



NOAA P-3 N42RF
IFEX/Hurricane 2005

~~KMCF~~ ~~KMCF~~ KNQX-MROC



Flight ID: H050708

Sensor or system

Inertial + Accelerometer Data

Temperature Probe

Dew Point Probe

Altitude (for vertical wind)

Static and Dynamic Pressure

Time Source

Constants File

Number or Name

1

1

1

Radar Altitude 159

Rosemount Fuselage

Micro 99

CO2054.CON

Notes:

There were time/data gaps from 163011-20Z, 220741-50Z, and 220811-30Z. Be aware of data spikes as a result of these data gaps.

RA-232 was substituted for RA-159 during the following times: 135401-135702Z (take off), and 220721-221100Z (landing) due to spiking.

There were several instances (i.e. 1936-1940Z) when the dew point temperature exceeded the ambient temperature resulting in a RH% above 100%. These times were during heavy precipitation events and were likely due to a wet-bulb effect on the total temperature sensor, and/or an artificial warming of the dew point sensor as it tried to burn off excess moisture. These periods are typically reflected in the J/W liquid water data. No corrections were made during these events unless noted above.

There were no working Liquid Water Sensors for this flight.

All other instruments worked optimally during the flight.

The aircraft INE positions were re-navigated with respect to GPS.

Due to AOC equipment/printer failure, the last step of our Quality Control process (visual QC) was not able to be performed. While other measures were taken to ensure there were no problems with the data, questions concerning questionable data should be brought to the attention of the Flight Director ASAP.

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 Director:
Phone #:

Contact Paul Flaherty
(813) 828-3310 ext. 3094

AOCWF1

AOC Personnel

Participating Scientists / Visitors / AOC

3 PENES

PENNES

0300Z 19.9 77-6
New HP 2110 80

MOE 0959.6
08412.5

NOSE (P4F4) OUT AT HIGH ALT (FREEY HOME)
FLING

1) 0522 z
2) 0622
3) 0651

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

AOCWF2

Flt ID: 050708H Time Off: 0732Z Time On: 0950Z

	A/C (Take Off)	Wx Station (Take Off)	A/C (Land)	Wx Station (Land)
Pressure	1013.4	1012.4	910.4	909.9

	Number	Data Disposition / Date / Quality
Flt Lvl Tapes	5	(ONLY 1 LU)
Radar Tapes	1	
Cloud Physics Tapes		
Video Tapes	MM	
AXBT		
AXCP		
AXCTD		
Dropsondes	12	(1 bad) 3 H2O 9 NITZ

Video					
	Forward	Left Side	Right Side	Down	Remarks
Time On					
Time Off					
Rate					

Remarks

 2356Z 09010KTS 10SM 31/26 A2994
 UPDATE 08007 *2995

(LAND) 0855Z CLR 5SM 0000KTS A3001

 (T/O) SONDES

	Time	Remarks
1	0514	(H2O)
2	0523	
3	0526	
4	0549	
5	0625	0653
6	0628	110655
7	0641	(20717) H2O
8	0651	

~~10#3~~
~~Cindy~~ ~~Recco~~
HARR DENNIS
050708H

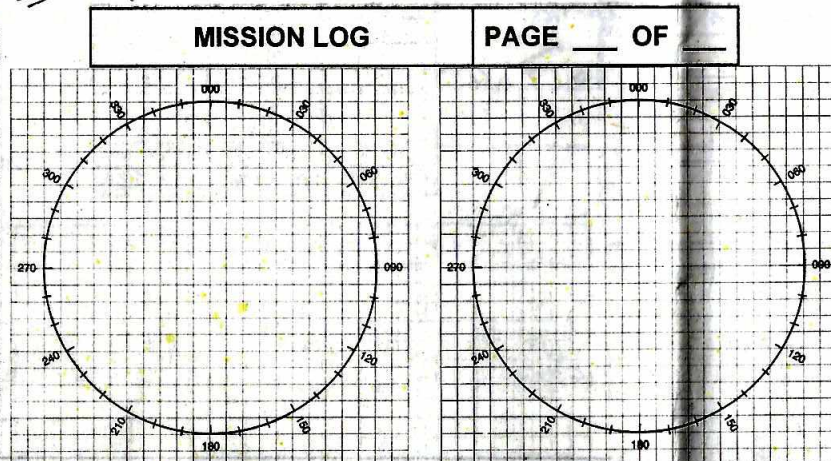
Flight ID : ~~05070911~~

Landing :

[illegible]

33 67

CLEARANCES			
FREQ	ALT	HDG	OTHER
	6000		6643



POSITION REPORT

- POSITION
- TIME
- ALTITUDE
- NEXT POSITION
- ETA
- 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 243.0 VHF/VOICE 121.5 MF/VOICE 2182 KHZ HF/CW 8364 KHZ MF/CW 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
0220	629																				
0235	A	24-34.3 081-30.8	24-34.2 081-31.0	+1.1 -2	24-34.2 081-30.9	+1.1 -1	257	4W	247	1L	247	261	0.8	32	16000	238	CAN	79	+18	0253	
0335	A	21-55.0 085-30.6	21-53.2 085-31.5	+1.8 -0.9	21-53.2 085-30.9	+1.8 -0.3	162	4W	098	3R	202	206	0.4	37	FL160	270	NW	42	+10	0345	
0435	A	21-02.5 081-38.1	21-01.0 081-38.6	+1.5 -0.5	20-59.7 081-38.4	+2.8 -0.3	087	5W	082	2R	084	258	0.28	10	FL160	282	CASW	78	+18	0453	
0525	2	19-47.6 077-32.9	19-44.4 077-33.4	+3.2 -1.4	19-43.5 077-32.9	+4.1 -0.9	134	5W	129	10L	119.2	241	222	39	FL100	259	2	34	+09	0544	
0625	2	20-20.8 078-12.8	20-27.2 078-14.9	+4.0 -2.1	20-25.9 078-14.3	+5.3 -1.5	245	5W	240	2R	260	268	1.41	80	FL100	255	Gye	9	+02	0627	
0652	2	18-06.5 081-24.8	18-04.6 081-23.4	+4.8 -1.6	18-04.6 081-23.1	+6.7 -1.3	236	4W	232	5L	227	287	0.11	35	FL200	282	RESTO	72	+15	0750	
0835	A	18-17.4 082-31.2	18-10.5 082-34.8	+6.9 -3.6	18-08.0 082-34.1	+9.4 -2.9	187	-	187	2L	185	271	3.43	21	160	275	AMVIA	75	+17	0832	
0910	LAM	09-59.7 084-12.7	09-51.5 084-18.4	+8.2 -5.7	09-48.2 084-17.2	+11.5 -4.5															
0927	DLW																				

0954

24-38.6

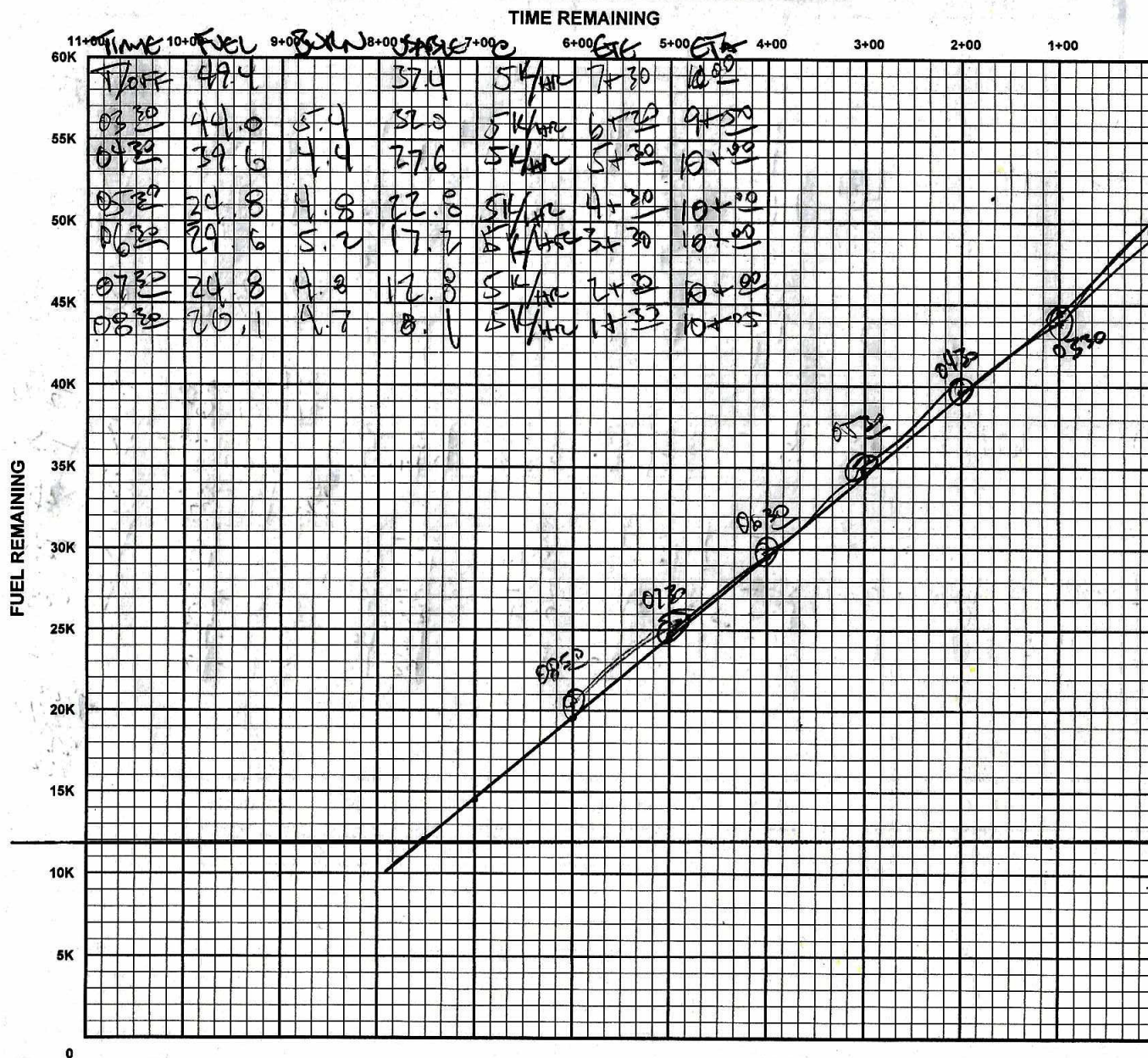
82-52

2506 083-14

[illegible]

NW/15
19.9 77.6
11 PM

RANGE CONTROL GRAPH



ENROUTE FUEL	
ENROUTE TIME	7+30
ENROUTE FUEL (6K 5K 4.5K RULE)	38.5
RESERVE AT DESTINATION	12.0
REQUIRED RAMP	50.5
ACTUAL RAMP FUEL	49.4

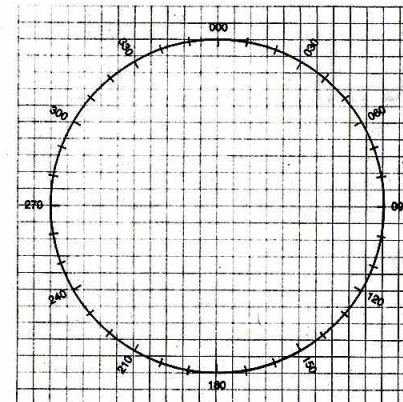
TACTICAL (OFFSTA TO DESTINATION)		
	4 ENG	3 ENG
DISTANCE (OFFSTA TO DEST)		
ENROUTE TIME (OFFSTA TO DEST)		
BURN RATE (LBS/HR)	4500	5500
ENROUTE FUEL REQUIRED		
RESERVE AT DESTINATION		
FUEL AT OFFSTA		

POINT OF SAFE RETURN		
	4 ENG	3 ENG
ETP DISTANCE (TO DEPARTURE)		
ENROUTE TIME (TO DEPARTURE)		
BURN RATE (LBS/HR)	4500	5500
FUEL REQUIRED		
RESERVE AT DEPARTURE		
PSR FUEL		

CEX - TRUE BEARING METHOD			
COMPASS TYPE	INS1	INS2	WET
MCH (READING)			
- MTH (SEXTANT)			
CE			
- VAR			
DEV			

CEX - ERB METHOD			
COMPASS TYPE	INS1	INS2	WET
MERB (DIAL 000)			
+ ZN			
= MTH			
MCH (READING)			
CE			
- VAR			
= DEV			

CEX SIGHT	
GMT	
GHA	
CORR	
GHA	
LONG +W -E	
EXACT LHA	
LAT	
BODY	
DEC	
HO/D	
CORR	
HC	
Z	
ZN	



ETP = .5(TOTAL DISTANCE x OUTBOUND WIND FACTOR)

DISTANCE REMAINING

WIND FACTOR		
WINDSPEED	HEADWIND	TAILWIND
10	1.03	.97
20	1.06	.94
30	1.10	.92
40	1.14	.89
50	1.18	.87
60	1.22	.85

PRESS ALT	200	250	300	350
10,000	1.0	1.0	.99	.99
20,000	.99	.98	.97	.97
30,000	.97	.96	.95	.94
40,000	.96	.94	.92	.90

TRUE AIRSPEED CROSS-CHECK							
TIME	IAS	PRESS ALT	"F" FACTOR	EAS	OAT	TAS	ITAS
0822	269				10°	276	269/280