

Hurricane 2000 T.S. Debby Reconnaissance

000824H

<u>Sensor or system</u>	<u>Number or Name</u>
INE	1
Accelerometer	1
Temperature Probe	2
Dew Point Probe	1
Altitude (for vertical wind)	RA-159
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO2004.CON

Notes:

Total temperature (TT2) had a spike removed and patched 0509:00-0510:00.

Dewpoint (DW1) was frozen and replaced by DW3 from 0256:23-0313:01 with an offset of -1.8C. DW1 was replaced by DW3 from 0649:20-0739:26 due to sensor not performing optimally. DW1 was frozen and replaced by DW2 from 0806:23-0826:00.

Radar altitude (RA-159) had a spike at takeoff and was replaced by RA-232 from 0042:00-0050:14. RA-159 was put in standby mode several times due to Iridium SAT phone calls. RA-159 was replaced by RA-232 during these times with appropriate offsets (0112:30-0115:25 (57.0), 0123:43-0127:53 (63.0), 0130:08-0145:47 (60.0), 0158:33-0210:36 (52.0), 03333:47-0338:47 (-11.0), 0432:00-0444:45 (-12.0), 0449:10-0452:39 (-7.0), 0623:07-0640:55 (-13.0 and was replaced by GPS), 0700:06-0715:50 (92.0), 0751:05-0752:19 (60.0), and 0807:21-0826:00 (no offset). A spike was removed from RA-159 at 0731:00-0732:00. Dips in RA-159 are due to overflying land (Cuba and Florida).

A spike was removed from PSF, PQF1, TT2, DAP, DBP, RS, RD and APF at 0048:50-0049:10.

The dynamic slip pressure (DBP) was invalid and was replaced by the radome dynamic slip pressure during the entire flight.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	1019.5	1017.5
Corrected tower pressure	1020.3	1019.1

The aircraft INE positions were re navigated 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. It is recommended that these values be used for vertical wind analysis.

Flight Meteorologist: Stan Czyzyk, (813) 828-3310 ext. 3086

FLT ID: 000924H	FM: KmCF	TO: KmCF
FLT NO: 00-061	BLK IN: 0827Z	ATA: 0817Z
ETD: 0045Z	DLK OUT: 0035Z	RTD: 0047Z
ETE: 0945Z	BLK TIME: 7.52 7.9	FLT TIME: 7:30 7.5
SPONSOR ORG: NOAA	PROGRAM: NHE	PURPOSE: T.S DEBBY. RECCO

OAO PERSONNEL

AC TAGGART, B ✓	SYS ENG MCMILLAN, J ✓
CP KENUL, P ✓	DATA SYS MCNAMARA, R ✓
NAV RATHBUN, D / ADLER, J ✓	RADAR LYNCH, T ✓
FE BAST, G ✓	DT/ODW
RADIO ROGERS, M ✓	CLD PHYS
FD CZYZYK, S ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
CARSWELL, J / CASTELS, A ✓	SFMR	UMASS
DONOVAN, B ✓	SFMR	UMASS
WALSH, E	SRA	NASA
MOBERG, C / LEIGHTON, P ✓	HRD Wkstation	HRD
BRIDGEMAN	VISITOR	6. GUNTER SHIP
FLOYD, D		
MICHAELS, M ✓	MEDIA	CH-8 WFLA

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

IP. 19.8 74.0
 1257A DEBBY
 BAL #3 0100Z

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO. 2 OROWF2

FLT ID: 000824H TIME OFF: 0047Z TIME ON: 0817Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1019.5	30.13	1017.5	30.09

NO		DATA DISPOSITION/DATE/QUALITY	
1/SEC FLT LVL TAPES	2		
FAST FLT LVL TAPES			
RADAR TAPES			
DOPPLER TAPES			
ODW CASSETTES			
HARD COPIES	2		
AXDT			
AXCP			
ODW			

PHOTOGRAPHY					
	FWD	LS	RS	VERT	
ON					
OFF					
RATE					

REMARKS

000824H

U.S. Dept. of Commerce/NOAA/Aircraft Operations Center

Form 413-50

TIME	LAT	LONG	TK	HO	TA	TD	WD	WS	PA	GA	PS	SP	REMARKS
021600	2342	7650	135	134	-3.4	-21.0	60	7.3	5141	5473	530.1	1011.5	LEVEL 17K PA
024910	2145	7450	160	157	-2.7	-10.5	75	14.2	5137	5456	530.5	1014.3	-
025240	2129	7447											DESCEND
042455	1934	7446											
050530	1853	7537	45	52	248	21.1	156	27.8	453	464	960.0	1011.8	SW BT
0547	1934	7508											
060940	1946	7609	268	271	249	20.1	020	13.3	453	478	960.0	1013.0	NW CORNER END
073840	2551	8003	315	318	-15.4	-33.8	78	17.7	6724	7140	426.7	1018.3	PITCH MAN 22K
075315	2643	8108	313	316	-16.0	-32.2	90	26.1	6745	7147	425.5	1018.7	

027/67 1951.4 7357.6

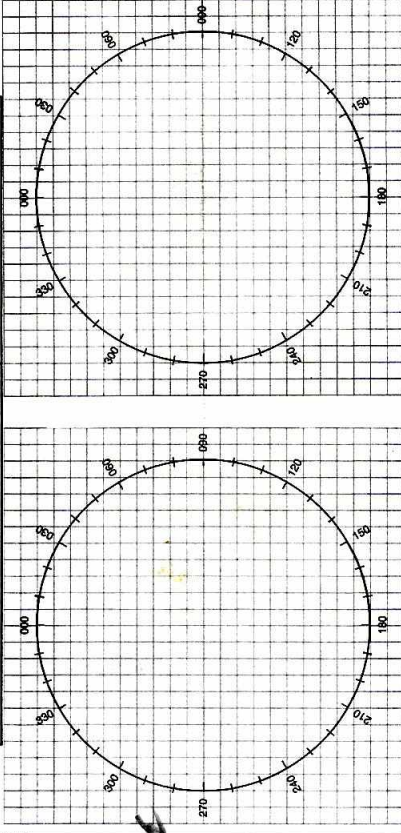
2034 7415

04508 3492d 5.26hr

0147
257
0710
0414

CLEARANCES		
FREQ	ALT	HDG
		OTHER
		HAVANA 120.25
		175/160
		127.22 MIAMI/ARCA
		45K 5200

MISSION LOG PAGE ___ OF ___



POSITION REPORT	
1. POSITION	
2. TIME	
3. ALTITUDE	
4. NEXT POSITION	
5. ETA	
6. NEXT POSITION	

EMERGENCY MESSAGE
 TRANSMIT THE FOLLOWING MESSAGE TO ANY AGENCY ON THE AIR-GROUND FREQUENCY IN USE. IF UNABLE TO ESTABLISH COMMS, ATTEMPT CONTACT ON ANY OF THE FOLLOWING EMERGENCY FREQUENCIES:
 UHF/VOICE 2182 KHZ HF/CW 8364 KHZ MFCW 500 KHZ
 121.5 2182 KHZ 8364 KHZ 500 KHZ
 MAYDAY, MAYDAY, MAYDAY
 THIS IS NOAA, NOAA, NOAA
 - POSITION _____ N/S _____ E/W AT _____ Z
 - HEADING _____ TRUE/MAG
 - AT _____ KTS TRUE/INDICATED
 - FLIGHT LEVEL OR ALTITUDE _____
 - WE ARE A P-3 AIRCRAFT WITH _____ SOULS ON BOARD
 - NATURE OF EMERGENCY _____
 - ASSISTANCE DESIRED _____
 - PILOT INTENTIONS _____
 - WE HAVE _____ ENDURANCE REMAINING

TIME	FIX TYPE	POSITION	INS 1 POSITION	K ERR	INS 2 POSITION	K ERR	MH	VAR +E=>	TH	DR +R=>	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS	
0037																						
0047																						
0118	FM1	2644.9 8043.1	2644.8 8042.9	+1.1 +1.2	2644.9 8044.3	0 -1.2			127	0	127	292	LV	LV	17K	293					RENL STAFF GLOBE OUT TANK OFF	
0200		2434.5 7753.3	2434.1 7753.2	+1.4 +1.1	2434.7 7754.3	-1.2 -1.0			128	1R	129	288	057	5	17K	290						
0230		2251.6 7556.6	2251.1 7556.5	+1.5 +1.1	2251.5 7557.3	+1.1 -1.7			134	2R	136	294	052	11	17K	295						
0307		2040.6 7423.2	2039.5 7423.0	+1.1 +1.2	2041.6 7424.4	-1.0 -1.2			120	6R	135	193	089	35	1500	218					44K	
0419		1943.0 7450.9	1941.4 7501.0	+1.6 -1.1	1945.4 7459.9	-2.4 0			091	1L	090	216	121	10	1500	224					38K	
0425		1934.5 7446.2	1932.5 7447.3	+2.0 -1.1	1936.8 7446.4	-2.3 -1.2			142	4L	138	213	211	16	1500	218					CHAPTER, 3	
0510		1904.5 07524.3	1903.1 07524.4	+1.8 -1.1	1905.5 07522.8	-1.6 +1.5	084	7W	047	4L	043	231	170	20	1500	218						
0540		1935.7 07454.8	1933.8 07456.5	+1.9 -1.7	1936.8 07453.0	-1.6 -1.2			180	1L	179	205	200	15	1500	216						
0547		1933.6 07508.3	1931.4 07510.1	+2.2 +3.5	1934.6 07507.2	-1.0 +1.6			218	2R	220	203	185	10	1500	207						
0630		2101.9 07654.6	2058.3 07654.4	+4.6 +1.2	2104.3 07654.3	+1.6 +1.3	369	6W	353	2L	351	266	106	10	7200	265	ENAMP	145	+32	0702		
0725		2500.7 07903.6	2458.0 07904.9	+4.7 -1.9	2501.4 07903.1	+1.3 +1.8			312	3L	310	324	080	22	220	304	MCF	258	+51	0816		
0817		LAMP MCF																				
0827		2751.1 08202.2	2749.6 08202.3	+1.5 -1.1	2750.8 08203.3	+1.3 +1.9																

0052
MAR 265/14
RFB

34K
12
22K