

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

FLT ID: 990829N	FM: KMCF	TO: KPRD
FLT NO:	BLK IN: 0226	ATA: 0223
ETD: 1730Z	DLK OUT: 1728	RTD: 1743
ETE: 9.5	BLK TIME: 8:58(9.0)	FLT TIME: 8:40 (8.7)
SPONSOR ORG: NHe	PROGRAM: Surveillance	PURPOSE: H. Dennis

OAO PERSONNEL

AC: Mason ✓	SYS ENG: Padas-Bergnes ✓
CP: Fink	DATA SYS: Smith ✓
NAV: Yates ✓	RADAR:
FE: Kirtson	DT/ODW:
RADIO: White ✓	CLD PHYS:
FD: Parrish ✓	DOPPLER:

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
Goldenberg, S. ✓		
Dorst, N. ✓		

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

310/10 1535Z 2205A DRO/ 27 sondes in Gulf, then S, E, NE of Dennis.

29.82 /23 Dropped 28 sondes. 26 obs. Sont.

33/22 CPH storm ~ 115 miles ESE of center.

1008.5

010/19-22

22/10

24.9

345/10m/s

22/8

1011.6

Time	Lat	Lon	TR	WD	WS	GA	PA	TA	TD	PS			
1728	Out												
175145	27 45	82 42	268	251	10	3831	3711	7.4	-5	638			
180520	28 29	84 02	285	231	15	8246	7893	-20	-35	362	Drop 1	1	
182400	28 30	86 30	271	226	26	12842	12285	-54	-56.6	183	Drop 2	2	
184325	28 15	88 56	~	230	24	13084	12571	-56.8	-60.2	175	Drop 3	3	
190239	26 01	88 54	~	224	14	13130	12568	-57.9	-61.4	176	Drop 4	4	
191925	25 59.5	86 29	105	233	6.3	13158	12562	-56.6	-61.9	175.6	Drop 5	5	Noisy Winds
193923	25 00	84 00	111	82	4	13182	12563	-57	-62	175.8	Drop 6	6	
201242	23 30	79 59	96	60	16	13187	12559	-58.8	-60	175.8	Drop 7	7	
202849	23 30	78 00	89	61	13	13184	12556	-56.9	-63	175.8	Drop 8	8	
204350	23 30	76 00	90	119	16.7	13767	13136	-62.3	-67.9	159.6	Drop 9	9	
210416	23 34	73 32	~	122	19	13770	13132	-62.7	-68.5	159.7	Drop 10	10	
211905	25 28	73 34	~	159	19	13795	13131	-62.4	-67.3	159.8	Drop 11	11	
213544	25 30	75 48	270	170	21	13793	13128	-61.7	-68.1	159.8	Drop 12	12	
214946	25 31	77 50	~	140	5	13782	13137	-60.9	-67.7	159.6	Drop 13	13	
220400	27 00	77 00	30	90	1.2	13799	13125	-60.2	-67.9	159.8	Drop 14	14	
221812	28 28	75 56	~	113	4.6	13811	13127	-60	-68	159.9	Drop 15	15	
223626	28 30	73 30	89	125	11.3	13821	13128	-62	-69	159.9	Drop 16	16	
225449	28 30	71 00	88.7	116	2	13830	13134	-62	-67	159.7	Drop 17	17	
231253	28 34	68 32	~	352	7.1	13830	13142	-63	-68	159.5	Drop 18	18	
233711	31 27	68 35	~	226	10.2	13823	13136	-62.7	-68.5	159.7	Drop 19	19	
235442	31 30	71 00	270	242	14.5	13820	13132	-61.4	-68	159.8	Drop 20	20	
001257	31 30	73 30	271	203	18	13803	13134	-60.9	-67.5	159.7	Drop 21	21	
003000	31 36	75 53	~	235	14	13801	13140	-58	-57	159	Drop 22	22	
004258	33 00	75 00	29	274	16						Drop 23	23	NO LAMBERT SET
004655	33 08	74 53		271	15	14381	13699	-65	-62		Drop 23A	23A	
005621	34 28	73 58	~	295	20	14380	13704	-65	-65		Drop 24	24	LARGE WINDS
005805	34 30	73 38		293	19	14380	13702	-65	-65	145	Drop 24A	24A	
011355	34 33	71 15	~	276	17	14384	13703	-65.7	-65.3	145	Drop 25	25	
013842	37 31	70 01	~	265	44	14328	13702	-64.6	-67.8	145	Drop 26	26	
021015	41 10	71 08	346	260	25	3293	3220	5.4	-30	694	↓ to PVD		
0223	On												
0226	41 43.9	71 25.5						23	7	1012.4			

N49RF Hurricane 99 / AVAPS DropSonde Log

N49RF Project: HURRICANE '99 Flight ID: 990829N

Mission: Dennis Flight #: 10 System Status:

Drop #	Sonde Serial Number	Chn. #	Time (Zulu)	Press. offset	Winds time	Operator Initials	Comments / Drop Status / Failure Reason	GOOD ☒
1	992435006	1	1805	0	33	JAS	300 KIAS LAUNCH	✓
2	984325398	1	1824	.4	55	JAS		✓
3	984715089	1	1843	0	28	JAS		✓
4	984325164	1	1902	0	17	JAS		✓
5	984715146	1	1919	0.4	10	JAS		✓
6	984325159	1	1939	0	30	JAS	POOR GPS SAT Lock - look at PI	✓
7	984715103	1	2012	0	26	JAS		✓
8	984325467	2	2028	0.4	25	JAS		✓
9	984325229	1	2043	0.4	24	JAS		✓
10	984715105	1	2104	0.4	49	JAS		✓
11	984715144	2	2119	0.4	41	JAS		✓
12	984715138	1	2135	0.6	22	JAS		✓
13	984325537	2	2149	0.6	20	JAS		✓
14	984325235	1	2204	0.3	18	JAS		✓
15	984325156	2	2218	0.4	22	JCPB		✓
16	984715087	1	2236	0.5	14	JCPB		✓
17	984715279	2	2254	0.4	22	JCPB		✓
18	984325457	1	2312	0.5	28	JCPB		✓
19	984715088	1	2337	0.8	54	JCPB		✓
20	984325165	1	2354	0.4	80	JCPB	Look PI	✓
21	984325231	1	0013	0.3	29	JCPB		✓
22	984325158	1	0030	0.6	14	JCPB		✓
23	984325160	2	0043	0.6	-	JCPB	NO LAUNCH DETECT	B
24	984325163	3	0044	0.5	20	JCPB		✓
25	984325542	1	0056	0.8	110	JCPB	LATE WINDS	✓
26	984715143	4	0058	0.3	43	JCPB	NO WINDS 7/8 SATS	B
27	992435224	5	0114	0.5	28	JCPB		✓
28	992435023	1	0138	0.5	22	JCPB		
29								
30								
31								
32								
33								

PI DATA COLLECTED FROM CHANNEL #1

NOAA/AOC/SED N49RF Flight Performance log

N49RF Project: Hurricane 99 Project No. 430 Flight No. 10 Flight ID: 990829W
 SED Crew: JCPB, Smith Mission: Dennis
 Pre-Flight: 1634 Z Take-Off: 1743 Z Landing: 0222 Z

SYSTEM			Pre-Flight Check	In-Flight	Post-Flight	
NAV	IRS #1		✓ JCPB			
	IRS #2		✓			
	IRS #3		✓			
	GPS Honeywell #1		✓			
	GPS Honeywell #2		✓			
	GPS Collins		✓		Off? ☒	
	Nose Radar -Collins		✓		Off? ☒	
TEMP		Time	Temp °C		Time	Temp °C
	Temp #1	1650	34.08	✓ JCPB		
	Temp #2		33.34	✓		
	Temp #3		32.82	✓		
	Temp #4		34.26	✓		
	DP Left		22.03		Cal. Time:	
	DP Right	↓	21.44	↓	Cal. Time:	
S	Attack Angle (ADCAOA)		✓ JCPB			
	Slip Angle (BPx/DxPx)		✓			
	Differential (PQ1/PQ2)		✓			
	Absolute (PS1/PS2)		1009.9/1009.8			
	Check Radome Press. Lines ☒		Date: 8/26/99			
	DOWN PRT-5 ⇒ Open? ☐		NO		Closed? ☐	
S	MADS (WINDS/DISCWIN)		✓ JCPB		# DATs: 1	
	MADS Printer ⇒ Paper? ☒		✓ JCPB		Printer Power off? ☒	
	MADS Cal. Date: 8/24/99		QC time: 1858	00:08	QC time: 0223	
	WINDS ⇒ NET BCAST ☒		✓ JCPB			
	HAPS System / Time set? ☒		✓ HRD		# Msg.: 26 # Fail: 5	
	AVAPS System / Time set? ☒		✓ JAS			
M	AVAPS Printer ⇒ Paper? ☒		✓ HRD			
	Exterior Walk Around ☒		✓ JAS			
	Inspect DropSonde Chute Bolts		✓ JAS			
	Satcom (Flight Phone) ☒		✓ JAS		Off CB? ☒	
	Call COMSAT? ☐ (*292#)		✓ JAS			
	FCU/UPS/CB		CB's Checked? ☒		UPS off? ☒	
S	AVAPS Sondes		# On Board: 25	# Dropped: 28	# Good: 26	
	AXBT		# On Board: —	# Dropped:	# Good: —	
	APN-232		✓ JCPB			
	Modem Power On? ☒		✓ JCPB			

1	DAT Tape #1	On: 1656	Type: V60	Off: 0227
2	DAT Tape #2	On:	Type:	Off:
Comments:				

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HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: XXXX

Prepared by the Hurricane Research Division at 01:23:49 PM on 08/28/99.
File: 990829np.ftk

Aircraft: N49RF Altitude: FL410-450 Proposed takeoff: 29/1730Z

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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	28 30	84 00		88.	88.	0:22
2	28 30	89 00		264.	352.	0:58
3	26 00	89 00		150.	502.	1:18
4	26 00	86 30		135.	637.	1:36
5	25 00	84 00		148.	785.	1:57
6	23 30	80 00		237.	1022.	2:29
7	23 30	73 30		358.	1381.	3:17
8	25 30	73 30		120.	1501.	3:34
9	25 30	78 00		244.	1745.	4:07
10	28 30	76 00		210.	1955.	4:35
11	28 30	68 30		396.	2351.	5:29
12	31 30	68 30		180.	2531.	5:54
13	31 30	76 00		384.	2915.	6:46
14	34 30	74 00		207.	3122.	7:14
15	34 30	68 30		272.	3394.	7:51
16	37 30	70 00		195.	3589.	8:17
17	PROVIDENCE			263.	3852.	9:03

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Prepared by the Hurricane Research Division at 01:23:49 PM on 08/28/99.
File: 990829np.ftk

Aircraft: N49RF Altitude: FL410-450 Proposed takeoff: 29/1730Z

DROP LOCATIONS

15512
30 28 C35
78 26 969

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#	LAT (d m)	LON (d m)	RAD/AZM (nm/dg)	TIME (h:mm)
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1	28 30	84 00		0:22
2	28 30	86 30		0:40
3	28 30	89 00		0:58 1828
4	26 00	89 00		1:18
5	26 00	86 30		1:36
6	25 00	84 00		1:57
7	23 30	80 00		2:29
8	23 30	78 00		2:44
9	23 30	75 48		3:00
10	23 30	73 30		3:17
11	25 30	73 30		3:34
12	25 30	75 48		3:51
13	25 30	78 00		4:07
14	27 00	77 00		4:21
15	28 30	76 00		4:35
16	28 30	73 30		4:53
17	28 30	71 00		5:11
18	28 30	68 30		5:29
19	31 30	68 30		5:54 2325
20	31 30	71 00		6:11
21	31 30	73 30		6:28
22	31 30	76 00		6:46
23	33 00	75 00		7:00
24	34 30	74 00		7:14
25	34 30	71 15		7:32
26	34 30	68 30		7:51
27	37 30	70 00		8:17 0117

24 34 30 74 00
25 34 30 72 00
26 34 30 70 00