



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



Flight ID: H050715

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 203221-30Z, 204042-50Z, and 215651-215710Z. Be aware of data spikes as a result of these gaps.

RA-232 was substituted for RA-159 during the following times: 175001Z-180200Z (take off), and 022014Z – 022500Z (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	911.1 mb	911.2 mb
Station pressure	909.3 mb	910.2 mb

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

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AOCWF1

Flt ID: 650715 H	From: MROC	To: MROC
Flt No: 05-036	Blk In: 0230z	ATA: 0222z
ETD: 8+05	Blk Out: 1742z	ATD: 1753z
ETE: 1730z / 1130L	Blk Time: 8+48 (8.8)	Flt Time: 8+29 (8.5)
Sponsor Org: NOAA (182)	Program: IFEX	Purpose: MISSION #2

AOC Personnel

AC: KENNEDY ✓	Sys Eng: McMillan
CP: CROY -	Data Sys: HILL
Nav: GALLAGHER ✓	Radar:
FE: WADE	GPS/BT:
FD: FLAHERTY ✓	Cld Phys:
Avionics: ROGERS	

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
ROGERS, R	PI	HRD
LEIGHTON, P ✓	RADAR	"
MURILLO, S ✓	RADAR	"
RAYMOND, DMC ✓	SCI	NMT
BROWN, SCOTT ✓	VIS	NASA
CISNEROS, JORGE	VIS	NMT

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

NOAA2 WXWXE SUSPECT

IP 915 / 85 (730 8415)

BVOY

MRLB

30/8

7/36.9

8/48

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AOCWF2

Flt ID: 050715H Time Off: 1753z Time On: 0222z

	A/C (Take Off)	Wx Station (Take Off)	A/C (Land)	Wx Station (Land)
Pressure	911.1	909.3	911.2	910.2

	Number	Data Disposition / Date / Quality
Flt Lvl Tapes	2	
Radar Tapes	2	
Cloud Physics Tapes		
Video Tapes	4	
AXBT	87 (7 LAUNCHED, 4 BACKUPS)	
AXCP		
AXCTD		
Dropsondes	29	24 DROPS 5 BACKUPS

Video

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

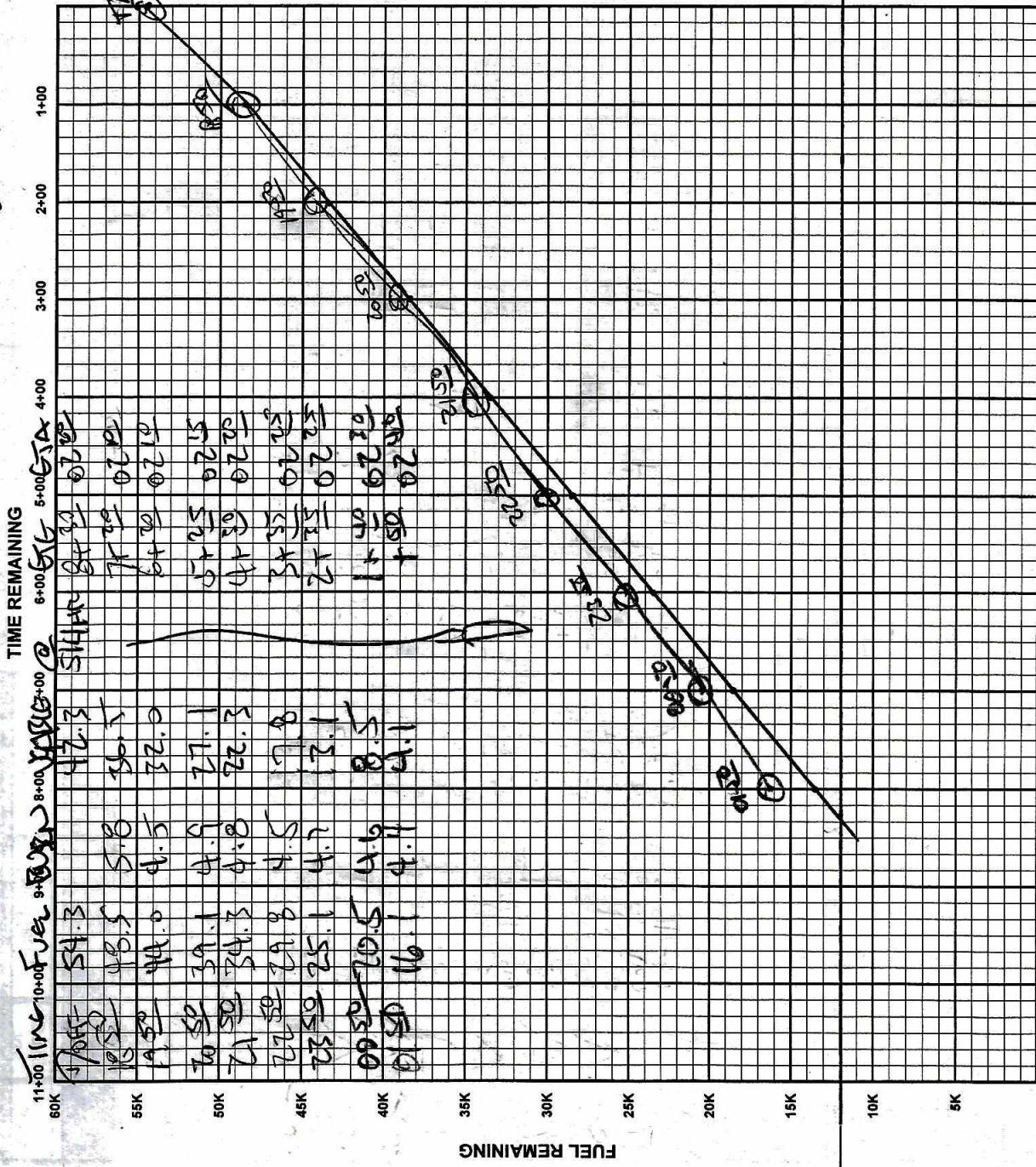
Remarks

0155z 0000KT 10SM

A2999
A3002FLT 7/14
8 BAD

9-80.3 9-17.4
88-43.5 89-19.7

RANGE CONTROL GRAPH



11
10
10
41.5
42.5

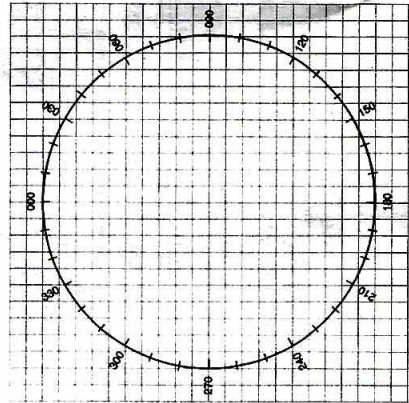
ENROUTE FUEL	
ENROUTE TIME	8+15
ENROUTE FUEL (5K 5K 4 5K RULE)	42.5
RESERVE AT DESTINATION	12.0
REQUIRED RAMP	54.5
ACTUAL RAMP FUEL	57.3

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

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



PRESS ALT		WIND FACTOR	
10,000	1.0	200	250
20,000	.99	300	350
30,000	.97		
40,000	.96		

WIND FACTOR		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	

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

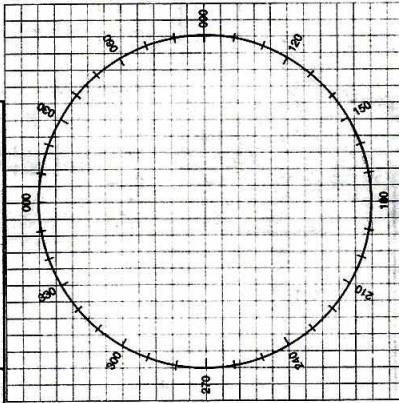
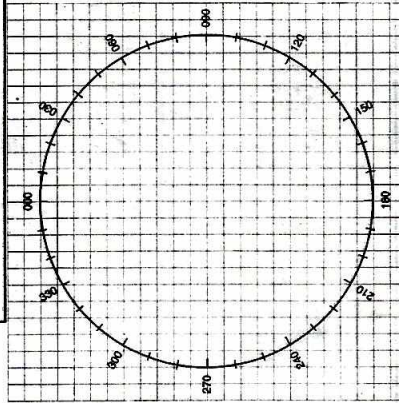
DISTANCE REMAINING

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

[illegible]

[illegible]

POSITION REPORT



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 _____

- HEADING _____ TRUE/MAG _____

- AT _____ KTS TRUE/INDICATED

- FLIGHT LEVEL OR ALTITUDE
WE ARE A B 3 AIRCRAFT WITH

: WE ARE A F-3 AIRCRAFT WITH _____ SOULES ON BOARD
: NATURE OF EMERGENCY

- ASSISTANCE DESIRED

- PILOT INTENTIONS
- WE HAVE _____
ENDURANCE REMAINING _____

[illegible]

Charge to HRD

NOAA · AOC · SED
N42RF AVAPS DROP LOG

Project : Hurricane '05
Take Off : 1751

Mission : TCSP
Landing :

Flight ID : 050715H

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Winds Time	Operator	Comments	Good ?
1	042825032	2	0	1837	37	JWH	No sfc winds, ^{room}	✓
2	043845009	3	0	1850	26		lost winds early	—
1(BT)	Ch 14	14	—	1837	—			✓
3	042825038	2	0	1903	—		NLD	—
4	042825028	4	0	1904	—		NLD DWP SN	—
5	042825018	5	0	1915	160?		Late Winds	?
2(BT)	Ch 14	14	—	1915	—			✓
6	042825015	6	0	1917	120?		Late Winds	?
7	042825040	7	0	1933	17			✓
8	043845003	8	0	1950	95			✓
9	042825036	5	0	2005	25			✓
10	043645067	6	0	2023	—		NLD	—
3(BT)	Ch 14	14	—	2008	—		Possible CAD misfire on 3A; lost 4A light	✓
11	043845066	5	0	2024	17			✓
12	042825051	5	0	2040	17			✓
13	042825039	6	0	2057	20			✓
14	042825033	5	0	2115	—		NLD	—
4(BT)	Ch 14 X	14	—	2057	—			✓
15	042825022	6	0	2132	40			✓
16	042825031	5	0	2148	—		NLD	—
17	043615109	6	0	2150	14			✓
5(BT)	Ch 14	14	—	2148	—			✓
18	043615110	5	0	2209	9			✓
19	042825030	6	0	2227	17			✓
20	042825025	5	0	2245	25			✓
21	043615171	6	0	2304	—		NLD	—
22	042825028	5	0	2321	17		DWP SN	✓
23	042825034	6	0	2329	—		NLD	—
24	042825021	7	0	2348	32			✓
25	043615101	5	0	0006	19			✓
26	043615106	6	0	0020	20			✓
6(BT)	Ch 14	14	—	0006	—	JWH		✓

↓
AVAPS
2

