



NOAA P-3 N42RF
Ocean Winds 2004 Hurricane Jeanne #1
KMCF - KMCF



Flight ID: H040922

<u>Sensor or system</u>	<u>Number or Name</u>
<i>Inertial + Accelerometer Data</i>	2
<i>Temperature Probe</i>	1
<i>Dew Point Probe</i>	1
<i>Altitude (for vertical wind)</i>	<i>Radar Altitude</i>
<i>Radar Altitude</i>	RA-159
<i>Static and Dynamic Pressure</i>	<i>Rosemount Fuselage</i>
<i>Time Source</i>	Micro 99
<i>Constants File</i>	CO2042.CON

Notes:

There were SIX Hurricane penetrations on this flight.

Possible data gaps from 153400-153416Z, 015740-015748Z.

RA-232 was substituted for RA-159 during the following times: 154201-154703Z (take off), 180204-180827Z and 014059-015000Z (landing) due to spiking.

The J/W liquid water data appears to be inconsistent until after 1747Z.

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 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.

Flight Director:
Phone #:

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

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

AOCWF1

Flt ID: 04092211	From: KMCF	To: KMCF
Flt No: 04-047	Blk In: 0158Z	ATA: 0148Z
ETD: 15Z	Blk Out: 1532Z	ATD: 1544Z
ETE: 9+00	Blk Time: 10+26 (10.4)	Flt Time: 10+04 = (10.1)
Sponsor Org: NESDIS / HRD	Program: OCEAN WINDS	Purpose: HURRICANE JEANNE

AOC Personnel

AC: KENZDY, P	Sys Eng: McMillen, S
CP: NELSON, M	Data Sys: PEAK, B
Nav: BRAKOB, D / SIGAL, P	Radar:
FE: WASS, S	GPS/BT:
FD: PARRISH, J / FLAHERTY, P	Cld Phys:
Avionics: RODGERS, M	

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
CHANG, P	OCEANWINDS PI	NESDIS
BUCK, M	CBLAST PI	HRD
KERR, B	IWRAP	UMASS
ZIMMERMAN, S	OBS	NRL
(14 SOBS)		
(6 PENETRATIONS)		

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

HURRICANE JEANNE FP 26-18 70.40 26-6 68.6 09Z 80KTS PENET 6

T/O DELAYED DUE TO PROBLEMS w/ 43 26.08 09Z 35 E 26.08 68.44 170Z - 25.49 09Z 24Z -

(DUPLOT 2 running low) DUPT 1 low ops RETAIN LEG 7.2

BRANCKE OUT 1654Z BACK UP AFTER DESCENT OUT AGAIN AFTER CLIMB

CHECK JW!!

1835Z 965
1956Z 984
2115Z
2140Z 965
2211Z 965
2241 966

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AOCWF2

Flt ID: 040922z Time Off: 1544z Time On: 0148z

	A/C (Take Off)	Wx Station (Take Off)	A/C (Land)	Wx Station (Land)
Pressure	1017.6	1017.5	1017.4	1017.4

	Number	Data Disposition / Date / Quality	
Flt Lvl Tapes			
Radar Tapes			
Cloud Physics Tapes			
Video Tapes			
Sensor	3	(HRD)	
AXBT	16	(2 BAD)	(HRD)
AXCP			
AXCTD			
Dropsondes	29	(5 BAD)	18 HRD / 11 MISDLS

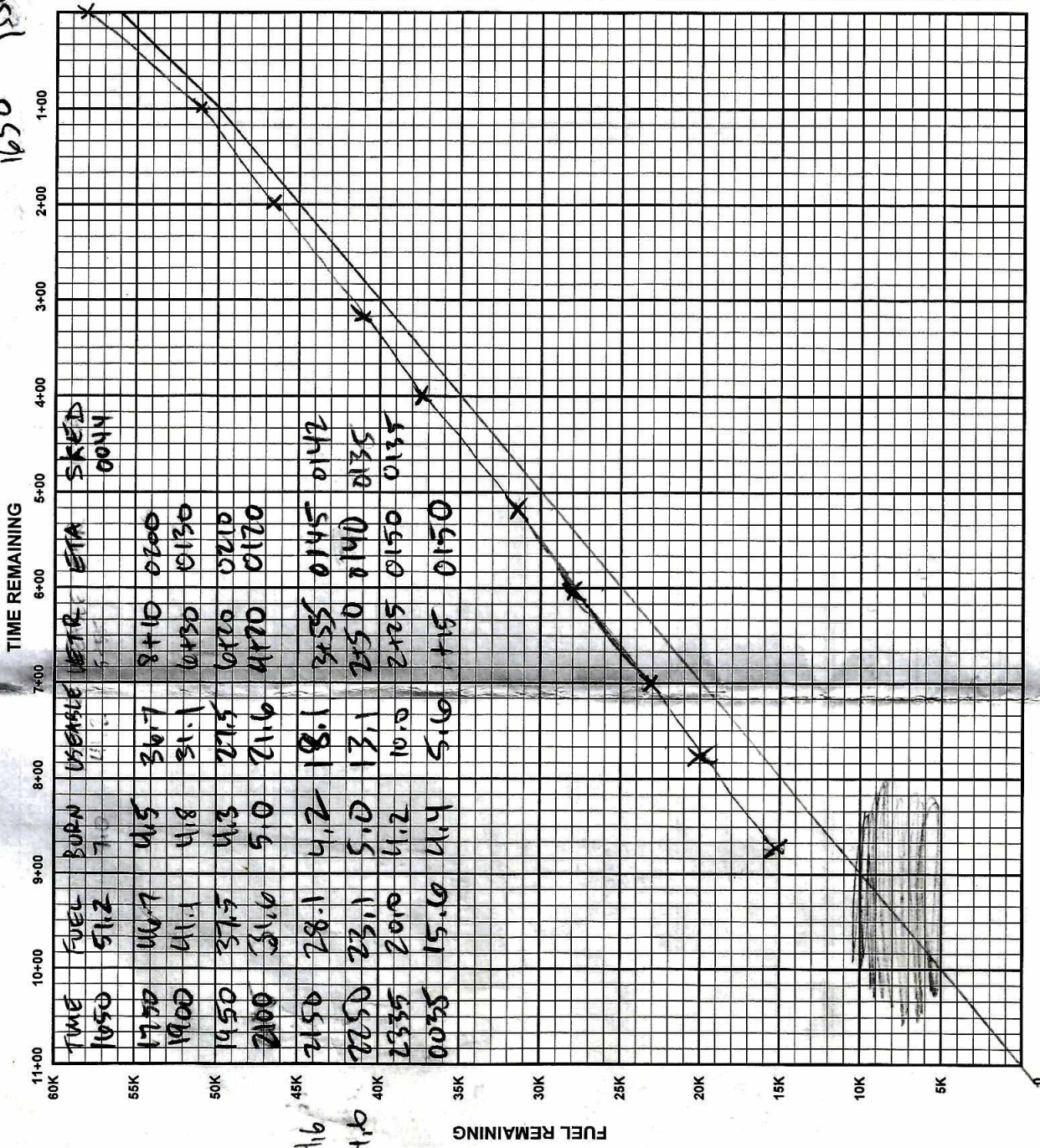
Video

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

Remarks 0055 06009KB 7SM 26/ A3004

RANGE CONTROL GRAPH

1650 1550



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	58.2

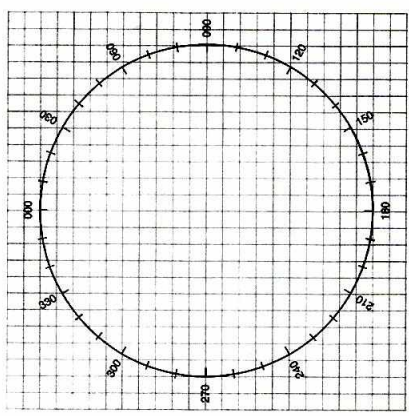
TACTICAL (OFFSTA TO DESTINATION)	
DISTANCE (OFFSTA TO DEST)	
ENROUTE TIME (OFFSTA TO DEST)	
BURN RATE (LBS/HR)	4500
ENROUTE FUEL REQUIRED	
RESERVE AT DESTINATION	
FUEL AT OFFSTA	5500

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

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

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

CEX SIGHT	
GMT	
GHA	
CORR	
GHA	
LONG +W -E	
EXACT LHA	
LAT	
BODY	
DEC	
HC/D	
CORR	
HC	
Z	
ZN	



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

WINDSPEED	WIND FACTOR	
	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

TRUE AIRSPEED CROSS-CHECK						
TIME	IAS	PRESS ALT	"F" FACTOR	EAS	OAT	ITAS
1608	216	150	X	X	9	276
						239

DISTANCE REMAINING

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

