

FLT ID: N980731	FM: TISX	TO: TISX
FLT NO: 98-035	BLK IN: 0221Z	ATA: 0217Z
ETD: 1730Z	BLK OUT: 1724Z	ATD: 1735Z
ETE:	BLK TIME: 8:57	FLT TIME: 8:42
SPONSOR ORG: NHC	PROGRAM: HURR. SURVEILLANCE	PURPOSE: TS ALEX

OAD PERSONNEL

AC PLAYER	SYS ENG GOLDSTEIN
CP MAXSON/McCANN	DATA SYS HORN BROOK
NAV	RADAR
FE KITSON	BT/ODW SMITH
RADIO	CLD PHYS
FD DAMIANO	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/OAD

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

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

Problem with DSM ~~extra~~ signal to MADS system prior to T/O.

Winds east up to 250 mb 1800Z

Stopped at 37K due to traffic above us for first

TT1-TT3 all close together at 185mb (182330Z)

TT4 ← by 10 178mb (213600Z)

182647 splash 1 1849Z OB2 sent

183630Z OPS MT dk 191330Z OB2 sent

1927Z old top

230224Z SYS STOP

231700 sp up

2257Z WINDSHT.

2323Z

~~2332Z~~ holy glitch check

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

FLT ID: *N980731* TIME OFF: *1735Z* TIME ON: *0217Z*

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	<i>1013.2</i>	<i>30.04</i>	<i>1014.6</i>	<i>30.06</i>

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES		
FAST FLT LVL TAPES		
RADAR TAPES		
DOPPLER TAPES		
ODW CASSETTES		
HARD COPIES		
AXBT		
AXCP		
DATA GPS : <i>31</i>		

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

24 26 sent *0204Z last message out*

N980731

M/S

TIME	LAT	LOX	TRK	HD	WD	WS	TR	TD	PA	GA	SP	PS		PO	
174100	1735	6421	110	109	94	11.8	3.3	-10.2	3838	4054	-	624.2	HAZE	155.5	
180600	1452	6318	161	162	275	12.3	-49.9	-64.6	11330	11852	-	214.6	CLR	101.3	
181423	1400	6246	89	86	302	9.1	-50.4	-60.8	11330	11852	-	214.6	DROP	100.6	
183000	1400	6044	90	87	302	10.5	-59.8	-70.6	12522	13074	-	176.9	DROP	88.6	
184422	1351	5855	149	149	207	7.8	-58.8	-69.9	12516	13074	-	177.0	DROP	87.2	
185300	1257	5822	150	151	249	12.2	-60.6	-70.0	12510	13081	-	177.2	CLD BLW	87.0	
190200	1159	5747	150	149	266	6.5	-59.3	-70.7	12508	13091	-	177.3	LT TURB	89.0	
190655	1129	5723	111	107	339	2.7	-59.4	-69.9	12510	13084	-	177.3	DROP	87.8	
191900	1109	5557	103	102	121	11.1	-59.6	-71.3	12501	13089	-	177.5	ARV CLD	89.6	
192510	1100	5513	92	92	123	17.2	-59.9	-70.3	12499	13092	-	177.5	NO W	DROP 89.7	
192636	1100	5503	90	91	119	18.8	-60.0	-70.2	12503	13095	-	177.5	DROP	87.6	
194523	1113	5360	359	002	90	14.4	-60.0	-69.2	12509	13102	-	177.3	DROP	88.2	
195530	1230	5300	0	2.1	109	13.9	-60.4	-68.1	12505	13104	-	177.3	DROP	88.5	
200428	1330	5314	270	266	123	16.8	-59.5	-66.8	12502	13103	-	177.5	DROP	90.2	
201859	1339	5506	327	325	151	15.2	-59.7	-68.5	12500	13101	-	177.5	NO W	DROP 87.6	
202227	1402	5522	326	324	157	16.8	-59.8	-69.2	12498	13099	-	177.5	NO W	DROP 88.0	
202548	1424	5537	326	324	159	19.1	-59.6	-67.9	12498	13099	-	177.6	DROP	87.6	
203713	1540	5630	326	323	165	22.6	-58.7	-69.3	12497	13095	-	177.6	DROP	89.4	
205642	1750	5800	327	324	177	11.7	-56.7	-71.3	12499	13085	-	177.6	DROP	88.4	
211721	2003	5930	352	353	87	6.9	-56.4	-72.3	12496	13084	-	177.6	DROP	86.3	
214219	2300	5915	90	88	84	8.2	-56.1	-73.4	12494	13080	-	177.7	DROP	87.4	
220630	2247	5615	180	178	157	6.6	-59.9	-75.7	13070	13695	-	161.3	NO T	DROP 82.1	
221126	2212	5615	180	178	164	7.8	-60.4	-75.6	13074	13694	-	161.4	DROP	79.4	
223109	2000	5600	89	91	173	11.7	-62.17	-76.9	13070	13701	-	161.4	DROP	79.6	
225550	2013	5300	359	358	172	10.7	-62.0	-74.8	13073	13712	-	161.4	DROP	79.5	
231537	2240	5300												DROP	
232200	2328	5300	00	00	134	8.0	-62.9	-76.3	13358	14015	-	153.7			
233442	2503	5303	328	325	176	11.7	-64.4	-77.2	13655	14303	-	146.2	NO T	DROP	76.6
233606	2511	5311	318	314	186	12.3	-64.3	-77.4	13654	14305	-	146.1	(23)	DROP	72.5
235554	2659	5503	286	284	201	3.6	-61.9	-76.5	13652	14300	-	146.2	(23)	DROP	73.2
001235	2700	5720	270	261	40	3.8	-61.2	-76.6	13653	14306	-	146.2		DROP	72.3
002914	2700	5946	270	270	50	5.3	-61.9	-76.6	13653	14302	-	146.2		DROP	72.8
004604	2648	6203	192	189	75	10.8	-63.9	-78.5	13652	14295	-	146.2		DROP	71.8
005500	2548	6218	198	187	96	17.3	-61.1	-78.4	13655	14299	-	146.2	NO T	DROP	74.4
010155	2500	6230	193	188	111	15.9	-62.1	-77.5	13651	14296	-	146.3	NO T	DROP	75.8
011500	2327	6253	193	189	130	11.5	-63.8	-78.1	13654	14292	-	146.3			73.1
011855	2300	6259	185	179	128	11.0	-63.4	-77.0	13657	14296	-	146.2		DROP	73.1
012700	2202	6300	180	172	138	11.5	-62.3	-77.6	13653	14290	-	146.2			73.7
013556	2100	6300	180	176	140	15.7	-62.3	-77.6	13649	14272	-	146.1	NO W	DROP	73.1
013806	2047	6307	208	203	150	13.8	-62.4	-77.6	13652	14284	-	146.2	(31)	DROP	72.0
															72.8

G4 Hurricane Surveillance

Flight #02 N980731 (T. S. Alex)

DATA TYPE

SENSOR or OPTION

INE	VEW_PITR, VNS_PITR
Accelerometer	ACINS_PITR
Temperature Probe	AT2
Altitude (for vertical wind)	PALT
Static Pressure	PS1M
Dynamic Pressure	QC1M
Dewpoint Probe	DPRC

Notes:

There are two time gaps:

230407Z - 231450Z

231503Z - 231511Z

The first time was caused by a system crash of MADS. Since the time gap is greater than 90 seconds, there are two DATs for this flight.

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	1013.2mb	1014.6mb
Corrected tower pressure	1013.8mb	1014.9mb

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

N980731

190205 - 190206

193857 - 193858

2 tapes

1731 - 230407

231450 ~~2314~~ - 022001

230407 - 231450
231503 - 231511
data gaps

DPR

TT2

PSM1

GPGALT

INS 2

API

BP2

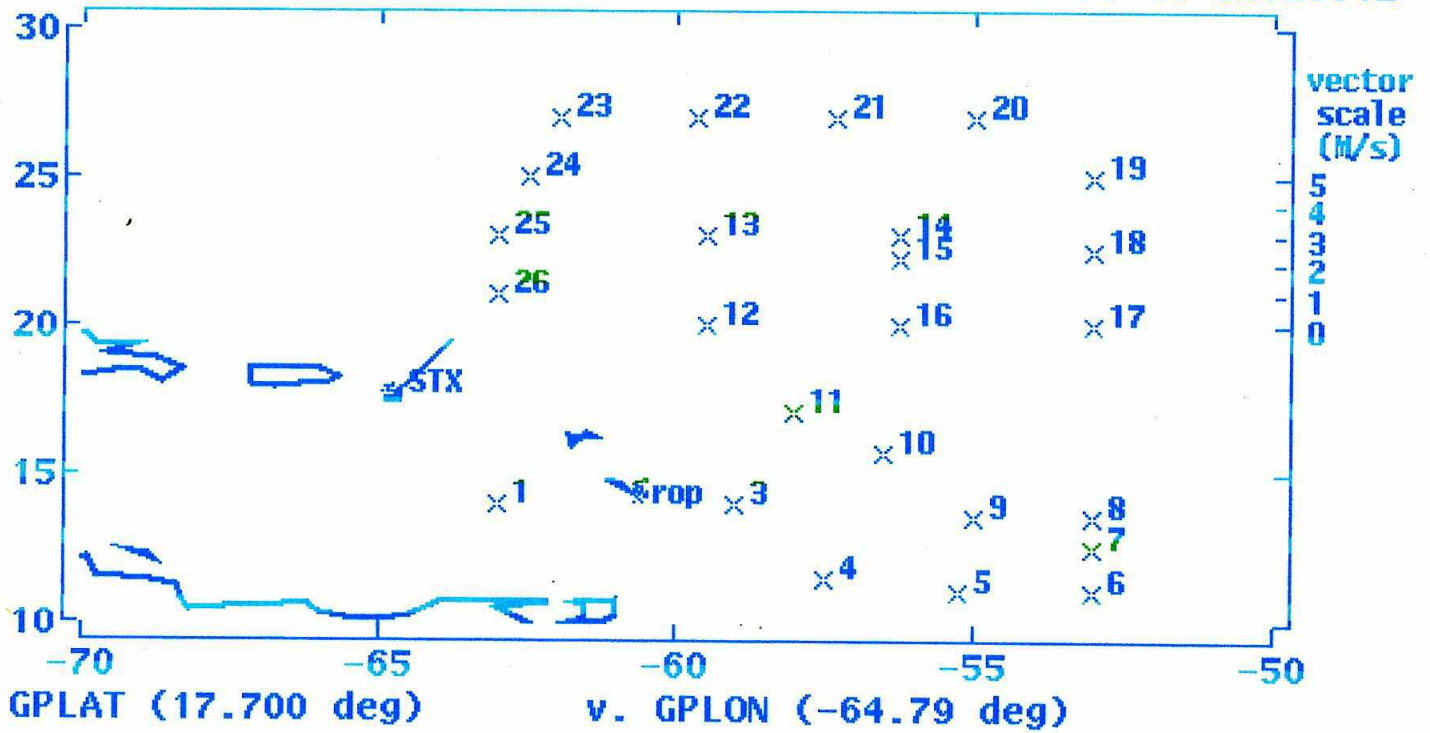
0038 - 0041

~~skipped~~ skip

03

'JCPB1' (winds@eider) Proj. 420 Flt 1 Aug-01-98 02:20:12

01:49:59 to 02:20:12



Fixed at 7/15am

more conation over center

15.6 47.0 31/00Z 45KTS

290/11

17.5

320 56w
Jet to Miami

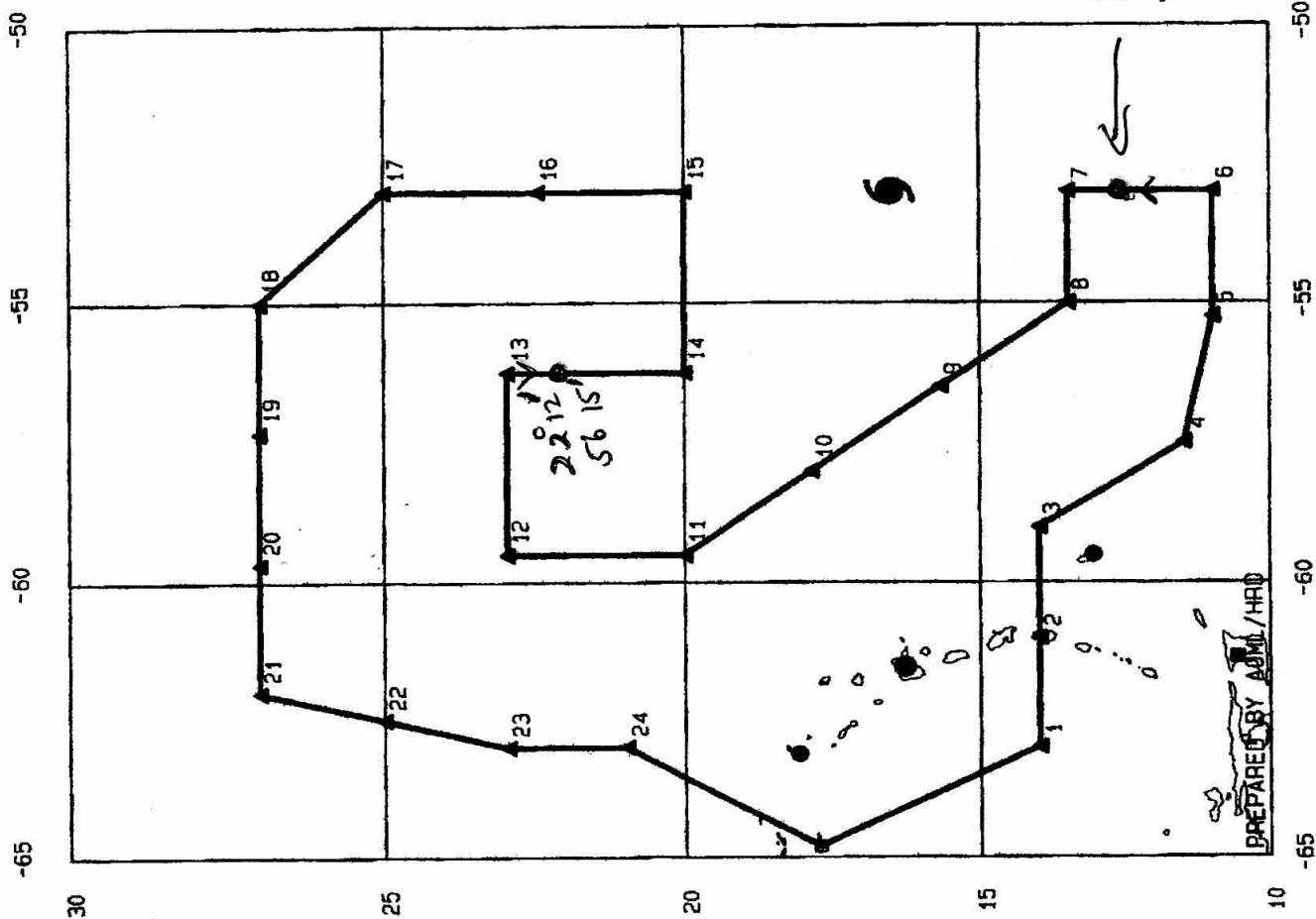
FLIGHT TRACKS ALEX

980731np.ftk

RAWINSONDES 9806

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

▲ DROP LOCATIONS



N49RF Hurricane 98 AVAPS DropSonde Log

N49RF Project: Alex Synoptic Flow Flight ID: 980731N

Mission: 0101A Flight #: Alex 1 System Status: ✓

Drop #	Sonde Serial Number	Time (Z)	Chn #	Press. offset	Winds time	Operator Init.	Comments Drop Status	GOOD <input checked="" type="checkbox"/>
1	972340089	1814	1	-0.6	47	JAS		✓
2	638232404	1829	2	-0.3	60	JAS		✓
3	974510110	1843	1	0.3	30	JAS		✓
4	971520027	1906	1	0.2	52	JAS		✓
5	385400822	1925	2	-0.9	-	JAS	NO WINDS - CH#2 FAILED	NO
6	973730048	1926	1	-0.3	24	JAS	Back-up	✓
7	973410069	1945	1	-0.2	56	JAS		✓
8	632232106	1955	3	-0.7	17	JAS	poor telem	✓
9	972440060	2004	1	-0.4	26	JAS	SLOW TEMP RESPONSE	✓
10	972340086	2018	3	0	-	ASG	FAST FALL	NO
11	972440074	2022	1	-0.5	-	ASG	NO WINDS	NO
12	972340055	2025	4	-2.8	20	ASG		✓
13	981810051	2037	1	+1.0	48	ASG		✓
14	972010086	2056	1	-1.6	46	ASG		✓
15	972340006	2117	1	+0.4	35	ASG		✓
16	973250023	2142	1	-0.5	38	ASG		✓
17	973410199	2206	1	+0.2	24	ASG	BAD TEMP	NO
18	972340085	2211	3	+2.1	41	ASG	SLOW TEMP RESPONSE	✓
19	971520005	2231	1	-0.3	18	ASG		✓
20	981040001	2255	1	+0.5	22	ASG		✓
21	974510108	2315	1	+0.2	37	ASG	ACFT DATA - MANUAL ENTRY	✓
22	973250057	2334	1	-1.2	97	ASG	DATA 1 mBAR HIGH NO TEMP, INT WINDS	NO
23	981820030	2336	3	0.0	81	ASG		✓
24	973250106	2356	1	0	36	CP		✓
25	981040002	0012	3	+0.7	28	CP		✓
26	974510109	0029	1	+0.3	30	CP		✓
27	973840074	0047	3	+0.4	45	CP		✓
28	964910074	0102	1	-2.9	58	CP		✓
29	973410140	0119	3	+0.2	47	CP		✓
30	972340060	0136	1	+0.4	200	CP	Late winds 200	NO
31	971750016	0138	4	+1	15	CP		✓
32	**						Removed S/N R04304 m/w #2	
33	**						Replaced w/SN T09516 #2	

Drop #	Sonde Serial Number	Time (Z)	Chn #	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: _____ Project No 420 Flight No. 1 Flight ID: 98 073 1N

SED Crew: Goldstein, Smith, Hornbrot Mission: 0101A

Pre-Flight: 1639 Z Take-Off: 17 Z Landing: 0217 Z

SYSTEM		Pre-Flight Check		In-Flight	Post-Flight	
N A V	IRS #1	<i>chk</i>				
	IRS #2	<i>chk</i>				
	IRS #3	<i>chk</i>				
	GPS Honeywell #1	<i>chk</i>				
	GPS Honeywell #2	<i>chk</i>				
	GPS Collins	<i>chk</i>				
Nose Radar -Collins						Off? <input type="checkbox"/>
		Time	Temp °C		Time	Temp °C
T E M P	Temp #1	<u>1654</u>	<u>33.9</u>			
	Temp #2		<u>32.1</u>			
	Temp #3		<u>33.3</u>			
	Temp #4		<u>31.3</u>			
	DP Left	↓	<u>22.9</u>		Cal. Time: <u>N/A</u>	
	DP Right	↓	<u>23.2</u>		Cal. Time: <u>N/A</u>	
P R E S S	Attack Angle (ADCAOA)	<i>chk</i>				
	Slip Angle (BP/DBP)	<i>chk</i>				
	Differential (PQ1/PQ2)	<i>chk</i>				
	Absolute (PS1/PS2)	<i>chk</i>				
	Check Radome Press. Lines <input type="checkbox"/>	<u>N/A</u>				
S Y S T E M	DOWN PRT-5 ⇒ Open? <input checked="" type="checkbox"/>	<i>chk</i>				Closed? <input type="checkbox"/>
	MADS (WINDS/DISCWIN)	<i>chk</i>				# DATs: <u>2</u>
	MADS Printer ⇒ Paper? <input checked="" type="checkbox"/>	<i>chk</i>				Printer Pwr off? <input type="checkbox"/>
	MADS Cal. Date: <u>7/30/98</u>	QC time: <u>1651</u>				QC time: <u>0218</u>
	WINDS ⇒ NET BCAST <input checked="" type="checkbox"/>	<i>chk</i>				
	HAPS System / Time set? <input type="checkbox"/>					# Msg.: <u>26</u> # Attempts: <u>51</u>
S Y S T E M	AVAPS System / Time set? <input checked="" type="checkbox"/>	<u>SS</u>				
	AVAPS Printer ⇒ Paper? <input checked="" type="checkbox"/>	<i>chk</i>				
	Exterior Walk Around	<u>AG</u>				
	Inspect DropSonde Chute Bolts	<u>SS</u>				
M I S S I O N	Satcom (Flight Phone)	<i>chk</i>				Off CB? <input type="checkbox"/>
	Call COMSAT? <input checked="" type="checkbox"/> (*292#)	<i>chk</i>				
	FCU/UPS/CB	CB's Checked? <input checked="" type="checkbox"/>	<i>chk</i>			UPS off? <input type="checkbox"/>
	AVAPS Sondes	# On Board: <u>109</u>		# Dropped: <u>35</u>		# Good: <u>25</u>
	AXBT	# On Board: <u>N/A</u>		# Dropped: <u>-</u>		# Good: <u>-</u>
	APN-232	<i>chk</i>				
	Modem Power On? <input checked="" type="checkbox"/>	<i>chk</i>				

1	DAT Tape #1	<u>980731N</u>	On: <u>1724</u>	Off: <u>2308</u>
2	DAT Tape #2		On: <u>2315</u>	Off: <u>0220</u>

Comments:
