

19870925HI-FDIR

U.S. DEPT. COMM./NORA/ORD - DATA SECTION WORK FORM NO.1 OROWF1 FILE

FLT ID: 870925H	FM: MFA	TO: MFA
FLT NO: 50-87	BLK IN: 0349	ATA: 03:36Z
ETD: 1800Z	BLK OUT: 1820Z	RTD: 1841Z
ETE:	BLK TIME: 9:29	FLT TIME: 8:55
SPONSOR ORG: HRD	PROGRAM: ODW	PURPOSE: SYNAPTIC FLOW

ORD PERSONNEL

AC TICKNOR / F	SYS ENG SCHRIECKER
CP ELLERS / LAYDON	DATA SYS JARVI
NAV GERISH	RADAR
FE MOORE	BT/ODW LEYVA / THOMPSON
RADIO NUNN	CLD PHYS
FD PARRISH / DAMIANO	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/ORD

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
WILLOUGHBY	ODW	HRD
GAMACHE, J.	ODW	HRD
BLACK, M.	ODW	HRD
DORST, N.	ODW	HRD
DONATO	GUEST	
DONATO	GUEST	

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

FIRST SONDE STUCK IN CHUTE ... ABLE TO FREE IT.

FIRST GOOD DROP AT FIRST TURN POINT

TRYING TO FIX ASDL PROBLEM ... SYSTEM DOWN

FIX DID NOT WORK ... NO 2 minute data

1945Z - 1948Z

PSR spike 205800Z

2105Z WZ spiking bad

Roll missing up even though not in maneuver. Seems to affect WZ

59

NB3

p File
Timer

183601 - 034000

0150Z
TA
TD.73

U.S. DEPT. COMM./NOAA/ORD - DATA SECTION WORK FORM NO.2 DROWF2 FILE

FLT ID: 870925H TIME OFF: 1841Z TIME ON: 0336Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	PS 1013.3 SP 1013.5	CALLAG 1013.4 29.95/1014.0	29.95/1014.0	29.99/1013.7 30.01/1016.0

NO	DATA DISPOSITION/DATE/QUALITY
1/SEC FLT LVL TAPES	1 / SP 1014.3 CALLAG PS 1016.3 1015.2
FAST FLT LVL TAPES	
RADAR TAPES	5
DOPPLER TAPES	
ODW CASSETTES	11
HARD COPIES	
AXBT	
AXCP	
ODW	27

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

T/O MDA TWR

1650Z

TA 89

TD 73

LND 0150Z

TWR

TA 76

TD 73

2999

870925H

TIME	LAT	LONG	TRK	HD	WD	WS	PA	GA	TA	TD	SP	PS		PQ
194500	2550	8003	48	45	301	9	1332	1441	18.0	17.6	1015.4	850.6		59.4
FIRST SONDE WAS STUCK NO/65														
194104	2828	7557	85	85	266	16	5790	6097	-8.4	-36.4	1010.6	485.6	Good	71.1
195644	2833	7428	87	87	263	17	5788	6092	-8.5	-22.8	1009.6	485.8	Good	73.3
201157	2835	7259	90	89	272	21	5800	6099	-8.9	-9.4	1007.7	484.9	Good	65.2
202701	2836	7128	89	89	267	32	5797	6103	-8.3	-19.4	1008.7	485.0	Good	77.6
204155	2837	6959	90	91	258	31	5792	6099	-8.3	-9.5	1009.0	485.4	Good	68.8
205715	2836	6828	90	93	240	30	5800	6111	-8.2	-8.8	1008.5	484.8	Good	74.7
211252	2835	6652	90	93	236	29	5797	6115	-8.3	-8.5	1009.9	485.1	Good	72.0
213151	2830	6458	119	124	236	30	5794	6128	-7.7	-10.1	1010.9	485.7	Good	78.0
214652	2740	6359	138	144	227	29	5786	6134	-8.0	-14.5	1012.9	485.7	Bad Press	82.1
215852	2658	6319	175	179	222	22	5785	6141	-7.5	-26.5	1014.2	486	Good	73.5
221717	2530	6320	207	208	202	16	5783	6146	-7.9	-19.5	1015	486	Good	
222856	2447	6359	225	220	203	14	5780	6140	-7.9	-6.5	1015.6	486	Good	
224241	2351	6435	220	220	210	12	5779	6137	-9.0	-18.6	1017.3	486	Bad P, S	
225436	2305	6507	260	259	181	9	6439	6832	-11.8	-25.3	1012.8	444	Good	
231514	2311	6658	2	2	201	9	6385	6774	-11.5	-33.6	1012.7	447.3	Good	81.9
233001	2431	6654	359	358	221	16	6385	6769	-11.5	-34.5	1012.8	447.5	Good	82.6
234753	2602	6704	270	268	218	18	6402	6773	-11.9	-26.3	1012.3	447.3	Good	77.3
000641	2604	6846	273	271	232	26	6718	7104	-14.8	-28.8	1013.5	427.1	Good	83.2
002541	2556	7021	187	190	213	16	6715	7098	-11.6	-13.5	1001.4	427.2	BAD	68.6
003551	2509	7022	180	186	243	28	6719	7103	-17.1	-21.2	1020.4	427.1	Good	77.5
010135	2305	7033	271	271	219	4	6713	7105	-13.9	-24.9	1011.9	427.6	BAD	77.4
010540	2305	7056	271	271	198	5	6713	7105	-14.2	-27.3	1012.5	427.6	BAD	79.5
013906	2314	7352	9	6	266	23	6711	7098	-13.8	-26.4	1010.2	427.7	Good	80.2
015320	2430	7349	0	355	261	35	6711	7096	-13.9	-31.5	1011.3	427.5	Good	82.3
021324	2605	7400	266	265	246	23	6708	7076	-15.3	-15.8	1011.1	427.8	Good	69.0
023640	2552	7601	266	266	260	22	6705	7071	-15.1	-19.9	1012.6	427.8	Good	83.9

A/C COMMANDER	NAVIGATOR	A/C NO.	MISSION NO.	TIME AIRBORNE	LOCATION	DATE	PROJ. NAME
Ticknor	Gerish	N 42 RF	WX	1841	NIA	25	ODW Test

TIME OF ENTRY	POSITION	TYPE INE USED	INE #1 POSITION	LAT LON COR'S	INE #2 POSITION	LAT LON COR'S	ALT GS	TH TK	REMARKS
1820	25 48.3 80 17.6	/	25 48.1 80 17.6	+0.2 0	25 48.0 80 17.6	+0.3 0	/	/	Block out
1841	25 48.0 80 17.6	/	25 47.4 80 17.7	+0.6 -4.1	25 47.3 80 17.7	+0.7 -0.1	/	/	Take off
190804		/	26 33.4 78 41.8		26 33.1 78 41.6		/	/	over ZFP
1956		/	28 33.1 74 28.2		28 33.3 74 28.2		/	/	3 rd Drop
2012		/	28 35.1 72 59.8		28 35.7 72 59.4		/	/	4 th Drop
2027		/	28 36.2 71 29.4		28 36.9 71 28.7		/	/	5 th Drop
2042		/	28 36.8 70 00.7		28 37.1 69 59.9		/	/	6 th Drop
2057		/	28 36.2 68 29.7		28 36.6 68 29.2		/	/	7 th Drop
2113		/	28 34.2 66 54.0		28 35.2 66 53.4		/	/	8 th Drop Late fix (1 min)
2132		/	28 28.7 64 54.5		28 30.8 64 58.3		/	/	9 th Drop
2147		/	27 38.1 64 01.8		27 40.8 63 59.9		/	/	10 Drop -Dud-
2154		/	26 54.5 63 20.6		26 57.3 63 18.6		/	/	11 Drop

ATC CLEARANCE: CAF

ENROUTE CLEARANCES: 10 40 17 2.0 17 5.0 17 8.0 17 13.0
27 30 77 50

TYPE OF FIX: (1) DR (2) RADIO (3) CELESTIAL (4) VISUAL (5) LORAN (6) RADAR (7) DOPPLER - INERTIAL
(8) OMEGA (9) INERTIAL (10) OMEGA - INERTIAL

TIME OF ENTRY	POSITION	TYPE INE USED	INE #1 POSITION	LAT LON COR'S	INE #2 POSITION	LAT LON COR'S	ALT GS	TH TK	REMARKS
2217			25 27.1 63 21.9		25 28.8 63 19.8				12 Drop
2254			24 45.1 64 01.0		24 47.9 63 58.7				13 Drop
2243			23 48.0 64 37.5		23 51.2 64 34.2				14 drop
2255			23 4.2 65 10.1		23 04.9 65 06.1				15 Drop
2330			24 27.3 66 57.8		24 30.9 66 53.8				16
2348			25 59.7 67 07.4		26 02.6 67 04.0				17
0026			25 51.4 70 28.1		25 56.7 70 21.5				19 Bad Sunde
0036			25 04.0 70 29.0		25 09.7 70 22.2				20
0102			22 59.9 70 37.1		23 05.4 70 32.3				21 Bad
0105			23 00.3 71 00.0		23 05.7 70 55.5				22
0137	23 04		23 00.6 73 54.8	+3.4	23 05.7 73 46.8	-1.7			22 NMI NW of north shore Crooked Island -Rocks-
0148	73 53		23 51.6 73 59.7	-6.7	23 57.2 73 50.3	+2.7			32 NMI East of east shore of San Salvador.
0336	25 48.0 80 17.6		25 40.9 80 22.9		25 48.2 80 12.9				Land
0350	25 48.3 80 17.6		25 41.5 80 22.0	+6.8 -4.4	25 49.1 80 14.5	-0.8 +3.1			Block in

FLIGHT PLAN

PROPOSED T.O. 1800
ACTUAL T.O. 1841

WAY POINT	TO	RTE	ALT	TAS	TC	W DC	V	TH	VAR	MH	GS	ZONE DIST	TOTAL DIST	ZONE TIME TOTAL TIME	PROPOSED ETA	ETA ATA
1	25 48.3 80 176															
2	26 33.3 78 41.9 2FP											89	89	+23 1904		
3	28 30 76 00											192	281	+103 1940 +126 2007	1940 1941	
4	27 00 504 FIA 63 20 28 34 65 00							2602	2142			679	960	+16 2132 +42 2213	2156 2158	
5	25 30 63 20											90	1050	+19 2212 +401	2218 2217	
6	23 00 65 00											176	1226	+36 2300 +428	2257 2253	
7	23 00 67 00											111	1337	+22 2330 +500	2315 2315	
8	26 00 67 00											180	1517	+37 2348 +537	2348 2341	
9	26 00 70 30											189	1706	+35 0024 +615	0024 0024	
10	23 00 70 30											180	1886	+36 0132 +659	-31 0101	
11	23 00 74 00											194	2080	+36 0139 +727	-30 0137	
12	26 00 74 00											180	2266	+33 0211 +800	0212 0212	
	Extc MIA											340	2600	+105 0246 +905		
	Extc													+24 0236	0240	
13	28 30 NY 70 42											280		+59 2033 +142	2037	
14	27 00 SIO 63 20															
15	26 00 MIA 69 45											144		+30 0018 +607	0018	

SYS	BEGIN ALIGN TIME	NCS CONN	Ω AID	TIME OUT OF COARSE ELAPSE ALIGN POST TIME	ALIGN STS 0-5	(1) TIME INTO NAV.	(2) TIME OUT NAV.	ΔT (2)(1)	TERMINAL ERRORS		
									LAT	LONG	GS
INS 1		N	N		0	17 35	03 50	10.3	-6.8	+4.4	3
INS 2 IMU		N	N		0	17 35	03 50	10.3	+0.8	-3.1	9

ALIGN REMARKS:

OTHER REMARKS:

HURRICANES 87 DATA SUMMARY

870925H Post-T.S. Emily ODW (NOAA42)

TYPE OF DATA

SENSOR OR OPTION

INE	2
Accelerometer	2
Temperature probe	2
Altitude change option (for vertical winds)	RA
Static pressure	Rosemount (fuselage)
Dynamic pressure	Rosemount (fuselage)
Time source	Micro 29
Constants file	CO2872.CON

Notes:

Numerous syncro radar altimeter spikes have been removed from the data and patched with either a digital radar altimeter or pressure altitude correction. The spikes normally occur while changing altitude, in roughly 3300 foot intervals.

No renavigation attempted.

Removed and patched a number of Rosemount static pressure spikes. We used the Garrett for these corrections (usually less than 5 seconds in duration).

The ASDL one-minute data failed immediately after take-off and was not available for the flight. RECCO and ODW messages went out fine.

The ambient temperature is somewhat untrustworthy from 0005Z to 0040Z in the ice. The side radiometer is a good substitute.

J/W liquid water instrument was out for this flight.

	Take Off	Landing
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Aircraft Static Pressure	1013.3 mb	1016.3 mb
Corrected Tower Pressure	1013.4 mb	1015.2 mb

Jack Parrish