



**NOAA P-3 N42RF**  
***Ocean Winds 2004 Hurricane Jeanne #2***  
***KMCF - KMCF***



***Flight ID: H040924***

*Sensor or system*

*Inertial + Accelerometer Data*

*Temperature Probe*

*Dew Point Probe*

*Altitude (for vertical wind)*

*Radar Altitude*

*Static and Dynamic Pressure*

*Time Source*

*Constants File*

*Number or Name*

*1*

*1*

*1*

*Radar Altitude*

*RA-159*

*Rosemount Fuselage*

*Micro 99*

*CO2042.CON*

---

**Notes:**

There were TEN Hurricane penetrations on this flight.

RA-232 was substituted for RA-159 during the following times: 152101-152629Z (take off) and 004818-005900 (landing) due to spiking in RA-159.

TDM2 was substituted for TDM1 from 200638-204235Z, and TDM3 was substituted for TDM1 (with a -2.5 offset) from 202945-203157Z due to spiking in TDM1.

There were numerous 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. These periods are typically reflected in the J/W liquid water data. No corrections were made during these events unless noted above.

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.**

---

Flight Director:  
Phone #:

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

---





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

AOCWF-2

Flt ID: 040924 H	Time Off: 1523z	Time On:
------------------	-----------------	----------

	A/C (Take Off)	Wx Station (Take Off)	A/C (Land)	Wx Station (Land)
Pressure	1015.2	1015.3		1012.4

	Number	Data Disposition / Date / Quality
Flt Lvl Tapes		
Radar Tapes		
Cloud Physics Tapes		
Video Tapes		
AXBT		
AXCP		
AXCTD		
Dropsondes		

## Video

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

Remarks 1355z 01009KT 7sm 25/20 2999  
235J 01008KT 10sm 26/21 2990



Leaf 44

26 11  
72 42

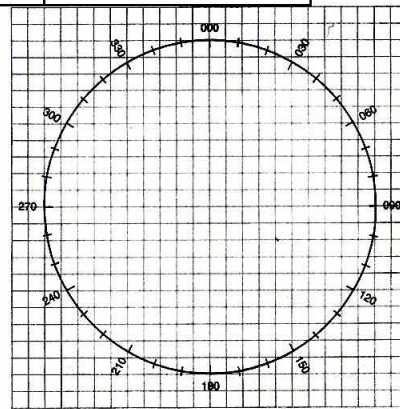
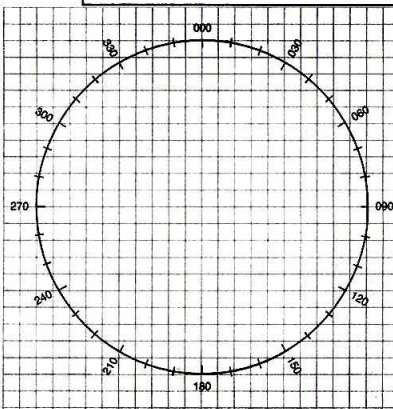
2700  
7300

14 SUB 2030

[illegible]

## MISSION LOG

PAGE 1 OF 2



## 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 42

- 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 14 SOULS ON BOARD

**- NATURE OF EMERGENCY**

**- ASSISTANCE DESIRED**

- PILOT INTENTIONS

- WE HAVE \_\_\_\_\_ ENDURANCE REMAINING

[illegible]



[illegible]

INS PERFORMANCE		
	INS 1	INS 2
BEGIN ALIGN TIME	1310	1310
ALIGN STATUS (0-5)	0	0
END NAV TIME	0057	0057
START NAV TIME	1432	1432
DELTA T	10+25	10+25

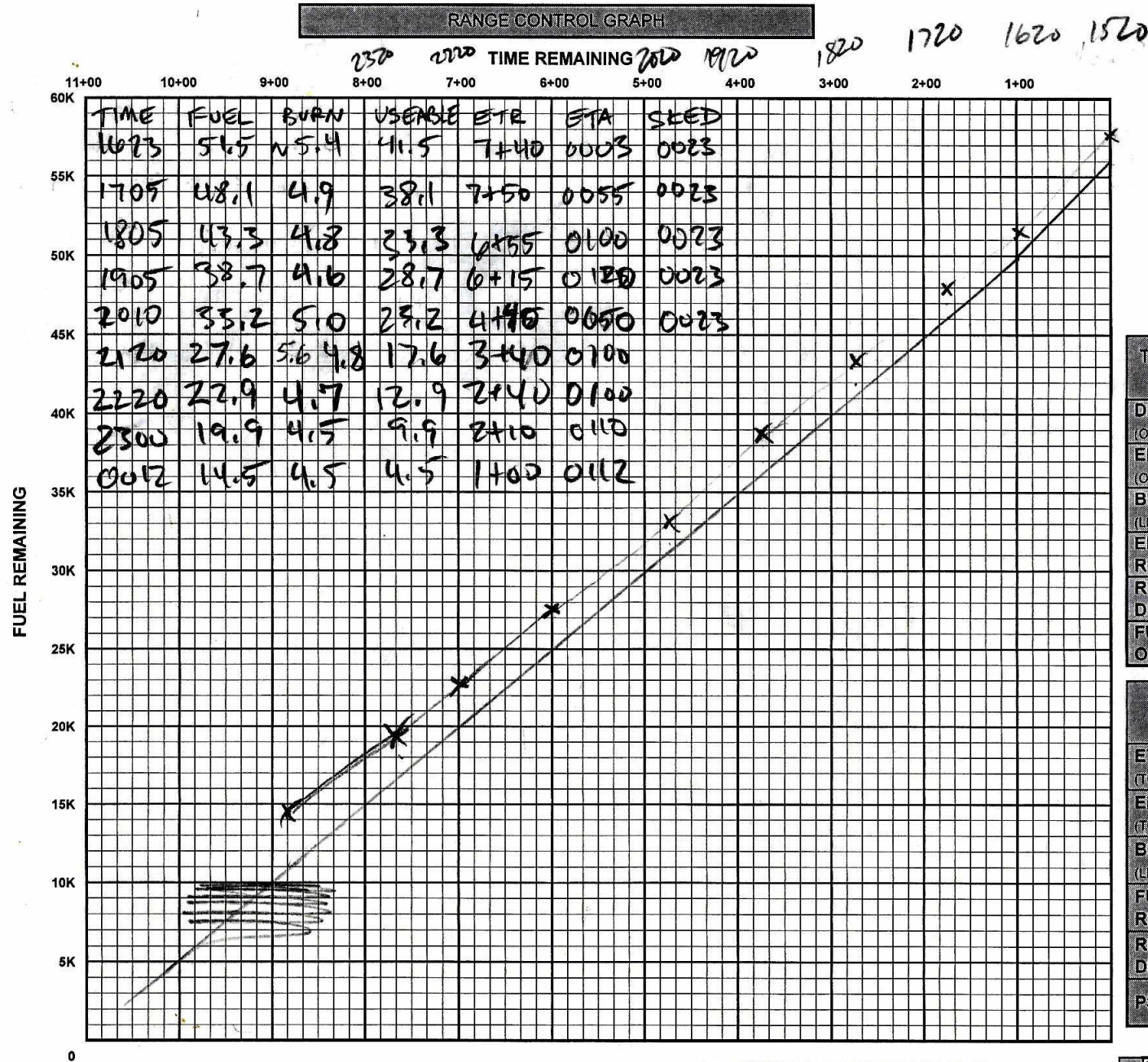
TERMINAL ERRORS		
	INS 1	INS 2
DELTA LAT	+4.5	+7.0
DELTA LON	+5.3	-7.0
RGS	1	2
RADIAL ERROR	7	10

[illegible]









DISTANCE REMAINING

ETP = .5(TOTAL DISTANCE x 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	9+00
ENROUTE FUEL (6K 5K 4.5K RULE)	46.0
RESERVE AT DESTINATION	10.0
REQUIRED RAMP	56.0
ACTUAL RAMP FUEL	57.9

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

TRUE AIRSPEED CROSS-CHECK							
TIME	IAS	PRESS ALT	"F" FACTOR	EAS	OAT	TAS	ITAS
1623	215	150			11	277	213
0025	218	200			5	302	205

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			

