



NOAA P-3 N42RF
IFEX/Hurricane 2005
KMCF - KMCF



Flight ID: H050723

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

2

1

1

Radar Altitude 159

Rosemount Fuselage

Micro 99

CO2054.CON

Notes:

Take-off was delayed 15 minutes due to Inertial problems. There were time/data gaps from 225051-225100Z, 225301-225310Z, and 230641-230650Z. Be aware of data spikes as a result of these gaps.

RA-232 was substituted for RA-159 during the following times: 161301-12110Z (take off) due to spiking in RA-159. TD3 (with an offset of -8) was substituted for TD1 from 191833-202325Z and 210603-211811Z due to problems with TD1.

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. Data for this flight terminates at 00300Z, about 30 minutes before landing. All other instruments worked optimally during the flight. LU9 was not working for this 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.

	Take-off	Landing
Aircraft pressure	1017.8 mb	1015.1 mb
Station pressure	30.08"	30.01"

231555Z 30007KT 7SM 32/25 A3001

Flight Director:
Phone #:

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

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

AOCWFI

Flt ID: 050723 H	From: KMCF	To: KMCF
Flt No: 05-	Blk In: 0109z	ATA: 0059z
ETD: 16z	Blk Out: 1605z	ATD: 1616z
ETE: 9+04	Blk Time: 9+04 (9.1)	Flt Time: 8+43 (8.7)
Sponsor Org: NOAA / HRD	Program: IFEX	Purpose: Mission 4

AOC Personnel

AC: TE BEEST, R	Sys Eng: HILL, J
CP: SILAH, M	Data Sys: McMillen, S
Nav: GALLAGHER, T	Radar:
FE: WADE, S	GPS/BT:
FD: FLAHERTY, P	Cld Phys:
Avionics: ROGERS, M	

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
ROGERS, R	PI	HRD
DODGE, P	SCI	HRD
STERN, D	SCI	HRD

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

NOAA WXWXA SUSPECT

NOAA WXWXA SUSPECT
LV9- INOP

T/O DELAYED DUE TO INERTIAL PROBLEM

2217 DUPT 1 BFL

(DUPT 1 MAY HAVE BEEN TO LOW FM ~ 1625z - BRANCE (COMPARE TO DU3))

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

AOCWF2

Flt ID: 0507234 Time Off: 16/62 Time On: 0059Z

	A/C (Take Off)	Wx Station (Take Off)	A/C (Land)	Wx Station (Land)
Pressure	1017.8		1015-1	

	Number	Data Disposition / Date / Quality
Flt Lvl Tapes	1	(LO 9 BAD)
Radar Tapes		
Cloud Physics Tapes		
Video Tapes	4	
AXBT		
AXCP		
AXCTD		
Dropsondes	19	18 HRD 1 AOC (FIRST DROP)

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

Remarks

23555Z 3000714T 7SM 32/25

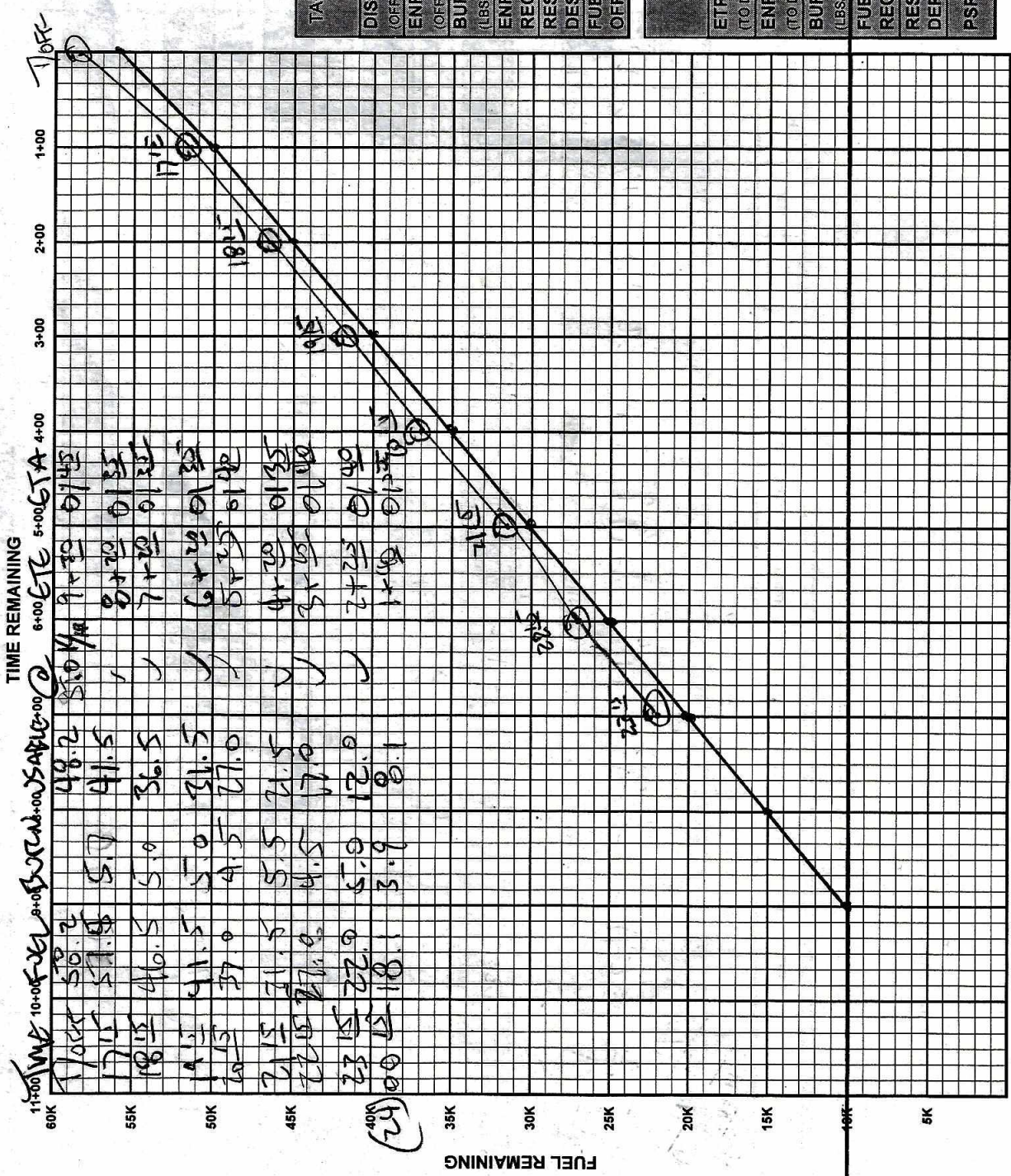
(A3008 T10)

3001

11 46
10 10
10 10
10 10

16 20
9 146

RANGE CONTROL GRAPH



ENROUTE FUEL	
ENROUTE TIME	9+00
ENROUTE FUEL (615K/4.6K RULE)	46.0
RESERVE AT DESTINATION	10.0
REQUIRED RAMP	56.0
ACTUAL RAMP FUEL	50.2

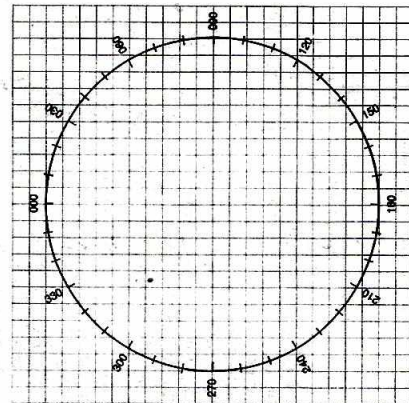
TACTICAL (OFFSTA TO DESTINATION)	
DISTANCE (OFFSTA TO DEST)	
ENROUTE TIME (OFFSTA TO DEST)	
BURN RATE (LBS/HR)	4500
ENROUTE FUEL	5500
RESERVE AT DESTINATION	
FUEL AT OFFSTA	

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

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

GMT		CEX SIGHT
GHA		
CORR		
GHA		
LONG/SHORT		
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	



WIND FACTOR	
WINDSPEED	HEADWIND
10	1.03
20	1.06
30	1.10
40	1.14
50	1.18
60	1.22

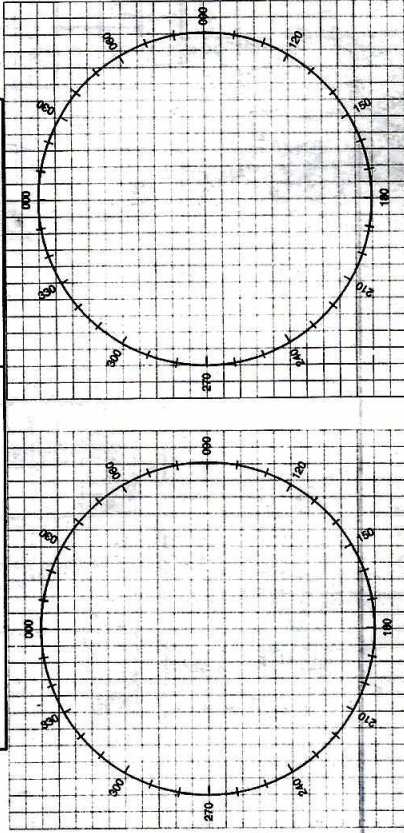
PRESS ALT	
10,000	1.0
20,000	.99
30,000	.97
40,000	.96

TRUE AIRSPEED CROSS-CHECK				
TIME	IAS	PRESS ALT	"F" FACTOR	EAS

DISTANCE REMAINING

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

POSITION REPORT



TIME	FIX TYPE	POSITION	INS 1 POSITION	K ERR	INS 2 POSITION	K ERR	VAR +E=>	TH	DR +R=>	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS
16 22	Δ	27-35.5 082-49.2	27-35.7 082-48.2	-2 +1.0	27-36.0 082-49.1	-0.5 +1	40	278 31	75	208	300	19	1500	203	158	1705	1705	1705		
17 22	Δ	27-35.5 082-49.2	27-35.7 082-48.2	-2 +1.0	27-36.0 082-49.1	-0.5 +1	40	278 31	75	208	300	19	1500	203	158	1705	1705	1705		
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73 22	Δ	27-35.5 08																		

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:

UHFVOICE	VHFVOICE	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** _____

- HEADING **TRUE/MAG**

- AT _____ KTS TRUE/INDICATED

- FLIGHT LEVEL OR ALTITUDE _____

- WE ARE A P-3 AIRCRAFT WITH _____ SOULS ON BOARD
NATURE OF EMERGENCY

- NATURE OF EMERGENCY
- ASSISTANCE DESIRED

- PILOT INTENTIONS

1. POSITION

2. TIME

3. ALTITUDE

4. NEXT POSITION

5 ETA

6. NEXT POSITION

