

27
13 40

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

AOCWFL

Flt ID: NO10915	From: KFL	To: KMCF
Flt No.: 01-55	Blk In: 01242	ATA: 0113Z
ETD: 1730Z	Blk Out: 1724Z	ATD: 1733Z
ETE:	Blk Time: 8:00 (8.0)	Flt Time: 7:40 (7.7)
Sponsor Org: NHC	Program: HURR SURV	Purpose: TS GABRIELLE NR CAPE CANAVERAL

AOC Personnel

AC: FINKE ✓	Sys Eng: LINO
CP: POSTON/YATES ✓	Data Sys: HORN BROOK
Nav:	Radar:
FE: KITSON	GPS/BT: McNAMARA
Avionics:	Cld Phys:
FD: DAMIANO ✓	

Participating Scientists/Visitors/AOC

Name (Last, First)	Activity on Aircraft	Affiliation
ABERSON ✓	HAPS	HRD
DUNION ✓	HAPS	HRD
PARRISH	PM	AOC

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

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

AOCWF2

Flt ID: **N070915** Time Off: **1733z** Time On: **0113z**

	A/C (Take Off)	Wx Stn (Take Off)	A/C (Land)	Wx Stn (Land)
Pressure	1008.4	29.77	1012.2	29.90

	Number	Data Disposition/Date/Quality
Slow/Fast Flt Lvl Tapes		
Radar Tapes		
Cloud Physics Tapes		
Video Tapes		
AXBT		
AXCP		
AXCTD		
Dropsondes	27	26 good; 1 bad (no wind)
Messages	27	

Video

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

Remarks

BAL DWA 1833z - 1837z

0055z
350/7

35 23
6 19

29.90

KMCF

2355z

0101/6
24 29.88
19

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

Form 413-50

Time	Lat	Long	Trk	Hdg	Wind Dir	Wind Spd kts	T _a	T _d	Press. Alt.	Geo. Alt.	Sfc Press.	Press. Sfc	Dyn. Press	Remarks
175128	2823	7828	45	45	224	26	-32.9	-45.7	9633	10125	—	275.3	129.4	(25) DROP
181448	2925	7631	33	30	211	19	-58.5	-70.0	12486	13091	—	175.7	88.2	(26) DROP
182500	3039	7552	23	21	218	21	-58.3	-71.2	12493	13092	—	175.7	90.1	ABV CLD
183050	3123	7531	12	8	214	25	-58.7	-71.4	12499	13091	—	175.8	89.5	(26) DROP
184634	3330	7529	16	12	224	34	-59.3	-72.2	12486	13031	—	176.0	88.8	(16) DROP
190233	3530	7415	27	20	235	45	-62.6	-75.1	12919	13421	—	163.8	81.8	(29) DROP
191200	3642	7330	27	19	239	51	-63.0	-75.9	12922	13383	—	163.8	81.3	NE TOP THN CLD
191759	3727	7258	62	60	248	53	-62.3	-75.4	12929	13356	—	163.7	82.6	(19) DROP
193129	3730	7030	90	93	245	54	-63.1	-74.9	13066	13510	—	160.0	78.7	(16) DROP
194448	3725	6803	143	158	251	55	-65.0	-77.0	13058	13526	—	159.8	80.2	(25) DROP
200227	3533	6805	233	238	244	50	-64.6	-69.4	13054	13612	—	159.6	80.7	(17) DROP
201853	3530	7000	271	265	253	50	-64.9	-76.9	13343	13892	—	152.0	76.6	(31) DROP
203558	3527	7159	226	228	244	50	-66.1	-76.7	13339	13890	—	152.0	76.9	(130) DROP
205628	3333	7252	131	136	232	35	-66.3	-76.1	13348	13942	—	152.1	76.7	(26) DROP
210700	3330	7111	90	94	233	34	-66.5	-74.8	13338	13953	—	152.0	77.8	NE TOP THN CLD
211411	3325	7003	146	156	231	36	-67.0	-73.7	13338	13953	—	152.2	75.7	(19) DROP
213122	3133	7005	235	236	250	28	-66.4	-72.1	13336	13999	—	152.1	77.3	(23) DROP
214445	3130	7145	271	265	247	31	-66.9	-69.9	13338	13991	—	152.0	77.9	(42) DROP
215827	3125	7326	215	214	235	27	-65.8	-71.0	13335	13987	—	152.1	77.3	(26) DROP
220800	3023	7330	180	182	229	19	-68.2	-73.6	13614	14295	—	145.0	73.6	THN CLD ABV
221518	2928	7332	206	208	—	—	-68.9	-74.1	13616	14308	—	145.0	72.8	NO W DROP
221917	2909	7345	209	212	234	15	-68.6	-74.1	13622	14305	—	145.0	70.9	(36) DROP
223043	2815	7445	222	221	209	16	-67.9	-73.8	13617	14293	—	145.1	73.1	(23) DROP
224536	2700	7600	224	222	214	15	-67.5	-74.8	13616	14297	—	145.1	72.4	(50) DROP
230025	2549	7719	227	224	223	13	-67.4	-76.0	13618	14303	—	145.2	72.9	(26) DROP
231458	2440	7840	226	224	220	11	-68.1	-76.8	13615	14290	—	145.3	69.7	(18) DROP
232940	2331	8001	252	250	185	8	-68.4	-76.6	13621	14300	—	145.2	74.0	(22) DROP
234852	2330	8230	270	268	208	9	-66.3	-75.2	13618	14297	—	145.2	72.6	(44) DROP
000800	2336	8454	348	349	298	3	-65.6	-76.6	13615	14299	—	145.2	72.3	(25) DROP
002121	2546	8402	356	353	307	13	-62.5	-75.9	13619	14299	—	145.2	73.3	(26) DROP
004744	2800	8500	346	347	302	14	-61.9	-74.6	13615	14277	—	144.9	72.7	(16) DROP

N49RF AVAPS DropSonde Log

N49RF Project: Hurricane 2001 Flight ID 010915N

Mission: Gabrielle 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	003 248 090	1	1759	0	25	Z		✓
2	003 115 246	2	1814	0.5	26	Z		✓
3	003 115 226	1	1830	0.8	26	Z		✓
4	003 135 040	2	1846	0	16	Z		✓
5	010 715 167	1	1902	0	29	Z		✓
6	010 715 172	2	1918	0.4	14	Z		✓
7	003 148 132	1	1931	0.6	16	Z		✓
8	003 515 271	2	1944	0.4	25	Z		✓
9	003 475 101	1	2002	0	7	Z		✓
10	003 148 151	2	2018	0	31	RJM		✓
11	003 148 139	1	2036	0.7	116	RJM	INT TELEMETRY, LATE WINDS	✓
12	003 515 069	1	2056	0.6	26	RJM	INT TELEMETRY	✓
13	010 748 071	2	2114	0.7	19	RJM		✓
14	003 248 118	1	2131	0	23	RJM		✓
15	003 135 042	2	2144	0.7	27	RJM		✓
16	003 515 089	1	2158	0.5	12	RJM	INT WINDS	✓
17	003 115 251	2	2216	0.6	—	RJM	NO WINDS	
18	003 515 062	3	2219	0.4	36	RJM	BACKUP	✓
19	010 715 202	1	2230	0.6	23	RJM		✓
20	003 148 138	2	2245	0.5	29	YR		✓
21	003 475 058	1	2300	.4	26	YR		✓
22	010 748 073	2	2315	.6	78	YR		✓
23	003 148 153	1	2329	.7	22	YR		✓
24	003 475 090	1	2348	.0	44	YR		✓
25	003 148 145	2	0008	.6	25	YR		✓
26	003 475 021	1	0027	.6	26	YR		✓
27	003 148 142	1	0047	.8	16	YR		✓
28								
29								
30								
31								
32								
33								

G4 Hurricane Surveillance

N010915 TS Gabrielle (East of Daytona Beach, FL)

<u>DATA TYPE</u>	<u>SENSOR or OPTION</u>
INE	VEW, VNS
Accelerometer	ACINS
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 from 1833Z - 1837Z.

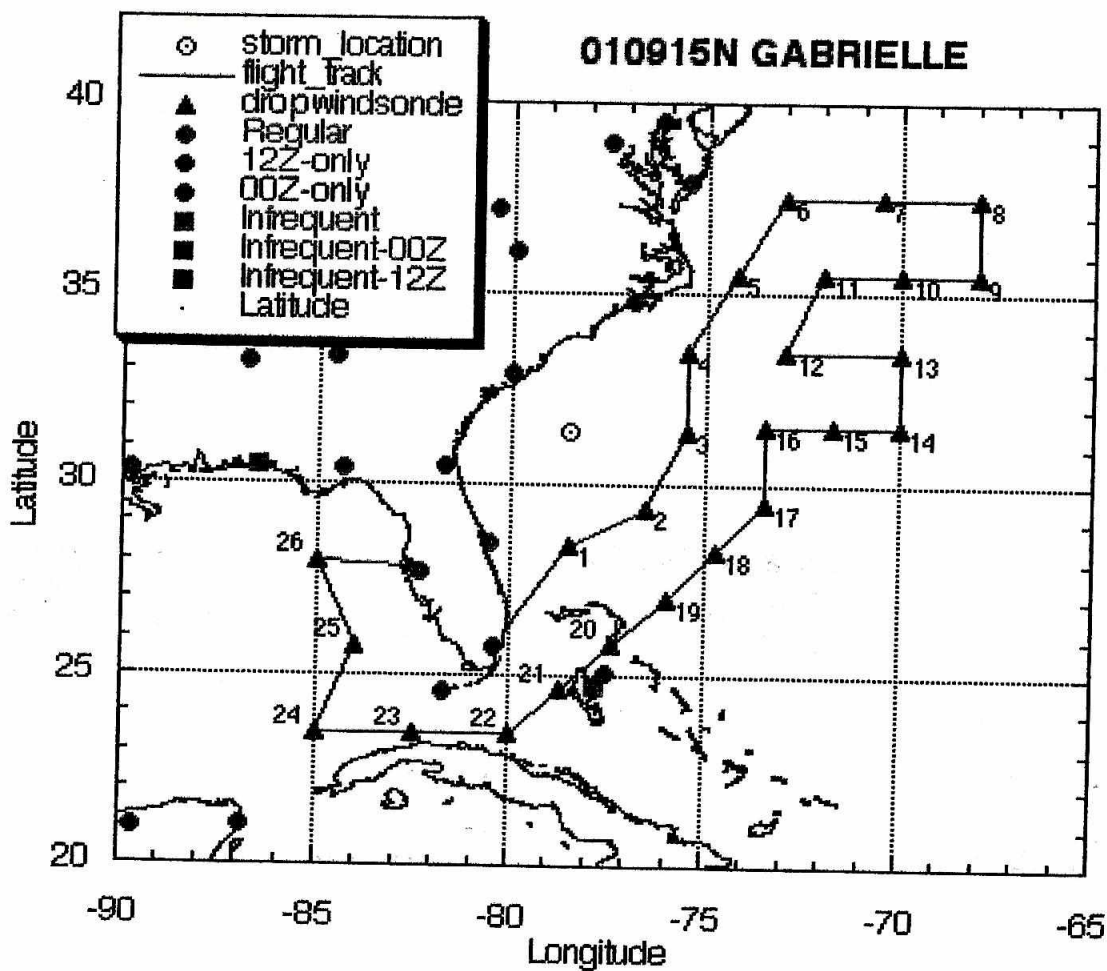
From 2209Z - 2220Z there was no inertial_PITR data due to a data system module (DSM) failure.

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	1008.4mb	1012.2mb
Corrected tower pressure	1007.7mb	1012.0mb

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

8hr



NOAA9 0908A GABRIELLE

VHF 123.05 → 42

UHF 305.8 → NASA 817

1653+

260/14

31 29.78

22

HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: GABRIELLE/SYNOPTIC

NOAA/Hurricane Research Division Friday, September 14, 2001 2:02:09 PM
Aircraft: N49RF Proposed takeoff: 15/1730Z

DROP LOCATIONS

#	LAT (d m)	LON (d m)	RAD/AZM (nm/dg)	TIME (h:mm)
1	28 23	78 30		0:22
2	29 23	76 30		0:40
3	31 23	75 30		0:58
4	33 30	75 30		1:15
5	35 30	74 15		1:34
6	37 30	73 00		1:53
7	37 30	70 30		2:11
8	37 30	68 00		2:29
9	35 30	68 00		2:48
10	35 30	70 00		3:00
11	35 30	72 00		3:15
12	33 30	73 00		3:33
13	33 30	70 00		3:55
14	31 30	70 00		4:12
15	31 30	71 45		4:25
16	31 30	73 30		4:38
17	29 30	73 30		4:54
18	28 15	74 45		5:08
19	27 00	76 00		5:22
20	25 49	77 19		5:37
21	24 40	78 40		5:51
22	23 30	80 00		6:05
23	23 30	82 30		6:24
24	23 30	85 00		6:44
25	25 45	84 00		7:04
26	28 00	85 00		7:24

29.0 EST for center
79.2

Deal 51 2130Z

1851Z 42 @ center

1911Z out

1918Z

15

15/21Z	30.1	78.3	45 KTS
16/06Z	31.2	76.4	
16/18Z	32.6	73.9	
17/06Z	34.1	71.0	
17/18Z	36.0	67.5	
18/18Z	39.5	61.0	

23
25

1854Z N42 center fix
29°50' EYE
79°12'

145 PA 2148Z 30° BT
5FC 1000mb 78° 23'
FROM DROP

035 4KN
612 3KZ
25K OV
7F 29.88

0057Z 0823 out

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HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: GABRIELLE/SYNOPTIC

NOAA/Hurricane Research Division Friday, September 14, 2001 2:02:09 PM
Aircraft: N49RF Proposed takeoff: 15/1730Z

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TRACK DISTANCES

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#	LAT (d m)	LON (d m)	RAD/AZM (nm/dg)	LEG (nm)	TOTAL (nm)	TIME (h:mm)
0	FORT LAUDERDALE			0.	0.	0:00
1	28 24	78 30		168.	168.	0:22
2	29 24	76 30		127.	295.	0:40
3	31 24	75 30		132.	427.	0:58
4	33 30	75 30		126.	553.	1:15
5	37 30	73 00		276.	829.	1:53
6	37 30	68 00		267.	1096.	2:29
7	35 30	68 00		120.	1216.	2:45
8	35 30	72 00		217.	1433.	3:15
9	33 30	73 00		132.	1564.	3:33
10	33 30	70 00		164.	1729.	3:55
11	31 30	70 00		120.	1849.	4:12
12	31 30	73 30		194.	2043.	4:38
13	29 30	73 30		120.	2163.	4:54
14	27 00	76 00		206.	2368.	5:22
15	23 30	80 00		310.	2678.	6:05
16	23 30	85 00		287.	2966.	6:44
17	25 45	84 00		147.	3112.	7:04
18	28 00	85 00		146.	3259.	7:24
19	MACDILL			140.	3399.	7:43

NOAA/AOC/SED N49RF Flight Performance log

N49RF Project: Hurr 01 Project No. 106 Flight No. 8 Flight ID: 010915N
 SED Crew: Hornbrot, Lino, McNamee Mission: TS Gabrielle
 Pre-Flight: 1632 Z Take-Off: 1733 Z Landing: 0113 Z

SYSTEM			Pre-Flight Check	In-Flight	Post-Flight Check	
N A V	IRS #1		✓			
	IRS #2					
	GPS Honeywell #1					
	GPS Honeywell #2					
	GPS Collins				Off? ☒	
	Nose Radar - Collins				Off? ☒	
T E M P / D P		Time	Temp °C		Time	Temp °C
	Temp #1	1636	30.6	✓		
	Temp #2		30.4			
	Temp #3		30.6			
	Temp #4		30.1			
	DP Left		20.4			
	DP Right		21.5			
CRYO	✓	NT				
P R E S S	Attack Angle (ADCAOA)		✓			
	Angle of Attack (APx, DAPx)		✓			
	Sideslip (BPx, DBPx)		✓			
	Static Pressure (PS1M, PS2M)		✓			
	Dynamic Pressure (QCxM)		✓			
	Radome Press. Lines		Checked? ☒ Date: 9/26/01			
Mission Pitot/Static Iso. Valves		Valves: open ☐ closed ☐				
S Y S T E M	Satcom (Flight Phone) ☒		✓		Off CB? ☒	
	Call COMSAT? ☒ (*292#)		CB's Checked? ☒			
	FCU/UPS/CB		✓		UPS off? ☐	
	MADS (WINDS/DISCWIN)		✓		# DATs: 1	
	Printer 1 (lp1)		Power? ☒ Paper? ☐		Printer Power off? ☒	
	MADS Cal. Date: 7/6/01		QC time: 1717		QC time: 0115Z	
	HAPS System		Time set? ☒		# Msg.: # Fail:	
	AVAPS System		Complete			
	Exterior Walk Around ☒		✓			
	Inspect DropSonde Chute Bolts		DL			
M I S C	Down Port Door		Open? ☒		Closed? ☒ DL	
	AVAPS Sondes		# On Board: 92	# Dropped: 27	# Good: 6	
	Sci. Power Monitor		✓			
	APN-232 Altimeter		✓			
	Modem		Power On? ☒			

1	DAT Tape #1	On: 1716	Type: 60	Off: 0124
Comments:				

Please Note Any Discrepancies

[illegible]