



NOAA P-3 N43RF SFMR/Recco Flight NOEL



Flight ID: 071031I

Sensor or system

INE

Accelerometer

Temperature Probe

Dew Point Probe

Altitude (for vertical wind)

Static Pressure

Dynamic Pressure

Time Source

Constants File

Number or Name

1

1

1

2 (Edgetech)

Altitude from inertial 1

Rosemount Fuselage PSF

Rosemount Fuselage PQF1

Micro 99

N/A

Notes:

There was one time/data gap during this flight which occurred from 200430Z – 201751Z.

The King liquid water sensor was inoperative throughout the flight.

Due to hardware changes in some of the navigational equipment, a number of parameters have been adjusted in the netCDF file.

RA159 and ALTI1 both display the blended altitude solution of the GPS/RINU system.

RA232 and ALTI2 altitude both display the HG9550 Radar Altitude, adjusted to the same scale as the previous INE altitude.

Temperature data from sensor number 3 is erroneous.

There was an ~40 mb difference in differential attack pressure between the fuselage and radome.

No Collins GPS data exist for this flight.

There were numerous times during the flight where the dewpoint temperature exceeded ambient temperature resulting in RH>100%. This was likely due to rain, a wet-bulb effect on the total temperature sensor, and/or an artificial warming of the dewpoint sensor as it tried to burn off excess moisture. Otherwise, all sensors worked optimally during this flight.

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.

	Takeoff	Landing
Aircraft Static Pressure	1013.3 mb	1013.0 mb
Corrected Tower Pressure	1013.5 mb	1013.5 mb

Flight Director: Martin Mayeaux (813) 828-3310 ext. 3086

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

Flt ID: 071031I	From: Kmcf	To: Kmcf
Flt. No: 08-04	Blk In: 0059 Z	Time On: 0051 Z
ETD: 1900 Z	Blk Out: 1854 Z	Time Off: 1911 Z
ETE: 7.00	Blk Time: 6.04 (6.1) Hrs	Flt Time: 5.40 (5.7) Hrs
Sponsoring Org: NHC	Program: Recco	Purpose: TS NOEL

AOC Flight Crew

Aircraft Commander: Choy, B	Data System: Peek, B
Co-Pilot: Newman, C	AVAPS: Delgado, J
Navigator: Bishop, J	System Eng:
Flight Eng: Floyd, D	A A:
Flight Director: Shepherd, T. Mayeaux, M	A A:
Avionics: Olney, B	Crew Chief:

Participating Scientists / Visitors

Name (Last, First)	Activity on Aircraft	Affiliation
McEadden, J	PI	AOC

Remarks (Storm Name, Mission ID, Recco Times, Fix Times)

Recco Times

Fix # Fix Time

Storm Name: TS NOEL

Mission ID: N00a3 0916A NOEL

Penetration number and time

2100Z Fix

0000Z fix

23.6N 78.7W → 360/5 → 46.22.6 78.7 996m / 1000 ft → 46.22.6 78.7 996m / 1000 ft → 46.22.6 78.7 996m / 1000 ft

(See reverse for additional remarks)

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Flight ID: 071031E		Time Off: 1911 Z		Time On: 0051 Z	
A/C: Takeoff		Wx Station: Takeoff		A/C: Land	
Wx Station: Land					
Pressure	1013.3 mb	2993 mb	1013.0 mb	2993 mb	
ATIS	Time	Observation			
Takeoff	1755Z	07018KT 26KT 105m 6W085 Bkn100 29/20 A2994 PA-5			
Land	2355Z	04616KT 105m Bkn210 25/19 A2993			
	Number	Data Disposition / Date / Quality			
Flight Level Tapes					
Radar Tapes					
Cloud Physics Tapes / CDs					
Video Tapes					
Dropsondes		Good:	Bad:		
AXBT					
AXCP					
AXCTD					

Remarks:

305-229-4474

Alpha Pattern as best as we can. Not much operating room south of Center.

They have Cuban over flight clearance. We will be only plane.

If 5100ft -> 5000ft; else 1000ft -> no sonde. AS at 925 mb. max W at

Center 53 at FL 48 at Center

Temp 72 22.6 78.8 SLP 995 at 1749Z

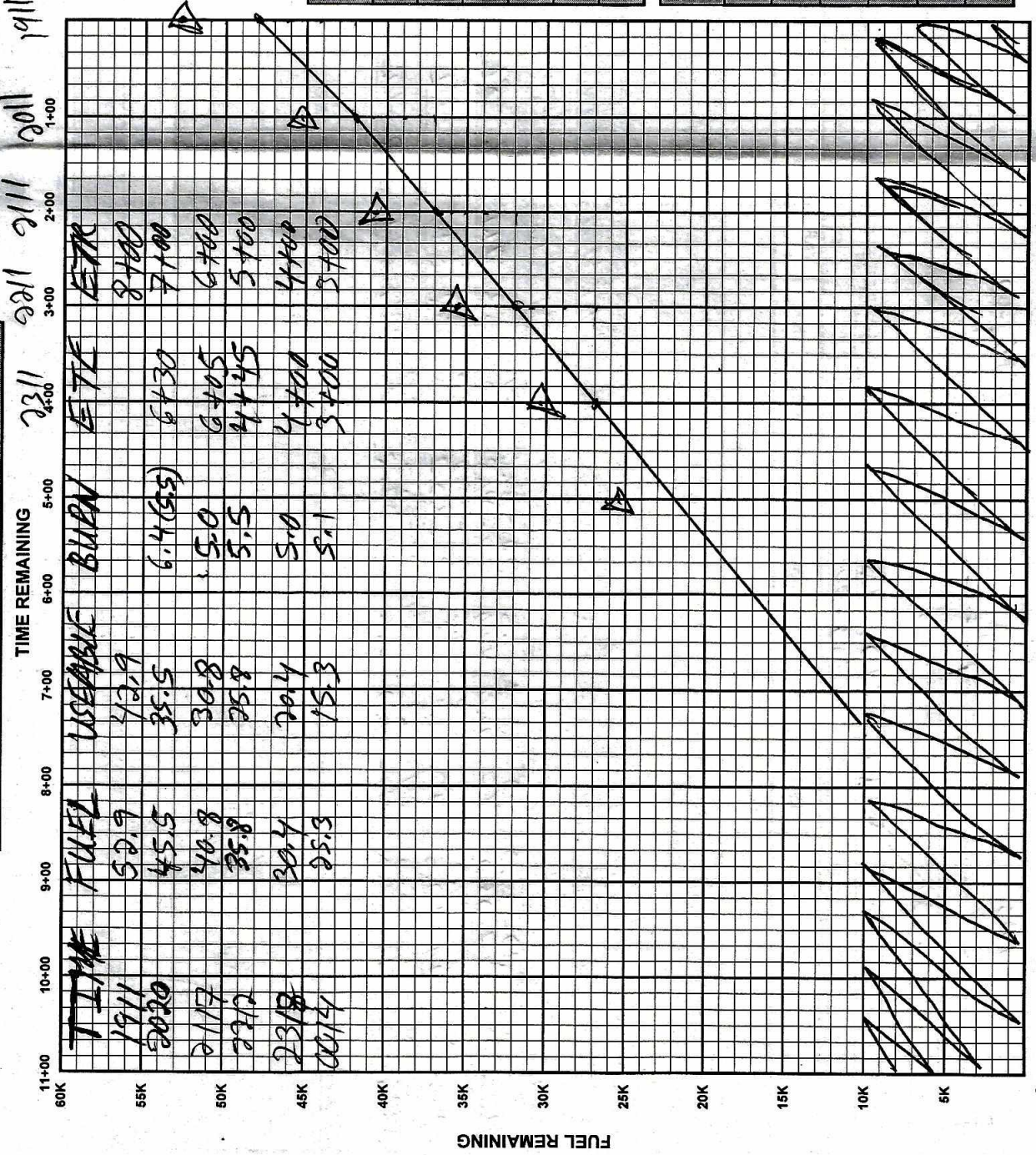
2010Z - Havana Center issues. We had to turn back North. Also, MOS reboot

2252Z - Radar fix: 2242 7838

2255 7840 @ 2207 ~ 997mb

22.6
78.8

RANGE CONTROL GRAPH



ENROUTE FUEL	
ENROUTE TIME	8+00
ENROUTE FUEL (6K 5K 4.5K RULE)	38.0
RESERVE AT DESTINATION	10.0
REQUIRED RAMP	48.0
ACTUAL RAMP FUEL	52.9

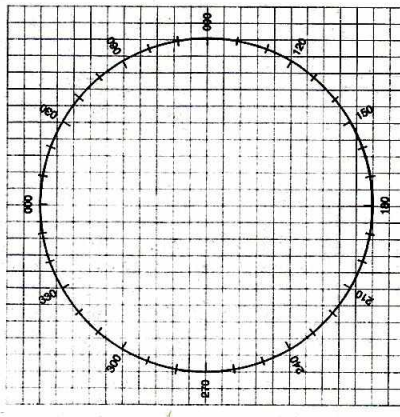
TACTICAL (OFFSETA TO DESTINATION)			
4 ENG		3 ENG	
DISTANCE			
(OFFSETA TO DEST)			
ENROUTE TIME			
(OFFSETA TO DEST)			
BURN RATE		4500	5500
(LBS/HR)			
ENROUTE FUEL			
REQUIRED			
RESERVE AT			
DESTINATION			
FUEL AT			
OFFSETA			

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

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



WIND FACTOR		
WIND SPEED	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

DISTANCE REMAINING

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

PRESS ALT	F. FACTOR			
	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

[illegible]

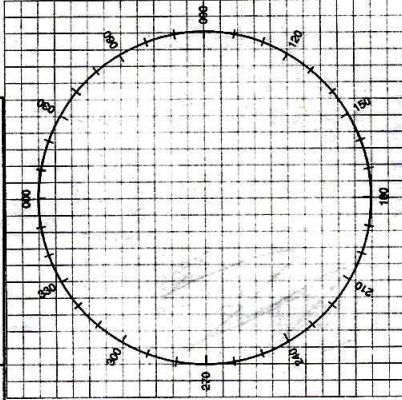
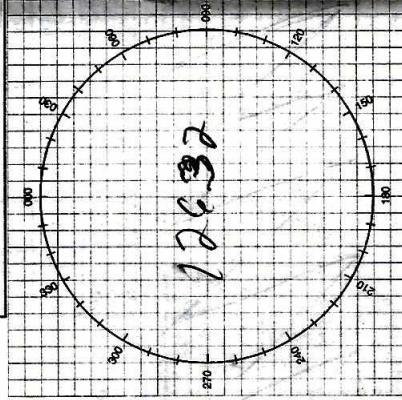
INS PERFORMANCE		
	INS 1	INS 2
BEGIN ALIGN TIME	/	/
ALIGN STATUS (0-5)	/	/
END NAV TIME	0115	0115
START NAV TIME	1800	1800
DELTA T	7415	7415

TERMINAL ERRORS		INS 1	INS 2
DELTA LAT	-4.0	+7.8	
DELTA LON	-1.4	+5	
RGS	/	/	
RADIAL ERROR	4.1	1.5	

[illegible]

FREQ	ALT	HDG	OTHER
			305-716-1589/1588
			Mini Center
		+43	
		(430)	Frequency 1356
			SAVING 7407
		2350	
			→ AT 12 N 25-15
			W 180-00

PAGE OF



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 _____
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 DESIR

-PILOT INTENTIONS

[illegible]