

19870924HI-FDIR

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

FLT ID: 870924H	FM: SAN JUAN	TO: MFA
FLT NO: 49-87	BLK IN: 0401Z	ATA: 0355Z
ETD: 1800Z	BLK OUT: 1812Z	RTD: 1820Z
ETE:	BLK TIME: 9:49	FLT TIME: 9:35
SPONSOR ORG: HRD	PROGRAM: ODW (HURRICANE)	PURPOSE: SYNOPSIS FLOW

ORD PERSONNEL

RC TURNER	SYS ENG GOLDSTEIN
CP LAYDON / EILERS	DATA SYS THOMPSON
NAV HENDERSON	RADAR
FE MOORE / FLEURY	BT/ODW LEYVA
RADIO NUNN	CLD PHYS
FD DANIANO / PARRISH	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/ORD

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
WILLOUGHBY, H	ODW	HRD
DORST, N	ODW	HRD
GAMACHE, J	ODW	HRD
KAPLAN, J	ODW	HRD
KINNEY	MECHANIC	ORD

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

1829Z Balanced DP

2030Z - changed mission designator to 1312 Emily

0220Z TT1 is bad or frozen went to TT2.

0201Z

SSTNR

1753Z

TA

92

TD 72

SP T/P

1015.0

1500 FT

1500 FT

SP 1012.6

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

FLT ID: 870924H TIME OFF: 1820Z TIME ON: 0355Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	PS 1015.0 SP 1014.8	29.98 / 1015.0 29.98	PS 1014.5 SC 1012.6	29.94 / 1013.5

NO

DATA DISPOSITION/DATE/QUALITY ^{CAL LAB}

1/SEC FLT LVL TAPES

1

FAST FLT LVL TAPES

RADAR TAPES

4

DOPPLER TAPES

ODW CASSETTES

10

HARD COPIES

RMS 600 FT
TAPES

4

AXBT

AXCP

ODW

28

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

870924H

TIME	LAT	LONG	TRK	HD	WD	WS	PA	GA	TA	TD	SP	PS	EE	PQ
182430	18 37	66 04	318	318	151	16	1075	1162	20.5	22.7	1016.5	883		
185805	2101	6546	60	62	137	9	5148	5477	-1.4	-26.8	1011.5	529.7	GOOD	78.1
192315	2203	6352	62	64	157	14	5143	5478	-2.8	-22.8	1015.5	530.0	≈ GOOD omega was so so	79.5
194843	2303	6200	353	353	168	11	5136	5477	-2.8	-14.9	1014.7	530.1	≈ GOOD omega was so so	74.3
200653	2431	6212	358	357	197	7	5140	5474	-2.6	-19.7	1014.2	530.2	NO OMEGA BAD	
200955	2446	6213	353	352	204	7	5139	5472	-2.1	-23.8	1013.3	530.3	GOOD	77.5
202536	2602	6223	352	351	185	12	5138	5467	-2.5	-25.6	1013.7	530.3	Good	74.6
204545	2743	6235	352	348	210	24	5104	6170	-6.5	-24.7	1011.6	484.6	Good	74.1
210010	2902	6246	6	3	206	29	5802	6161	-7.1	-24.4	1012.1	484.8	With no or good ch. dir & avoid bump NO OMEGA BAD	77.5
211824	3029	6302	271	264	222	37	5843	6189	-7.7	-33.0	1010.7	479.8		71.7
214150	3031	6502	271	264	218	41	6111	6452	-9.4	-15.9	1007.4	464.3	Good	74.5
220734	3025	6659	176	184	228	47	6112	6427	-9.5	-9.4	1004.9	464.8	Good	62.3
222855	2856	6657	192	194	202	39	6099	6451	-9.6	-17.6	1009.3	465.4	Good	73.9
225137	2716	6646	177	181	209	33	6104	6464	-8.9	-15.9	1008.9	465.1	Good	79.4
230818	2559	6649	185	188	216	26	6101	6471	-8.9	-27.6	1011.0	465.2	Good	77.7
233342	2359	6702	211	211	209	16	6100	6479	-8.1	-30.9	1009.8	465.2	Good	78.8
234414	22 58	67 47	210	215	200	22	6732	7148	-12.7	-35.2	1010.1	426	Good	72.6
000514	22 01	68 36	268	266	208	12	6731	7149	-12.9	-39.8	1011	426	Good	52
002327	22 05	70 11	2	2	206	10	6730	7141	-13.5	-21.3	1011.7	426.5	Good	73.5
003929	23 32	70 09	2	359	222	23	7034	7468	-15.8	-23.7	1012.6	408.7	Good	
005620	25 01	70 09	359	355	231	25	7032	7452	-16.2	-14.4	1012.4	408.7	Good	

A/C COMMANDER		NAVIGATOR		A/C NO.		MISSION NO.		TIME AIRBORNE		LOCATION		DATE		PROJ. NAME	
TURNER		HENDERSON		N42RF		870924H		1820Z		STU ↓ MIA		24 SEPT 87		T/S "EMILY"	
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						
1807	18-26.3 66-00.7	4 2	18-26.3 66-00.7	φ	18-26.3 66-00.7	φ	X	X	BLOX						
1920		9 2	21-57.9 64-06.7		21-56.5 64-05.4		17.0 289	064 061							
2024		9 2	25-58.6 62-25.6		25-55.1 62-22.5		17.0 298	352 352							
2122	30-34.0 63-17.0	2 2	30-32.3 63-23.1	+1.7 -6.1	30-29.8 63-20.2	+4.2 -3.2	20.0 271	267 273	326°/132 BDA						
2149	30-32.0 65-36.0	2 2	30-35.1 65-42.8	-3.1 -6.8	30-32.1 65-38.0	-0.1 -2.0	20.0 256	263 271	023°/120 BDA						
2250		9 2	27-28.4 66-49.9		27-27.3 66-47.1		20.0 279	180 176							
2350		9 2	22-59.0 67-50.9		22-59.2 67-46.6		22.0 280	217 217							
0010	22-02.0 69-05.0	2 2	21-59.8 69-04.1	+2.2 +0.9	22-00.2 69-00.4	+1.8 +4.6	22.0 301	270 271	253°/122 GT						
0039	X	2 2	23-29.2 70-14.9	X	23-27.9 70-09.6	X	22.0 325	358 001	192°/130 GT X						
0105		9 2	25-50.5 70-15.7		25-50.5 70-10.4		23.0 328	355 000							
0134		9 2	28-22.4 69-47.9		28-24.7 69-43.3		23.0		Δ (45)						
0207		9 2	28-29.3 72-05.5		28-30.5 71-58.7		23.0 297	269 270							
ATC CLEARANCE: 719.0 548 717.0 710' CL/TO 4010 717.0 717.0 717.0 717.0 717.0 717.0 717.0 717.0 717.0 717.0 717.0 717.0 717.0 717.0 717.0															
720.0 722.0 723.0 724.0 725.0 726.0 727.0 728.0 729.0 730.0 731.0 732.0 733.0 734.0 735.0															
ENROUTE CLEARANCES:															
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															

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PROPOSED T.O.	1800 Z
ACTUAL T.O.	1820 Z

FIR	2038
	2110
FIR	
	-6
	-8
	-5

OTHER REMARKS:

HURRICANES 87 DATA SUMMARY

870924H T.S. Emily ODW (NOAA42)

TYPE OF DATA

SENSOR OR OPTION

INE	1
Accelerometer	1
Temperature probe	1
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 had intermittent failures during the whole flight. Most lines of one-minute data were not transmitted after 2130Z, but RECCO and ODW messages went out OK.

The ambient temperature is somewhat unreliable from 0120Z to 0155Z, as we encountered lots of ice at this time. 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	1015.0 mb	1014.5 mb
Corrected Tower Pressure	1015.0 mb	1013.5 mb

Jack Parrish