-62.1	-72.5	13118	13734	160.1	NO W DROP 79.7
222113	3202	7321	223	223	240	15	-62.6	-73.0	13120	13738	160.1	DROP 80.4
223018	3022	7500	180	183	261	21	-61.2	-74.0	13120	13770	160.1	DROP 80.3
224725	2930	7500	180	184	256	22	-66.3	-75.0	13697	14357	145.1	DROP 73.2
225659	2826	7446	108	106	287	9	-66.1	-76.6	13700	14379	145.0	DROP 73.2
230826	2800	7315	108	106	308	5	-66.0	-77.0	13698	14381	145.1	DROP 68.5
231500	2745	7223	108	107	171	4	-66.7	-75.8	13698	14391	145.0	CLD ABV 68.0
232244	2744	7130	0	355	255	11	-66.0	-70.4	13696	14387	145.2	DROP 73.8
232400	2754	7130	0	355	270	15	-66.7	-70.1	13693	14387	145.1	NO W DROP 71.2
233900	2941	7130	0	352	270	27	-66.2	-72.9	13696	14360	145.2	CLR 72.4
234652	3036	7119	55	51	260	19	-65.7	-73.5	13694	14340	145.2	DROP 72.3
235700	3121	7006	55	52	280	12	-66.0	-74.6	13695	14328	145.1	71.7
000619	3202	6858	33	29	310	12	-65.6	-75.8	13694	14319	145.2	DROP 73.1
002000	3325	6753	34	28	326	15	-65.5	-75.5	13692	14306	145.2	72.2
003154	3430	6649	89	86	323	8	-66.3	-76.1	13697	14299	145.2	DROP 73.2
005720	3417	6309	210	214	224	18	-66.1	-74.9	13697	14300	145.1	FF DROP 73.3
010	23											DROP



FLIGHT TRACKS BONNIE

980823hp.ftk
980823ip.ftk
980823np.ftk

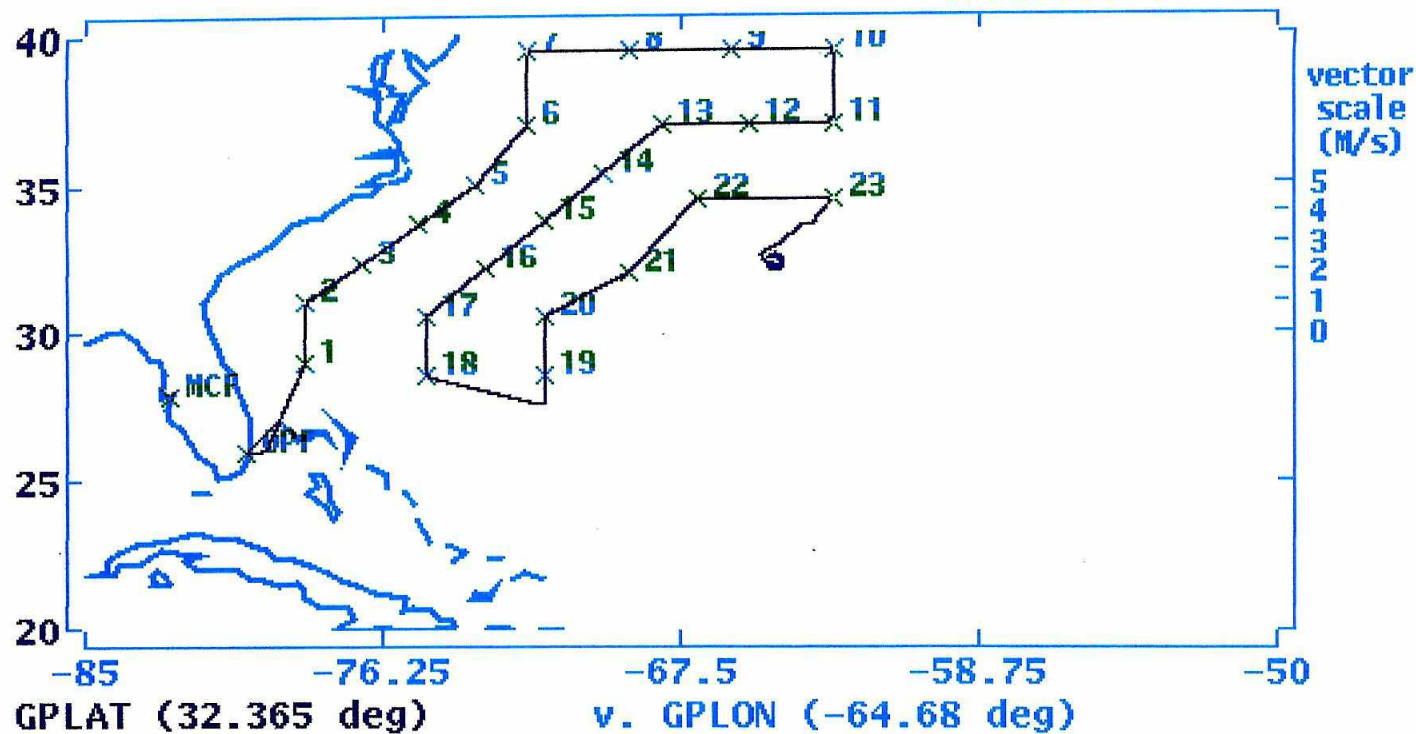
RAWINSONDES 9807

- Regular
- 12Z only
- 00Z only
- Infrequent
- ▲ Infrequent - 00Z
- △ Infrequent - 12Z

▲ DROP LOCATIONS

'JCPB1' (winds@eider) Proj. 420 Flt 7 Aug-24-98 01:37:30

17:24:55 to 01:37:30



N49RF Hurricane 98 AVAPS DropSonde Log

N49RF Project: Hurricane 98 Flight ID: 980823N

Mission: 420 Flight #: 7 System Status: O.K.

Drop #	Sonde Serial Number	Time (Z)	Chn #	Press. offset	Winds time	Operator Init.	Comments Drop Status	GOOD ☒
1	974510088	1759	1	-0.5	30	CFH		✓
2	974740022	1816	2	-0.1	+120	CFH	Late winds NO MESSAGE SENT VIA SATCOM	✓ B/U
3	974510073	1818	3	-0.5	17	CFH		✓
4	974730068	1829	1	-0.4	48	CFH		✓
5	974530066	1845	1	-0.1	18	CFH		✓
6	974530103	1901	2	-0.1	25	CFH		✓ B/U
7	974740023	1919	2	-0.1	+118	CFH	Late winds NO MESSAGE	✓
8	974550027	1921	1	-0.1	25	CFH		✓
9	974510013	1940	1	0	30	CFH		✓
10	974510005	1957	2	-0.1	+110	CFH	Late winds NO MESSAGE	✓ B/U
11	974510087	1958	1	-0.1	44	CFH		✓
12	974010100	2013	3	-0.2	28	JWH		✓
13	974510009	2031	1	0	28	JWH		✓
14	982630028	2049	2	+0.1	27	JWH		✓
15	974540006	2105	1	+0.7	23	JWH		✓
16	973840033	2125	2	-0.1	27	JWH		✓
17	982630110	2142	1	+0.3		JWH	NO winds / Fast Fall	✓
18	974110039	2143	2	-0.1	27	JWH		✓
19	974530075	2201	1	0	33	JWH		✓
20	974730085	2220	1	-0.5		JWH	NO winds	✓
21	973840011	2221	2	0	31	JWH		✓
22	974730089	2240	1	-0.5	45	JWH		✓
23	974510012	2247	2	+0.3	25	JWH		✓
24	974730122	2257	3	-0.6	38	JWH		✓
25	973840070	2308	1	-0.1	45	JWH		✓
26	974540041	2322	2	+0.4	70	JWH		✓
27	974530059	2324	3	+0.5		JCPB	NO winds / Fast Fall	✓
28	973730036	2346	1	0	19	JCPB		✓
29	974540055	0006	2	-0.1	30	JCPB		✓
30	974540051	0032	2	+0.1	23	JCPB		✓
31	974510069	0057	4	+0.1	16	JCPB	Fast Fall	✓
32								
33								

31 3 bad

Drop #	Sonde Serial Number	Time (Z)	Chn #	Press. offset	Winds time	Operator Init.	Comments Drop Status	GOOD ☒
34								
35								
36								
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06/16/98

AVAPS PRE-FLIGHT CHECK:

- (1) Apply power to computer, VAPS fan and VAPS chassis
- (2) Verify no **ER** status lights on the four MWG cards
- (3) Set the computer time to GPS time
- (4) Start AVAPS and run the hardware checks via the **Utility** function
- (5) Start **Soundings** and set the **Project Name** and **Flight ID** (6) Perform a prelaunch check using all four channels simultaneously reading one sonde, look for reasonable data and no CRC error status lights, winds data is not expected. All AVAPS chassis status lights should be green.

NORMAL LAUNCH NOTES:

When selecting a sonde frequency, select a frequency other than the default (if there is a default), and away from other sondes in use.

Do not pull the Power Enable Pin during pre-launch setup until after the Umbilical is attached.

If pre-launch is complete, and more than 5 minutes remain prior to launch, replace the power Enable pin until 5 minutes prior to launch.

Don't put the sonde in the launch tube until you have removed the ribbon retaining tape.

Don't put the sonde in the tube until you have selected **Begin Data Collection**, and verified good data (good winds data is not expected).

The Power Enable Pin must be removed for at least two minutes prior to launch to allow for the Sonde GPS Oscillator to warm up.

NOAA/AOC/SED N49RF Flight Performance log - Hurricane 98

N49RF Project: Hurricane Bonnie Project No 420 Flight No. 7 Flight ID: 980823YSED Crew: CFH, JWH, JCPB, ABD Mission: Bonnie SurveillancePre-Flight: 1630Z Z Take-Off: 1723Z Z Landing: 0134Z Z

SYSTEM			Pre-Flight Check		In-Flight		Post-Flight	
N A V	IRS #1		✓	JCPB				
	IRS #2		✓					
	IRS #3		✓					
	GPS Honeywell #1		✓					
	GPS Honeywell #2		✓					
	GPS Collins		✓					✓
Nose Radar -Collins			✓	JCPB			Off? ☒	
T E M P	Time	Temp °C					Time	Temp °C
	Temp #1	1652	37.16	✓	JCPB		0138Z	27.5
	Temp #2		34.56	✓				28.0
	Temp #3		34.82	✓				27.8
	Temp #4		33.658	✓				27.5
	DP Left		22.54	✓		Cal. Time: 1800		20.0
	DP Right	✓	22.43	✓		Cal. Time: 1800	✓	19.5
P R E S S	Attack Angle (ADCAOA)		✓	JCPB				
	Slip Angle (BP/DBP)		✓					
	Differential (PQ1/PQ2)		✓					
	Absolute (PS1/PS2)				1011.8 / 1012.3			
	Check Radome Press. Lines ☒			JCPB @ 980818X				
	DOWN PRT-5 ⇒ Open? ☐			UXOP JWH			Closed? ☒ N/A	
S Y S T E M	MADS (WINDS/DISCWIN)		✓	JCPB			# DATs: 1	
	MADS Printer ⇒ Paper? ☒		✓	JCPB			Printer Pwr off? ☒	
	MADS Cal. Date: 02/18/98			QC time: —			QC time: 0136Z	
	WINDS ⇒ NET BCAST ☒			JCPB				
	HAPS System / Time set? ☒			JWH			# Msg.: 25 # Attempts: 25+9	
	AVAPS System / Time set? ☒			CFH				
	AVAPS Printer ⇒ Paper? ☒			CFH				
	Exterior Walk Around			CFH				
	Inspect DropSonde Chute Bolts			CFH				
	Satcom (Flight Phone)			JWH			Off CB? ☒	
M I S C	Call COMSAT? ☒ (*292#)			JWH				
	FCU/UPS/CB			CB's Checked? ☐			UPS off? ☒	
	AVAPS Sondes			# On Board: 151		# Dropped: 31	# Good: 28	
	AXBT			# On Board: —		# Dropped: —	# Good: —	
	APN-232			✓ JCPB				
	Modem Power On? ☒			✓ JCPB				

1	DAT Tape #1		On: 1657	Off: 0142
2	DAT Tape #2		On:	Off:
Comments:				

Problem Description & Observations

N49RF N49RF