

Flt ID: 010802N	From: KMCF	To: KMCF
Flt No: 01-43	Blk In: 0213Z	ATA: 0205Z
ETD: 1730	Blk Out: 1718Z	ATD: 1732Z
ETE: 0200	Blk Time: 8:55 8.9	Flt Time: 8:33 8.6
Sponsor Org: NOAA	Program: NHC	Purpose: SYN SURV INVEST

AOC Personnel

AC: MCCANN, B ✓	Sys Eng: HORNBRUOK, C
CP: YATES, G ✓ / POSTON, R ✓	Data Sys: LINO, D
Nav:	Radar:
FE: KITSON, G	GPS/BT: GOLOSTEIN, A
FD: CZ4ZYK, S ✓	Cld Phys:
Avionics:	

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
LANDSEA, C ✓	HAPS	HRD
BLACK, M ✓	HAPS	HRD
		FE
		FE

Proposed/Actual Mission Remarks (Recco, Fixes, Storm, PENET, NHOP #)

TEAL 06
HOT WARNING AREAS
BALANCE OPTIC 1821:45

TS BARRY FORMER ~ 197

Flt ID: 010802N

Time Off: 1732Z

Time On: 0205Z

AVC (Take Off)

Wx Station (Take Off)

AVC (Land)

Wx Station (Land)

Pressure

1019.5

30.13

1018.5

30.11

	Number	Data Disposition / Date / Quality
Flt Lvl Tapes		
Radar Tapes		
Cloud Physics Tapes		
Video Tapes		
AXBT		
AXCP		
AXCTD		
Dropsondes	29	26X MITTED

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

Remarks

KTPA 2357

0153 100/10 10 R-06050 23/22 30.07

010802N

Flight ID:

Page of

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

Form 413-50

TIME	LAT	LONG	TK	HD	TA	TD	WO	WS	PA	GA	PS	REMARKS
												FEW DRY AREAS IN CLOUD MOSTLY THIN 32K
175000	2809	8351	7	291	-21.7	-23.6	135	3.5	8059	8561	348.8	
180710	2852	8552		287	-55.8	-55.6	213	14.2	12207	12853	185.3	IN + OUT THIN CIRRUS
181017	2859	8615		266	-60.2	-58.9	218	13.8	12491	13124	175.8	DROP #1 SEC
182947	2830	8850		257	-61.6	-60.5	274	4.9	12484	13115	175.8	DROP #2
184912	2800	9125		257	-61.4	-60.5	68	4.7	12487	13117	175.2	DROP #3
190742	2722	9400	214	208	-60.8	-61.1	86	19.9	12505	13115	175.8	DROP #4
192801	2500	9456	156	155	-61.4	-60.3	231	5.1	12641	13252	173.4	DROP #5
194745	2337	9258	49	44	-63.4	-62.1	260	6.7	12925	13554	165.5	DROP #6 NO TEMP/H
195459	2425	9232	24	21	-62.7	-68.5	271	10.0	12930	13564	165.3	DROP #6A INT MID
200435	2529	9157	63	69	-61.6	-61.1	260	8.4	12495	13114	177.6	DROP #7
202239	2557	8930	120	127	-61.6	-61.1	240	12.1	12497	13118	177.7	DROP #8
204207	2401	8759	126	125	-64.1	-64.5	189	10.5	13064	13713	161.6	DROP #9
210252	2301	8530	92	92	-64.5	-66.1	200	10.0	13068	13730	161.5	DROP #10
211150												IN CIRRUS
211400												LT TURB
212518	2330	8230	93	92	-68.5	-67.0	296	10.1	13492	14168	150.3	DROP #11
215015	2307	7915	97	93	-68.8	-68.5	10	9.6	13629	14321	146.8	DROP #12
221515	2245	7600	91	88	-69.7	-69.1	24	5.8	13626	14315	146.9	DROP #13 NO WIND
221605	2245	7553	89	86	-70.1	-68.9	24	6.1				DROP #13A
224024	2250	7248	34	28	-69.3	-68.7	353	13.2	13620	14310	147.0	DROP #14 NO TEMP
224158	2259	7245										DROP #14A
225942	2459	7253	287	285	-67.4	-68.8	300	6.6	13619	14312	147.1	DROP #15
231658	2500	7507	279	269	-68.4	-68.8	249	11.6	13615	14311	147.1	DROP #16
233504	2504	7727	326	378	-67.8	-69.3	354	3.9	13624	14316	146.9	DROP #17 NO WIND
233728	2521	7730										DROP #17A
235551	2729	7724	82	82	-67.1	-68.7	275	7.7	13632	14297	146.7	DROP #18
000919	2730	7530	90	89	-67.5	-68.0	256	5.6	13639	14310	146.6	DROP #19
002425	2732											DROP #20 NO TEMP
002516	2746	7330	359	356								DROP #20A DIED
002737	2802	7330										DROP #20B NO TEMP
004541	2959	7337	289	283	-66.9	-68.4	235	15.8	13631	14284	144.8	DROP #21
010263	3000	7600	261	260	-63.3	-70.6	263	12.9	13628	14267	146.9	DROP #22
012122	2930	7830	247	249	-65.5	-72.0	288	17.7	13625	14283	146.9	DROP #23

NOAA/AOC/SED N49RF Flight Performance log

N49RF Project: Huss 01 Project No. 106 Flight No. 3 Flight ID: 010802N
 SED Crew: Hornbrook, Lino, Goldstein Mission: T03
 Pre-Flight: 1620 Z Take-Off: 1732 Z Landing: 0205 Z

SYSTEM			Pre-Flight Check	In-Flight	Post-Flight Check		
N A V	IRS #1		✓ NSG				
	IRS #2		✓ ASG				
	IRS #3		✓ ASG				
	GPS Honeywell #1		✓ ASG				
	GPS Honeywell #2		✓ ASG				
	GPS Collins		✓ ASG		Off? ☒		
	Nose Radar - Collins		✓ ASG		Off? ☒		
T E M P	Time	Temp °C			Time	Temp °C	
	Temp #1	1632	24.3	✓ ASG		0205	23.5
	Temp #2		23.7	✓ ASG			23.7
	Temp #3		24.7	✓ ASG			23.6
	Temp #4		23.4	✓ ASG			23.6
	DP Left		20.9	✓ ASG	Cal. Time: 1822		21.2
	DP Right	✓	19.7	✓ ASG	Cal. Time: 1822	✓	22.6
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:				
S Y S T E M	DOWN PRT-5 ⇒ Open? ☐		N1		Closed? ☐	N/A	
	MADS (WINDS/DISCWIN)		✓ ASG		# DATs: 1		
	Printer 1 ⇒ Paper? ☒				Printer Power off? ☒		
	MADS Cal. Date:		QC time: 1637	✓ ASG	QC time: 0207		
	WINDS ⇒ NET BCAST ☐						
M S	HAPS System / Time set? ☒		✓ CH		# Msg.: 26	# Fail: 25	
	AVAPS System		✓ DL				
	Printer 2 ⇒ Paper? ☐		N1		Printer Power off? ☐	N/A	
	Exterior Walk Around ☒		✓ CH				
	Inspect DropSonde Chute Bolts						
M I S C	Satcom (Flight Phone) ☒				Off CB? ☒		
	Call COMSAT? ☐ (*292#)						
	FCU/UPS/CB		CB's Checked? ☒ ASG		UPS off? ☒		
	AVAPS Sondes		# On Board: 75	# Dropped: 29	# Good: 19		
	Sci. Power Monitor ☐						
	APN-232 Altimeter						
	Modem Power On? ☒		✓ ASG				
	Pilots are happy? ☒		✓ ASG				

1	DAT Tape #1	On: 1719	Type: SONY DG60P	Off: 0213
Comments:				

010802N

AOEDA- P1TR

AOCTK- P1TR

AP2 +

AT2 +

AKRDZ +

BP2 +

DAP2 +

DBP2 +

OPRC +

DRFTA- P1TR

GSF

LAT- P1TR +

LON +

MCH- P1TR +

PS2M +

QC2M +

ROL- P1TR +

SSDFZ

SSRDZ -

TASZ +

THOC- P1TR +

VEW +

VNS- P1TR +

VSPD +

TTZ +

AT- e 41 + 43K

AT1 + AT2 0.5-1.0°C COLDER THAN AT3 + AT

AT2 COOLEST, AT3 WARMEST

e 45K AT3 1.3-1.7 WARMER THAN REST

AT2 COOLEST, CLOSE TO AT1

AT1 MINOR PROBS

HALT DROPOUTS

GALAT PROBS	2009-2011	2009-2011
1741-1742	2155-2156	2155-2156
1801-1803	0009-0010	0009-0010
1823-1824	0047-0048	0047-0048
1833-1834		
1839-1842		

2009-2011

CHALTS61 SPIKES 2009-2011 (3)
 2115-2117 (2)

BAL OPRC 1820-1835
 OPLC

1753-1759, 1803-1806, 1837-1840
 1850-1858, 1911-1912, SW SURF 1940-
 2111-2112, 2203-2204, 2207-2209,
 2227-2230, 2241-2244, 2248-2249,
 2332-2337, 0140-0142

ADCSAT 2111-2341, 0011-0042,
 0125-0129

N49RF AVAPS DropSonde Log

N49RF Project: Hurricane 2001

Flight ID: 010802N

Mission: 02AAA

Flight #: 3

System Status: OK

Drop #	Sonde Serial Number	Chn. #	Time (Zulu)	Press. offset	Winds time	Operator Initials	Comments / Drop Status / Failure Reason	GOOD ☒
1	990 745 005	1	1810	0	56	Z		✓
2	990 415 186	1	1829	0.7	48	Z		✓
3	990 745 006	1	1849	0.6	43	P		✓
4	003 475 037	1	1907	0	37	Z		✓
5	990 415 183	1	1929	0.6	29	Z		✓
6	011 245 405	1	1947	0.8	11	Z	Lost Temp, Geo Alt, Humidity	
7	990 845 004	2	1955	0.8	12	Z	Temp lost telemetry	
8	011 245 234	3	2004	0.6	26	Z		✓
9	990 845 001	1	2022	0.7	50	Z		✓
10	991 435 124	1	2042	0	38	gh		✓
11	990 745 014	1	2102	.5	12	gh		✓
12	990 415 182	1	2125	.6	41	gh		✓
13	011 245 404	1	2150	0	12	gh		✓
14	990 415 348	1	2215	.7		gh	No winds / No SATS	
15	990 745 003	2	2216	0	19	gh		✓
16	011 245 034	1	2240	0	46	gh	No Temp	
17	003 135 156	2	2241	0	38	gh		✓
18	992 525 882	1	2259	.5	23	ash		✓
19	011 245 029	1	2317	0	37	ash		✓
20	011 245 211	1	2335	.4	-	ash	VERY INTERMITTENT WINDS	
21	990 435 466	1	2337	.8	27	ash		✓
22	990 415 125	1	2355	.5	14	ash	LOST TELE @ ~ 750 mb	
23	011 245 227	2	0009	.4	25	ash		✓
24	011 245 402	1	0024	.3	13	ash	NO TEMP	
25	011 245 232	3	0025	.2	-	ash	LOST TELEM ON LAUNCH, THEN NO TEMP	
26	003515052	2	0027	0	40	ash	NO TEMP ABOVE 850mb	
27	990 815 184	1	0043	.3	43	ash	LOST TELEM NEAR END OF DROP	✓
28	003515125	2	0102	.4	19	ash		✓
29	003115228	1	0121	.5	25	ash		
30								
31								
32								
33								

NHC

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HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: XXXX /SYNOPTIC

NOAA/Hurricane Research Division Wednesday, August 1, 2001 2:46:52 PM

Aircraft: N49RF

Proposed takeoff: 02/1730Z

DROP LOCATIONS

#	LAT (d m)	LON (d m)	RAD/AZM (nm/dg)	TIME (h:mm)
1	29 00	86 15		0:30
2	28 30	88 49		0:50
3	28 00	91 25		1:10
4	27 30	94 00		1:30
5	25 00	96 00		1:52
6	23 30	93 00		2:12
7	25 30	92 00		2:30
8	26 00	89 30		2:50
9	24 00	88 00		3:10
10	23 00	85 30		3:31
11	23 30	82 30		3:55
12	23 07	79 15		4:21
13	22 45	76 00		4:47
14	22 45	72 45		5:12
15	25 00	72 45		5:31
16	25 00	75 07		5:49
17	25 00	77 30		6:08
18	27 30	77 30		6:28
19	27 30	75 30		6:43
20	27 30	73 30		6:59
21	30 00	73 30		7:19
22	30 00	76 00		7:38
23	29 30	78 30		7:58

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HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: XXXX /SYNOPTIC

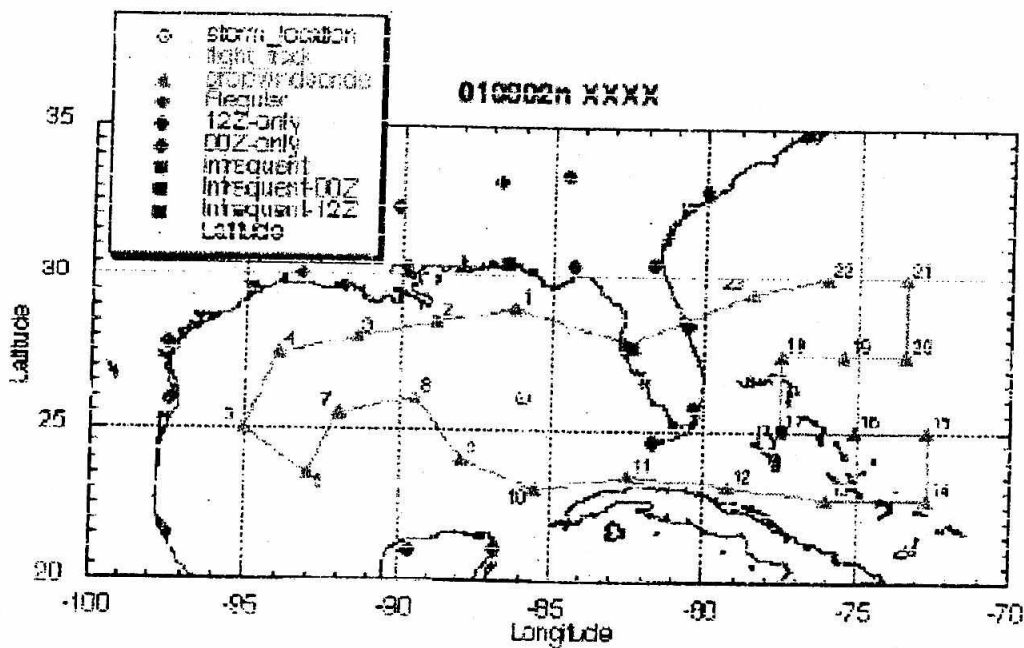
NOAA/Hurricane Research Division Wednesday, August 1, 2001 2:46:52 PM

Aircraft: N49RF

Proposed takeoff: 02/1730Z

DROP LOCATIONS

#	LAT (d m)	LON (d m)	RAD/AZM (nm/dg)	TIME (h:mm)
1	29 00	86 15		0:30
2	28 30	88 49		0:50
3	28 00	91 25		1:10
4	27 30	94 00		1:30
5	25 00	96 00		1:52
6	23 30	93 00		2:12
7	25 30	92 00		2:30
8	26 00	89 30		2:50
9	24 00	88 00		3:10
10	23 00	85 30		3:31
11	23 30	82 30		3:55
12	23 07	79 15		4:21
13	22 45	76 00		4:47
14	22 45	72 45		5:12
15	25 00	72 45		5:31
16	25 00	75 07		5:49
17	25 00	77 30		6:08
18	27 30	77 30		6:28
19	27 30	75 30		6:43
20	27 30	73 30		6:59
21	30 00	73 30		7:19
22	30 00	76 00		7:38
23	29 30	78 30		7:58



984

WHXX04 KWBC 021017

CHGQLM

ATTENTION...NATIONAL HURRICANE CENTER

NCEP COUPLED GFDL HURRICANE MODEL FORECAST MADE FOR

TROPICAL DEPRESSION INVEST 96L

INITIAL TIME 6Z AUG 2

DISCLAIMER ... THIS INFORMATION IS PROVIDED AS GUIDANCE. IT
REQUIRES INTERPRETATION BY HURRICANE SPECIALISTS AND SHOULD
NOT BE CONSIDERED AS A FINAL PRODUCT. PLEASE SEE THE TPC/NHC
OFFICIAL FORECAST.

FORECAST STORM POSITION

HOUR	LATITUDE	LONGITUDE	HEADING/SPEED (KT)
0	24.2	83.7	285./ 7.0
6	25.0	84.9	301./14.1
12	25.8	86.0	307./12.1
18	26.2	86.6	304./ 7.4
24	26.3	87.4	273./ 7.4
30	26.5	88.1	293./ 6.0
36	26.7	88.7	284./ 6.0
42	26.6	88.8	230./ 1.6
48	26.4	89.0	225./ 2.5
54	26.5	88.7	78./ 3.1
60	27.0	88.4	32./ 5.6
66	27.4	88.6	336./ 4.4
72	27.8	88.8	329./ 4.7
78	28.8	89.5	325./11.3



NOAA Gulfstream-IV Hurricane Surveillance 2001 Tropical Storm Barry



Flight Name: 010802n

<u>Instrument/System</u>	<u>Variable Name</u>			
Attack Pressure	AP1	☐	AP2	☒
Sideslip Pressure	BP1	☐	BP2	☒
Dynamic Attack Pressure	DAP1	☐	DAP2	☒
Dynamic Sideslip Pressure	DBP1	☐	DBP2	☒
Static Pressure	PS1M	☐	PS2M	☒
Dynamic Pressure	QC1M	☐	QC2M	☒
True Airspeed	TAS1	☐	TAS2	☒
Latitude	LAT	☐	LAT_PITR	☒
Longitude	LON	☒	LON_PITR	☐
E-W Ground Speed	VEW	☒	VEW_PITR	☐
N-S Ground Speed	VNS	☐	VNS_PITR	☒
Vertical Velocity	VSPD	☒	VSPD_PITR	☐
Pitch	PITCH	☐	PITCH_PITR	☒
Roll	ROLL	☐	ROLL_PITR	☒
True Heading	THDG	☐	THDG_PITR	☒
Dewpoint Temperature	DPRC	☒	DPLC	☐
Total Temperature	TT1	☐	TT2	☒
Ambient Temperature	AT1	☐	AT2	☒
			AT3	☐
			AT4	☐
			CRYOC	☐

Constants File: header01a

	Takeoff	Landing
Aircraft Static Pressure	1019.5 mb	1018.5 mb
Corrected Tower Pressure	1020.3 mb	1019.6 mb

Flight Director: Stan Czyzyk
E-mail: Stanley.Czyzyk@noaa.gov
Phone #: (813) 828-3310
FAX #: (813) 828-5061
Address: P.O. Box 6829
MacDill AFB, FL 33608-0829

Mission Notes:

All scientific and aircraft sensors appeared to perform properly throughout the mission with the exception of the following parameters:

GPGALT - Several offsets, spikes and deviations (1741-1742, 1801-1803, 1823-1824, 1833-1834, 1839-1842, 2009-2011, 2139-2140, 2155-2156, 0009-0010 and 0047-0048).

HGM232 - Several offsets, spikes and deviations (1753-1759, 1803-1806, 1837-1840, 1850-1858, 1911-1912, 1940-2030, 2111-2112, 2203-2204, 2207-2209, 2227-2230, 2241-2244, 2248-2249, 2332-2337 and 0140-0142).

GHALT_SG1 - Several spikes (2109-2111 (3) and 2115-2217 (2)).

DPLC - Spike due to balancing 1820-1835.
&
DPRC

ADCSAT - Problems with the derivation below -63C (2111-2341, 0011-0042 and 0125-0129).

Dropsondes: 29 Dropsondes released
26 Transmitted