

Flt ID: N000930	From: TISX	To: TISX
Flt No.: 00-41	Blk In: 0218Z	ATA: 0213Z
ETD: 1730Z	Blk Out: 1719Z	ATD: 1730Z
ETE:	Blk Time: 8:59	Flt Time: 8:43
Sponsor Org: NHC	Program: HURR. SURV.	Purpose: T.S. JOYCE

AOC Personnel

AC: McCann /	Sys Eng: GOLDSTEIN /
CP: FINKE /	Data Sys: PRADAS-BERGNES ✓
Nav:	Radar:
FE: RITSON / ROTTEVEEL	GPS/BT: SMITH /
Avionics:	Cld Phys:
FD: DAMIANO /	

Participating Scientists/Visitors/AOC

Name (Last, First)	Activity on Aircraft	Affiliation
LANDSEA /	HAPS	HRD
GAMACHE /	HAPS	HRD

Proposed/Actual Mission/Remarks (Recco, Fixes, Storm, PENET, NHOP #) Room 11
 NO monitor shutdown Bal DPT 1809-1812Z
 Coast band along 55.5°W (N/S) 002825 LGT
 N of 9°N 0150Z OVR TCU LGT Below
 DRW 10-15 NM
 S of TISX 0156Z

U.S. Dept. of Commerce/NOAA/Aircraft Operations Center

AOGWF2

Flt ID: *NOU0930* Time Off: *1730z* Time On: *0213z*

	A/C (Take Off)	Wx Stn (Take Off)	A/C (Land)	Wx Stn (Land)
Pressure	1013.0 1012.0	29.96	1013.8	29.99

	Number	Data Disposition/Date/Quality
Slow/Fast Flt Lvl Tapes	1	
Radar Tapes		
Cloud Physics Tapes		
Video Tapes		
AXBT		
AXCP		
AXCTD		
Dropsondes	24	all good; 24 messages sent

Video

	Forward	Left Side	Right Side	Down	Remarks
Time On					
Time Off					
Rate					

Remarks

G4 Hurricane Surveillance

N000930 TS Joyce (East of Trinidad)

<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	DPRC

Notes:

There were no data gaps.

Both dewpoint sensors were balanced between 1807Z - 1812Z. Also both dewpoint values exceeded ambient temperature between 0045Z - 0049Z. This was attributed to being in close proximity to a thunderstorm.

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	1012.0mb	1013.8mb
Corrected tower pressure	1014.0mb	1015.0mb

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

NOAA/AOC/SED N49RF Flight Performance log

N49RF Project: SURV 00 Project No. 6 Flight No. R409 Flight ID: 000930N

SED Crew: Golstein, Smith, Damiano, Parrish, JCPB Mission: Hu Joyce

Pre-Flight: 1630 Z Take-Off: 1730 Z Landing: 0213 Z

SYSTEM		Pre-Flight Check		In-Flight	Post-Flight Check		
N A V	IRS #1	✓ JCPB					
	IRS #2	✓					
	IRS #3	✓					
	GPS Honeywell #1	✓					
	GPS Honeywell #2	✓					
	GPS Collins	✓ ↓			Off? <input checked="" type="checkbox"/>		
	Nose Radar - Collins				Off? <input checked="" type="checkbox"/>		
T E M P		Time	Temp °C			Time	Temp °C
		Temp #1	1652	34.695	✓ JCPB	0215	28.01
		Temp #2		31.445	↓		27.87
		Temp #3		31.731	↓		27.761
		Temp #4		31.027	↓		28.286
		DP Left		23.8		Cal. Time:	24.347
		DP Right	↓	23.4	↓	Cal. Time:	23.604
P R E S S	Attack Angle (ADCAOA)	✓ JCPB					
	Slip Angle (BPx/DxPx)	✓					
	Differential (PQ1/PQ2)	✓					
	Absolute (PS1/PS2)	1013.6 / 1013.4					
	Check Radome Press. Lines <input checked="" type="checkbox"/>	Date: 091500					
S Y S T E M	DOWN PRT-5 ⇒ Open? <input checked="" type="checkbox"/>	Not installed				Closed? <input checked="" type="checkbox"/>	
	MADS (WINDS/DISCWIN)	✓ JCPB				# DATs: 1	
	MADS Printer ⇒ Paper? <input checked="" type="checkbox"/>	✓ JCPB				Printer Power off? <input checked="" type="checkbox"/>	
	MADS Cal. Date: 0608/00	QC time: 1640				QC time:	
	WINDS ⇒ NET BCAST <input checked="" type="checkbox"/>	—					
	HAPS System / Time set? <input checked="" type="checkbox"/>	✓ JCPB				# Msg.: 26 # Fail: 6	
	AVAPS System	✓ JAS					
M I S C	K2 Printer ⇒ Paper? <input checked="" type="checkbox"/>	✓ JCPB				Printer Power off? <input checked="" type="checkbox"/>	
	Exterior Walk Around <input checked="" type="checkbox"/>	✓ JAS/JCPB					
	Inspect DropSonde Chute Bolts	✓ JCPB					
M I S C	Satcom (Flight Phone) <input checked="" type="checkbox"/>	✓ JCPB				Off CB? <input checked="" type="checkbox"/>	
	Call COMSAT? <input checked="" type="checkbox"/> (*292#)	—					
	FCU/UPS/CB	CB's Checked? <input checked="" type="checkbox"/> JCPB				UPS off? <input checked="" type="checkbox"/>	
	AVAPS Sondes	# On Board: 150	# Dropped: 24	# Good: 24			
	AXBT	# On Board: 0	# Dropped: —	# Good: —			
C	APN-232 Altimeter	✓ JCPB					
	Modem Power On? <input checked="" type="checkbox"/>	✓ JCPB					

1	DAT Tape #1	On: 1637	Type: V60	Off: 0225
	Comments: BALANCE Downpoints 1810			

U.S. Dept. of Commerce/NOAA/Aircraft Operations Center

Form 413-50

Time	Lat	Long	Trk	Hdg	Wind Dir	Wind Spd	T _a	T _d	Press. Alt.	Geo. Alt.	Sfc Press.	Press. Sfc	Dyn. Press	Remarks
180050	1937	6721	313	315	23	17	-58.6	-65.8	12060	12545	-	190.0	83.0	DROP (28)
180700	2002	6755	309	312	22	23	-63.5	-65.2	12579	13086	-	175.2	89.0	CLR
182006	2101	6913	308	312	14	22	-62.5	-68.2	12577	13101	-	175.2	90.0	CLR
182712	2133	6956	309	310	346	18	-61.7	-63.1	12578	13107	-	175.3	87.6	DROP (23) CLD
184000	2235	7117	309	309	329	13	-61.3	-63.3	12574	13117	-	175.4	89.7	IN CLD
185320	2333	7225	4	3	345	14	-61.3	-68.9	12570	13115	-	175.5	89.0	DROP (34)
190300	2430	7145	35	30	347	17	-60.9	-67.8	12561	13115	-	175.7	88.3	RTN CLD + TCU
191302	2530	7160	34	31	336	5	-64.2	-67.0	12950	13406	-	168.0	86.7	DROP (25)
192900	2707	6948	34	27	308	23	-66.3	-71.7	13138	13694	-	159.5	80.7	ABV THN CLD
193238	2725	6927	89	87	309	19	-66.7	-71.4	13141	13687	-	159.5	80.5	DROP (1)
194500	2633	6756	125	120	359	12	-65.5	-71.7	13141	13703	-	159.5	80.3	CLR
195256	2558	6704	175	176	341	3	-66.3	-72.0	13141	13693	-	159.5	79.2	DROP (24)
200700	2424	6753	207	205	351	2	-66.8	-76.7	13141	13703	-	159.4	80.7	CLR
201248	2344	6810	161	157	39	3	-66.5	-71.8	13142	13695	-	159.4	80.9	DROP (19)
203955	2135	6529	79	73	42	15	-66.1	-71.8	13134	13671	-	159.6	79.9	DROP (40)
205200	2235	6425	44	43	87	7	-65.0	-72.9	13137	13683	-	159.6	79.8	CLR
210200	2323	6328	110	112	127	17	-64.6	-72.3	13140	13679	-	159.5	80.9	DROP (17)
211500	2210	6236	149	146	135	17	-65.8	-70.9	13139	13676	-	159.6	78.3	CLR
212425	2115	6200	149	144	128	19	-66.2	-71.5	13136	13679	-	159.6	80.6	DROP (23)
214722	1900	6030	147	143	98	11	-70.0	-74.2	13706	14231	-	144.9	73.6	DROP (29)
221018	1645	5900	147	144	92	10	-68.9	-75.6	13707	14226	-	144.9	72.1	DROP (26)
222200	1535	5813	147	146	145	11	-69.4	-75.5	13709	14224	-	144.9	72.0	—
223257	1432	5728	112	112	163	9	-70.3	-76.1	13709	14220	-	144.8	72.1	DROP (20)
225246	1429	5500	111	113	213	13	-70.0	-76.1	13707	14226	-	144.8	72.9	DROP (39)
231006	1314	5315	140	143	231	16	-70.7	-74.5	13704	14217	-	144.8	75.0	DROP (25)
232644	1129	5218	187	190	233	16	-68.0	-73.7	13705	14231	-	144.9	73.1	DROP (43)
234432	945	5316	234	233	219	20	-69.2	-74.7	13708	14236	-	144.8	72.2	DROP (110)
000021	900	5500	260	257	223	19	-69.8	-74.5	13708	14249	-	144.9	73.3	DROP (14)
001211	900	5615	270	265	217	17	-70.2	-74.3	13705	14246	-	144.8	73.1	DROP (47) EXTRA
002305	902	5730	297	294	248	14	-70.9	-74.6	13705	14249	-	144.9	72.3	DROP (59)
003211	948	5815	308	305	230	9	-71.3	-74.7	13701	14245	-	145.0	71.6	DROP (53) EXTRA
004044	1030	5900	307	303	250	8	-71.3	-73.5	13704	14249	-	144.9	73.1	DROP (26)
011047	1230	6200	322	320	257	4	-71.1	-74.1	13706	14258	-	144.9	72.6	DROP (23)
013506	1505	6323	331	330	325	1	-69.9	-74.4	13702	14244	-	145.0	73.2	DROP (14)
014500	1608	6359	331	330	117	1	-70.0	-74.3	13698	14250	-	145.0	72.1	—

HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: JOYCE/SYNOPTIC

NOAA/Hurricane Research Division Saturday, September 30, 2000 7:29:28 AM
Aircraft: N49RF Proposed takeoff: 30/1730Z

DROP LOCATIONS

21 (06Z)
22 out

OB
17
0019Z

OB 1 out 1840Z
2 out 1906Z
4 out 1950Z
5 out 2006Z
6 out 2023
7 out 2040Z
9 out 2132

1808Z 11 out
17° 55'
86° 40'
977 550 mb
82 KTS
98 KTS
2118Z
17° 59'
86° 52'
966 mb
101 kts
SW

#	LAT (d m)	LCN (d m)	RAD/AZM (nm/dg)	TIME (h:mm)
1	19 37	67 21		0:25
2	21 33	69 56		0:55
3	23 30	72 30		1:17
4	25 30	71 00		1:37
5	27 30	69 30		1:57
6	26 00	67 00		2:20
7	23 45	68 15		2:41
8	21 30	65 30		3:09
9	23 30	63 30		3:32
10	21 15	62 00		3:54
11	19 00	60 30		4:16
12	16 45	59 00		4:37
13	14 30	57 30		5:00
14	14 30	55 00		5:20
15	13 15	53 15		5:37
16	11 30	52 15		5:53
17	9 45	53 15		6:10
18	9 00	55 00		6:25
19	9 00	57 30		6:46
20	10 30	59 00		7:03
21	12 30	62 00		7:32
22	15 05	63 23		7:56

(9) 1675'

21Z	10.5	57.3	25
06Z	11.0	59.5	
18Z	11.8	62.2	
06Z	12.5	65.0	
18Z	13.5	67.5	
18Z	15.0	72.0	65 KTS

330°
333°
10.5 57.3
W 16 mph

5 ~~10/15~~
004540Z
TURB

01Z
VTS 10 km
11F
25W 4K
1012

Ø114A JOYCE

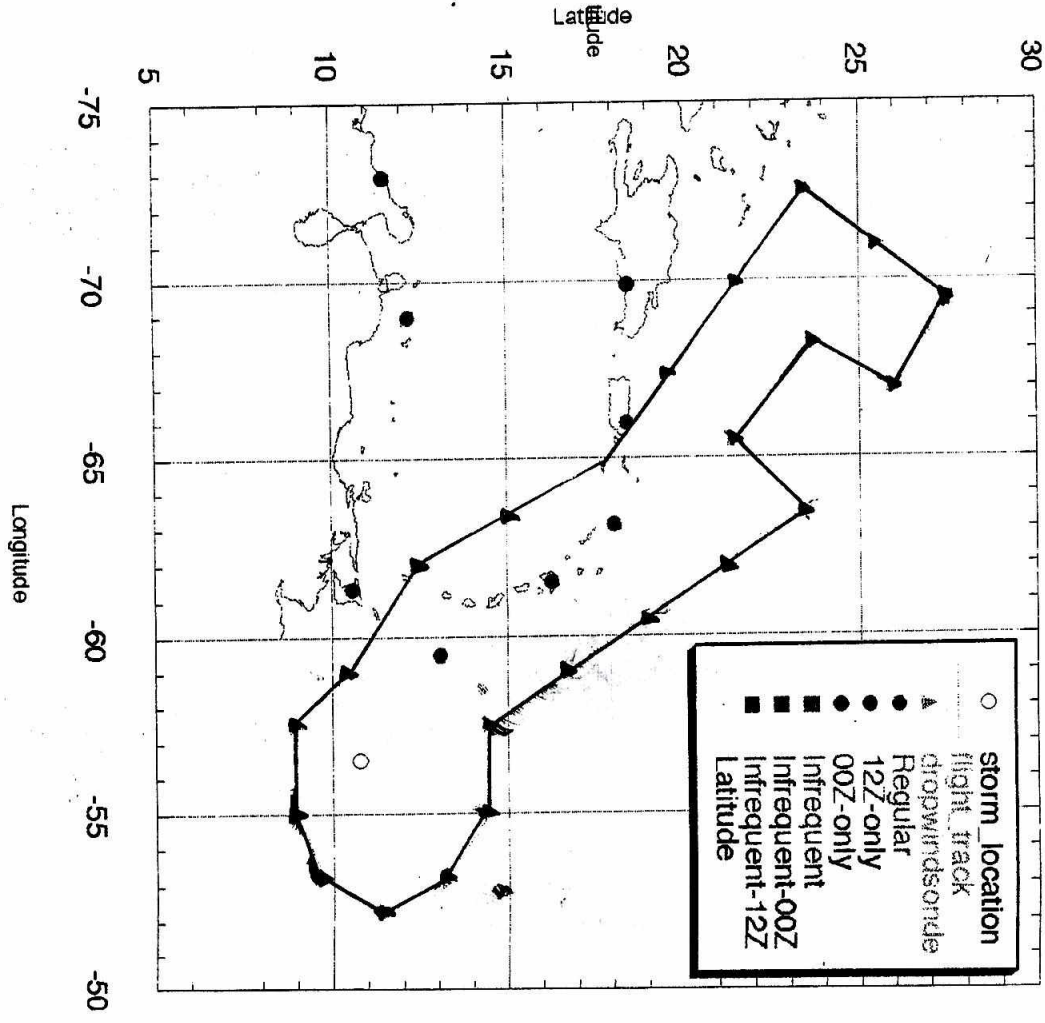
Fuels west

10.7 56.5

NB mission for now

Very look to
KMEF

000930n JOYCE (revised)



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

 NOAA/Hurricane Research Division Saturday, September 30, 2000 7:29:28 AM
 Aircraft: N49RF Proposed takeoff: 30/1730Z
 =====

 TRACK DISTANCES

=====

#	LAT (d m)	LCN (d m)	RAD/AZM (nm/dg)	LEG (nm)	TOTAL (nm)	TIME (h:mm)
0	ST CROIX			0.	0.	0:00
1	23 30	72 30		566.	566.	1:17
2	27 30	69 30		295.	861.	1:57
3	26 00	67 00		168.	1029.	2:20
4	23 45	68 15		153.	1182.	2:41
5	21 30	65 30		208.	1390.	3:09
6	23 30	63 30		166.	1556.	3:32
7	14 30	57 30		644.	2200.	5:00
8	14 30	55 00		148.	2348.	5:20
9	13 15	53 15		128.	2475.	5:37
10	11 30	52 15		121.	2596.	5:53
11	9 45	53 15		121.	2717.	6:10
12	9 00	55 00		114.	2830.	6:25
13	9 00	57 30		149.	2979.	6:46
14	10 30	59 00		127.	3106.	7:03
15	12 30	62 00		215.	3321.	7:32
16	ST CROIX			353.	3674.	8:20
