

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

FLT ID: 980617N	FM: KMCF	TO: KMCF
FLT NO: 98-030	BLK IN: 1944Z	ATA: 1936Z
ETD: 1500Z	BLK OUT: 1352Z	RTD: 1359Z
ETE: 2000Z	BLK TIME: 5.52 5.9	FLT TIME: 5.37 5.6
SPONSOR ORG: NOAA	PROGRAM: CAL/DROP	PURPOSE: CAL/DROP TEST

OAO PERSONNEL

RC MAXSON, B ✓	SYS ENG GOLDSTEIN, A ✓
CP FINKE, M ✓	DATA SYS SMITH, J ✓
NAV	RADAR
FE	BT/ODW HILL, J ✓
RADIO	CLD PHYS
FD C2424K, S ✓	DOPPLER
PARRISH, J ✓	

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
LAURITSEN, D ✓	DROPSONDE	NCAR
HOCK, T ✓		NCAR
LESKINEN, M ✓	DROPSONDE	VAISALA
FRANKLIN, J	HAPS	HRD
MAYFIELD, M ✓	HAPS/OBSERVER	NHC

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

~~CAL~~ DATA CALIBRATION ON ROUT

9 Messages Xmitted

PS1m + PS2m much closer throughout flight @ 45K < 0.5mb

U.S. DEPT. COMM./NOAA/ORD - DATA SECTION WORK FORM NO.2 ORWF2

FLT ID: 980617N

TIME OFF: 13522

TIME ON: 19362

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1019.4	30.14	1017.1	30.11

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES		
FAST FLT LVL TAPES		
RADAR TAPES		
DOPPLER TAPES		
ODW CASSETTES		
HARD COPIES		
AXBT		
AXCP		
ODW		
GPS	19	

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

980617N

TIME	LAT	lon	TK	HD	TA	TD	WD	WS	PA	GA	PS	EAS	REMARKS
141925	28 20	80 30	60	55	-37.1	-39.5	292	16.4					3412
142200	28 30	80 09											Drop 1 BUSHY
142210	28 30	80 08	74	72	-44.7	-55.1	275	11.8	10727	11279	236.0		Drop 2 BUSHY
142315	28 55	79 29	65	61	-44.9	-60.2	277	14.1	10726	11266	236.1		Drop 3 BUSHY
143340													Drop 4 BUSHY
150109	31 15	75 07	51	31	-44.7	-61.6	270	22.1	10725	11237	236.1	265	Drop 5 BUSHY
151000	32 00	74 51	90	98	-45.7	-64.1	274	19.5	10724	11216	238.2	238	Drop 6 BUSHY
151146	32 00	74 37											Drop 7 BUSHY
151305	32 00	74 24										239	Drop 8 BUSHY
151500	32 03	73 57	084	081	-45.9	-64.3	274	19.5	10723	11213	236.2	256	Drop 9 BUSHY
151905	32 05	73 28											Drop 10 BUSHY
152420	31 50	73 34											Drop 11 BUSHY
152545	31 49	73 44	260	259	-44.7	-63.0	260	27.8	10723	11224	236.2	257	Drop 12 BUSHY
152845	31 45	74 06					260	29.1					Drop 13 BUSHY
153115	31 43	74 28	260	259	-44.8	-63.2	264	28.6				238	Drop 14 BUSHY
153425	31 40	74 45					267	27.2					Drop 15 BUSHY
154225	31 56	74 41	87	87	-46.1	-62.0	259	19.4	10715	11212	236.5	274	Drop 16 BUSHY
154105	31 55	74 55										275	Drop 17 BUSHY
154111	31 56	74 54										275	Drop 18 BUSHY
154540	31 57	74 09											Drop 19 BUSHY
155010	31 38	74 11	263	262	-44.9	-61.3	262	27.2	10715	11236	236.4	275	Drop 20 BUSHY
155315	31 36	74 37					268	25.8	10715			274	Drop 21 BUSHY
1557													Drop 22 BUSHY
1601	31 52	74 58	84	82	-55.4	-65.7	265	23.5	12225	12784	185.8	245	Drop 23 BUSHY
160255	31 54	74 42	86	85	-55.3	-66.9	267	23.5					Drop 24 BUSHY
160605							263	23.7					Drop 25 BUSHY
161115	31 39	74 08	265	264	-55.1	-68.2	265	32.8	12221	12793	185.8	245	Drop 26 BUSHY
161430	31 38	74 34					261	32.6					Drop 27 BUSHY
161730	31 35	74 58	261	259			262	31.7				228	Drop 28 BUSHY
162030	31 32	75 16					262	31.1					Drop 29 BUSHY
162500	31 48	75 03	84	83	-56.7	-70.0	265	22.1	12220	12778	185.9	228	Drop 30 BUSHY
162741	31 50	74 39					267	23.2				228	Drop 31 BUSHY
162835													Drop 32 BUSHY
163100	32 06	74 22	0	352	-57.0	-70.2	271	26.7	12217	12769	185.9	228	Drop 33 BUSHY
163333	32 23	74 22										227	Drop 34 BUSHY
163900	32 29	74 22											Drop 35 BUSHY
163900	32 18	73 57	167	172	-56.9	-70.7	259	26.1					Drop 36 BUSHY
164200													Drop 37 BUSHY
164545	31 54	73 14	82	81	-56.6	-71.2	267	23.9	12222	12716		212	Drop 38 BUSHY
164950	31 58	72 44										212	Drop 39 BUSHY
165420	32 09	72 56											Drop 40 BUSHY
165437	32 09	72 57											Drop 41 BUSHY
165445	32 09	72 58	260	259	-57.4	-71.4	261	34.0	12222	12778	185.8	212	Drop 42 BUSHY
165800	32 05	73 21	259	260			262	32.2				212	Drop 43 BUSHY
171505	32 15	74 09	82.8	80	-65	-72	265	22				221	Drop 44 BUSHY
171540	171540												Drop 45 BUSHY
172355	31 54	74 29	265	264	-65	-74	263	30	44821	14258	146	217.6	Drop 46 BUSHY
173140	32 08	74 43	85.4	84.0	-65	-73	269	19	44829	14285	145.9	202.4	Drop 47 BUSHY
173905													Drop 48 BUSHY
173906													Drop 49 BUSHY
173935	31 55	74 25	264.7	264	-64	-74	267	29	44829	14250	145.9	203.6	Drop 50 BUSHY
174730	32 07	74 41	85.2	83.7	-64	-74	270	18.8	44832	14256	145.9	188.2	Drop 51 BUSHY
175000	31 56	74 18	265.4	264.7	-64.6	-75.2	269	29	44821	14253	145.9	187.8	Drop 52 BUSHY
175910													Drop 53 BUSHY
175915													Drop 54 BUSHY

980017N

Time	LAT	LONG	VIS	WD	TA	TD	WD	WS	PA	GA	PS	IAS	Remarks
180030	31.57	74.48											
1803	1												↓ to 40K
1805	Balancing deepbinder												Milling about
181000	31.59	73.44	~	~	57.7	-70.3	269	30	41040	13080	177	228.5	→ Drop 2
1820	31.02	75.16	234	235	-58	-69	259	31	41044	13074	177.2	228.5	
184315	29.55	77.01	233	235	-57.8	-69.7	264	30	41044	13099	177	230	
1846	↓ to	351K											
1850	29.25	77.46	272	233	-45.4	-63	266	20.5	35112	11214	236	288.5	-35K
185715	28.52	78.38	255	255	-44.8	-59.9	274	21.6	351	11266	236.7	288	Drop 18+19
1910	28.30	80.11											DESCEND BUDY 41009
192400	28.00	82.00	237	236	7.4	-7.5	293	28					DESCEND 13K

14 new sondes
(new temp)

5 others (NOAA standard)

3 sondes w/ box
all failed

9 w/ wire support
No Temp Damage or Break
on 8 of 9

1 at 290 IAS failed
worked as fast as 275 IAS

N49RF Hurricane 98 AVAPS DropSonde Log

22 sondes onboard

N49RF Project: Instrumentation FLIGHT Flight ID: 980617NMission: _____ Flight #: Ø System Status: ✓ Rev 4.1.1 AVAPS
Rev 1.17/2.01 MWG

Drop #	Sonde Serial Number	Time (Z)	Chn #	Press. offset	Winds time	Operator Init.	Comments Drop Status	GOOD ☒
1	973720 074	1422	1	0		JAS	Conformed Coated-SST-Taped	
2	981510057	1422	3	0			RSS-CARDBOARD-TI FAILED	
3	981510061	1433	2	1.0	85	JAS	RSS-Wire Support-Taped	✓
4	981510049	1500	1/4	0		JAS	RSS-WIRE-35K'-235K-	FAST FALL
5	981510056	1511	2/3	0	25	JAS	RSS-CARDBOARD-COVER DID NOT	release
6	981510043	1540	2/3	0	55	JAS	RSS-WIRE	✓
7	981510053	1540	1/4	0		JAS	RSS-WIRE-Poor Telm/WINDS	
8	981510050	1715	2/3	0		JAS	RSS-WIRE	✓
9	981510033	1715	1/4	0		JAS	No INSUL-Poor Telm	
10	981510055	1738	2/3	0	45	JAS	RSS-DEAN Support	✓
11	981510052	1739	1/4	0	24	JAS	RSS-WIRE	✓
12	981510059	1627	2/3	0	20	JAS	Box-RSS-T Failed	
13	981510062	1633	1/4	0	40	JAS	Box Removal-PTH Good	✓
14	981510071	1653	2/3	0.9	25	JAS	Box Removed T FAILED	
15	981510054	1654	1/4	0	40	JAS	Box Removal	✓
16	981510013	1759	2/3	0		JAS	Rev B-New	✓
17	981510026	1759	1/4	0		JAS	No INSUL-Rev B	✓
18	981510051	1857	2/3	0.9		JH	RSS-WIRE T FAILED	
19	971750 062		1/4	0.6		JH	Rev B-1/2 insul. P-FAILED	
20								
21								
22								
23								
24								
25								
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32								
33								

305 361 4402

Aircraft Operations Center
P.O. Box 6829
MacDill AFB, FL 33608-0829

AOC1:SC

June 15, 1998

MEMORANDUM FOR: All G-IV Test Flight Participants

FROM: Stan Czyzyk

SUBJECT: Aircraft/Dropsonde Test Flight - Wednesday June 17, 1998

This test flight will include the release of approximately 16 dropsondes to test various aspects of dropsonde performance. In addition, several calibration legs will be flown into, out of and perpendicular to the wind at 35K, 40K and 45K feet and at speeds of .70, .75, and .80 Mach. Specific requirements are needed for the launch of many of the dropsondes. These include high winds (>80 kts), various airspeeds, as well as releases over a buoy. Total flight duration will be 4-5 hours and will take place over the Atlantic Ocean off of the southeast coast.

- 1) N49RF will takeoff at 1000 local time.
- 2) N49RF will then climb to FL350 and head east to buoy 41009 (28 30N and 80 11W)
- 3) At buoy 41009, continue to buoy 41010 (28 54N and 78 30W). Dropsonde releases are possible at either/both of these locations.
- 4) We will then turn to the northeast to point 32N and 74W. A 80-100 nm radius circle will be blocked out from FL350-FL450 for 2.5 hours for calibration legwork. Throughout the duration in the blocked airspace, dropsonde releases will occur.
- 5) All legs will be 3 minutes in duration. The first three (3) legs will begin with the wind at FL350 at .70 Mach, then .75 Mach, then .80 Mach. Next, reverse course and fly into the wind at .70 Mach, then .75 Mach, then .80 Mach.

75 15W

94
84

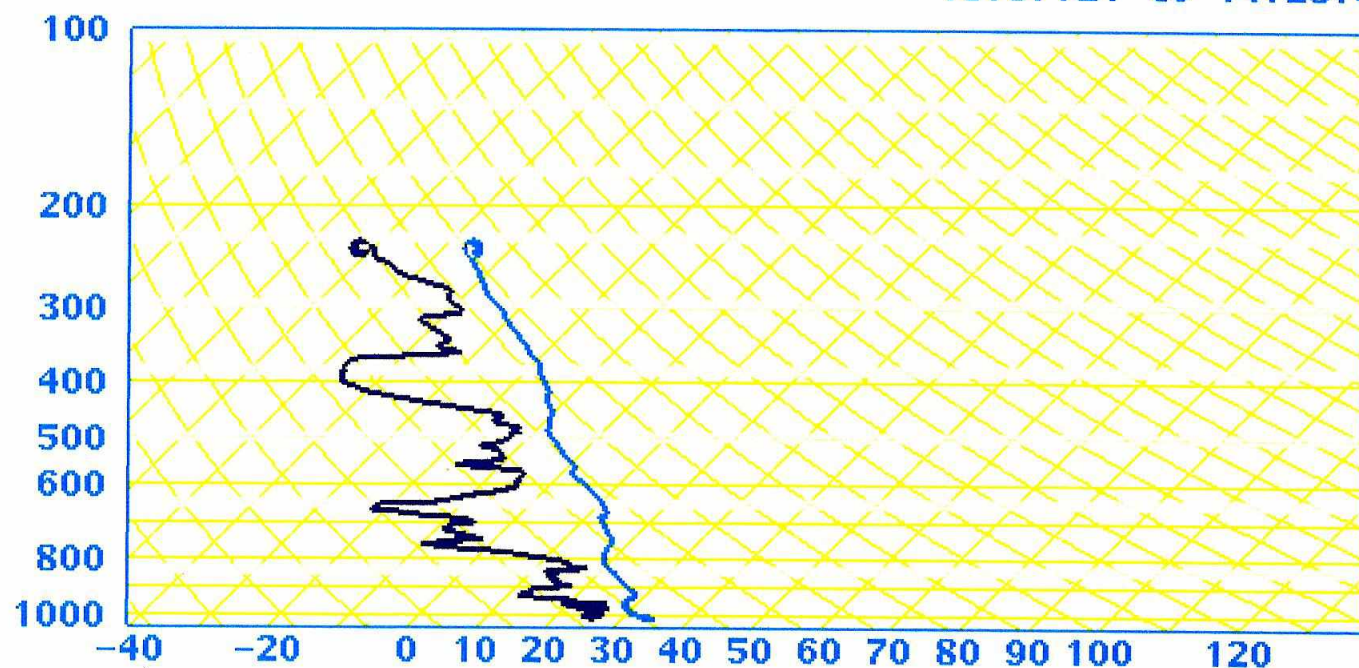
35 .7
235
.75
253
.80
272
40 .7
209
.75
226
.8
242
45 .7
186
.75
201
.8
216

- 6) Climb to FL400 and begin three legs into the wind at .70, .75, and .80 Mach. Next, reverse course and fly into the wind at .70, .75 and .80 Mach. We will then fly a 3-minute leg perpendicular to the wind at .75 Mach. Next, reverse course and fly another 3-minute leg perpendicular to the wind at .75 Mach.
- 7) Climb to FL450 and begin three legs into the wind at .70, .75 and .80 Mach. Next, reverse course and fly into the wind at .70, .75 and .80 Mach.
- 8) Return to buoy 41010 (dropsonde release possible).
- 9) Overfly buoy 41009.
- 10) N49RF will then return to MacDill.

CREW LIST

Player	Pilot
McCann	Pilot
Maxson	Pilot
Czyzyk	Flight Director
Parrish	Flight Director
Hill	SED
Smith	SED
Goldstein	SED
Franklin	HRD
Mayfield	NHC
Lauritsen	NCAR
Hock	NCAR
Keskinen	Vaisala

'Std-Skew-T' (winds@eider) Proi. 420 Flt 0 06/17/98 14:23:55
13:57:21 to 14:23:55



DPXC (-60.77 C)

v. PSXC (236.05 mbar)

ATX (-45.29 C)

v. PSXC (236.05 mbar)

'Std-Flight-Track' (winds@eider) Proi. 420 Flt 0 06/17/98 14:2
13:40:53 to 14:25:19

