

LT ID: N991019	FM: TISX	TO: TXKF
FLT NO: 00-07	BLK IN: 0151Z 0151Z	ATA: 0136Z
ETD: 1730Z	BLK OUT: 1721Z	ATD: 1732Z
ETE:	BLK TIME: 8:30	FLT TIME: 8:04
SPONSOR ORG: NHC	PROGRAM: HURR. SURV.	PURPOSE: H. JOSE

0AO PERSONNEL

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

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
KAPLAN ✓	HAPS	NRD
DORST ✓	HAPS	NRD
McNERNEY	OBS	ABC

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

TEAL 35 TEAL 23 TXKF ~~BEARCO~~ BEARCO ATC 1647Z 05/15

DELATED CLMB 32 29.92

TO 41K. 25

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

FLT ID: N991019

TIME OFF: 1732Z

TIME ON: 0136Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1010.0	29.90	1022.3	30.23

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES

FAST FLT LVL TAPES

RADAR TAPES

DOPPLER TAPES

DDW CASSETTES

HARD COPIES

AXBT

AXCP

~~GPS~~ GPS

29. 5 bad; 29 XMIT

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

700MB 246/15

N991019

TIME	LAT	LOU	TRK	HD	WD	WS	TA	TD	PA	GA	PS	CLIMBING	PS
175050	1558	6600	176	177	274	17	-21.8	-43.6	1244	8651	342	(22) DROP	153.6
180719	1400	6400	179	176	138	15	-50.7	-58.0	11372	11898	213.2	(33) DROP	101.9
182440	1258	6355	132	129	76	8	-61.5	-65.0	12574	13105	175.4	(33) DROP	87.9
182722	1149	6337	116	115	81	6	-61.4	-65.7	12571	13112	175.4	(34) DROP	89.7
184211	1100	6200	117	114	49	13	-60.9	-67.6	12568	13112	175.6	(20) DROP	89.1
184900	1038	6115	117	113	47	18	-60.9	-68.6	12568	13114	175.5	RTN CLD	89.7
190032	1000	6000	103	97	36	22	-60.6	-70.5	12563	13117	175.7	(24) DROP	89.3
192549	1005	5702	46	45	27	7	-61.4	-62.4	12557	13113	175.8	(24) DROP	88.7
194500	Line of CBA												
194715	1222	5600	19	13	310	26	-61.2	-50.0	12562	13121	175.9	CB (12) DROP	88.2
195600	1322	5601	349	344	282	17	-61.1	-57.6	12559	13131	175.8	CB	89.3
200040	CBA												
200813	1445	5630	328	324	217	16	-61.3	-57.3	12557	13142	175.8	(22) DROP	90.3
201900	1604	5652	345	342	216	16	-61.6	-60.3	12554	13144	175.8	RTN CLD	89.1
202541	1652	5708	309	302	208	19	-61.8	-59.3	12560	13140	176.0	(23) DROP	89.2
203500	1658	5818	273	268	172	21	-67.2	-64.4	13138	13729	159.5	RTN CLD	86.3
204023	1703	5900	302	301	145	15	-66.9	-65.8	13139	13729	159.5	(28) DROP	82.5
204258	1717	5915	321	319	161	16	-66.8	-66.7	13142	13720	159.5	(28) DROP	80.3
205200	1810	6000	321	317	193	13	-66.6	-66.7	13140	13708	159.5	RTN CLD	80.6
205755	1845	6030	321	317	211	13					159.7	(29) DROP	
211000	1954	6124	317	310	241	25	-67.4	-67.9	13137	13713	159.6	RTN CLD	82.1
211855	2028	6200	290	284	244	28	-67.6	-67.7	13140	13713	159.6	(22) DROP	81.6
212700	2034	6311	270	267	241	23	-67.3	-68.6	13138	13708	159.6	RTN CLD	80.3
213529	2034	6410	272	267	230	28	-67.9	-69.6	13134	13697	159.7	(25) DROP	78.4
215349	2030	6620	270	265	223	23	-67.5	-70.0	13131	13694	159.8	NO W DROP	79.4
215518	2030	6631	270	266	222	20	-67.3	-70.0	13130	13696	159.8	(23) DROP	79.5
221114	2036	6828	330	331	197	7	-66.7	-70.3	13127	13679	159.9	NO W DROP	80.3
221900	2132	6830	0	1	68	5	-68.9	-71.7	13696	14266	145.0	RTN CLD	72.3
223106	2257	6825										(21) DROP	
224524	2300	6641	90	87	55	17	-70.5	-74.0	13702	14270	145.0	(21) DROP	72.7
225954	2300	6453	90	87	34	10	-70.6	-74.6	13707	14270	144.9	(22) DROP	74.0
231408	2300	6304	90	86	3	13	-69.9	-74.7	13708	14269	144.9	(27) DROP	72.6
232747	2306	6117	27	22	267	17	-68.9	-75.5	13705	14244	144.9	(25) DROP	72.7
233934	2432	6115	0	358	261	17	-67.9	-74.8	13703	14235	145.0	(20) DROP	71.1
234736	2528	6122	298	295	209	4	-67.0	-74.5	13702	14241	145.0	(20) DROP	71.9
235000	2530	6140	270	269	145	3	-67.0	-74.5	13703	14251	144.9	(30) DROP	73.4
000425	2530	6338	270	271	12	3	-67.3	-74.7	13706	14267	144.8	(30) DROP	72.9
002146	2537	6555	355	359	34	10	-68.8	-76.1	13712	14282	144.8	NO W DROP	72.9
002315	2547	6552	24	24	16	12	-68.9	-76.1	13710	14286	144.8	(25) DROP	72.1
003945	2730	6500	12	11	15	13	-68.6	-76.0	13711	14290	144.8	(27) DROP	73.3

(24)

N49RF AVAPS DropSonde Log

N49RF Project: HURR JOSE Flight ID 991019N

Mission: Jose Flight #: 24 System Status: OK

Drop #	Sonde Serial Number	Chn. #	Time (Zulu)	Press. offset	Winds time	Operator Initials	Comments / Drop Status/ Failure Reason	GOOD ☒ / B
1	992455 454	1/5	1751	Ø	22	ASG		✓
2	992538 009	2/6	1807	.4	55	ASG		✓
3	992455 470	1/5	1824	.3	134	ASG	LATE WINDS, INTERMITTENT	✓
4	992455 473	2	1827	.3	34	ASG	INTERMITTENT WINDS 1ST 1/3	✓
5	992455 467	1/5	1842	.5	20	ASG		✓
6	992455 448	1/5	1900	.7	24	ASG		✓
7	992538 010	1/5	1925	.4	8	ASG		✓
8	992455 472	1/5	1948	.4	12	ASG	WEAK GPS TELEM	✓
9	992455 471	1/5	2008	.6	32	ASG		✓
10	992455 469	2/6	2026	.9	22	PGH		✓
11	992455 456	1/5	2040	.8	68	PGH	LATE WINDS GPS TEL WK	✓
12	992455 447	3/7	2043	.6	86	PGH	LATE WINDS	✓
13	992455 455	2/6	2058	.6	29	PGH		✓
14	992455 450	1/5	2117	0.7	22	PGH		✓
15	992515 740	2/5	2136	0.6	19	PGH		✓
16	990415 003	1/5	2154	0.6	N/A	PGH	NO WINDS (recorded as drop pt 13)	✓
17	990415 127	2	2155	0.6	53	PGH		✓
18	992455 468	3/5	2211	0.9	82	PGH	LATE WINDS	✓
19	992455 342	1/5	2231	0.4	85	PGH	LATE WINDS	✓
20	990415 253	2/6	2245	0.8	21	DTL		✓
21	992455 452	1/5	2259	0.7	78	DTL	LATE WINDS	✓
22	990415 247	2/6	2314	0.5	97	DTL	LATE WINDS	✓
23	992455 359	1/5	2327	0.6	55	DTL	LOST WINDS	✓
24	984325 548	2	2339	0.9	10	DTL	Back - UP	✓
25	990845 160	1/5	2347	0.4	30	DTL		✓
26	991435 034	2/6	0004	0.5	30	DTL		✓
27	990415 378	1/5	0021	0.6	—	DTL	NO WINDS	✓
28	990415 232	3	0023	1.2	15	DTL	Back up	✓
29	990235 007	1/5	0039	0.5	51		6 SAT REQ FOR WINDS	✓
30								
31								
32								
33								

* CHECK P1 DATA - SONDE OF INTEREST

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HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: JOSE/SYNOPTIC

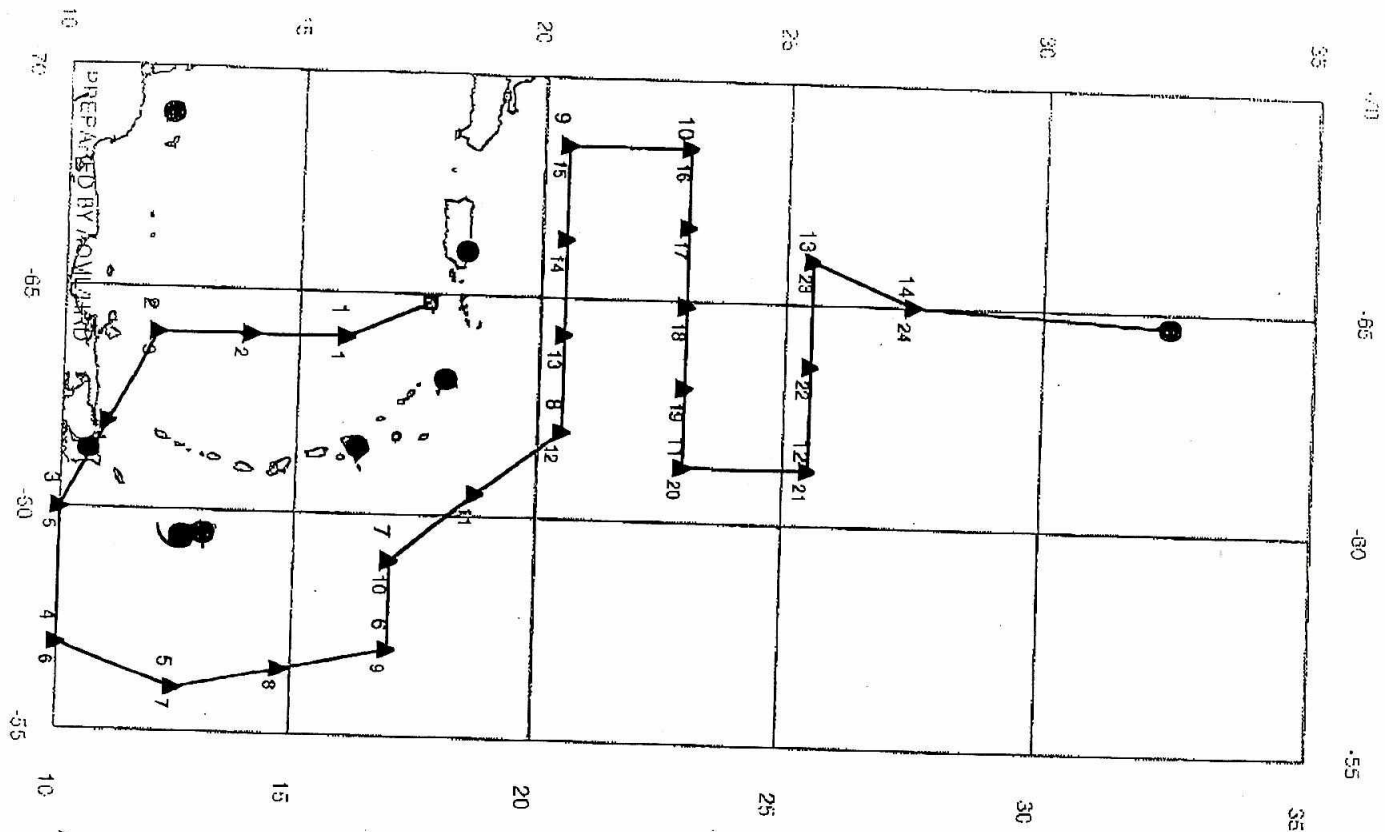
Prepared by the Hurricane Research Division at 11:59:32 AM on 10/18/99.
 File: 991019np1.ftk

Aircraft: N49RF Altitude: FL410-450 Proposed takeoff: 19/1730Z

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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	ST CROIX			0.	0.	0:00
1	16 00	64 00		112.	112.	0:25
2	12 00	64 00		240.	353.	0:58
3	10 00	60 00		265.	617.	1:34
4	10 00	57 00		178.	795.	1:58
5	12 30	56 00		161.	956.	2:20
6	17 00	57 00		277.	1233.	2:57
7	17 00	59 00		115.	1348.	3:13
8	20 30	62 00		271.	1619.	3:50
9	20 30	68 30		366.	1985.	4:39
10	23 00	68 30		150.	2135.	5:00
11	23 00	61 15		401.	2536.	5:54
12	25 30	61 15		150.	2686.	6:15
13	25 30	66 00		258.	2944.	6:50
14	27 30	65 00		132.	3076.	7:08
15	BERMUDA			293.	3368.	7:57



FLIGHT TRACKS JOSE/SYNOPTIC

991019np1.ftk

RAWINSONDES 9909

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

A DROP LOCATIONS

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HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: JOSE/SYNOPTIC

Prepared by the Hurricane Research Division at 11:59:32 AM on 10/18/99.
File: 991019npl.ftk

Aircraft: N49RF Altitude: FL410-450 Proposed takeoff: 19/1730Z

=====

TRACK DISTANCE TABLE

#	LAT (d m)	LON (d/m)	RAD/AZM (nm/dg)	LEG (nm)	TOTAL (nm)	TIME (h:mm)
0	ST CROIX			0.	0.	0:00
1	16 00	64 00		112.	112.	0:25
2	12 00	64 00		240.	353.	0:58
3	10 00	60 00		265.	617.	1:34
4	10 00	57 00		178.	795.	1:58
5	12 30	56 00		161.	956.	2:20
6	17 00	57 00		277.	1233.	2:57
7	17 00	59 00		115.	1348.	3:13
8	20 30	62 00		271.	1619.	3:50
9	20 30	68 30		366.	1985.	4:39
10	23 00	68 30		150.	2135.	5:00
11	23 00	61 15		401.	2536.	5:54
12	25 30	61 15		150.	2686.	6:15
13	25 30	66 00		258.	2944.	6:50
14	27 30	65 00		132.	3076.	7:08
15	BERMUDA			293.	3368.	7:57

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HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: JOSE/SYNOPTIC

Prepared by the Hurricane Research Division at 11:59:32 AM on 10/18/99.
File: 991019npl.ftk

Aircraft: N49RF Altitude: FL410-450 Proposed takeoff: 19/1730Z

=====

DROP LOCATIONS

#	LAT (d m)	LON (d m)	RAD/AZM (nm/dg)	TIME (h:mm)
1	16 00	64 00		0:25
2	14 00	64 00		0:42
3	12 00	64 00		0:58
4	11 00	62 00		1:16
5	10 00	60 00		1:34
6	10 00	57 00		1:58
7	12 30	56 00		2:20
8	14 45	56 30		2:39
9	17 00	57 00		2:57
10	17 00	59 00		3:13
11	18 45	60 30		3:31
12	20 30	62 00		3:50
13	20 30	64 10		4:06
14	20 30	66 20		4:23
15	20 30	68 30		4:39
16	23 00	68 30		5:00
17	23 00	66 41		5:13
18	23 00	64 53		5:27
19	23 00	63 04		5:41
20	23 00	61 15		5:54
21	25 30	61 15		6:15
22	25 30	63 38		6:32
23	25 30	66 00		6:50
24	27 30	65 00		7:08

G4 Hurricane Surveillance

N991019 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	1010.0mb	1022.3mb
Corrected tower pressure	1012.0mb	1023.1mb

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

NOAA/AOC/SED N49RF Flight Performance log

N49RF Project: Hurr 99 Project No. 430 Flight No. 24 Flight ID: 991019N
 SED Crew: Goldstein, Hall, Lino Mission: Jose 1
 Pre-Flight: 1530 Z Take-Off: 1731 Z Landing: 0137 10/20 Z

SYSTEM			Pre-Flight Check	In-Flight	Post-Flight Check	
N A V	IRS #1		☒			
	IRS #2		☒			
	IRS #3		☒			
	GPS Honeywell #1		☒			
	GPS Honeywell #2		☒			
	GPS Collins		☒		Off? ☒	
	Nose Radar -Collins		☒		Off? ☒	
T E M P	Time	Temp °C			Time	Temp °C
	Temp #1	16:51 34.3	☒		0139	23.9
	Temp #2	16:51 38.4	☒			24.0
	Temp #3	16:52 32.8	☒			23.3
	Temp #4	16:52 41.4	☒			24.7
	DP Left	16:53 22.7	☒	Cal. Time:		21.2
	DP Right	16:53 23.8	☒	Cal. Time:		21.7
P R E S S	Attack Angle (ADCAOA)		☒			
	Slip Angle (BPx/DxPx)		☒			
	Differential (PQ1/PQ2)		☒			
	Absolute (PS1/PS2)		☒			
	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)		☒		# DATs: 1	
	MADS Printer ⇒ Paper? ☒		☒		Printer Power off? ☐	
	MADS Cal. Date: 8/26/99		QC time: 17:18		QC time: 01:38	
	WINDS ⇒ NET BCAST ☒		☒			
	HAPS System / Time set? ☒		☒		# Msg: 29 # Fail: 16	
	AVAPS System		☒			
	K2 Printer ⇒ Paper? ☒		☒		Printer Power off? ☐	
	Exterior Walk Around ☒		☒			
	Inspect DropSonde Chute Bolts		☒			
M I S C	Satcom (Flight Phone) ☒		☒		Off CB? ☒	
	Call COMSAT? ☒ (*292#)		☒			
	FCU/UPS/CB		CB's Checked? ☒		UPS off? ☐	
	AVAPS Sondes		# On Board: 120	# Dropped: 29	# Good: 24	
	AXBT		# On Board: 10	# Dropped:	# Good:	
	APN-232 Altimeter		☒			
Modem Power On? ☒		☒				

1	DAT Tape #1	On: 17:17	Type: 4mm DL 60m	Off: 0151
2	DAT Tape #2	On: 17:17	Type: 4	Off:
Comments:				
157 14.5N 58.6W				