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

FLT ID: 970902H	FM: MCF	TO: CYYT
FLT NO: 96-057	BLK IN: 2058Z	ATA: 2054Z
ETD: 1200Z	BLK OUT: 1200Z	ATD: 1218Z
ETE: 2015Z	BLK TIME: 8.58 9.0	FLT TIME: 8.36 8.6
SPONSOR ORG: NOAA/AL	PROGRAM: NAR-E	PURPOSE: FERRY/MISSION

OAO PERSONNEL

AC MCKIM X	SYS ENG MCMILLAN, S X
CP OMARA X	DATA SYS MCNAMARA, R X
NAV RATHBUN X	RADAR
FE TORREY X	DT/ODW
RADIO MCWHIRTER X	CLD PHYS
FD CZ4Z4K X	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
HUBLER, G X	FS/PI	AL/CIRES
RYERSON, T X	NO/NOy	
HUEY, G X	CIMS	
FRIED, A X	TDLAS	
WILLIAMS, J X	PANS	
KUSTER, W X	GC	
JOBSON, B X	Peroxides	
HOLLOWAY, J X	Pod Co	

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

TW3 TOO COLD

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

FLT ID: 970902H TIME OFF: 1218Z TIME ON: 2054Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1015.8	30.02		30.17

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

PHOTOGRAPHY

	FWD	LS	RS	VERT	
ON					
OFF					
RATE					

REMARKS

Form 413-50
63

970902H

TIME	LAT	LON	TK	HD	TA	TD	WD	WS	PA	GA	PS	SP	REMARKS
1159:35													
1218													BLOCK OUT
123700	2807	8120	56	58	1.1	1.8	232	6.5	4554	4819	572.9	1008.8	TAKEOFF
124800	2834	8037											15K CAL
1253													TURN W
130000	2857	8121	346	345	0.6	-1.7	191	5.6	4549	4832	573.6	1012.5	TURN NW
1316													
131930	3022	8130	003	004	7.1	3.1	53	5.2	3470	3658	664.7	1012.8	DESCEND
132500	3043	8129	003	003	19.8	16.4	64	4.9	1203	1283	877.0	1015.5	BETWEEN CLDLYRS
132810													4K LEVEL
140300	3235	8034	052	054	19.3	16.3	69	20.7	1220	1335	872.1	1017.8	3K LEVEL
141520	3302	7952											CLIMB
141803													LEVEL 13K
143030													CLIMB
143320													LEVEL 19K
143815	3410	7828	29	29	-10.9	-28.0	298	5.1	6405	6810	445.8	1011.3	CLIMB
144815													LEVEL 21K
150045													DESCEND
1504													11.5K
151340	3621	7656	44	44	22.1	14.7	143	2.9	550	643	948.2	1021.9	DESCEND
151810													2K LEVEL
152030													↓1K
1526	3654	7615											↑2K
153332													TURN E
1535	3656	7532											
153630													300 FT
153815	3657	7520	89	91	21.0	16.7	188	5.6	548	648	949.2	1022.2	↑2K FT
154800	3657	7436	91	92	21.0	16.2	204	3.9					2K FT
155310	3656	7411											↑6.5K FT
155620													↓2K FT
160300													LEVEL 2K
160530													↓300 FT
160910													↑7K FT
161320													↓2K FT
161810													TURN NE
163000	3739	7140	53	49	5.6	-11.1	327	12.0	3269	3481	677.4	1020.4	CLIMB
1642	3813	7046											11K FT LEVEL
165540													17K FT LEVEL
170015													↑19K FT
172010	3959	6801	012	010	-5.2	-35.4	299	7.0	5783	5473	527.2	1015.0	LEVEL 17K
1727													ALT
173500	4100	6743	18	14	11.6	7.5	270	11.8	1831	1960	811.9	1020.7	DESCEND
180300													6K FT LEVEL
181800	4304	6602											6.3K FT
182900	4252	6502	108	111	4.6	-8.1	245	22.7	2994	3159	701.6	1019.8	CLIMB FROM 1K
183305	4247	6442											10K LEVEL
185600	4318	6215	66	62	-19.4	-38.0	281	37.7	6947	7294	413.0	1018.3	CLIMB
190015													23K FT
191700													DESCEND
191730													300 FT
194200	4455	5750	57	50	-22.3	-30.5	308	37.8	7005	7289	410.3	1017.7	CLIMB
200600													23K LEVEL
202430													DESCENT
202955	4636	5329											CIRCLE
205400													500 FT LIGHTHOUSE CAPE NINE
													TOUCHDOWN

FERRY TO ST. JOHN'S

Flight #1 H970902

Sensor or system	Number or Name
INE	1
Accelerometer	1
Temperature Probe	2
Dew Point Probe	2
Altitude (for vertical wind)	RA-159
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO2974.CON

Notes:

Downward spikes in radar altimeter are a result of overflying land (2029:50-2030:05 and 2038:31-2053:30).

Radar altimeter (RA-159) had a spike at takeoff (1218:30-1218:46) and was replaced with RA-232. RA-159 was set to zero at landing due to spike (2053:31-2058:00). A spike in RA-159 was removed and patched 1248:21-1248:35.

	Takeoff	Landing
Aircraft static pressure	1015.8	1005.2
Corrected tower pressure	1016.6	1021.7

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

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TITLE (MAX 21 CHARACTERS) -- EX  HURRICANE PAINE
FERRY TO ST. JOHN'S
YYMMDDL  FLT I.D.
970902H
HHMMSS START TIME    -99999 DEFAULT TO START OF DATA FOR PRINTOUT ONLY
121501
HHMMSS END TIME      999999 DEFAULT TO END OF DATA FOR PRINTOUT ONLY
205700
HHMMSS TAKE OFF TIME
121800
* NUMBER OF TAPES (I2) ...FOR STANDARD TAPE OUTPUT ONLY
1
* -------LOGICAL UNIT OF INPUT DATA (I1)  5, 8 OR 9 FOR TAPE DRIVE
9
* -------LOGICAL UNIT OF OUTPUT TAPE DRIVE (I1) [FOR STANDARD TAPE ONLY]
9
* -------LOGICAL UNIT OF PRINTER (I1)
0
* -------DATE OF PROGRAM (MMDDY)
06094
* -------STATIC PRESSURE PROBE (I1)
* 1 = PSW (WINGTIP)
* 2 = PSF (CO-PILOT/FUSELAGE)
* 3 = FUTURE USE
2
* -------DYNAMIC PRESSURE PROBE (I1)
* 0 = PQW(WINGTIP)
* 1 = PQF1 (FUSELAGE 1281)
* 2 = PQF2 (FUSELAGE 1221)
* 3 =FUTURE US
1
* ---------INE SELECTION  (I1)
* 1 = INE 1
* 2 = INE 2
1
* ---------ACCELEROMETER (I1) - USUALLY THE SAME AS YOUR INE SELECTION
1
* --------- TOTAL TEMPERATURE PROBE (I1) [1 OR 2]
2
* --------- DEWPONT TEMPERATURE PROBE (I1) [1 OR 2]
2
* ---------ALTIMETER OPTION (I1) - FOR VERTICAL WIND COMPUTATION
* 0 = PRESSURE ALTITUDE (OVER LAND)
* 1 = RADAR ALTITUDE APN-159 (OVER WATER)
* 2 = RADAR ALTITUDE APN-232 (OVER WATER)
1
* ---------PRINTOUT RATE  SECONDS (I2)
10
* ---------WINDSPEED/DIRECTION RUNNING AVERAGE TIME, SECONDS (I2)
10                                  ! FOR STANDARD TAPE OUTPUT ONLY
* ---------TIME OPTION (I1)
* 1 = MICRO 29
* 2 = TIME BASED GENERATOR #1
* 3 = TIME BASED GENEATOR #2
1
* ---------NAME OF CONSTANTS FILE EX CO3863.CON
CO2974.CON
*****************************************************************
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Science Crew for 9/2/97

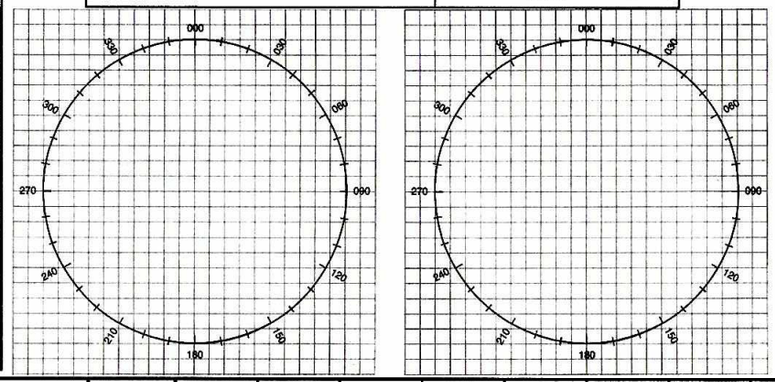
NO/NO$_4$	Ryerson, T.
CIMS	Huey, G.
TDLAS	Fried, A
~~PAN~~'s	Williams, J.
in situ GC	Kuster, W.
Peroxides	Jobson, B.
~~PAN~~S PodCo	Holloway, J.
~~PodCo~~	
FS	Hübler, G.

CLEARANCES

FREQ	ALT	HDG	OTHER
			OCT LAL, V533 ORL
			ANG HOBEE ADOOR
			TROUT 35 7130,
			3630 70W, 40N 68W
			BNAAR, CHOAS, 44N 60W,
			(46 37N) 533W, YYT
			KZNY 172Ø CZQM 272Ø
			CZQX 77ØØ

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

TIME	FIX TYPE	POSITION GPS	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
~~1136~~ 1139 1217																					ENGINE START TAXI TAKE OFF
1332	FM1	3107.7 8126.9	3107.6 8126.7	+.1 +.2	3106.8 8127.2	+.9 -.3			Ø16	2L	Ø14	2Ø5	Ø4Ø	2Ø	3K	223					
1427		3333.Ø 7909.3	3332.6 7908.9	+.4 +.4	3330.7 7909.3	+2.3 Ø			Ø52	Ø	Ø52	263	228	18	FL21Ø	24Ø					
1531		3655.4 7553.1	3654.9 7552.4	+.5 +.7	3651.8 7553.4	+3.6 -.3			Ø89	1L	Ø88	213	189	1Ø	2K	223					
1648		3827.7 7Ø25.5	3827.4 7Ø24.8	+.3 +.7	3822.7 7Ø27.2	+5.Ø -1.7			Ø46	2R	Ø48	269	245	3Ø	18Ø	241					
172Ø		4ØØØ.4 68ØØ.5	4ØØØ.4 68ØØ.6	Ø +.5	3954.6 6803.3	+5.8 -2.8			Ø1Ø	2R	Ø12	261	21Ø	23	17Ø	24Ø					
1738		4111.7 6738.5	4111.8 6738.Ø	-.1 +.5	4105.6 6741.3	+6.1 -2.8			Ø15	3R	Ø18	243	238	2Ø	6K	224					
1808		4307.6 6655.5	4307.3 6654.8	-.2 +.7	4301.2 6658.7	+6.4 -3.2			1ØØ	5L	Ø95	223	193	18	1K	221					
1853		4311.6 6235.9	4312.4 6235.Ø	-.8 +.9	4304.7 6241.1	+6.9 -5.2			Ø63	4R	Ø67	332	267	55	FL22Ø	282					
1943		4459.7 5739.7	4501.1 5738.7	-1.4 +1.Ø	4453.Ø 5746.8	+6.7 -7.1			Ø53	7R	Ø6Ø	3Ø3	284	5Ø	FL23Ø	268					
2031		4642.8 5324.2	4644.1 5323.2		4635.4 5333.7				Ø23	3R	Ø26	2Ø3	335	15	25ØØ	212					
~~2053~~ 2058		4737.Ø 5244.3	4738 5242.9	-1.5 +1.4	4734.Ø 5254.2	+7.Ø -9.9															LAND BLOCK IN
			2		10																