

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO.1 OAOWF1 FILE

FLT ID: 990821N	FM: MCF	TO: MCF
FLT NO:	DLK IN: 0242	ATA: 0231
ETD: 1730Z	DLK OUT: 1720Z	RTD: 1728Z
ETE: 8	BLK TIME: 9:22 (9.4)	FLT TIME: 9:03 (9.0)
SPONSOR ORG: OMC	PROGRAM: SURVEILLANCE	PURPOSE: H. BACT

OAO PERSONNEL

AC Maxson ✓	SYS ENG Pradgs - Bergnes ✓
CP McCann	DATA SYS Goldstein ✓
NAV Yates	RADAR
FE Kitson	DT/ODW Delgado Smith ✓
RADIO	GLD PHYS White
FD Parrish ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
Goldenberg, S. ✓		MRD
Kaplan, J. ✓		↓

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

NOA49 0703A BACT

RTS 32/24 31.7/228 In the soup from Drop 4 to Drop 7. No eye on radar.

200/8 1016.1 1015

30.02 210/17 ~0100 - SatComm problems. H.D.

30/24

83915m3

850 230/5 19/13

200 180/8 9/5

32 Total Drops

4 Bad Winds

M 0155Z 160/2

25/24 1015.6

30.02 27.7/24.7

-77 ft

130/4

Time	Lat	Lon	TR	WD	WS	PA	GA	TH	TD	IS			
1720	Out												
1728	Off												
17330	27.7	-82.6	2	232	4	2211	2522	13.8	9.0	258			
1740	26.5	84.1	2	282	12	8609	9119	-26	-32	325	Drop 1	Ro winds	
175130	26.5	84.5	283	274	13	9548	10029	-34	-37	282	Drop 1A	Back up	
180000	27 00	86 33		289	23							Drop 2	
182534	27 00	88 66	270	271	20.7	11958	12570	-55	-63	185	Drop 3	48 Good	
184238	27 00	90 45	270	260	25	12548	13177	-59.6	-65.8	187	Drop 4		
185937	27 00	92 54	270	228	24	12545	13185	-59	-59	176	Drop 5	Ro winds	
190127	27 00	93 08	270								Drop 5A	Ro winds	
190545	27 00	93 42	270	218	19	12549	13172	-59.5	-55.7	177	Drop 5B	Good	
191548	27 00	95 00	254	180	17	12542	13188	-59	55	177	Drop 6		
192345	26 40	96 01	249	175	16.9	12544	13165	-58.9	-56.2	177			
194953	24 00	97 21	~	150	9	12537	13179	-58	-62	177	Drop 7		
200320											Drop 8		
201718	21 04	95 36	150	74	10.3	12538	13171	-58.6	-60.5	177	Drop 9		
203112	19 36	94 36	105	48	18	12540	13173	-59	-60	176	Drop 10		
204033	19 33	93 00	89	49	10	13167	12535	-59	-58		Drop 11		
205645	19 42	91 28		17	10	13168	12531	-59	-57.5		Drop 12		
210832	21 00	91 00	1	23	10	13173	12529	-59	-58	176	Drop 13		
212238	22 38	91 08	356	328	11	13769	13117	-64.7	-60.6	160	Drop 14		
213715	24 15	90 38	90	295	10.5	13758	13112	-64.9	-63.1	160	Drop 15		
215240	24 04	88 55	158	311	9.9	13766	13105	-64.5	-64.3	160	Drop 16	Ro winds	
215530	23 42	88 45	158	307	8.8	13769	13106	-64.4	-64.6	160.5	Drop 16A	Backup	
221133	22 00	88 48	89	25	12	13774	13105	-64.97	-64.6	160	Drop 17		
222145	22 00	86 29		32	14	13762	13106	-65.97	-63.67		Drop 18		
224643	18 58	86 54	140	60	12	13766	13106	-65.9	-64.9	160	Drop 19		
230538	17 49	84 58	~	53	19	14332	13684	-69.7	-70	145	Drop 20		
232211	19 00	83 30	53	32	20	14330	13681	-70.7	-70.1	51	Drop 21		
234445	20 27	81 19	55	30	15	14326	13682	-70	-68	54	Drop 22	424	
000000	100 ft	ing	strange	winked	on	GPS							
001039	20 43	83 00	203	357	15	14333	13680	-71	-68	145	Drop 23		
002654	20 40	85 02	~	16	20	14344	13673	-70.3	-68.45	145	Drop 24		
004247	22 23	85 23	849	356	21	14343	13674	-70.4	-68	145	Drop 25		
005957	24 07	85 31	~	354	16.3	14352	13680	-70.5	-67.3	145	Drop 26		
011233	23 30	83 59	96	352	18	14336	13647	-69.6	-67.3	88	Drop 27		
012753	23 30	82 00	89	356	11	14331	13673	-70.25	-67.26	5	Drop 28		
014348	23 41	80 05	332	7	9	14326	13671	-69.5	-67.1	145	Drop 29		
015830	25 15	80 59	332	314	5	14329	13672	-68.3	-66.9	145.7	Drop 30		
0215	27 02	81 54	333	300	7	6621	6220	-8	-10	472			
0242	27 50.9	82 29.6						27.2	22.5	1015.9	13000	1N	

N49RF Hurricane 99 / AVAPS DropSonde Log

N49RF Project: Hurricane 99

Flight ID: 990821N

Mission: BRETH

Flight #: 990821 N

System Status: ✓

Drop #	Sonde Serial Number	Chn. #	Time (Zulu)	Press. offset	Winds time	Operator Initials	Comments / Drop Status/ Failure Reason	GOOD ☒
1	984715191	1/5	1749	-		JCPB/JAS	402.70 - NO WINDS	B
2	984325320	2/6	1751	-	36	JAS	403.7	✓
3	984325494	3/7	1809	-	24	JAS	404.7	✓
4	984715182	4/8	1825	.4	20	JAS	405.7	✓
5	984715147	1/5	1842	.4	48	JAS		✓
6	984715219	2/6	1859	-		JAS	NO WINDS - SATS ACQ	B
7	984325350	3/7	1901	-		JAS	NO WINDS - SATS ACQ	B
8	984715212	4/8	1905	-	36	JAS		✓
9	984325488	1/8	1915	.4	79	JAS	LATE!	✓
10	984325313	1/5	1949	.4	18	JAS		✓
11	984325465	2/6	2003	.5	21	ASG		✓
12	984325495	3/7	2017	.4	17	ASG		✓
13	984325243	4/8	2031	.5	21	ASG		✓
14	984715318	1/5	2043	.4	19	ASG	telem poor after boom	✓
15	984715183	2/6	2056	.4	15	ASG		✓
16	984715135	3/7	2108	.3	22	ASG		✓
17	984715085	4/8	2122	.4	21	ASG		✓
18	984715111	1/5	2137	.3	20	ASG		✓
19	984715274	6	2152	.4	-	ASG	NO WINDS 6-7 SAT ON SND	B
20	984715194	7	2155	.3	39	ASG		✓
21	984325478	8/4	2211	.6	45	JAS		✓
22	984325247	5/1	2246	.4	21	JAS		✓
23	984715141	6	2305	.4	24	JAS		✓
24	984715018	7	2322	.5	26	JAS		✓
25	984715022	8	2344	.3	15	JAS		✓
26	984715331	5	0010	.5	20	JAS		✓
27	984715149	6	0025	.4	10	JAS		✓
28	984715023	7	0042	.3	41	JAS		✓
29	984715216	8	0100	.4	40	JAS		✓
30	984715024	5	0112	.5	26	JAS	LATE!	✓
31	984715327	6	0127	.5	18	JAS		✓
32	984715086	7	0143	.5	90	JAS	LATE!	
33								

AVAPS 1-4 minute Lockup - PDU #2 FAIL - Reboot ok
 "ELAPSED TIME" NOT VALID IF TELEM SIGNAL = RED
 4 second data offset on AVAPS
 5-8

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HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: BRET

Prepared by the Hurricane Research Division at 08:54:17 AM on 08/21/99.
File: 990821new.ftk

Aircraft: N49RF Altitude: FL410-450 Proposed takeoff: 21/1730Z

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DROP LOCATIONS

#	LAT (d m)	LON (d m)	RAD/AZM (nm/dg)	TIME (h:mm)
1	26 30	84 00		0:25
2	27 00	86 30		0:44
3	27 00	88 38		1:00
4	27 00	90 45		1:15
5	27 00	92 53		1:30
6	27 00	95 00		1:46
7	24 00	97 24		2:19
8	22 32	96 30		2:33
9	21 04	95 36		2:46
10	19 36	94 42		3:00
11	19 36	93 06		3:13
12	19 36	91 30		3:25
13	21 00	91 00		3:37
14	22 38	91 08		3:50
15	24 15	91 15		4:04
16	24 15	89 00		4:20
17	22 00	88 00		4:40
18	19 00	87 00		5:18
19	17 45	85 00		5:37
20	19 00	83 30		5:52
21	21 00	80 30	20 27 81 19	6:20
22	20 45	82 45	20 42 83 00	6:37
23	20 30	85 00		6:55
24	22 23	85 23		7:10
25	24 15	85 45		7:26
26	23 30	84 00		7:40
27	23 30	82 00		7:55
28	23 30	80 00		8:10

Backed up

Backed up - Backed up again

1950

2003

2016

2030

2043

2055

2107

2120

2134

2150

2210

2248

2307

2322

2350

0007

0025

0040

0056

0110

0125

0140

42K

→ call Sean

Last report

22 20 42
83 00

1703Z
23 44'
94 59'
976 mb

01313 2300Z 21 Out
24 22/18Z 25.7 96.5W 110
48 23/18Z 25.8 98.3W 45
72

2354Z

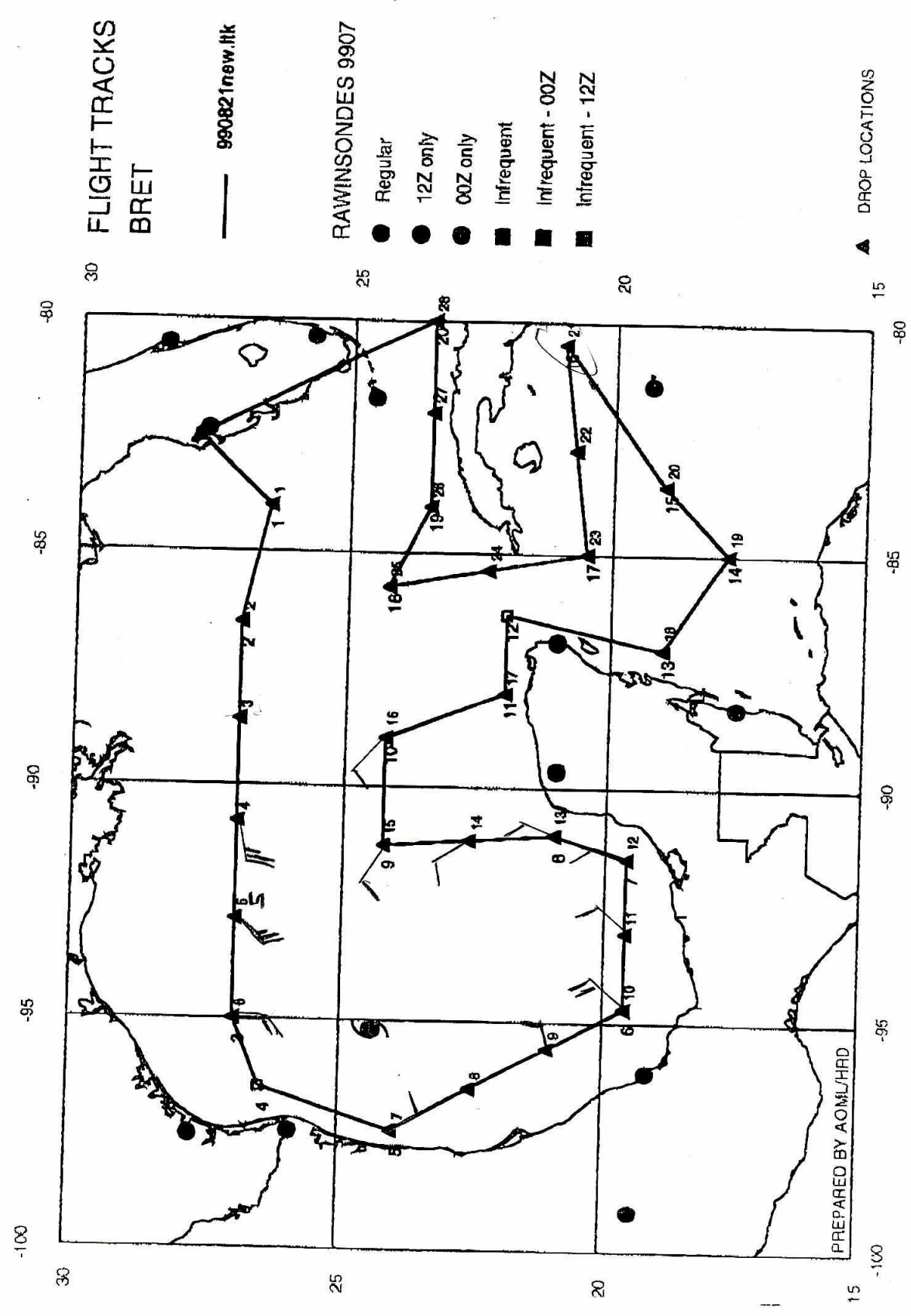
24 47D 95 01W

955 mb

125 kt 115 FL

CLOSED 15NM

www.nasa.gov/cgi-bin/post-goos



===== HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: BRET =====

Prepared by the Hurricane Research Division at 08:54:17 AM on 08/21/99.
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Aircraft: N49RF Altitude: FL410-450 Proposed takeoff: 21/1730Z
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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	MACDILL			0.	0.	0:00
1	26 30	84 00		113.	113.	0:25
2	27 00	86 30		138.	251.	0:44
3	27 00	95 00		455.	706.	1:46
4	26 30	96 30		86.	792.	1:58
5	24 00	97 24		158.	950.	2:19
6	19 36	94 42		304.	1254.	3:00
7	19 36	91 30		181.	1436.	3:25
8	21 00	91 00		89.	1524.	3:37
9	24 15	91 15		196.	1720.	4:04
10	24 15	89 00		123.	1843.	4:20
11	22 00	88 00		146.	1990.	4:40
12	22 00	86 18		95.	2084.	4:53
13	19 00	87 00		185.	2269.	5:18
14	17 45	85 00		137.	2405.	5:37
15	19 00	83 30		114.	2519.	5:52
16	21 00	80 30		208.	2727.	6:20
17	20 30	85 00		255.	2982.	6:55
18	24 15	85 45		229.	3211.	7:26
19	23 30	84 00		106.	3317.	7:40
20	23 30	80 00		220.	3538.	8:10
21	MACDILL			295.	3833.	9:00

NOAA/AOC/SED N49RF Flight Performance log

N49RF Project: Hurricane 99 Project No. 430 Flight No. 5 Flight ID: 990821N
 SED Crew: Goldstein, Smith, JCPB Mission: Hurricane BRET
 Pre-Flight: 1600 Z Take-Off: 1728 Z Landing: 2031 Z

SYSTEM				Pre-Flight Check	In-Flight	Post-Flight	
N A V	IRS #1			✓			
	IRS #2			✓			
	IRS #3			✓			
	GPS Honeywell #1			✓			
	GPS Honeywell #2			✓			
	GPS Collins			✓		Off? ☒	
	Nose Radar -Collins			✓ JCPB		Off? ☒	
T E M P		Time	Temp °C	✓		Time	Temp °C
	Temp #1	1634	33.37	✓	20:45 -34.07	0236	27.164
	Temp #2		31.9	✓	↓ -33.10		27.111
	Temp #3		31.26	✓	↓ -33.8		26.136
	Temp #4		32.19	✓	↓ -33.2		27.253
	DP Left		22.3	✓	Cal. Time:		23.7
	DP Right	↓	21.6	✓	Cal. Time:	↓	23.8
P R E S	Attack Angle (ADCAOA)			✓			
	Slip Angle (BPx/DxPx)			✓			
	Differential (PQ1/PQ2)			✓			
	Absolute (PS1/PS2)				1016.8/1016.8		
	Check Radome Press. Lines ☒				Date: 990820		
S Y S T E M	DOWN PRT-5 ⇨ Open? ☐			NU			Closed? ☒
	MADS (WINDS/DISCWIN)			✓ JCPB			# DATs: 1
	MADS Printer ⇨ Paper? ☒			✓ JCPB			Printer Power off? ☒
	MADS Cal. Date: —			QC time: 1711			QC time: 0242
	WINDS ⇨ NET BCAST ☒			✓ JCPB			
	HAPS System / Time set? ☒			✓ AFG			# Msg.: 28 # Fail: 12
	AVAPS System / Time set? ☒			✓ AFG			
	AVAPS Printer ⇨ Paper? ☒			✓ JCPB			
	Exterior Walk Around ☒			✓ JCPB			
	Inspect DropSonde Chute Bolts			✓ JCPB			
M I S C	Satcom (Flight Phone) ☒			✓ JCPB			Off CB? ☒
	Call COMSAT? ☒ (*292#)			✓ JCPB			
	FCU/UPS/CB			CB's Checked? ☐			UPS off? ☒
	AVAPS Sondes			# On Board: 62	# Dropped: 32		# Good: 28
	AXBT —			# On Board: —	# Dropped: —		# Good: —
	APN-232			✓ JCPB			
	Modem Power On? ☒			✓ JCPB			

1	DAT Tape #1	On: 1710	Type:	Off: 0243
2	DAT Tape #2	On:	Type:	Off:
Comments: AVAPS CH#1 telem RVR replaced due to poor telem. JAS AVAPS-4 mouse failure-removed 3com network PCB JAS				