

1994091111.FDIR

T.S. DEBBY GENESIS

FLIGHT #02 I940911

TYPE OF DATA

SENSOR OR OPTION

INE	2
Accelerometer	2
Temperature probe	1
Altitude change option (for vertical winds)	RA159
Static pressure	Rosemount fuselage
Dynamic pressure	Rosemount fuselage
Time source	Micro 99
Constants file	CO3943.CON

Notes:

There were two time/data gaps:

190841Z - 191000Z

214540Z - 214550Z

Also at 023040Z there was a data system problem, thus the last four (4) minutes of flight are not available.

The fuselage static pressure sensor, PSF, experienced a few electronic dropouts during the following time frames:

1909Z - 1912Z
2229Z - 2232Z
2247Z - 2249Z
2257Z - 2259Z
2308Z - 2310Z
2312Z - 2315Z
2348Z - 2350Z
0032Z - 0034Z
0011Z - 0014Z

All of these dropouts were removed and patched.

The fuselage dynamic pressure sensor, PQF1, experienced electronic dropouts during the following time frames:

2018Z - 2020Z
0211Z - 0214Z

These dropouts were removed and patched.

The dewpoint sensor, DW1, was balanced by this flight meteorologist. The spike generated by this action during the time frame, 1930Z-1936Z, was removed and patched.

The aircraft INE positions were renavigated with respect to GPS.

SPECIAL NOTE!!! Locations 80, 81 and 82 of record five on the

standard tape contain vertical ground, vertical air
and vertical speeds, respectively, computed using
Dave Jorgensen's vertical wind algorithm.

	Take off -----	Landing -----
Aircraft static pressure	1006.7mb	1017.8mb
Corrected tower pressure	1006.2mb	1017.6mb

Flight Meteorologist: A. Barry Damiano, (813) 828-3310 ext. 3073

FLT ID: <u>E940911</u>	FM: <u>TBPB</u>	TO: <u>KOPF/KMCF</u>
FLT NO: <u>94-027</u>	BLK IN: <u>0239Z/0341Z</u>	RTA: <u>0234Z/0331</u>
ETD: <u>1800Z</u>	BLK OUT: <u>1843Z/0246Z</u>	RTD: <u>1855Z/0250Z</u>
ETE: <u>11</u>	BLK TIME: <u>7:56/9:55</u>	FLT TIME: <u>17:39/18:41</u>
SPONSOR ORG: <u>HRD</u>	PROGRAM: <u>HURF RESEARCH</u>	PURPOSE: <u>GENESIS OF TROPICAL CYCLONE</u>

DAO PERSONNEL

AC <u>TICKNOR</u>	SYS ENG <u>ROLES</u> ✓
CP <u>TENNESEN</u> ✓	DATA SYS <u>LYNCH</u>
NAV <u>RATHBUN</u> ✓	RADAR
FE <u>WADE/BAST</u>	BT/ODW <u>GONZALEZ</u> ✓
RADIO <u>SANS SOURCE</u> ✓	CLD PHYS
FD <u>DAMIANO</u> ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/DAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
<u>CLOSSER</u>		<u>ROC</u>
<u>McFADDEN</u>		<u>S</u>
<u>WILLOUGHBY</u>	<u>PI</u>	<u>HRD</u>
<u>M. BLACK</u>	<u>RADAR</u>	<u>S</u>
<u>KAPLAN</u>	<u>ODW</u>	<u>S</u>
<u>GRIFFIN</u>	<u>ODW</u>	<u>S</u>

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

190900 TIME PROBLEMS

1326 DRAIN 1932Z

205430

WD check

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

FLT ID: 1940911

TIME OFF: 1855Z/0250Z TIME ON: 0234Z/0331Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1006.7	1006.2/30.04	1017.8/30.04	30.08

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES

FAST FLT LVL TAPES

RADAR TAPES

DOPPLER TAPES

ODW CASSETTES

HARD COPIES

PMS

AXBT

AXCP

ODW

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

A/C COMMANDER		NAVIGATOR		A/C NO.		MISSION NO.		TIME AIRBORNE		LOCATION BARBADOS → MACILL		DATE 11 SEP 94		PROJ. NAME 17 EDDIE	
TICKNOR		PLATHORN		NH32F		94-27		1854							
TIME OF ENTRY	POSITION GPS	TYPE INE USED	INE #1 POSITION	LAT LON COR'S	INE #2 POSITION	LAT LON COR'S	ALT GS	TH TK	REMARKS						
1839 1841 1854		GPS #1							ENGINE START TAKE TAKEOFF						
	1353.0		1353.1	-1	1353.2	-2	71	318							
1914	6015.8		6016.0	-2	6015.3	+5	271	316							
	1600.0		1600.6	-6	1600.4	-4	180	310							
1054	6238.9		6239.1	-2	6238.4	+5	289	311							
	1642.1		1642.3	-2	1642.3	-2	180	290							
2026	6501.1		6501.6	-5	6500.5	+6	274	286							
	1701.6		1702.4	-8	1702.3	-7	180	271							
2050	6700.6		6700.6	0	6659.0	+1.6	272	270	DROP #1						
	1700.8		1701.9	-1.9	1701.7	-9	194	267							
2122	6948.9		6948.8	+1	6947.6	+1.3	299	268	DROP						
	1659.8		1700.4	-6	1700.5	-7	180	274							
2155	7242.0		7241.9	+1	7240.3	+1.7	297	270	DROP						
	1654.4		1655.7	-1.3	1655.6	-1.2	180	125							
2234	7601.0		7600.3	+7	7558.7	+2.3	281	126	DROP						
	1533.6		1534.6	-1.0	1534.3	-7	180	121							
2304	7357.2		7356.8	+4	7355.2	+2.0	297	124							
	1641.9		1643.3	-1.4	1642.3	-4	180	311							
2336	7320.3		7320.9	-6	7317.6	+2.7	301	308							
	2026.9		2025.5	-1.6	2027.3	-4	190	003							
0034	7315.0		7315.1	-1	7312.3	+2.7	300	358							
	2334.3		2335.7	-1.4	2333.3	+1.0	180	296							
0110	7339.5		7340.1	-6	7335.2	+4.3	308	296							
ATC CLEARANCE: 1710N 7350W															
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.	18452
ACTUAL T.O.	18542

SYS	BEGIN ALIGN TIME	NCS CONN	Ω AID	TIME OUT OF COARSE	ALIGN STS 0-5	(1) TIME INTO NAV.	(2) TIME OUT NAV.	ΔT (2)(1)	TERMINAL ERRORS		
				ELAPSE ALIGN POST TIME					LAT	LONG	G S
INS 1	1700Z				0	1835	0338	9400	-2.0	-0.8	0
INS 2 IMU	1700Z				5	1838	0338	9400	+0.8	+4.2	3

OTHER REMARKS:

I 940911

TIME	LAT	LONG	TRK	HD	WD	WS	PA	GA	TA	TD	SP	PS		PO
190200	1318	5939	298	306	66	37	2371	2501	13.2	-4.4	1012.8	753.8	CLR	69.5
192000	1412	6036	316	317	113	11	4958	5244	-1.4	-4.7	1008.2	540.2	CLD BLW	67.9
192900	1441	6108	316	316	154	3	5519	5497	-5.7	-4.8		503.4	CLD BLW	68.3
195000	1546	6222	310	310	151	6	5546	5860	-5.6	-10.9	1009.4	501.9	CLD ARV	70.0
200300	1620	6315	232	4	237	3	5570	5881	-6.2	-9.5	1009.7	500.3	CLD	73.6
202200	1639	6444	281	282	104	4	5569	5880	-6.5	-7.3	1009.7	500.5	CLD	75.0
203300	1645	6537	281	280	156	6	5614	5929	-6.5	-9.8	1009.6	497.3	CLD	69.7
204700	1659	6645	280	280	90	4	5612	5924	-7.1	-7.3	1010.4	497.4	CLD	67.1
205025	1702	6702	272	273	48	7	5614	5926	-7.3	-7.5	1011.0	497.4	Good ODW	63.5
210800	1701	6831	268	269	66	13	5614	5923	-6.6	-10.1	1009.4	497.3	CLD	72.5
212100	1701	6940	264	268	156	20	5610	5920	-6.3					
212237	1701	6948	270	267	149	21	5611	5920	-6.4	-11.5	1008.4	497.5	Good ODW	74.1
213500	1700	7054	270	271	80	12	5611	5917	-5.9	-7.7	1006.9	497.5	CLD	78.0
215534	1700	7242	270	274	29	20	5611	5921	-4.6	-13.8	1004.7	497.5	Good ODW	76.9
221800	1700	7441	270	273	33	21	5610	5928	-4.9	-21.0	1006.8	497.5	CLR	76.1
223450	1654	7601	125	124	65	10	5611	5929	-5.3	-24.0	1008.0	497.6	Good ODW	75.0
224700	1621	7512	124	121	55	15	5609	5927	-4.8	-17.6	1006.4	497.7	CLD BLW	79.3
231300	1510	7320	124	121	13	14	5610	5928	-5.3	-13.2	1005.4	497.6	CLD BLW	77.3
234000	1652	7334	308	312	45	19	5609	5926	-6.2	-9.4	1009.6	497.7	CLD BLW	81.1
235500	1750	7427	320	324	54	16	5611	5935	-6.5	-16.1	1011.8	497.6	CLD	84.4
001000	1854	7416	37	39	68	16	5610	5932	-6.6	-14.6	1011.5	497.6	DARK	87.7
004000	2058	7319	351	355	98	20	5609	5932	-5.6	-23.0	1008.9	497.6	DARK	82.6
005800	2229	7327	354	356	93	12	5611	5954	-6.5	-23.2	1013.9	497.6		86.7
011100	2334	7339	246	297	105	7	5611	5954	-6.8	-19.1	1014.6	497.7		84.5
013100	2414	7320	291	291	99	3	5609	5935	-6.8	-23.6	1012.0	497.6		82.1
014000	2451	7651	294	293	218	8	5649	5885	-7.1	-22.0	1016.6	501.4		86.4
021100	2531	7543	291	292	286	5	5624	5963	-7.7	-10.9	1015.5	496.6		86.5
022400	2552	7944	279	280	68	12	1200	1301	20.6	13.5	1017.7	479.2		71.9