19980924H1-FDIR

Hurricane Georges
Recco Flight #2

Flight #14 H980924

Sensor or system	Number or Name
INE	2
Accelerometer	2
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	CO2989.CON

Notes:

The radar altimeter (RA159) had a spike at takeoff and was replaced by RA232 from 0752:31-0802:26. There were several dips in RA159 due to overflying land 1224:00-1226:00 (Cuba). Several spikes in RA159 were removed and patched throughout the flight (0908:00-0908:30, 1029:00-1030:00, 1151:30-1152:00, 1201:00-1201:30, 1215:30-1216:30, 1243:00-1243:30, 1407:30-1408:30, 1424:30-1425:00(2), 1432:30-1433:00, 1438:00-1439:00, 1629:00-1629:30, and 1630:00-1630:30). A spike also occurred just prior to landing and RA159 was set to zero (1633:44-1643:00).

Dewpoint temperature (DW1) exceeded ambient temperature (AT2) several times due to heavy precipitation.

	Takeoff	Landing
Aircraft static pressure	1009.7	1012.3
Corrected tower pressure	1009.2	1013.9

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.
It is recommended that these values be used for vertical wind analysis.

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

980924H

413-50

TIME	LAT	LON	TK	HD	TA	TD	WD	WS	PA	GA	PS	SP	REMARKS
083230	2432	7834	133	130	-1.0	-25.0	74	19.5	5217	5508	524.7	1004.6	LEVEL 17K
0839	2406	7810										OVER	ROLLING
0855													DESCEND
0900													RAINBAND
0927	2108	7645											&
095950	2052	7459	120	128	17.2	16.4	178	54.0	1504	1515	844.6	1004.6	DROP
1007	2038	7432											CLIMB
1019	2037	7423											DESCEND
1024	2043	7429											LEVEL 5K
104528	2117	7607											DROP
1059	2105	7659											&
113045	2105	7700											DROP
1209	2116	7705											&
1251	2228	7826											RAINBAND
318	2124	7715											&
134711	2238	7548			17.9	17.1	153	55.1	1507	1509	844.4	1007.1	DROP NE
141229	2138	7601	229	219	19.0	15.9	171	51.6	1481	1491	847.8	1005.0	DROP SND
435	2132	7720											&
150915	2256	7819	326	333									CLIMB

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

FLT ID: 980924H	FM: KOPF	TO: KTPA
FLT NO: 98-080	BLK IN: 1643Z	ATA: 1634Z
ETD: 0807Z	BLK OUT: 0752Z	ATD: 0806Z
ETE: 17Z	BLK TIME: 8.51 8.9	FLT TIME: 8.34 8.6
SPONSOR ORG: NOAA/NHC	PROGRAM: RECCO	PURPOSE: HURR. GEORGES

OAO PERSONNEL

AC PHILIPPSBORN, R ✓	SYS ENG ROLES, J ✓
CP KENN, P / TAGGART, B ✓	DATA SYS CARPENTER, D ✓
NAV RATHBUN, D ✓	RADAR
FE TORREY, R ✓	DT/ODW BARR, J ✓
RADIO ~~ROGERS~~, M ✓	CLD PHYS
FD CZYZYK, S ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
BLACK, M ✓	P.I.	HRD
LEIGHTON, P ✓	SCIENTIST	"
HUNGERFORD, P ✓	"	"
POPSTEFANIJA, I ✓	CSCAT/VSRR	QUADRANT
COOPER, M ✓	MEDIA	CBS
HOOPER, D ✓	"	CBS
RAINEY, R ✓	"	CBS

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

KING LW DEAD, DYNA = ALPHA DEAD

5 PENETRATIONS

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO.2 OAOWF2

FLT ID: 980924H TIME OFF: 0800Z TIME ON: 1347

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1009.7	29.82	1012.3	29.94

	NO	DATA DISPOSITION/DATE/QUALITY
1/SEC FLT LVL TAPES	2	
FAST FLT LVL TAPES		
RADAR TAPES		
DOPPLER TAPES		
ODW CASSETTES		
HARD COPIES	1	
AXDT		
AXCP		
ODW		
GPS	5	

PHOTOGRAPHY

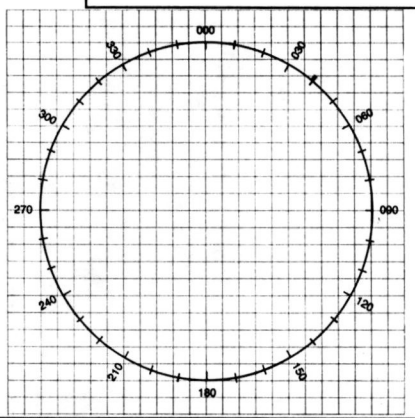
	FWD	LS	RS	VERT	
ON					
OFF					
RATE					

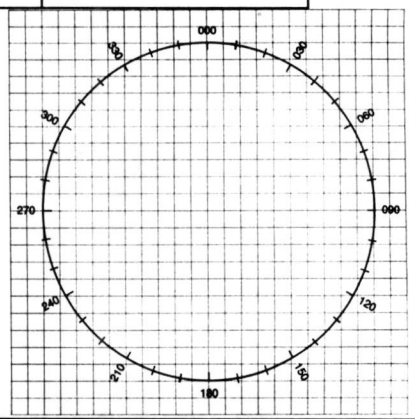
REMARKS

2153.8 7720.6 2154 7721 2117 7607

CLEARANCES			
FREQ	ALT	HDG	OTHER
			2131.2 7720.9
			BRDGR

MISSION LOG PAGE ___ OF ___





POSITION REPORT

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

TRANSMIT THE
FREQUENCY IN
ANY OF THE FO

UHF/VOICE
243.0

MAYDAY, MA
THIS IS NOAA

- POSITION _
- HEADING _
- AT _____
- FLIGHT LEV
- WE ARE A P
- NATURE OF
- ASSISTANC
- PILOT INTE
- WE HAVE _

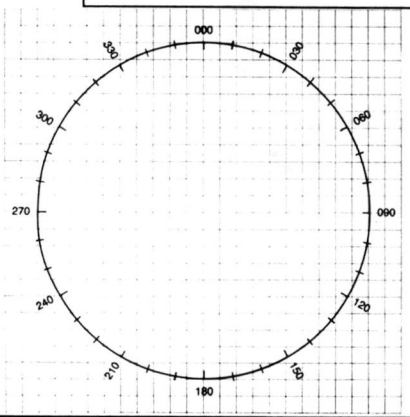
TIME	FIX TYPE	POSITION	INS 1 POSITION	K ERR	INS 2 POSITION	K ERR	MH	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST
~~0748~~ ~~0752~~ ~~0759~~																		
0835	FM1	2424.2 7822.9	2424.5 7822.7	-.3 +.2	2424.4 7822.9	-.2 0			128	SR	133	265	076	26	17K	282		
0929	10 SOUTH 6	2116.0 7645.2	2116.5 7644.4	-.5 +.8	2116.5 7644.6	-.5 +.6			096	0	096	212	109	14	RADAR 5K	226		
1006		2041.5 7440.2	2043.5 7439.2	-2.0 +1.0	2043.6 7439.6	+2.1 +1.6			135	9L	126	193	171	48	5K	225		
1037		2104.6 7531.4	2106.0 7529.7	-1.4 +1.7	2106.3 7530.1	-1.7 +1.3			277	14R	291	251	177	61	5K	231		
1059	6	2105.1 7658.6	2106.7 7657.4	-1.6 +1.2	2106.4 7657.6	-1.3 +1.0												
1127		2249.6 7657.2	2253.0 7656.2	-2.4 +1.0	2251.8 7656.7	-2.2 +.5			003	8L	355	248	116	41	5K	229		
1208	6	2116.5 7704.9	2117.9 7702.5	-1.4 +2.4	2118.7 7703.0	-2.2 +1.9												
1318	6	2123.6 7714.6	2125.4 7711.7	-1.8 +2.9	2127.2 7712.6	-3.6 +2.0			046	0	046	239	207	7	5K	234		
1435	6	2132.3 7719.9	2134.9 7716.7	-2.6 +3.2	2138.2 7717.0	-5.9 +2.9												
1450		2153.4 7730.7	2156.0 7726.9	-2.6 +3.8	2159.9 7727.2	-6.5 +3.5			328	SL	323	244	070	28	5K	232		
1535		2431.1 7936.1	2434.4 7937.3	-3.3 -1.2	2438.2 7932.8	-7.1 +3.3			326	SL	321	314	077	30	FL220	303		
1634 1643		2758.7 8231.7	2801.1 8225.8	-2.4 +5.9	2807.0 8226.8	-8.3 +4.9												
			6		9													

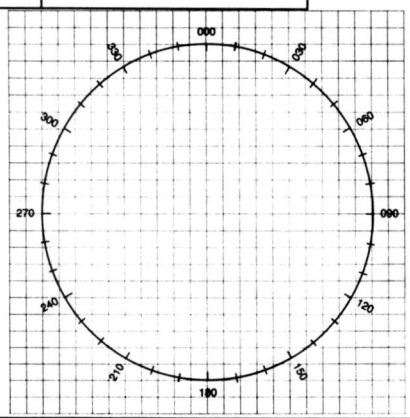
2117 7607

2330
8030

OTHER
2 7726,9

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	VHF/VOICE	MF/VOICE	HF/CW	MF/CW
243.0	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

OSITION	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
																		ENG START BLOCK OUT TAKE OFF
24.5 22.7	-.3 +.2	2424.4 7822.9	-.2 Ø			128	5R	133	265	Ø76	26	17K	282					
16.5 44.4	-.5 +.8	2116.5 7644.6	-.5 +.6			Ø96	Ø	Ø96	212	1Ø9	14	RADAR 5K	226					5 2108 7645
43.5 39.2	-2.Ø +1.Ø	2Ø43.6 7439.6	-2.1 +.6			135	9L	126	193	171	48	5K	225					
Ø6.Ø 29.7	-1.4 +1.7	2106.3 75 3Ø.1	-1.7 +1.3			277	14R	291	251	177	61	5K	231					
Ø6.7 57.4	-1.6 +1.2	2106.4 7657.6	-1.3 +1.Ø															
52.Ø 56.2	-2.4 +1.Ø	2251.8 7656.7	-2.2 +.5			ØØ3	8L	355	248	116	41	5K	229					
17.9 Ø2.5	-1.4 +2.4	2118.7 77Ø3.Ø	-2.2 +1.9															
25.4 11.7	-1.8 +2.9	2127.2 7712.6	-3.6 +2.Ø			Ø46	Ø	Ø46	239	2Ø7	7	5K	234					310/9.5
34.9 16.7	-2.6 +3.2	2138.2 7717.Ø	-5.9 +2.9															
16.Ø 26.9	-2.6 +3.8	2159.9 7727.2	-6.5 +3.5			328	5L	323	244	Ø7Ø	28	5K	232					
34.4 57.3	-3.3 -1.2	2438.2 7932.8	-7.1 +3.3			326	5L	321	314	Ø77	3Ø	FL22Ø	3Ø3					
Ø1.1 25.8	-2.4 +5.9	2807.Ø 8226.8	-8.3 +4.9															LAND BLOCK IN
6		9																

FLIGHT LOG

SION	NAVIGATOR	AIRCRAFT COMMANDER	FLIGHT DIRECTOR	SCHEDULED / ACTUAL TAKEOFF Z	DATE OF TAKEOFF
6 GEORGES	RATHBUN	PHILIPPSBORN	CZYZYK	0800Z / 0759Z	24 SEP 98

1H	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	LEG / TOT DIST	LEG / TOT TIME	PROP ETA	ETA	ATA	REMARKS

INS PERFORMANCE

	INS 1	INS 2
BEGIN ALIGN TIME	0601Z →	
ALIGN STATUS (0-5)	0	0
END NAV TIME	1635Z →	
START NAV TIME	0745Z →	
DELTA T	8150 →	

TERMINAL ERRORS

	INS 1	INS 2
DELTA LAT	-2.4	-8.3
DELTA LON	+5.9	+4.9
RGS	1	2
RADIAL ERROR	6	9

REMARKS

NOAA FORM 56-49
(2-95)

MISSION PREFLIGHT LOG

DESTINATION	MISSION	NAVIGATOR	AIRCRAFT COMMANDER	FLIGHT DIRECTOR	SCHEDULED / ACTUAL TAKEOFF Z	DATE OF TAKEOFF
KOPF-KTPA	9 GEORGES	RATHBUN	PHILIPPSBORN	CZYZYK	0800Z / 0759Z	24 SEP 98

	WP	LAT / LON	RTE	MH	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	LEG / TOT DIST	LEG / TOT TIME	PROP ETA	ETA	ATA	REMAR
1	OPF	2554.8 8017.2																	
2	SKIPS	2533.2 7916.1																	
3	SWIMM	2529.9 7902.0																	
4	JAYEE	2426.9 7744.6																	
5	HOOBY	2409.7 7723.8																	
6	ENAMO	2333.7 7721.6																	
7	UNV NUEVAS	2123.9 7713.7																	
8	9	2130 7700																	
1	~~UANUS~~	2400.0 7900.8																	
2	~~ELLEE~~	2451.3 7938.5																	
3	~~OHP~~	2548.0 8020.9																	
4	~~LBV~~	~~2649.7~~ ~~8123.5~~	BRDGE																
5	PIE	2754.5 8241.1																	
6	TPA	2758.5 8232.0																	

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
AIRCRAFT OPERATIONS CENTER