

FLT ID: <i>N980821</i>	FM: <i>TXKF</i>	TO: <i>KAEOPF</i>
FLT NO: <i>98-038</i>	BLK IN: <i>0241z</i>	ATA: <i>0238z</i>
ETD: <i>1745z</i>	BLK OUT: <i>1739z</i>	ATD: <i>1750z</i>
ETE:	BLK TIME: <i>9:02</i>	FLT TIME: <i>8:48</i>
SPONSOR ORG: <i>NAC</i>	PROGRAM: <i>HURR. SURVEILLANCE</i>	PURPOSE: <i>T.S. BONNIE</i>

OAD PERSONNEL

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

PARTICIPATING SCIENTIST/VISITORS/OAD

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
<i>FRANKLIN</i>	<i>HAPS</i>	<i>HRD</i>
<i>LANDSEA</i>	<i>HAPS</i>	<i>HRD</i>
<i>WHITE</i>	<i>PM</i>	<i>AOC</i>

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

N43RF grounded due to broken nose wheel cable.

Due to ATC problems skipped DROP 3 and → shorten flt by 30 minutes.

ADDED TWO DROPS IN CENTRAL BAHAMAS

26 MESSAGES SENT

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

01502
FLT ID: N9808218 TIME OFF: 1750Z TIME ON: 0238Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1019.7	30.15	1016.5	30.01

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES	2	
FAST FLT LVL TAPES		
RADAR TAPES		
DOPPLER TAPES		
DDW CASSETTES		
HARD COPIES		
AXBT		
AXCP		
GPS	29	Sent 26 messages

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

G4 Hurricane Surveillance

Flight #02 N980821 (T. S. 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 two time gaps:

231550Z - 232910Z
233213Z - 233220Z

Because a time gap greater than 90 seconds occurred, there two data sets for this flight (980821na and 980821nb).

The IRS2 system lost its signal from 2306Z - 232920Z.

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	1019.7mb	1016.5mb
Corrected tower pressure	1019.9mb	1015.7mb

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

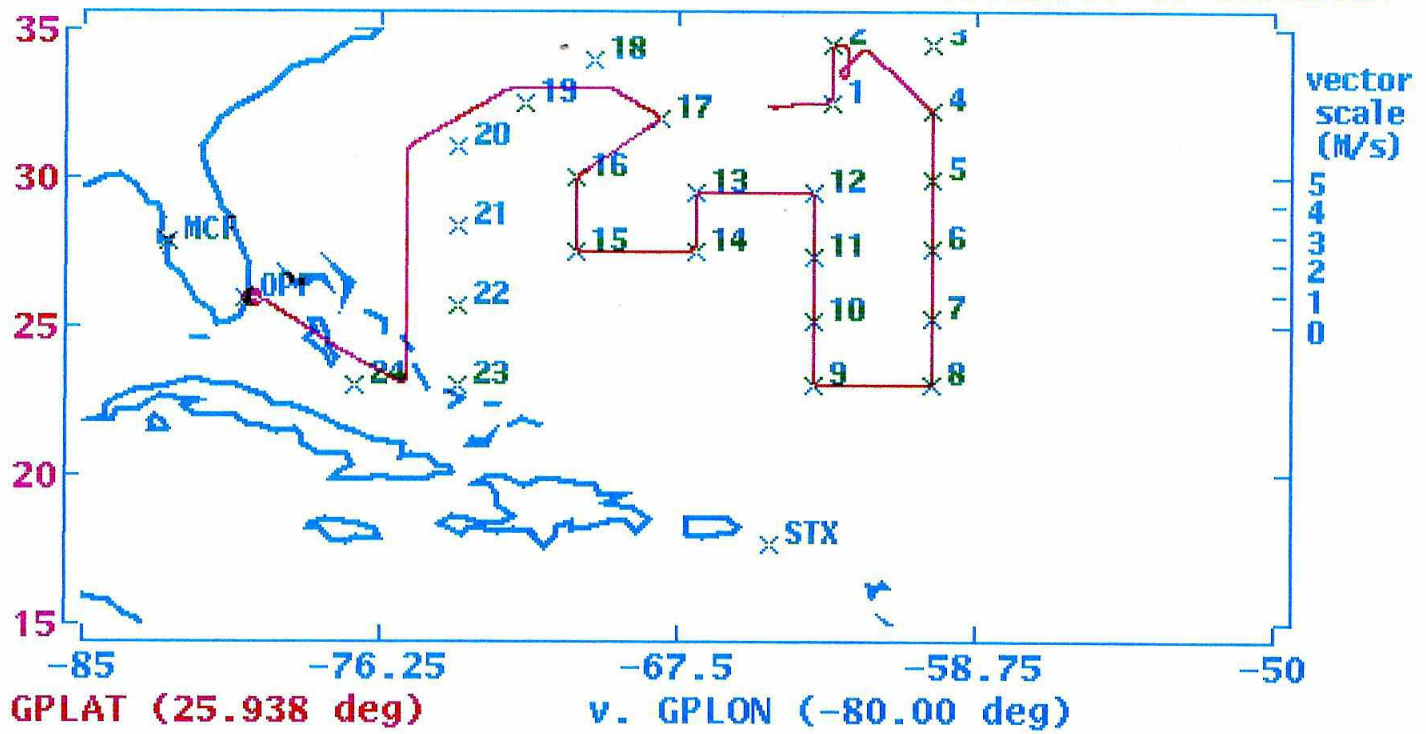
N980821

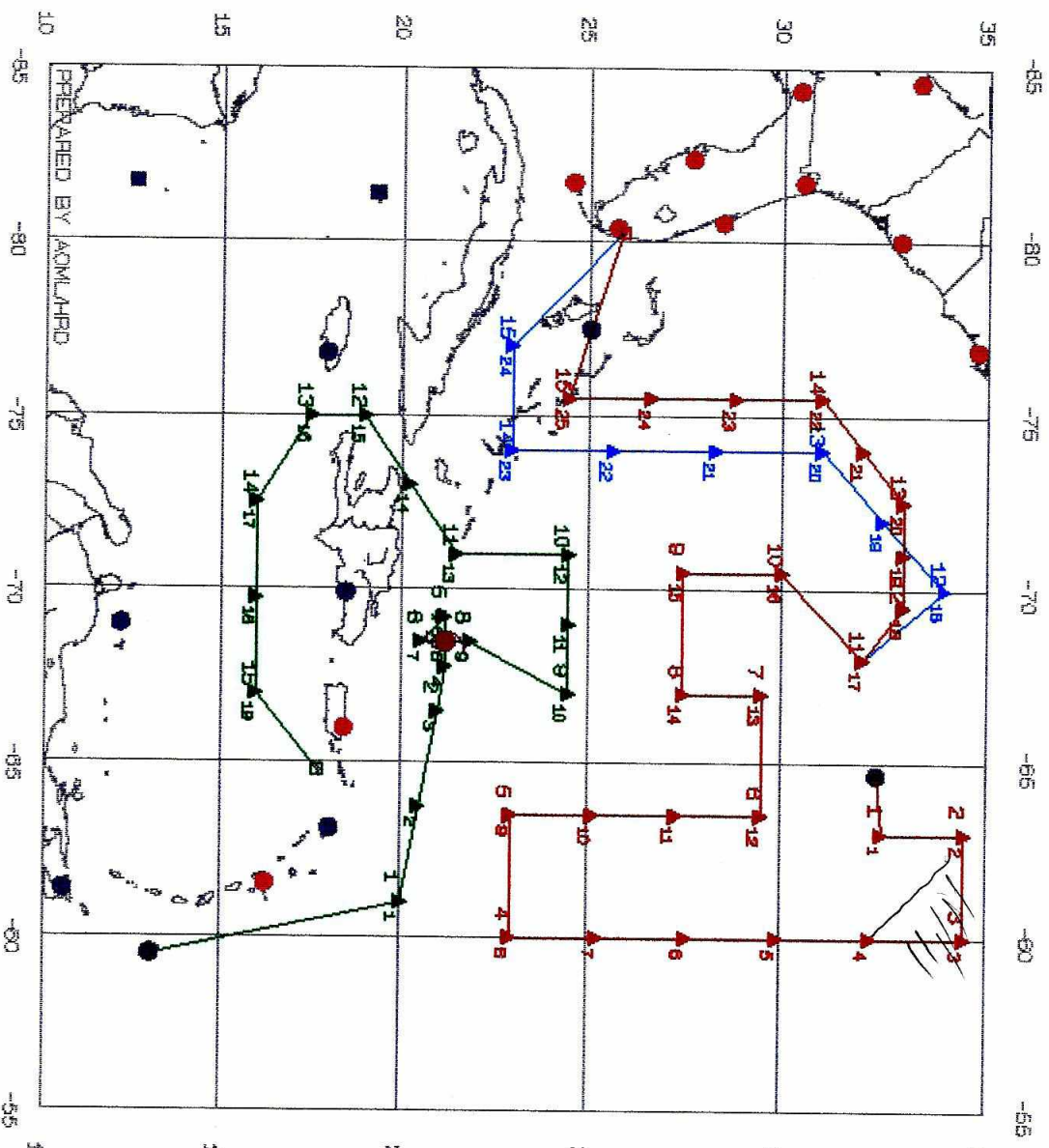
m/s

TIME	LAT	LOU	TRK	HD	WD	WS	TA	TD	PA	GA	PS		PG
180000	3228	6405	87	86	267	12	-4.5	-31.6	5339	5650	506.7		155.3
180832	3443	6300	0	354	278	17	-23.9	-39.3	8230	8667	343.0	NO W	DROP 157.1
181122	3505	6300	0	354	270	18	-31.0	-45.5	9095	9562	305		DROP 143.5
182314	3430	6243	97	98	241	21	-48	-61.5	10987	11490	225.2		DROP 106.2
184600	3406	6146	142	145	241	20	-60.4	-74	12559	13101	175.8	CLR	86.4
185400	3318	6100	142	146	259	24	-58.9	-73.0	12556	13110	175.9	-CLD	BLW 88.2
190532	3205	6000	179	186	258	29	-59	-71.8	12554	13132	175.9		DROP 89.1
191700	3043	6000	180	188	255	36	-58.7	-68	12549	13157	176.1	HAZE	88.9
192405	2954	6000	180	187	259	35	-58.1	-65.8	12544	13163	176.2		DROP 87.6
193200	2857	6000	180	186	259	29	-57.9	-63.4	12543	13175	176.2	F-CLD	ABV 89.5
194315	2736	6000	180	185	255	27	-58.6	-63.4	12540	13194	176.2		DROP 89.1
195600	2604	6000	180	182	240	18	-59.3	-64.4	12538	13194	176.5	THN	CLD 87.1
200229	2518	6000	180	181	245	11	-59.3	-62.6	12536	13192	176.5		DROP 89.3
202245	2300	6015	271	269	271	4	-58.9	-63.2	12537	13189	176.5		DROP 89.6
202600													
203100													
203500													
204850	2313	6330											
205003	2322	6330	0	358	303	6	-58.6	-61.9	12541	13197	176.4		DROP 86.0
210432	2510	6330	0	354	262	17	-63.6	-69.4	13120	13793	160.0		DROP 80.1
210700													
211300	2612	6330	0	354	284	18	-62.7	-71.5	13117	13793	160.1	ABV	CLD 78.3
212210	2720	6330	0	353	267	20	-63.5	-70.5	13120	13777	160.1		DROP 80.3
213500	2855	6330	0	351	258	31	-62.9	-66.9	13119	13779	160.1	THN	CLD 79.8
214057	2930	6345	270	266	250	35	-62.7	-67.3	13122	13782	160.1		DROP 80.9
215600	2931	6533	270	264	241	39	-63	-69.2	13119	13782	160.1	CLR	79.2
220924	2916	6700	179	184	227	35	-62.1	-71.4	13112	13782	160.4		DROP 80.6
222655	2750	6716	271	265	216	22	-62.1	-65.4	13105	13792	160.3		DROP
224500	2730	6933	269	264	226	22	-61.7	-66	13120	13796	160.0	CLR	81.2
225334	2740	7030	0	354	242	20	-63	-71.7	13123	13790	160.1		DROP 80.1
231248	3008	7020	0	44	243	24	-63.6	-71.1	13120	13760	160.1		DROP 76.5
233504	3208	6813	308	303	257	18	-59.6	-72.3	13120	13735	160.1		DROP 80.2
234755	3300	6940	270	269	325	5	-60.8	-73.6	13117	13732	160.1		DROP 80.7
235712	3300	7100	270	270	345	5	-62.5	-73.9	13519	14159	149.5		DROP 74.1
000754	3257	7233	235	232	71	2	-64.5	-77.4	13695	14343	145.1		DROP 73.3
002046	3200	7400	232	232	266	7	-63.7	-77.1	13698	14345	145.2		DROP 73.1
003000	3120	7500	232	230	236	10	-64	-76.8	13692	14345	145.3		72.9
003539	3051	7530	179	180	222	10	-64.1	-77.6	13692	14348	145.2		DROP 73.0
005414	2842	7530	180	181	221	16	-65.4	-77.6	13689	14366	145.3	NO W	DROP 73.1
005618	2828	7530	180	181	210	20	-66.5	-77.1	13694	14370	145.2	(25)	DROP 72.9
011000	2655	7530	180	181	211	22	-68.3	-75.7	13691	14380	145.3		71.9
011219	2640	7530	180	181	212	21	-68	-75.7	13691	14376	145.2		DROP 72.8
012600	2508	7530	180	180	194	20	-68.1	-76.2	13691	14389	145.2		71.8
013012	2440	7530	180	179	189	17	-68.1	-76	13693	14391	145.3		DROP 72.5
014519	2309	7544	304	301	209	6	-67.8	-76.2	13690	14401	145.3		DROP 72.2
020117	2414	7729	306	303	213	9	-67.6	-74.5	13691	14385	145.3		DROP 72.7
020900	2450	7816	310	305	199	13	-65.9	-74.3	13297	13922	157.3		83.6

'JCPB1' (winds@eiaer) Proj. 420 Flt 6 Aug-22-98 02:26:31

16:52:01 to 02:26:31





FLIGHT TRACKS
BONNIE

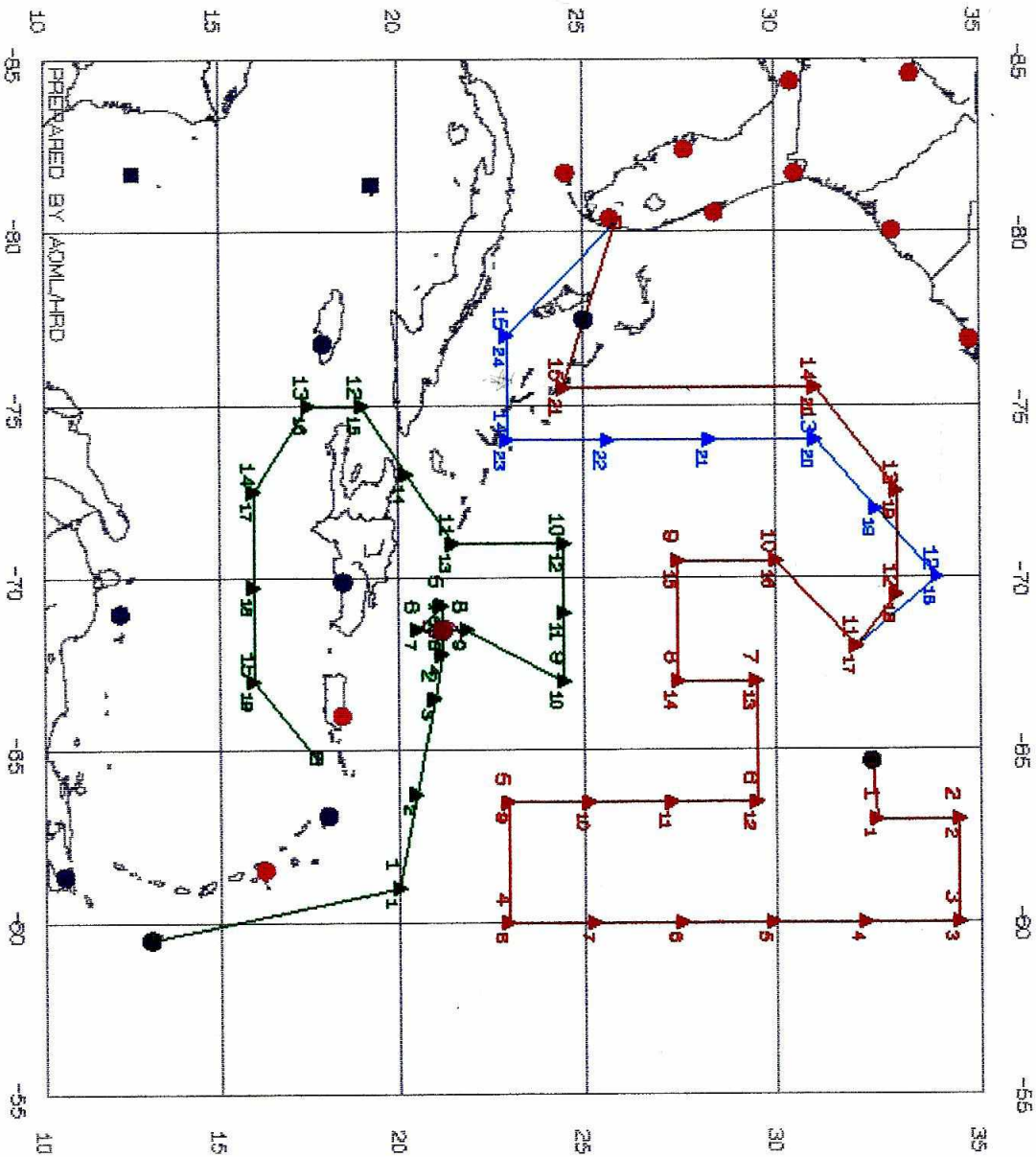
- 960821hp.ftk
- 960821np.ftk
- 960821n2.ftk

RAWINSONDES 9604

- Regular
- 12Z only
- 00Z only
- Infrequent
- Infrequent - 00Z
- Infrequent - 12Z

▲ DROP LOCATIONS

PREPARED BY AOML/HRD



PREPARED BY AOML/HRO

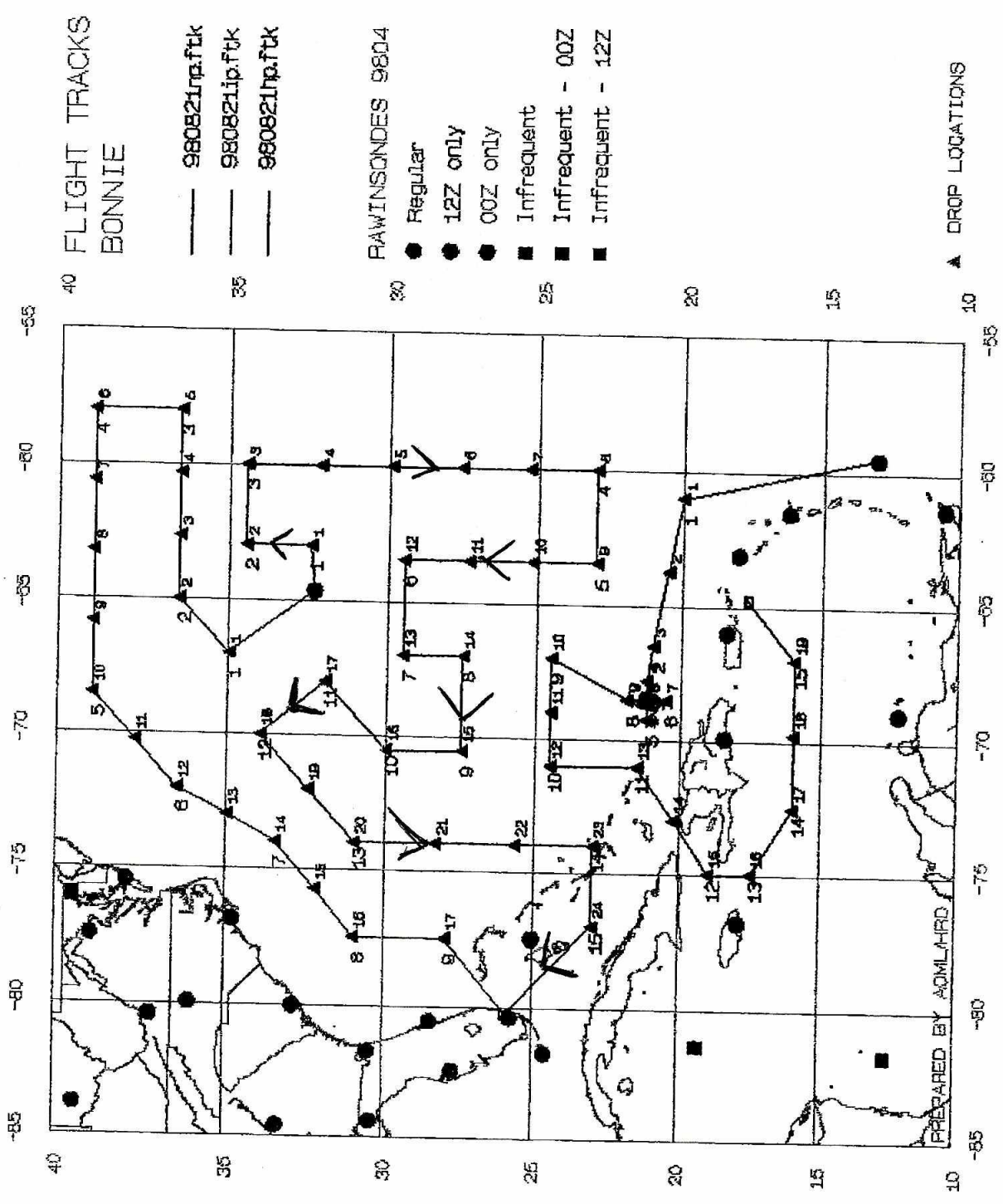
FLIGHT TRACKS BONNIE

- 980821hp.ftk
- 980821np.ftk
- 980821n2.ftk

RAWINSONDES 9804

- Regular
- 12Z only
- 00Z only
- Infrequent
- Infrequent - 00Z
- Infrequent - 12Z

▲ DROP LOCATIONS



40
35
30
25
20
15
10

-85 -80 -75 -70 -65 -60 -55

45 minutes

Latest FY

1712z

20.2

65.8

999 mm

NW QUAD

63 KTS

N49RF Hurricane 98 AVAPS DropSonde Log

N49RF Project: Hurricane 98

Flight ID: 980821W

Mission: 420

Flight #: 6

System Status: OK

Drop #	Sonde Serial Number	Time (Z)	Chn #	Press. offset	Winds time	Operator Init.	Comments Drop Status	GOOD <input type="checkbox"/>
1	974510090	1808	1	-0.3	—	CFH	Fast Fall - No winds	<input type="checkbox"/>
2	974010056	1811	2	-0.4	64	CFH		<input checked="" type="checkbox"/>
3	974110031	1823	3	-0.3	22	CFH	Glob on sensor	<input checked="" type="checkbox"/>
4	974530150	1905	1	0	29	CFH	Glob	<input checked="" type="checkbox"/>
5	974540045	1924	1	-0.1	29	CFH	Glob slightly slow-drop	<input checked="" type="checkbox"/>
6	974530057	1943	1	0	25	CFH	Glob	<input checked="" type="checkbox"/>
7	973840058	2002	1	-0.3	24	CFH	Glob	<input checked="" type="checkbox"/>
8	972440018	2022	1	+0.7	25	CFH	Small Glob	<input checked="" type="checkbox"/>
9	974510074	2048	2	+0.1	30	JCPB	Small Glob/no pressure	<input type="checkbox"/>
10	973730043	2050	3	+0.1	30	JCPB	Glob	<input checked="" type="checkbox"/>
11	974510068	2104	1	+0.1	26	JCPB	Small Glob	<input checked="" type="checkbox"/>
12	974530112	2122	2	0	31	JCPB	Glob	<input checked="" type="checkbox"/>
13	974530072	2141	1	-0.6	22	JCPB	Glob	<input checked="" type="checkbox"/>
14	974530117	2209	2	+0.1	28	JCPB	Small Glob	<input checked="" type="checkbox"/>
15	974730019	2227	1	0	36	JCPB	Small Glob	<input checked="" type="checkbox"/>
16	974730048	2253	1	+0.4	24	JWH	Glob	<input checked="" type="checkbox"/>
17	974740025	2312	1	-0.1	25	JWH	Small Glob - slow temp sensor	<input checked="" type="checkbox"/>
18	974510015	2335	1	-0.2	71	JWH	Glob	<input checked="" type="checkbox"/>
19	974740024	2347	2	-0.1	14	JWH	Glob	<input checked="" type="checkbox"/>
20	974510017	2357	1	+0.3	14	JWH	Glob	<input checked="" type="checkbox"/>
21	974740031	0008	2	-0.3	25	JWH	Glob	<input checked="" type="checkbox"/>
22	974730022	0020	1	+0.1	37	JWH	Glob slow Fall	<input checked="" type="checkbox"/>
23								
24								
25	974110038	0035	2	-0.1	23	JWH	Glob	<input checked="" type="checkbox"/>
26	974510128	0054	1	+0.2		JWH	Glob / no winds / Fast Fall	<input checked="" type="checkbox"/>
27	982630111	0056	2	+0.2	27	JWH	Small Glob	<input checked="" type="checkbox"/>
28	974530119	0112	1	+0.5	37	JWH	Glob	<input checked="" type="checkbox"/>
29	981030068	0130	2	+1.0	37	JWH	Glob Very slow Temp	<input checked="" type="checkbox"/>
30	974740020	0145	1	0	37	JWH	Glob slow Fall	<input checked="" type="checkbox"/>
31	973840127	0201	2	+0.2	28	JWH	Glob	<input checked="" type="checkbox"/>
32								
33								

Drop #	Sonde Serial Number	Time (Z)	Ghn #	Press. offset	Winds time	Operator Init.	Comments Drop Status	GOOD <input checked="" type="checkbox"/>
34								
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								
49								
50								
51								
52								
53								
54								
55								
56								
57								
58								
59								
60								

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: BONNIE (TS) Project No 420 Flight No. 6 Flight ID: 980821H

SED Crew: CFH, JCPB, JWH, ABD Mission: MISSION BERMUDA → MIAMI

Pre-Flight: 1600 Z Take-Off: 1749Z Z Landing: 0237Z Z

SYSTEM		Pre-Flight Check		In-Flight	Post-Flight	
N A V	IRS #1	JWH				
	IRS #2	JWH				
	IRS #3	JWH				
	GPS Honeywell #1	JWH				
	GPS Honeywell #2	JWH				
	GPS Collins	JWH				
Nose Radar -Collins						Off? <input type="checkbox"/>
		Time	Temp °C		Time	Temp °C
T E M P	Temp #1	1844	35.9	JCPB	0246	34.171
	Temp #2		31.6			31.052
	Temp #3		32.2			35.058
	Temp #4		30.3			29.060
	DP Left		23.5		Cal. Time: —	22.5
	DP Right	↓	22.8	↓	Cal. Time: —	21.9
P	Attack Angle (ADCAOA)	20.04° JWH				
R	Slip Angle (BP/DBP)	0.45 JWH				
E	Differential (PQ1/PQ2)	0.0 JWH				
S	Absolute (PS1/PS2)	1020.2/1020.3				
S	Check Radome Press. Lines <input checked="" type="checkbox"/>	JCPB @ 980818N				
S	DOWN PRT-5 ⇒ Open? <input checked="" type="checkbox"/>	JWH				Closed? <input checked="" type="checkbox"/>
Y	MADS (WINDS/DISCWIN)	✓ JCPB				# DATs: 2
S	MADS Printer ⇒ Paper? <input checked="" type="checkbox"/>	✓ JCPB				Printer Pwr off? <input type="checkbox"/>
T	MADS Cal. Date: 08/18/98	QC time: 1714				QC time: 0241
E	WINDS ⇒ NET BCAST <input checked="" type="checkbox"/>	✓ JCPB				
M	HAPS System / Time set? <input checked="" type="checkbox"/>	JWH				# Msg.: 2 # Attempts: —
S	AVAPS System / Time set? <input checked="" type="checkbox"/>	CFH				
	AVAPS Printer ⇒ Paper? <input checked="" type="checkbox"/>	CFH				
	Exterior Walk Around	CFH				
	Inspect DropSonde Chute Bolts	CFH				
	Satcom (Flight Phone)	—				Off CB? <input checked="" type="checkbox"/>
	Call COMSAT? <input checked="" type="checkbox"/> (*292#)	JWH				
M	FCU/UPS/CB	CB's Checked? <input type="checkbox"/>				UPS off? <input checked="" type="checkbox"/>
I	AVAPS Sondes	# On Board: 59		# Dropped: 29		# Good: 26
S	AXBT	# On Board: —		# Dropped: —		# Good: —
C	APN-232	✓ JWH				
	Modem Power On? <input checked="" type="checkbox"/>					

1	DAT Tape #1	On: 1713Z/2329	Off: 2317/0245
2	DAT Tape #2	On:	Off:

Comments:

