

FLT ID: <i>N991020</i>	FM: <i>TXKF</i>	TO: <i>TXKF</i>
FLT NO: <i>00-08</i>	BLK IN: <i>0125Z</i>	ATA: <i>0116Z</i>
ETD: <i>1730Z</i>	BLK OUT: <i>1733Z</i>	ATD: <i>1740Z</i>
ETE:	BLK TIME: <i>7:52</i>	FLT TIME: <i>7:36</i>
SPONSOR ORG: <i>NHC</i>	PROGRAM: <i>HURR. SURV.</i>	PURPOSE: <i>H. JOSE</i>

DAO PERSONNEL

AC <i>MAXSON</i>	SYS ENG <i>GOLDSTEIN</i>
CP <i>YATES/McCANN</i>	DATA SYS <i>LINO</i>
NAV	RADAR
FE <i>KITSON</i>	BT/ODW <i>HALL</i>
RADIO	CLD PHYS
FD <i>DAMIANO</i>	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/DAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
<i>KAPLAN</i>	<i>HAPS</i>	<i>HRD</i>
<i>DORST</i>	<i>HAPS</i>	<i>HRD</i>
<i>McNERNEY</i>	<i>OBS</i>	<i>A/C</i>

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

TT3 bad right after T/O. 1841Z Lgt TURB ABV station deck.
good at 1750Z
213920
ABeam CB
TEAL 13 left area at 2105Z due to #1 engine shutdown

U.S. DEPT. COMM./NOAA/ORA - DATA SECTION WORK FORM NO.2 OROWFZ FILE

FLT ID: *N991020* TIME OFF: *1740Z* TIME ON: *0116Z*

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	<i>1020.3</i>	<i>30.146</i>	<i>1019.5</i>	<i>30.14</i>

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES

1

FAST FLT LVL TAPES

RADAR TAPES

DOPPLER TAPES

ODW CASSETTES

HARD COPIES

AXBT

AXCP

ODW

GPS

23

21 good; XMIT 23

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

N991020

m/s

TIME	LAT	LOU	TRK	HD	WD	WS	TA	TD	PA	GA	PS	②	Drop	P
181603	2830	6400	177	176	183	9	-60.0	-67.0	12567	13081	175.6	②	DROP	89.2
182900	2655	6400	180	179	158	8	-59.1	-68.1	12562	13083	175.7	ABV	CLD	87.0
183638	2600	6400	180	180	189	7	-59.7	-68.6	12562	13089	175.7	②	DROP	87.9
185100	2417	6400	180	180	193	12	-59.6	-69.3	12578	13103	175.3	ABV	CLD	89.2
185749	2336	6400	186	189	215	17	-60.0	-69.4	12551	13096	176.0	②	DROP	87.1
192003	2100	6424	130	131	198	9	-60.3	-69.6	12550	13108	176.1	③	DROP	88.6
192220	2053	6408	109	111	205	11	-61.0	-69.6	12545	13109	176.3	③	DROP	89.1
193136	2030	6300	110	111	185	10	-60.2	-71.9	12548	13129	176.1	③	DROP	90.7
194354	1954	6135	120	121	135	14	-60.1	-64.4	12554	13139	176.0	③	DROP	88.1
200630	1730	6030	157	158	163	12	-59.7	-60.9	12558	13123	175.9	③	DROP	88.4
201100	1700	6021	165	165	210	13	-59.4	-60.5	12559	13117	175.8	IN	CLD	88.3
202600	1525	6107	222	222	220	8	-59.6	-60.8	12553	13157	176.0	IN	CLD	88.0
203038	1500	6131	238	239	244	6	-59.4	-60.5	12552	13158	176.0	③	DROP	88.4
203700	1442	6215	248	247	191	2	-64.8	-65.1	13136	13753	159.6	IN	CLD	80.1
205214	1402	6401	274	274	254	6	-65.3	-66.7	13136	13731	159.6	③	DROP	80.7
211424	1502	6629	320	317	243	14	-65.0	-70.3	13136	13726	159.6	③	DROP	81.2
212600	1622	6657	342	338	246	17	-65.0	-71.7	13135	13722	159.6	IN	CLD	80.9
213125	1700	6710	342	337	240	22	-65.8	-71.8	13134	13734	159.7	③	DROP	80.5
214400	1829	6740	343	337	238	23	-66.0	-71.8	13134	13713	159.6	IN	CLD	80.4
214821	1900	6750	343	338	236	23	-65.8	-71.6	13138	13700	159.6	③	DROP	80.2
220512	2058	6835	289	282	227	26	-66.1	-71.3	13137	13674	159.6	③	DROP	78.7
222100	2105	7027	327	327	227	20	-66.5	-71.2	13139	13670	159.5	③	DROP	81.8
223827	2315	7030	0	0	350	2	-64.6	-71.0	13130	13682	159.8	Now	DROP	80.5
223958	2327	7030	0	0	82	17	-64.9	-71.5	13423	13994	157.5	③	DROP	75.8
225725	2529	7021	74	75	80	9	-67.0	-74.1	13707	14267	144.8	③	DROP	71.1
231147	2525	6833	146	148	148	9	-67.2	-74.9	13713	14269	144.7	③	DROP	74.1
233029	2317	6824	123	122	117	6	-68.2	-75.9	13712	14273	144.8	③	DROP	75.0
234453	2315	6630	90	96	195	22	-68.5	-75.3	13716	14275	144.7	③	DROP	72.4
235800	2451	6625	355	352	230	15	-67.6	-74.9	13710	14279	144.8	③	DROP	72.5
000621	2553	6630	358	357	275	5	-67.7	-75.2	13709	14281	144.8	③	DROP	73.0
002758	2830	6629	13	14	70	2	-67.8	-76.2	13708	14283	144.8	③	DROP	72.7

G4 Hurricane Surveillance

N991020 H. Jose (East of Lesser Antilles)

<u>DATA TYPE</u>	<u>SENSOR or OPTION</u>
INE	VEW_PITR, VNS_PITR
Accelerometer	ACINS_PITR
Temperature Probe	AT2
Altitude (for vertical wind)	PALT
Static Pressure	PS1M
Dynamic Pressure	QC1M
Dewpoint Probe	DPLC

Notes:

There were no time gaps.

There were several times during the flight that both dewpoint sensor values were warmer than ambient temperature.

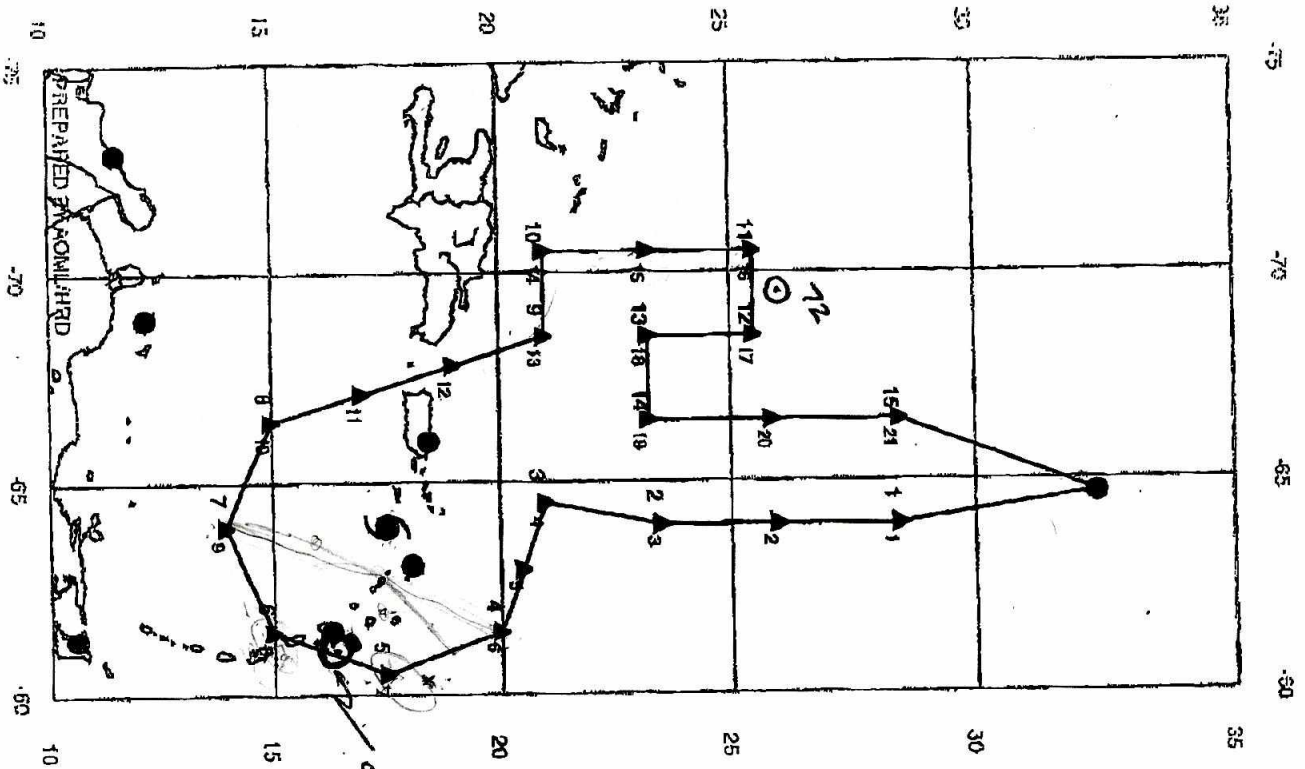
No dynamic corrections were applied to the measured static and dynamic pressures. Thus wind direction and wind speed may not be representative of actual flight level conditions.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1020.3mb	1019.4mb
Corrected tower pressure	1020.7mb	1020.0mb

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

FAX NO. : 3053614402

Oct. 19 1999 06:37PM P2



FLIGHT TRACKS
JOSE/SYNOPSIS

991020n14k

RAWINSONDES 9909

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

TEAL 34

AF

1512Z

7:30

170°

984

61°35'

TEAL 13

21Z
03Z

FAX NO. : 3053614402

Oct. 19 1999 06:38PM P4

===== HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: JOSE/SYNOPTIC =====

Prepared by the Hurricane Research Division at 06:27:14 PM on 10/19/99.
File: 991020npl.ftk

Aircraft: N49RF Altitude: FL410-450 Proposed takeoff: 20/1730Z
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DROP LOCATIONS

#	LAT (d m)	LON (d m)	RAD/AZM (nm/dg)	TIME (h:mm)
1	28 30	64 00		0:42
2	26 00	64 00		1:02
3	23 30	64 00		1:23
4	21 00	64 30		1:43
5	20 30	63 00		1:56
6	20 00	61 30		2:08
7	19 30	60 20		2:30
8	15 00	61 30		2:51
9	14 00	64 00		3:13
10	15 00	66 30		3:34
11	17 00	67 10		3:51
12	19 00	67 50		4:08
13	21 00	68 30		4:26
14	21 00	70 30		4:41
15	23 15	70 30		4:59
16	25 30	70 30		5:17
17	25 30	68 30		5:32
18	23 15	68 30		5:51
19	23 15	66 30		6:06
20	25 30	66 30		6:27
21	28 30	66 30		6:48

OB 1 out 1840Z
OB 2 out 1807Z

18Z 17.6 62.0
00Z 18.8 63.8

Forecast

1512Z
1700Z
6135
984

1715Z 060/12
TXKF VIS 9
1000 BKN

3 out 25
21
30.16

(3)

HF 1700Z
17°14' 987 92
61°55' 111 KTS

800 BKN 4000

7+ 080/12 30.14

17 1000 BKN 4000 OVC

TEMP 7000 7+ 060/10 615
3 RW-

0125 (2)

2100Z
17°23'
62°21' 52 KTS
980

1700
0625Z
NE

2155Z
070/12
9+
800

1200 BKN
23 30.13
22

2355Z
090/8
150 BKN
080/05
23 9 L-
22 800
30.14 1400 OVC

2345Z
17°37'
62°40'
48 KTS
990 MB

23

12
20/21Z 17.5 62.4
21/06Z 18.3 63.6
21/18Z 19.5 65.2
22/06Z 21.5 66.5
22/18Z 23.5 67.0
23/18Z 31.5 66.5
24 2 good

18Z
85 KTS

95 KTS

FAX NO. : 3053614402

Oct. 19 1999 06:37PM P3

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HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: JOSE/SYNOPTIC

Prepared by the Hurricane Research Division at 06:27:14 PM on 10/19/99.
 File: 991020np1.ftk

Aircraft: N49RF Altitude: FL410-450 Proposed takeoff: 20/1730Z

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TRACK DISTANCE TABLE

#	LAT (d m)	LON (d/m)	RAD/AZM (nm/dg)	LEG (nm)	TOTAL (nm)	TIME (h:mm)
0	BERMUDA			0.	0.	0:00
1	28 30	64 00		235.	235.	0:42
2	23 30	64 00		301.	535.	1:23
3	21 00	64 30		153.	688.	1:43
4	20 00	61 30		179.	867.	2:08
5	17 30	60 30		161.	1028.	2:30
6	15 00	61 30		161.	1189.	2:51
7	14 00	64 00		157.	1346.	3:13
8	15 00	66 30		157.	1504.	3:34
9	21 00	68 30		378.	1882.	4:26
10	21 00	70 30		112.	1994.	4:41
11	25 30	70 30		270.	2265.	5:17
12	25 30	68 30		109.	2373.	5:32
13	23 15	68 30		135.	2509.	5:51
14	23 15	66 30		110.	2619.	6:06
15	28 30	66 30		316.	2935.	6:48
16	BERMUDA			250.	3185.	7:32

NOAA/AOC/SED N49RF Flight Performance log

N49RF Project: Arr 99 Project No. 430 Flight No. 25 Flight ID: 991020N
 SED Crew: Goldstein, Hall, Lino Mission: Jose 2
 Pre-Flight: 1520 Z Take-Off: 1740 Z Landing: 0116 Z

SYSTEM				Pre-Flight Check	In-Flight	Post-Flight Check	
N A V	IRS #1			✓ ASG			
	IRS #2			✓ ASG			
	IRS #3			✓ ASG			
	GPS Honeywell #1			✓ ASG			
	GPS Honeywell #2			✓ ASG			
	GPS Collins			✓ ASG		Off? ☒	
Nose Radar -Collins						Off? ☒	
T E M P		Time	Temp °C			Time	Temp °C
	Temp #1	1638	27.4	✓ ASG		0119	25.9
	Temp #2	1	27.0	✓ ASG		1	26.2
	Temp #3	1	26.5	✓ ASG	①	1	25.3
	Temp #4	1	28.1	✓ ASG		1	27.0
	DP Left	1	20.9	✓ ASG	Cal. Time:	1	21.6
	DP Right	1	21.2	✓ ASG	Cal. Time:	1	22.1
P R E S S	Attack Angle (ADCAOA)			✓ ASG			
	Slip Angle (BPx/DxPx)			✓ ASG			
	Differential (PQ1/PQ2)			✓ ASG			
	Absolute (PS1/PS2)			✓ ASG			
	Check Radome Press. Lines ☐			Date: 9/8/99			
S Y S T E M S	DOWN PRT-5 ⇨ Open? ☐			Not USED		Closed? ☐	
	MADS (WINDS/DISCWIN)			✓ ASG		# DATs: 1	
	MADS Printer ⇨ Paper? ☒			ASG	②	Printer Power off? ☒	
	MADS Cal. Date: 8/26/99			QC time: 1715		QC time: 0117	
	WINDS ⇨ NET BCAST ☒			ASG			
	HAPS System / Time set? ☒			ASG		# Msg: 23 # Fail: 11	
	AVAPS System			✓			
	K2 Printer ⇨ Paper? ☒			ASG		Printer Power off? ☐	
M I S C	Exterior Walk Around ☒			✓			
	Inspect DropSonde Chute Bolts			✓			
	Satcom (Flight Phone) ☒					Off CB? ☐	
	Call COMSAT? ☐ (*292#)						
	FCU/UPS/CB			CB's Checked? ☒ ASG		UPS off? ☒	
	AVAPS Sondes			# On Board: 91	# Dropped: 23	# Good: 21	
	AXBT			# On Board: 0	# Dropped: —	# Good: —	
	APN-232 Altimeter						
	Modem Power On? ☒			ASG			

1	DAT Tape #1	On: 1714	Type: 4am DL 60m	Off: 0119
2	DAT Tape #2	On:	Type:	Off:
Comments: ① TT3 - SEVERE OSCILLATION FROM T.O. → T.O+5 min				
② PAPER HANDLING FAIL AFTER T.O.				

N49RF AVAPS DropSonde Log

N49RF Project: Hurr 99 Flight ID 991020N

Mission: Jose 2 Flight #: 25 System Status: OK

Drop #	Sonde Serial Number	Chn. #	Time (Zulu)	Press. offset	Winds time	Operator Initials	Comments / Drop Status/ Failure Reason	GOOD ✓/B
1	990 235 012	1/5	1816	0.5	20	P		✓
2	990 838 020	2/5	1836	—	26	P		✓
3	990 845 144	3/5	1857	—	15	P		✓
4	990 415 222	4/5	1920	0.7	63	P	LATE & INTERMITTENT WINDS	B
4	991 435 006	1	1922	0.5	37	P	Back-up	✓
5	990 415 119	2/6	1931	0.6	22	P		✓
6	992 615 052	3/5	1943	0.5	16	P	Winds frequently dropped out	—
7	990 415 095	4/5	2006	0.6	25	P		✓
8	990 415 390	1/5	2030	0.4	18	T		✓
9	992 538 002	1/5	2052	—	23	T		✓
10	991 037 047	1/5	2114	0.4	55	T		✓
11	990 845 176	2/6	2131	0.4	11	T		✓
12	992 645 033	1	2148	0.4	44	T		✓
13								
14								
15	990 415 339	3/5	2205	0.6	15	T		✓
16	992 445 449	4/6	2221	0.8	27	T		✓
17	990 415 384	1/5	2238	0.5	—	ASG	NO WINDS	B
18	992 435 153	2	2239	.4	16	ASG		✓
19	990 415 395	1/5	2257	.4	40	ASG		✓
20	990 148 019	2/6	2311	.9	49	ASG		✓
21	991 515 077	1/5	2330	.3	23	ASG		✓
22	990 845 030	2/6	2344	.3	58	ASG		✓
23	992 615 059	1/5	0006	.7	55	ASG		✓
24	991 845 205	1/5	0028	.4	16	ASG		✓
25								
26								
27								
28								
29								
30								
31								
32								
33								