

FLT ID: I970905	FM: KMCF	TO: TXKF
FLT NO: 97-029	BLK IN: 0318Z	ATA: 1559Z / 0307Z
ETD: 1500Z	BLK OUT: 1456Z 1732Z	ATD: 1509Z / 1740Z
ETE:	BLK TIME:	FLT TIME: 150 / 9:27
SPONSOR ORG: HRD	PROGRAM: HURRICANE RESEARCH	PURPOSE: DROPSONDE FOR ERIKA

DAO PERSONNEL

AC KENNEDY KENNEDY	SYS ENG LYNCH
CP KENUL	DATA SYS
NAV STRONG	RADAR BARR
FE WADE / MOORE	BT/ODW SMITH
RADIO SANS SOUCI	CLD PHYS CARPENTER
FD DAMIANO	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/DAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
31 McFADDEN ✓	??	AO C
CLOSSER	MECH	AO C
ABERSON ✓		HRD
BLACK, P /		
FEVER ✓		
LEIGHTON ✓		
MARKS ✓		
47 DUNION ✓		

REMO 15 45
 PROPOSED/ACTUAL MISSION/REMARKS (RECCO, FIXES, STORM, PENET, NHOP #) 9:30 am
 STOPPED AT OPF TO PICK UP HRD FOLKS. no work
 ERIKA UPGRADED AT 1100AM (1500Z) TO HURRICANE R0, A
 T/O DELAYED DUE TO FUELING NEEDS (2 fuel trucks)

1751 RWT

0247 time glitch

203650 2037 BAL DWI
 2102Z
 2206Z 0001Z

NO MESSAGE FOR
 DROP II (HAPS on AVAS
 PROBLEM)

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

FLT ID: I970905 TIME OFF: 1509Z/1740Z TIME ON: 1559Z/0307Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1015.1	30.01/29.98	1016.3	29.98/30.03

NO

DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES

FAST FLT LVL TAPES

RADAR TAPES

DOPPLER TAPES

ODW CASSETTES

HARD COPIES

PMS

AXBT

AXCP

ODW GPS

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

H. ERIKA

Flight #01 1970905 (Dropsonde mission)

<u>DATA TYPE</u>	<u>SENSOR or OPTION</u>
INE	1
Accelerometer	1
Temperature Probe	1
Altitude (for vertical wind)	RA159
Static Pressure	Fuselage
Dynamic Pressure	Fuselage
Dewpoint Probe	2

Notes:

There was one data gap from 023921Z - 025020Z.

Fuselage static pressure, PSF, had dropouts during the following time periods:

1843Z - 1845Z
1917Z - 1919Z
1930Z - 1932Z
2133Z - 2135Z
0003Z - 0005Z
0126Z - 0128Z
0133Z - 0135Z
0301Z - 0303Z

These dropouts were removed and patched over.

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

Aircraft inertial positions were re-navigated with respect to GPS. From 2100Z until the end of the flight, the inertial groundspeeds in the x and y directions had oscillating differences of between one and 2 m/s with respect to GPS groundspeeds.

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

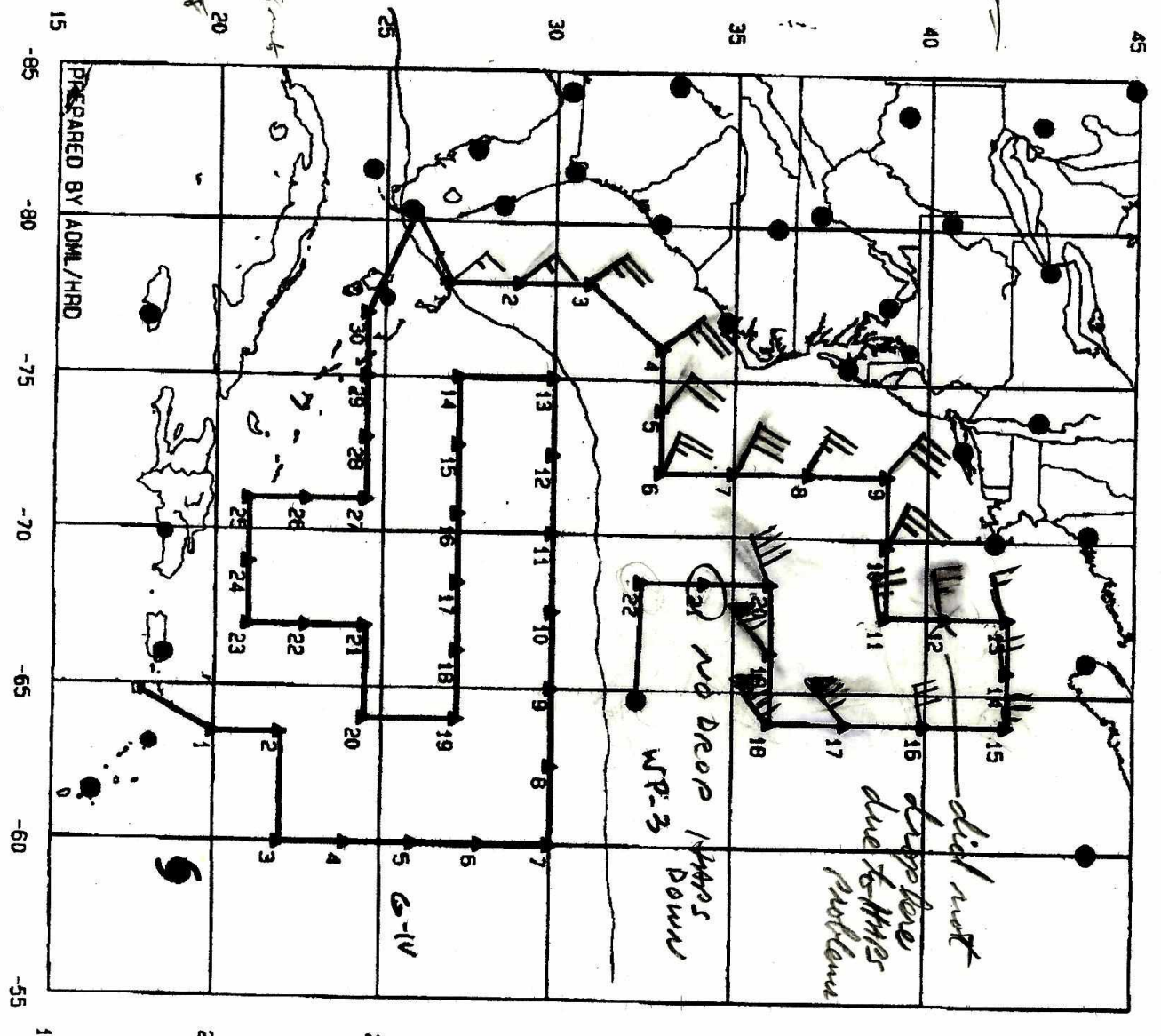
	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1013.5mb	1016.0mb
Corrected tower pressure	1015.2mb	1016.9mb

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

TIME	LAT	LONG	TRK	HD	WD	WS	TA	TD	PA	GA	SP	PS			
151400	2747	8226	180	179	20	15	15.4	9.1	1949	2042	1012.9	795.3	ABV	CLD	66.2
153500	2643	8152	155	156	302	10	4.1	-10.7	3942	4169	1013.5	621.0	BTN	CLD	73.2
174800	2601	7946	57	59	132	3	15.5	11.6	1827	1928	1014.2	812.2		CLD	76.3
180600	2638	7842	58	57	354	9	-4.4	-11.2	5380	695	—	512.1	THN	CLD	60.7
181530	2202	7802	2	2	327	17	-6.7	-13.3	5604	5923	—	497.8		DEOP	70.5
182400	2839	7800	1	0	329	16	-6.4	-22.3	5603	5915	—	498.1		CLR	71.3
184141	2900	7800	0	0	334	17	-6.7	-22.0	5603	5914	—	498.1		DROP	72.4
185900	3017	7800	0	359	331	23	-7.7	-21.5	5600	5902	—	498.3		CLR	74.5
190840	3100	7758	31	27	324	27	-8.1	-21.1	5599	5898	—	498.3		DROP	72.0
193000	3212	7648	40	36	343	33	-10.0	-19.3	5820	6110	—	483.5		CLR	72.7
194359	3259	7559	90	89	326	26	-11.3	-18.7	5821	6100	—	483.6		DROP	72.4
200405	3259	7400	90	90	299	21	-12.4	-17.4	5819	6083	—	483.4		DROP	
202000	3258	7224	90	89	291	26	-18.0	-13.5	6435	6712	—	444.4		CLR	68.9
202427	3301	7200	358	354	284	25	-17.9	-32.0	6435	6713	—	444.3		DROP	65.1
204000	3414	7200	0	355	280	30	-16.8	-30.6	6434	6688	—	444.4		CLR	69.8
204941	3500	7200	0	355	290	33	-19.1	-31.4	6432	6670	—	444.5		DROP	68.9
210000	3546	7200	0	354	284	34	-24.7	-32.8	6978	7246	—	410.5		CLR	67.3
211543	3700	7200	7	4	300	26	-25.3	-36.5	7043	7278	—	408.1		DROP	69.5
212900	3800	7200	0	357	314	32	-25.3	-36.2	7044	7265	—	408.1		CLR	69.6
213800	3840	7200	0	358	316	29	-26.2	-36.8	7043	7260	—	408.1		CLR	70.7
214306	3900	7154	92	89	319	32	-26.1	-36.8	7044	7254	—	408.1		DROP	68.2
220000	3900	7000	90	90	287	25	-27.3	-39.9	7042	7242	—	408.2		CLR	69.3
220222	3900	6945	91	90	282	26	-27.4	-40.0	7043	7242	—	408.1		DROP	70.7
222249	3904	6729	356	353	259	26	-25.9	-39.5	7043	7240	—	408.2		DROP	66.8
225500	4143	6730	0	359	263	14	-32.5	-43.0	7656	7827	—	374.0		CLR	69.1
225858	4200	6724	87	89	260	14	-32.7	-43.5	7658	7825	—	374.1		DROP	66.7
230800	4200	6221	89	90	260	14	-34.9	-44.7	7906	8074	—	360.4		CLR	68.2
231258	4200	6545	89	91	257	18	-35.2	-45.9	7954	8125	—	358.4		DROP	71.1
232300	4200	6431	89	92	255	22	-34.8	-46.5	7952	8126	—	358.4		CLR	66.7
232745	4156	6402	172	178	266	26	-34.6	-46.7	7954	8131	—	358.4		DROP	67.4
234900	4011	6400	180	188	255	35	-32.6	-45.3	7954	8165	—	358.4		—	66.4
235111	4000	6400	160	188	259	34	-33.1	-45.2	7952		—	358.4	BAD	DROP	—
235155	3956	6400	179	186	255	32	-32.9	-45.2	7953	8173	—	358.4		DROP	67.2
000915	3833	6400	179	189	231	58	-28.2	-42.2	7952	8201	—	358.4	PICTURE JET	SRM	66.2
001635	3800	6400	179	189	233	64	-27.4	-44.3	7951	8205	—	358.5		DROP	72.6
003700	3633	6400	179	193	231	90	-24.2	-37.6	7951	8261	—	358.6		—	63.6
004559	3559	6404	275	266	231	80	-22.5	-36.6	7949	8289	—	358.7		DROP	69.6
010400	3600	6535	264	261	234	87	-25.8	-37.4	7951	8249	—	358.6		—	74.2
011138	3600	6514	270	264	238	72	-27.3	-38.9	7951	8233	—	358.6		DROP	72.7
012800	3600	6746	270	267	245	46	-31.2	-42.1	7950	8218	—	358.6		—	71.3
013300	3600	6814	271	270	253	42	-31.6	-42.7	7951	8215	—	358.5		—	72.2
013614	3557	6830	182	189	252	40	-31.8	-43.1	7951	8218	—	358.6		DROP	70.1
020500	3337	6830	181	193	238	73	-26.1	-40.2	7952	8287	—	358.5		—	69.8
021500	3254	6830	179	192	238	71	-23.3	-38.0	7951	8323	—	358.5		—	67.8
022119	3225	6828	158	171	235	69	-22.7	-36.9	7951	8339	—	358.6		DROP	70.3
023200	3202	6741	77	83	227	56	-23.7	-32.0	7951	8364	—	358.6		—	72.3

42 65 180
 41 64 260
 320/33
 -85 -80 -75 -70 -65 -60 -55

60
 .25
 1.7
 1.5



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HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN

Prepared by the Hurricane Research Division at 10:15:54 AM on 09/04/97.
 File: /users/james/field_prm/flight_tracks/970905ip.ftk

Aircraft: N43RF Proposed takeoff: 05/1730Z

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DROP LOCATIONS

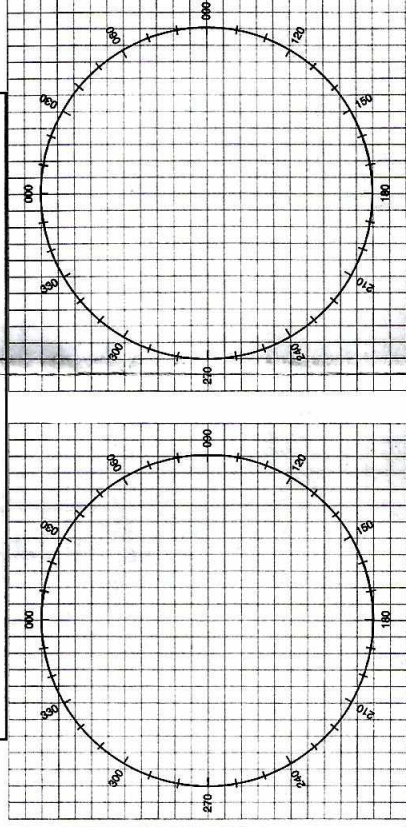
=====

#	LAT	LON	TIME
1	27 00	78 00 ✓	0:29
2	29 00	78 00 ✓	0:54
3	31 00	78 00 ✓	1:18
4	33 00	76 00 ✓	1:51
5	33 00	74 00 ✓	2:12
6	33 00	72 00 ✓	2:33
7	35 00	72 00 ✓	2:58
8	37 00	72 00 ✓	3:22
9	39 00	72 00 ✓	3:47
10	39 00	69 45 ✓	4:09
11	39 00	67 30 ✓	4:31
12	40 30	67 30 ⊗	4:49
13	42 00	67 30 ✓	5:08
14	42 00	65 45 .75 ✓	5:24
15	42 00	64 00 ✓	5:40
16	40 00	64 00 ✓	6:05
17	38 00	64 00 ✓	6:30
18	36 00	64 00 ✓	6:55
19	36 00	66 15 .25 ✓	7:17
20	36 00	68 30 ✓	7:40
21	34 15 .25	68 30	8:02
22	32 30	68 30	8:23

*did not drop
 due to HAPS problems*

[illegible]

POSITION REPORT

[illegible]

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 _____

- AT _____ KTS TRUE/INDICATED

- FLIGHT LEVEL OR ALTITUDE _____

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

**-NATURE OF EMERGEN-
ASSISTANCE DESIRED**

- ASSISTANCE DESIR
- PILOT INTENTIONS

- FIRST INTENTIONS
- WE HAVE

[illegible]

OUT 1457 1733
OFF 1508 1739
DN 1559 0306
IN 1605 0318

MISSION PREFLIGHT LOG										NAVIGATOR		AIRCRAFT COMMANDER			FLIGHT DIRECTOR		SCHEDULED / ACTUAL TAKEOFF Z		DATE OF TAKEOFF																	
DESTINATION		MISSION		RTE		MH		VAR		TH		DR		TRK		GS		WD		WS		ALT		TAS		LEG / TOT DIST		LEG / TOT TIME		PROP ETA		ATA		REMARKS		
OFF / TAKE		ERICA						+E=>				+R=>																								
LAT / LON																																				
26-21.2															067																					
26-06.6																																				
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26-41.9																																				
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INS PERFORMANCE		
BEGIN ALIGN TIME	INS 1	INS 2
	1315	1315
ALIGN STATUS (0-5)	0	0
END NAV TIME	208	0320
START NAV TIME	1445	1445
DELTA T	1235	1235

TERMINAL ERRORS		
DELTA LAT	INS 1	INS 2
	-13.7	+2.3
DELTA LON	+17.2	-3.8
RCS	4	5
RADIAL ERROR	—	—

REMARKS	
INS 1 marked	
up 39N	
1265	