



NOAA P-3 N42RF
IFEX/Hurricane 2005

~~KMCF-KMCF~~ MROC-KNIP



Flight ID: H050709

Sensor or system

Number or Name

Inertial + Accelerometer Data

2

Temperature Probe

1

Dew Point Probe

1

Altitude (for vertical wind)

Radar Altitude 159

Static and Dynamic Pressure

Rosemount Fuselage

Time Source

Micro 99

Constants File

CO2054.CON

Notes:

There were time/data gaps from 055552-055600Z. Be aware of data spikes as a result of these data gaps.

RA-232 was substituted for RA-159 during the following times: 050301Z-050749Z (take off), and 123957-124400Z (landing) due to spiking.

There were several instances 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. No corrections were made during these events.

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

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

AOCWF1

Flt ID: 050709H	From: MROC	To: KNIP
Flt No: 05-032	Blk In: 1247Z	ATA: 1241Z
ETD: 5Z	Blk Out: 0447Z	ATD: 0506Z
ETE: 7+30	Blk Time: 8+00 (8.0)	Flt Time: 7+35 (7.6)
Sponsor Org: NOAA	Program: Hur 05	Purpose: Hurricane Dennis

AOC Personnel

AC: CONROY	Sys Eng: McMINN
CP: CHDY / SILAH	Data Sys: HILL
Nav: GAWAGH, T	Radar:
FE: KLIPPEL / WADE	GPS/BT:
FD: FLAHERTY	Cld Phys:
Avionics: ROGERS	CC: TORREY

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
LEIGHTON, P	RADAR	HRD
ROGERS, R	SFMR	HRD
MURRAY, S	SCI	HRD

Proposed/Actual Mission Remarks (Recco, Fixes, Storm, PENET, NHOP #)

NOAA2 1204A DENNIS
 04Z 23-1N 82.2W
 T/O ABORTED (low power)

23 15 844
 233 82.4 0530Z
 3 PENET
 0846Z
 1013Z
 1111Z

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

AOCWF2

Flt ID:

05070914

Time Off:

0306Z

Time On:

1201Z

A/C (Take Off)

Wx Station (Take Off)

A/C (Land)

Wx Station (Land)

Pressure

912.0

910.2

1013.0

1014.4

Number

Data Disposition / Date / Quality

Flt Lvl Tapes

2

Radar Tapes

1

Cloud Physics Tapes

Video Tapes

4

AXB T

AXCP

AXCTD

Dropsondes

13

8 PHC

15 HCP

Video

Forward

Left Side

Right Side

Down

Remarks

Time On

Time Off

Rate

Remarks

T/O CLR 0000KTS 22/19 A3002

11008KTS 75m 28/26 A3001

6A00K

N42RF AXBT DropSonde Log

N42RF Project: Hurricane 05

Flight ID: 050709H

Mission: ~~ISCP~~ Recco

Flight #: 3
STM

System Status: UP

[illegible]

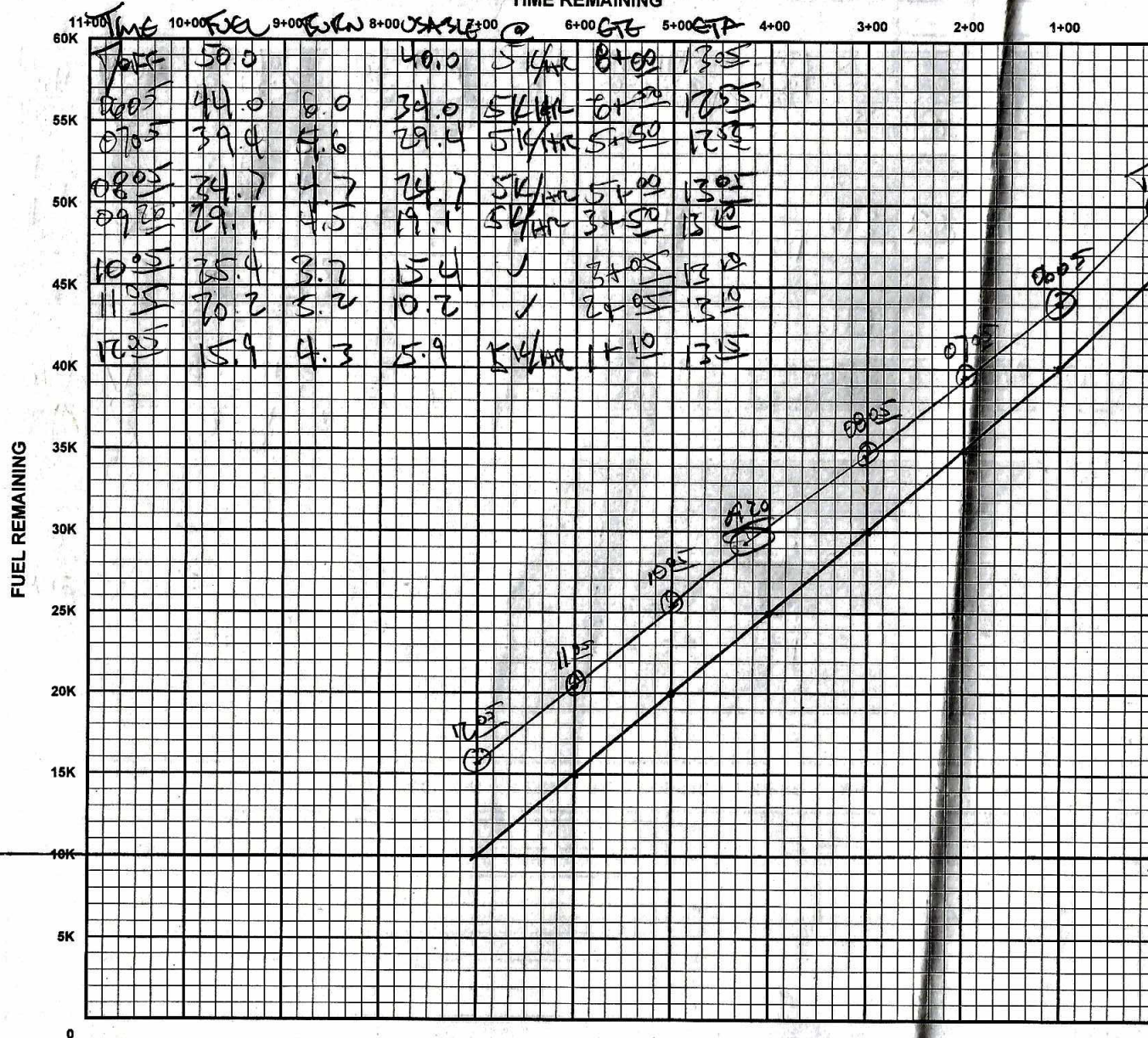
5 H₂O / 8 NH₄⁺

64 13
56 6 | 0

(STM

RANGE CONTROL GRAPH

TIME REMAINING



DISTANCE REMAINING

$$ETP = .5(TOTAL\ DISTANCE \times OUTBOUND\ WIND\ FACTOR)$$

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

ENROUTE FUEL

ENROUTE TIME	7+00
ENROUTE FUEL (6K 5K 4.5K RULE)	36.0
RESERVE AT DESTINATION	10.0
REQUIRED RAMP	46.0
ACTUAL RAMP FUEL	50.0

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		

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

7 11 10 5 36 46

CEX - TRUE BEARING METHOD

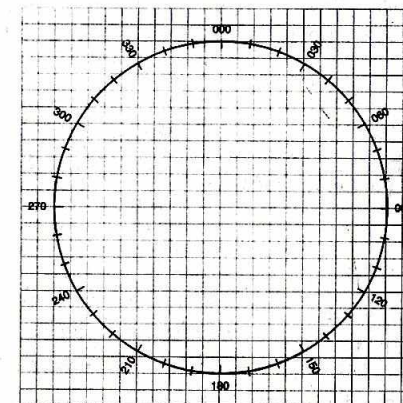
COMPASS TYPE	INS1	INS2	WET
MCH (READING)			
MTH (SEXTANT)			
CE			
- VAR			
DEV			

CEX SIGHT

GMT	
GHA	
CORR	
GHA	
LONG W E	
EXACT LHA	
LAT	
BODY	
DEC	
HC/D	
CORR	
HC	
Z	
ZN	

CEX - ERB METHOD

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



TRUE AIRSPEED CROSS-CHECK

TIME	IAS	PRESS ALT	"F" FACTOR	EAS	OAT	TAS	ITAS
0531	210				09		282/263