

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

FLT ID: 9709224	FM: CYT	TO: CYT
FLT NO: 97-065	BLK IN: 2116Z	ATA: 2109Z
ETD: 1130Z	DLK OUT: 1129Z	RTD: 1137Z
ETE: 2100Z	BLK TIME: 9.47 9.8	FLT TIME: 9.32 9.5
SPONSOR ORG: NOAA/AL	PROGRAM: NARE/OZONE	PURPOSE: DOUBLE FRONT

OAO PERSONNEL

AC McKim, G ✓	SYS ENG McMILLAN, S ✓
CP TAGGART, B ✓	DATA SYS MCNAMARA, R
NAV RATHBUN, D ✓	RADAR
FE TORREY, R ✓	BT/ODW
RADIO	CLD PHYS
FD CZYZYK, S ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
HUBLER, G ✓	PI SCIENTIST	
KNAPP, K/HUEY, G ✓		
HENRY, B ✓		
STROUD, C ✓		
GOLDAN, P ✓		
JOBSON, T ✓		
FROST, G ✓		
JAKOUBEK, R ✓		

PROPOSED/ACTUAL MISSION/REMARKS (RECCO, FIXES, STORM, PENET, NHOP #)
 DV#2 SPIKE 171820Z-172000Z

709 256 6771

U.S. DEPT. COMM./NOAA/OAD - DATA SECTION WORK FORM NO.2 DROWF2 F

FLT ID: 970922H

TIME OFF: 1137Z

TIME ON: 2109Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	991.6	29.76	994.4	29.88

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

TIME	LAT	Lon	TIC	HD	TA	TD	WD	WS	PA	GA	PS	SP	REMARKS
114450	4753	5210	66	66	-8.2	-15.4	249	35.3	3107	3041	691.7	1009.3	LEVEL 10K
121145	4837	4919	83	91	-2.7	-31.3	222	52.8	3114	3051	691.1	1002.1	CLIMB ↑
124610	4851	4525											LEVEL 15K
1253													DESCEND
130000	4854	4347	86	92	-4.2	-29.5	218	39.6	4626	4721	567.7	1001.5	CIRCUIT ABOVE MOUNT 2 (VES)
130110													LEVEL 2K CLOUD TOP
130400	4856	4318											DESCEND
130730	4857	4254											LEVEL 300 FT
131230	4858	4221	91	91	12.8	10.4	272	17.6	613	625	935.7	1007.7	FRONT 2 (NO)
131610													CLIMB 2K
131930	4859	4141	87	87	15.4	14.2	259	20.3	150	96	995.5	1006.8	POSSIBLE WSHFT FRONT ? (NO)
132730	4900	4047											FRONT 2
133102	4901	4033											LEVEL 300 FT
133300	49	4022					215	28					CLIMB ↑
140215	4902	3725											LEVEL 300 FT
140730	4901	3701	95	101	18.3	17.1	187	26.4	104	93	1000.7	1011.6	CLIMB ↑
140820													LEVEL 18K
143040	4856	3650	271	267	-8.8	-13.3	215	22.0	5487	5690	505.9	1006.1	FRONT 2 ✓
143230	4856	3702	274	270	-8.7	-11.4	210	21.9	5486	5691	506.0	1005.1	CIRCUIT + DESCEND
143900	4858	3751	271	270	-8.3	-10.3	262	20.8	5486	5687	506.0	1003.8	LEVEL 12K
151200	4902	3715	265	259									FRONT 2 ✓
151845	4857	4110	080	085	2.7	-2.6	233	42.7	3651	3723	645.0	1002.0	CLIMB + CLIMB
153400	4900	3712	088	093	2.1	-1.2	206	25.9	3650	3753	645.0	1006.3	FRONT 2 2K
160110	4900	3628											LEVEL 23K
161800	4848	3618	270	269	-14.5	-17.6	259	23.5	6608	6870	432.8	1000.2	DESCEND + CIRCUIT
164215	4854	3905	274	271	-18.7	-32.4	240	30.6	7039	7205	408.3	1002.5	LEVEL 5K
170020	4903	4109	279	270	-18.0	-34.0	225	50.5					DESCEND
171520	4852	4032	83	86	13.1	-1.9	231	29.5	1535	1520	842.0	1006.1	3K ↑
173500	4914	3828											LEVEL 6K
173620	4904	3819											FRONT 2 ✓
173945	4904	3757	91	91	14.2	8.6	272	20.3	1826	1842	812.7	1005.7	DESCEND + TURN
174100	4903	3740											IN PRECIP CLOUD
175730	4858	3606											LEVEL 2K
175830													↓
180010	4800	3615	271	261	15.6	15.4	201	35.3	619	612	941.0	1010.5	SWIF ↑
180645													LEVEL 2K
180900	4900	3700											↓
181200	4900	3715	269	263	16.4	16.4	238	37.1	612	588	941.7	1008.6	500 FT ↑
181840	4900	3741	268	267	16.6	16.1	270	25.7	613	587	941.8	1008.0	LEVEL 2K
182325	4859	3810	271	270	17.1	16.0	271	29.1					FRONT 2 ✓
182515	4859	3818	275	274	15.1	14.8	269	26.6	621	596	940.7	1008.7	500 FT ↑
184630	4901	4002											LEVEL 2K
184820													↓
184910													LEVEL 500 FT
185900	4901	4103	270	271	9.5	7.2	303	17.1	622	604	940.9	1010.9	↑
190105													FRONT 1 ✓
190305	4900	4124											↓
191840	4900	4245	257	249	-15.7	-42.3	221	63.3	6135	6272	463.2	1002.9	250 FT ↑
200720	4813	4638	263	249	-21.4	-52.1	211	85.9	6064	6067	467.7	1005.5	LEVEL 20K
200400	4810	4656	260	253	-15.0	-34.5	227	54.6	4877	4867	549.1	1007.9	DESCEND
204810	4741	5114											16K LEVEL
215750	4736	5201											↓
													300 FT ↑

DOUBLE FRONT

Flight #9 H970922

<u>Sensor or system</u>	<u>Number or Name</u>
INE	1
Accelerometer	1
Temperature Probe	1
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:

Radar altimeter (RA-159) had a spike at takeoff 1136:50-1136:59 and was replaced by RA-232. RA-159 was set to zero at landing (2109:25-2112:00). Dips in radar altimeter were due to overflying land.

Dewpointer #2 (DW2) was frozen 1541:22-1602:46 and 1712:37-1720:00 and was replaced by DW1.

Dewpoint temperature exceeded ambient temperature a few times due to heavy precipitation.

	<u>Takeoff</u>	<u>Landing</u>
Aircraft static pressure	991.6	994.4
Corrected tower pressure	1007.8	1011.9

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

970922H

RENAV

121700	-0.2, -0.3	48 39.8	-48.43.5
125800	-0.6, ^{0.00} 0.3	48 53.9	-44 2.8
133700	-0.0, -0.3	49 2.3	-39 58.1
143200	-0.3, ^{0.12} -0.1	48 55.5	-36 57.4
152100	0.3, 0.4	48 58.8	-40 54.6
162000	0.1, -0.2	48 47.8	-39 29.2
171800	0.2, 0.6	48 53.3	-40 14.4
174800	0.3, -0.1	49 3.1	-37 4.6
182900	0.4, 0.6	49 0.1	-38 35.9
193000	0.5, 0.1	48 39.7	-43 49.6
201800	0.2, 0.7	48 2.7	-48 15.3
211400	1.0, 0.9	47 37.4	-52 44.2

RA-159 SPIKE & TAKEOFF REPLACE W/232 1130:50-1136:59 X
 RA-232 SPIKE & LANDING SET TO ZERO 2109:05-2114:00 X
 DW#2 FROZEN REPLACE W/DW#1 1541:22-1502:46 X
 DW#2 FROZEN DW#1 1702:37-1700:00 X
 APR PROB/SPIKE 1604:00-1644:00
 APR PROB 1435:00-1515:00
 1535:00-1625:00

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TITLE (MAX 21 CHARACTERS) -- EX HURRICANE PAINE
DOUBLE FRONT
YYMMDDL FLT I.D.
970922H
HHMMSS START TIME -99999 DEFAULT TO START OF DATA FOR PRINTOUT ONLY
113201
HHMMSS END TIME 999999 DEFAULT TO END OF DATA FOR PRINTOUT ONLY
211200
HHMMSS TAKE OFF TIME
113700
* NUMBER OF TAPES (I2) ...FOR STANDARD TAPE OUTPUT ONLY
9
* -----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]
8
* -----LOGICAL UNIT OF PRINTER (I1)
6
* -----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]
1
* ----- 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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DATE : 9/22/97
TO : Chief, AOC Flight Operations
FROM : Pilot/Flight Director, Aircraft N42RF
SUBJECT: Hazardous Duty
ON 2116Z
BLOCKTIME OFF 1129Z
98

PURPOSE OF FLIGHT: NARE/ Double Front Crossings
Hazardous Duty Pay is required for flight made on 9/22/97
(DATE)
Request based on HAZARDOUS GASES + CHEMICALS ONBOARD

Personnel on board authorized Hazard Pay:

CHYZYK, S
MCMILLAN, S
MCNAMARA, R
TORREY, R

PILOT/FLIGHT DIRECTOR: *[Signature]*

APPROVED: _____
DISAPPROVED: _____

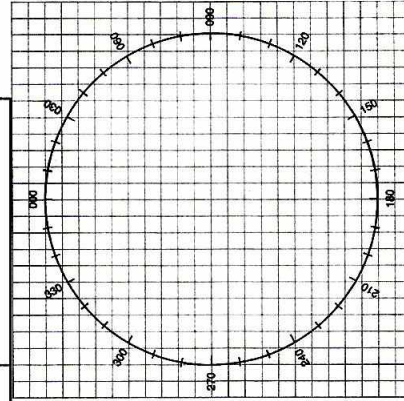
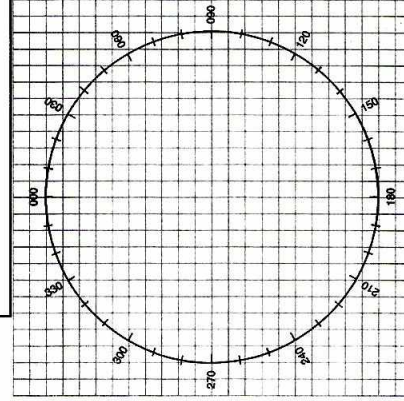
CHIEF, AOC FLIGHT OPERATIONS: _____

CLEARANCES

FREQ	ALT	HGD	OTHER
			4545 4847W
			R16 TORBAY 040 1200Z
			1352
			1700Z 260/15 625
			V64 3K5C
			1700Z-2200 LTAN 2500AN
			1700Z 260/15 625 V64 3K5C
			1700Z-2200Z LTAN 2500AN

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

- 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

- NATURE OF EMERGENCY

- ASSISTANCE DESIRED

- PILOT INTENTIONS
WE HAVE
ENDURANCE REMAINING

[illegible]