

Flt ID: 000822N	From: TBFB	To: TXKF
Flt No.: 00-34	Blk In: 0149	ATA: 0138
ETD: 1730Z	Blk Out: 1718Z	ATD: 1729Z
ETE: 0130Z	Blk Time: 831 8.5	Flt Time: 8:09 8.2
Sponsor Org: NHC	Program: HURRICANE SURVEY	Purpose: HURRICANE DEBBY

AOC Personnel

AC: FINKE, M ✓	Sys Eng: Hill, J ✓
CP: McCANN, B ✓	Data Sys: HORN BROOK, C ✓
Nav: CP: YATES, G ✓	Radar:
FE: KITSON, G	GPS/BT: GOLDSTEIN, A ✓
Avionics:	Cld Phys:
FD: SHEPHERD, T / DAMIANU, B ✓	

Participating Scientists/Visitors/AOC

Name (Last, First)	Activity on Aircraft	Affiliation
LANDSEA, C ✓	PI - HAPS	HRD
KAPLAN, J ✓	PI - HAPS	HRD
PARRISH, J ✓	PM	AOC

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

1821 Balance DPT's	2538
1828 Finish balance DPTs	1729
~1929 FL wind spds bad	809
~1936 FL winds back	2549
~1954 FL winds bad	1718
~1955 FL winds back	831
2135 Contact TEAL 29	
FIX 2051Z 1907, 6605, 985mb 65KTS SFC 58KTS NW@FL	

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

AOCWF2

Flt ID: *000822 N* Time Off: *1729Z* Time On: *0138*

A/C (Take Off) Wx Stn (Take Off) A/C (Land) Wx Stn (Land)

Pressure *1007.1* *1007.5 mb* *1021.3* *30.21*

	Number	Data Disposition/Date/Quality
Slow/Fast Flt Lvl Tapes	<i>1</i>	
Radar Tapes		
Cloud Physics Tapes		
Video Tapes		
AXBT		
AXCP		
AXCTD		
Dropsondes	<i>33</i>	<i>8 sondes with no launch detect 1 sonde ended before splash</i>

Video

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

Remarks

G4 Hurricane Surveillance

N000822 H. Debby (North of Lesser Antilles)

<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 between 1821Z - 1828Z.

From 1935Z - 1943Z and from 1956Z - 1959Z 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	1007.1mb	1021.6mb
Corrected tower pressure	1007.5mb	1023.0mb

Flight Meteorologist: A. Barry Damiano, (813) 828-3310 ext. 3073
Tom Shepherd, (813) 828-3310 ext. 3053

HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: DEBBY/SYNOPTIC

NOAA/Hurricane Research Division Monday, August 21, 2000 10:38:43 AM
Aircraft: N49RF Proposed takeoff: 22/1

DROP LOCATIONS

TXKF 3222/6441

#	LAT (d m)	Lon (d m)	RAD/AZM (nm/dg)	TIME (h:mm)
1	14 01	61 59		0:21
2	15 00	64 30		0:43
3	14 15	66 00		0:56
4	13 30	67 30		1:10
5	14 45	69 22		1:28
6	16 00	71 15		1:46
7	17 15	73 07		2:05
8	18 30	75 00		2:23
9	20 30	73 30		2:43
10	22 30	72 00		3:03
11	22 45	69 45		3:21
12	23 00	67 30		3:39
13	21 53	65 35		3:56
14	20 48	63 42		4:14
15	19 41	61 47		4:31
16	18 36	59 53		4:49
17	17 30	58 00		5:06
18	19 00	56 00		5:27
19	20 18	58 00		5:46
20	21 36	60 00		6:05
21	22 53	62 00		6:24
22	24 11	64 00		6:43
23	25 30	66 00		7:02
24	27 47	65 33		7:21
25	30 04	65 07		7:40

- ①
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- ⑲
- ⑳

011 874 557 407
404

1753
18/46

65/25
995
41 KTS
74 KTS

1915 CARCAH
2002 CARCAH
2148 11
2313 17

28/7

09012

12305
122,925

50
0130

ETA XKF

660/8
18 J1

25/22
30.2

2051 1907 6605 995 65 KTS
58 - NW

212	19.1	66.1	65
23/06	19.8	68.9	70
23/18	21.0	72.0	75
24/06	22.0	74.5	75
24/18	23.0	76.0	80
25/00	25.0	78.5	90

2322

1906

6636

998

32 NE



305 229 4474

~~LE~~ ~~FAA~~

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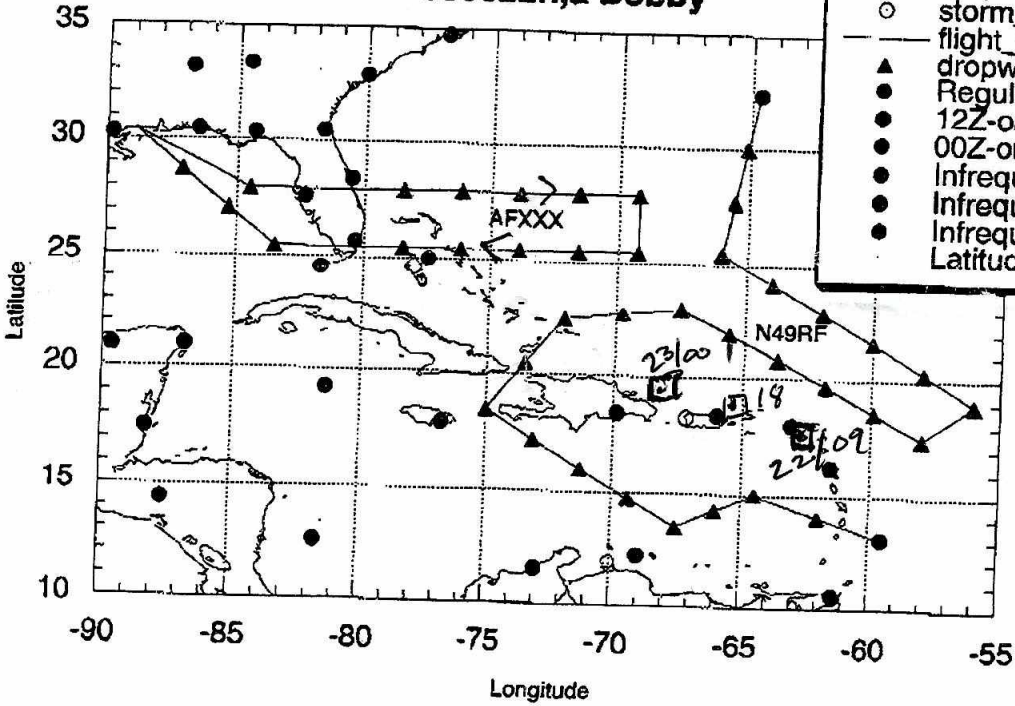
NOAA9 0107A DEBBY
0707A

TEAD 29, 2100/00
Arrive Michaels
ARNIE Michaels

13
Gayle Carter
182430

TXKF

000822n,a Debby



23/00 19.1/68

22/09 17.7/62.6
991 994 mb

#8 15/45

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HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: DEBBY/SYNOPTIC

NOAA/Hurricane Research Division Monday, August 21, 2000 10:38:43 AM

Aircraft: N49RF

Proposed takeoff: 22/1730Z

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DROP LOCATIONS

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HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: DEBBY/SYNOPTIC

NOAA/Hurricane Research Division Monday, August 21, 2000 10:38:43 AM

Aircraft: N49RF

Proposed takeoff: 22/1730Z

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TRACK DISTANCES

#	LAT (d m)	LON (d m)	RAD/AZM (nm/dg)	LEG (nm)	TOTAL (nm)	TIME (h:mm)
0	BARBADOS			0.	0.	0:00
1	15 00	64 30		318.	318.	0:43
2	13 30	67 30		199.	517.	1:10
3	18 30	75 00		534.	1050.	2:23
4	22 30	72 00		297.	1347.	3:03
5	23 00	67 30		261.	1608.	3:39
6	17 30	58 00		643.	2251.	5:06
7	19 00	56 00		148.	2399.	5:27
8	25 30	66 00		697.	3095.	7:02
9	BERMUDA			418.	3514.	7:59

N49RF AVAPS DropSonde Log

N49RF Project: HURR SURV 2000 Flight ID 000822N

Mission: HURR DEBBIE Flight #: _____ System Status: OK

Drop #	Sonde Serial Number	Chn. #	Time (Zulu)	Press. offset	Winds time	Operator Initials	Comments / Drop Status / Failure Reason	GOOD <input type="checkbox"/> / B	Drop Point
1	992515732	1/5	1754	.6	8	ASG		✓	1
2	994015024	1/5	1816	.2	—	ASG	TELEM FAIL ON LAUNCH	B	2
3	990415280	2	1817	.2	21	ASG		✓	2bl
4	994015022	1/5	1829	∅	—	ASG	TELEM FAIL ON LAUNCH	B	3
5	994338034	3	1830	.3	19	ASG		✓	3bl
6	990935174	1/5	1842	.2	13	ASG	NO WIND ON L5; OK ON R5	✓	4*
7	984715329	2/6	1900	0	23	ASG		✓	5
8	993818027	1/5	1918	.2	9	ASG		✓	6
9	993925206	2/6	1935	.3	—	ASG	TELEM FAIL ON LAUNCH	B	7
10	994024091	3	1936	.6	21	ASG		✓	7bl
11	994335216	1/5	1953	.8	36	ASG		✓	8
12	993818021	2/6	2011	.3	—	ASG	TELEM FAIL ON LAUNCH	B	9
13	994315049	3	2012	.6	38	ASG		✓	9bl
14	994024117	1/5	2030	.4	80	JH	Late winds	✓	
15	993818015	2/6	2047	.4	147	JH	no Launch Detect. Initials. Then got Launch at 147sec.	B	
16	994325106	3	2048	∅	38	JH		✓	
17	993925134	1/5	2104	.4	—	JH	NO Launch Detect	B	
18	994015038	4	2104	.5	—	JH	Late Launch Detect	B	
19	993925210	1/5	2122	∅	—	JH	NO Launch Detect	B	
20	993925189	2	2122	∅	31	JH		✓	
21	994315026	1/6	2139	.4	16	JH	Checked chute	✓	
22	992615061	2/5	2156	.7	24	JH	checked chute	✓	
23	993818001	1/6	2213	∅	30	JH	✓chute	✓	
24	992515765	2/5	2231	.3	35	JH	✓chute	✓	
25	993915043	—	—	∅	—	—	✓chute Failed Prep NO PTH	No Drop	
26	994024115	1/5	2251	.1	19	JH		✓	
27	983310199	1/5	2310	.2	19	JH		✓	
28	991515156	1/5	2330	-.2	16	JH		✓	
29	983620546	1/5	2350	.4	26	JH		✓	
30	994024110	1/5	0010	.4	37	JH		✓	
31	992455331	1/5	0030	.4	34	JH		✓	
32	993818050	2/5	0048	.2	—	JH	No launch detect; No Telem	B	
33	993645024	1/5	0048	∅	10	JH		✓	

* LOOK AT PI DATA

Drop #	Sonde Serial Number	Chn #	Time (Z)	Press. offset	Winds time	Operator Init.	Comments Drop Status	GOOD <input checked="" type="checkbox"/>
34	094015042	215	0106	.2	29	JH		
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								
49								
50								
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55								
56								
57								
58								
59								
60								

07/26/99

AVAPS PRE-FLIGHT CHECK:

- (1) Apply power to computer, AVAPS fan and AVAPS chassis
- (2) Verify no **ER** status lights on the four MWG cards
- (3) Start AVAPS and run the hardware checks via the **Utility** function
- (4) Start **Soundings** and set the **Project Name** and **Flight ID**
- (5) Perform a prelaunch check using all four channels simultaneously reading one sonde, look for reasonable data and no CRC error status lights, winds data is not expected. All AVAPS chassis status lights should be green.

NORMAL LAUNCH NOTES:

- When selecting a sonde frequency, select a frequency other than the default (if there is a default), and away from other sondes in use.
- Do not pull the Power Enable Pin during pre-launch setup until after the Umbilical is attached.
- If pre-launch is complete, and more than 5 minutes remain prior to launch, replace the power Enable pin until 5 minutes prior to launch.
- Don't put the sonde in the launch tube until you have removed the ribbon retaining tape.
- Don't put the sonde in the tube until you have selected **Begin Data Collection**, and verified good data

(good winds data is not expected).

The Power Enable Pin must be removed for at least two minutes prior to launch to allow for the Sonde GPS Oscillator to warm up.

NOAA/AOC/SED N49RF Flight Performance log

N49RF Project: Surv. - 2000 Project No. 006 Flight No. rf03 Flight ID: 000822N
 SED Crew: Hornbrook, Hill, Goldstein, Mission: Hurricane Debby
 Pre-Flight: 1600 Z Take-Off: 1729 Z Landing: 0139 Z

SYSTEM			Pre-Flight Check	In-Flight	Post-Flight Check		
NAV	IRS #1		✓	✓			
	IRS #2		✓	✓			
	IRS #3		✓	✓			
	GPS Honeywell #1		✓	✓			
	GPS Honeywell #2		✓	✓			
	GPS Collins		✓	✓	Off?	<input type="checkbox"/>	
Nose Radar - Collins				✓	Off?	<input type="checkbox"/>	
TEMP		Time	Temp °C			Time	Temp °C
	Temp #1	1650	35.7	✓	✓		
	Temp #2		30.4	✓	✓		
	Temp #3		32.6	✓	✓		
	Temp #4		30.9	✓	✓		
	DP Left		23.5	✓	Cal. Time:		
	DP Right		22.6	✓	Cal. Time:		
PERS	Attack Angle (ADCAOA)			✓	✓		
	Slip Angle (BPx/DxPx)			✓	✓		
	Differential (PQ1/PQ2)			✓	✓		
	Absolute (PS1/PS2)			✓	✓		
Check Radome Press. Lines <input type="checkbox"/>			Date:				
SYSTEMS	DOWN PRT-5 ⇨ Open? <input type="checkbox"/>		Not USED			Closed? <input type="checkbox"/>	
	MADS (WINDS/DISCWIN)		✓	see Comments	# DATs:		
	MADS Printer ⇨ Paper? <input checked="" type="checkbox"/>		✓	✓	Printer Power off? <input type="checkbox"/>		
	MADS Cal. Date:		QC time: 1652	✓	QC time: 0141		
	WINDS ⇨ NET BCAST <input checked="" type="checkbox"/>		N/A	✓			
	HAPS System / Time set? <input checked="" type="checkbox"/>		✓	✓	# Msg:	# Fail:	
	AVAPS System		ASG	✓			
	K2 Printer ⇨ Paper? <input checked="" type="checkbox"/>		✓	✓	Printer Power off? <input type="checkbox"/>		
	Exterior Walk Around <input checked="" type="checkbox"/>		JWH	✓			
	Inspect DropSonde Chute Bolts		ASG	✓			
MISC	Satcom (Flight Phone) <input checked="" type="checkbox"/>		✓	✓	Off CB? <input type="checkbox"/>		
	Call COMSAT? <input checked="" type="checkbox"/> (*292#)			✓			
	FCU/UPS/CB		CB's Checked? <input checked="" type="checkbox"/> 9N/A	✓	UPS off? <input type="checkbox"/>		
	AVAPS Sondes		# On Board: 111	# Dropped: 33	# Good: 24		
	AXBT		# On Board:	# Dropped:	# Good:		
	APN-232 Altimeter		✓	✓			
Modem Power On? <input checked="" type="checkbox"/>		✓	✓				

33
78

1	DAT Tape #1	On: 1650	Type: 60M	Off:
2	DAT Tape #2	On: -	Type:	Off:
Comments: 1821 → Desuperfusers Balanced 1936 → AFT DSM disconnected 1955 → AFT DSM disconnected SATCOM: Incoming calls do not ring onboard. Inmarsat contacted, they suggest reset.				

