



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



Flight ID: H050714

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 50 mins due to fuel delivery. There were time/data gaps from 181251-181310Z, 234924-30Z, 235539-235610Z, 000238-000300Z, 002939-50Z, 003426-40Z, 004424-30Z, 004426-40Z, 005203-10Z, 005733-10Z, 011857-011930Z, and 015701-10Z. Be aware of data spikes as a result of these gaps.

RA-232 was substituted for RA-159 during the following times: 174801-175202Z (take off), and 020905-021200Z (landing) due to spiking in RA-159.

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 renavigated 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	910.3 mb	910.4 mb
Station pressure	908.4 mb	909.3 mb

Flight Director: Contact Paul Flaherty
Phone #: (813) 828-3310 ext. 3094

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

AOCWF-1

Flt ID: 050714 H	From: MROC	To: MROC
Flt No: 05-035	Blk In: 0215z	ATA: 0209z
ETD: 17z	Blk Out: 1738z	ATD: 1751z
ETE: 9+00	Blk Time: 8+37 (8.6)	Flt Time: 8+18 (8.3)
Sponsor Org: NOAA / HRD	Program: IFEX	Purpose: MISSION # 1

AOC Personnel

AC: KENNEDY	Sys Eng: McMillen
CP: CHOI	Data Sys:
Nav: GUTWASSER	Radar:
FE: WADE	GPS/BT: 1711L
FD: FLAHERTY	Cld Phys:
Avionics: ROGERS	

Participating Scientists / Visitors / AOC

Name (Last, First)

Activity on Aircraft

Affiliation

ALBERS, C	VIS	FSU
SEARCY, J	VIS	MT
Mackay, K	VIS	COLO STATE
MAUSEN, K	VIS	COLO STATE
ROGERS, R	PI	HRD
WILHELMSON, E	SFMR	"
LEIGHTON, P	RADAR	"
MURILLO, S	RADAR	"

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

T/O DENIED - FUEL USAGE

NOAA? WXWWE SUSPECT

(16)

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

AOCWE2

Fit ID: 050714 H

Time Off: 1751z

Time On: 0809z

A/C (Take Off)

Wx Station (Take Off)

A/C (Land)

Wx Station (Land)

Pressure

910.3

908.4

910.4

909.3

Number

Data Disposition / Date / Quality

Fit Lvl Tapes

2

Radar Tapes

2

Cloud Physics Tapes

Video Tapes

4

AXBT

8

AXCP

AXCTD

Dropsondes

27

(H2D)

Video

Forward

Left Side

Right Side

Down

Remarks

Time On

Time Off

Rate

Remarks

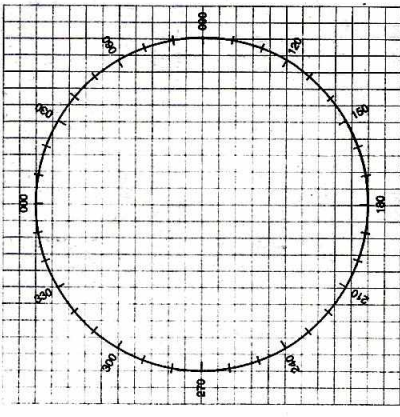
9-15 to 2000z 2300Hr 105M 23/21 \$42996
9-15 (Land) 1500z 0000Hr 105M 20/19 \$2999

11
10
10
12.5
43.5

CEX - TRUE BEARING METHOD					CEX SIGHT	
COMPASS TYPE	INS1	INS2	WET		GMT	
MCH (READING)					GHA	
- MTH (SEXTANT)					CORR	
CE					GHA	
- VAR					LONG-W	
DEV					E	
					EXACT LHA	
					LAT	
					BODY	
					DEC	
					HG/D	
					CORR	
					HG	
					Z	
					ZN	

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				



ENROUTE FUEL	
ENROUTE TIME	0130
ENROUTE FUEL (6K/5K/4K RULE)	43.5
RESERVE AT DESTINATION	17.0
REQUIRED RAMP	55.5
ACTUAL RAMP FUEL	53.8

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	5500
REQUIRED RESERVE AT DEPARTURE	
PSR FUEL	

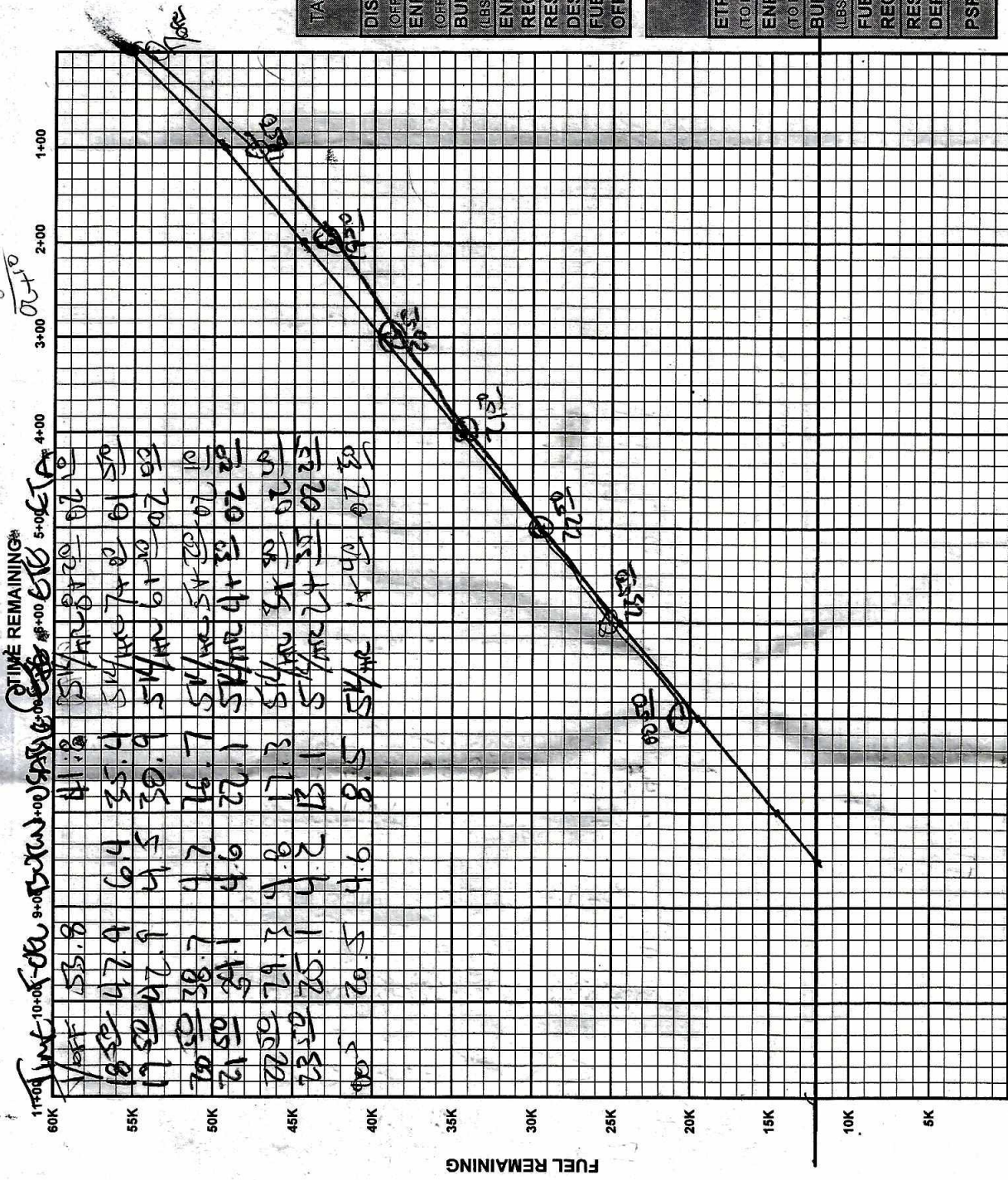
PRESS ALT		200	250	300	350
10,000	1.0	1.0	1.0	1.0	1.0
20,000	.99	.99	.98	.97	.97
30,000	.97	.97	.96	.95	.94
40,000	.96	.96	.94	.92	.90

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

DISTANCE REMAINING

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

RANGE CONTROL GRAPH



TRUE AIRSPEED CROSS-CHECK

TIME	IAS	PRESS ALT	"F" FACTOR	EAS	OAT	TAS	ITAS

[illegible]

NOAA · AOC · SED
N42RF AVAPS DROP LOG

change to HRD

100.90
107
231

Project : Hurricane '05
Take Off :

Mission : TCSP

Flight ID : 050714H

Landing :

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Winds Time Winds	Operator	Comments	Good ?
1	043 845 263	2		1810	1810	STM		✓
1(BT)	channel #14	14		1810	1810	STM		✓
2	043 835 086	2		1917		STM		✓
3	043 835 007	3		1930		STM	No launch Det	
4	043 845 194	2		1943		STM	Late Wind	✓
2(BT)	channel #14	14		1943		STM		✓
5	043 845 195	3		1949		STM		✓
6	043 835 105	4		1957		STM		✓
3(BT)	channel 14	14		2011		STM		✓
7	043 845 198	3		2011		STM		✓
8	043 845 191	4		2027		STM		✓
9	044 415 192	3		2039		STM	No launch Detect	
10	043 825 164	4		2043		STM		✓
11	043 845 190	2		2054		STM		✓
4(BT)	channel 14	14		2054		STM		✓
12	043 845 261	4		2114		STM	No launch Detect	
13	043 845 262	2		2133		STM		✓
14	044 415 193	4		2152		STM	Winds SW/OVR	✓
15								
5(BT)	channel 16	16		2152		STM		✓
15	043 845 208	2		2222		STM	Late Launch Det	✓
16	043 845 090	4		2234		STM		✓
17	043 845 072	8		2254		STM	No launch Det	
18	044 415 191	2		2259		STM		✓
6(BT)	channel 16	16		2259		STM		✓
19	043 845 199	3				STM		✓
20	043 835 104	4				STM		✓
21	043 845 271	1		2322		STM	No launch Det	
22	044 415 187	3		2335		STM		✓
23	043 845 197	4		2348		STM		✓
24	042 715 073	1		0001		STM		✓
7(BT)	chan 16	16		0001		STM		✓
	042 715			0000		STM		

serina

Jacob
Kate

