

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

Fit ID: 040924 I	From: KVQQ	To: KMCF
Flt. No: 04-69	Blk In: 225 1/2	Time On: 0250Z
ETD: 1500 Z	Blk Out: 1451 Z	Time Off: 1503 Z
ETE: 8 + 00	Blk Time: 8 + 07 8.1 Hrs	Flt Time: 7 + 47 7.8 Hrs
Sponsoring Org: NOAA / HRD	Program: Hurr 2004	Purpose: 14. JEANNE

**AOC Flight Crew**

Aircraft Commander: SILAH, M /	Data System: LYNCH, T /
Co-Pilot: CHOY, B   STRONG, T	AVAPS: SMITH, J -2
Navigator: GALLAGHER, T /	System Eng:
Flight Eng: BAST, G   KLIPPEL, J	A A:
Flight Director: SHEPHERD, T /	A A:
Avionics: SANS SOUCCI, D /	Crew Chief:

**Participating Scientists / Visitors**

Name (Last, First)	Activity on Aircraft	Affiliation
ROGERS, R /	PI	NOAA / HRD
WILSON, E /	SFMR	
LEIGHTON, P /	RADAR	
WALSH, E /	SRA	NASA
LITCHENDORF, T /	PDA	
LASWELL, J /	MASS	SCRIPPS
LEE, WEN C. /	OBS	NCAR
ORTNER, P /	OBS	AOML

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

Storm Name: JEANNE

Mission ID: NOAA3 WX11A JEANNE

1-1734      5-2102  
 2-1840  
 3-1930  
 4-2024

(See reverse for additional remarks)

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Flight ID: 040924 I      Time Off: 1503      Time On: 2250

	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
Pressure	1014.0	1017.9 30.06	1011.3	29.89 <sup>1015.2</sup>

	Number	Data Disposition / Date / Quality
Flight Level Tapes	2	
Radar Tapes	1	
Cloud Physics Tapes / CDs	<del>0</del>	
Video Tapes	4	
Dropsondes	<del>0</del>	Good:      Bad:
AXBT	6	
AXCP		
AXCTD		

**Remarks:**

DP1 T.U. @ T.O.

#3 EDC ↓ @ T.O. - will dup RA & PDA ↓ til needed

~1530 install new DPI control head - NO cal coeff  
ser # 93602

- 1630 S

- 1640 RADAR TAPE STARTED

~1700 Bal DPI

- 2129 Stop Radar record

- " Radars.

2548    2731  
7146    7232  
1-8    14  
2-10    16  
7-15

17572  
2623 AF  
7305

2107  
2622  
7343  
964

2624  
7314 16

16-

14  
15

1738  
2623  
1300

Y-16-9743  
X 11.2793

1645  
2611  
7242

~~2700~~  
~~7340~~

110

16/10

93602

1933  
2625  
7321  
965



**NOAA P-3 N43RF  
CBLAST 2004  
FLIGHT #14**

**Flight ID: 1040924**

Sensor or system

Number or Name

INE.....	2
Accelerometer.....	2
Temperature Probe.....	1
Dew Point Probe.....	2
Altimeter (for vertical wind).....	RA-159
Static Pressure.....	Rosemount (fuselage)
Dynamic Pressure.....	Rosemount (fuselage)
Time Source.....	Micro 99
Constants File.....	CO3043.con

Local Met. Data: Not copied at takeoff

Take off: 1503Z  
Land: 2250Z

The RA-232 was substituted for the RA-159 during take off and landing due to spiking (T.O. 150001-150430; Land 224630-225300).

The RA-159 had spikes that were removed and patched (171824-171830; 222539-222603).

The Johnson-Williams liquid water sensor was inoperative for the entire flight.

There were data gaps noted: 191811-191817; 191931-191942; 192121-192130; 192241-192247.

There were times during heavy precipitation events (e.g. eye wall penetrations) when the dew point exceeded ambient temperature yielding a RH of greater than 100%. This is probably due to a wet bulb effect on the total temperature probe and/or the dew pointer over heating while trying to remove excess moisture. In these instances, no corrections were attempted.

The aircraft INE positions were re-navigated with respect to GPS.

SPECIAL NOTE: Locations 80, 81, and 82 of record 5 in the standard data contain vertical ground speed, vertical air speed, and vertical wind speed computed using Dr. Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

	<b>Take off</b>	<b>Land</b>
Aircraft Static Pressure	1014.0 mb	1011.3 mb
Corrected Tower Pressure	1017.9 mb	1015.2 mb

Flight Director: Tom Shepherd  
813-828-3310 x3053



Please Note any Discrepancies

Item #	Zulu Time	Problem Description	Initials	Status
1	Pre	Dew #1 reading $\approx 47^{\circ}$ - turned off	TZ	
2	Pre	Purged all press lines + cleaned all sensors previous day	TZ	
3	↓	Install ACLA card # 009 into ASDL slot 1 (Rams Port) - Added 232 Resistor pack	TZ	
4		BAT Probe diff pressure in-op. Rest is OK	TZ	
5	↓	AXBT tube IE "BUOY IN TUBE LIGHT" INTERMITTENT IN FLIGHT 040922i -	JS	
	1530	Dew #1 reads way high - Purged + Remove SH 5221 Install SH #3602		
6		QSFMR getting hot - Recv Noise $\approx 47^{\circ}$ ; Rcvr Reference $\approx 40^{\circ}$	TZ	
*		- Need far more 232 Resistor packs for ACLA card	TZ	
		- Ensure that spare HP Mux is onboard		
		- Need latch for Coke Cabinet		

Mission Jeanna Fit ID 040924

SED Crew Lynch, Sans Souci, Smith

Pre-Flight 12:45 Take-Off 15:02 Landing 22:50

System		Pre-Flight		In-Flight		Post-Flight			
NAV	GPS	FM: 1	OK			LAT	Lon	GS	RE
	INE #1	Time On: 1240	Aligned to: 0	OK		-5.2	433	2	6
	INE #2	Time On: 1240	Aligned to: 0	OK		-2.1	423	0	3
	Diff GPS			TL					
RADAR	MARS Data	Start	Stop	Ready?	HRD?	# DATs ? Given To:			
	MARS	16:40	21:59	TL	Y/N				
	MARS Data / Tape Status				LFRec	TARec	EOP's		
	MARS (U8)	Clear		TL					
	MARS LU9	Clear		TL					
PMS	RADAR R/T SN	Tail 202	LF 102	TL	Mod Switches ON		Mod Switches OFF		
	Nose			OK			Power OFF		
	FSSP Ref VDC:	Covers OFF		NE			Covers ON		
	Cloud Mono	Covers OFF					Covers ON		
SEA	CIP	Covers OFF					Covers ON		
	SEA Data DAT	Start	Stop	Ready?	#DATS	Errors	Disk Write		Given To:
	DAT	Clean?					Y / N		
TEMP		Cal High	Cal Low			Cal High	Cal Low		
	Temp #1	30.5	-30.4	TL		430.5	-30.2		
	Temp #2			TL			Power OFF		
	Temp #3			TL			Power OFF		
	Dewpoint	#1 #2 #3 (TDL)		TL			Power OFF		
PRES	Attack / Slip Angle	AP BP CP DP		TL			Power OFF		
	Differential	PQ1 PQ2 PQ3 PQ4		TL			Power OFF		
	Absolute	PS1 PS2 CPBS		TL			Power OFF		
FLTLVL	Apn-159 SN:	66-024		TL			Power OFF		
	Apn-232 SN:	1761		TL			Power OFF		
	Liquid Water	J&W King		JAS	28V WOW: ON?		Power OFF		
	Radiometer	CO2 SST		TL	28V WOW: ON?		Power OFF		
RAMS	RAMS Data	Start	Stop	Ready?	Errors 8:	Errors 9:	# DATs ? 2 Given To: TS		
	CPU: A (B)	14:43	22:58	TL	1	1	Power OFF		
	RAMS Data / Tape Status				Slow Rec	Fast Rec	Disk Records: 2964		
	RAMS (U8)	Clear		TL	2964	2964			
	RAMS (LU9)	Clear		TL	29628	29628			
	Flight Director Laptop			TL			Power OFF		
	Network			NI					
MISC	ASDL Mission #:	WX11A	Name: Jeanna	TL (3)	Freq: 30	Block: 10	Power OFF		
	C.I. Printer	Start	Stop	Ready?	Paper Bin Stores			Given To: TS	
	PRATE: 10	14:43	22:58	TL	0%	25%	50%	75%	100%
	Exterior Walk Around	Plugs	Covers	JS				Plugs Covers	
	SATCOM	W/S Inmarsat	GlobalStar	JS				Power OFF	
USER	AXBT Internal	# Loaded:		NA				# Launched: -	
	AXBT External	# Loaded: 6		NA	28V WOW			# Launched: 5	
	AVAPS 43	# On Board:		JS				# Dropped: 0	
	Video Cameras	Start	Stop	Ready?	Cameras	Mode	# Tapes ? 4 Given To: P		
	VHS (SVHS)	14:44	23:00	TL	OVERLOAD	2 / 10	Lens Cap ? : JS		
FCU	- B C D		TL			UPS OFF			
USER	SFMR (ED AOD)			TL	(6)				
	HRD Work Station							Accelerometers	
	NASA SRA			EW				#1 (2 G): 8205	
	ARL BAT Probe, SST & IRGA			EU				#2 (2.5 G): 6687	
	UW PDA			Trim				#3 (3 G): 5967	
Scripps MASS, Laser Alt, IR Cam & Sono			JL				#4 (3.5 G): 2892		
RSMAS Licor			TL						

- HWTL -  
 TL 94  
 040924

#3 EDC in-op - very warm in tube d



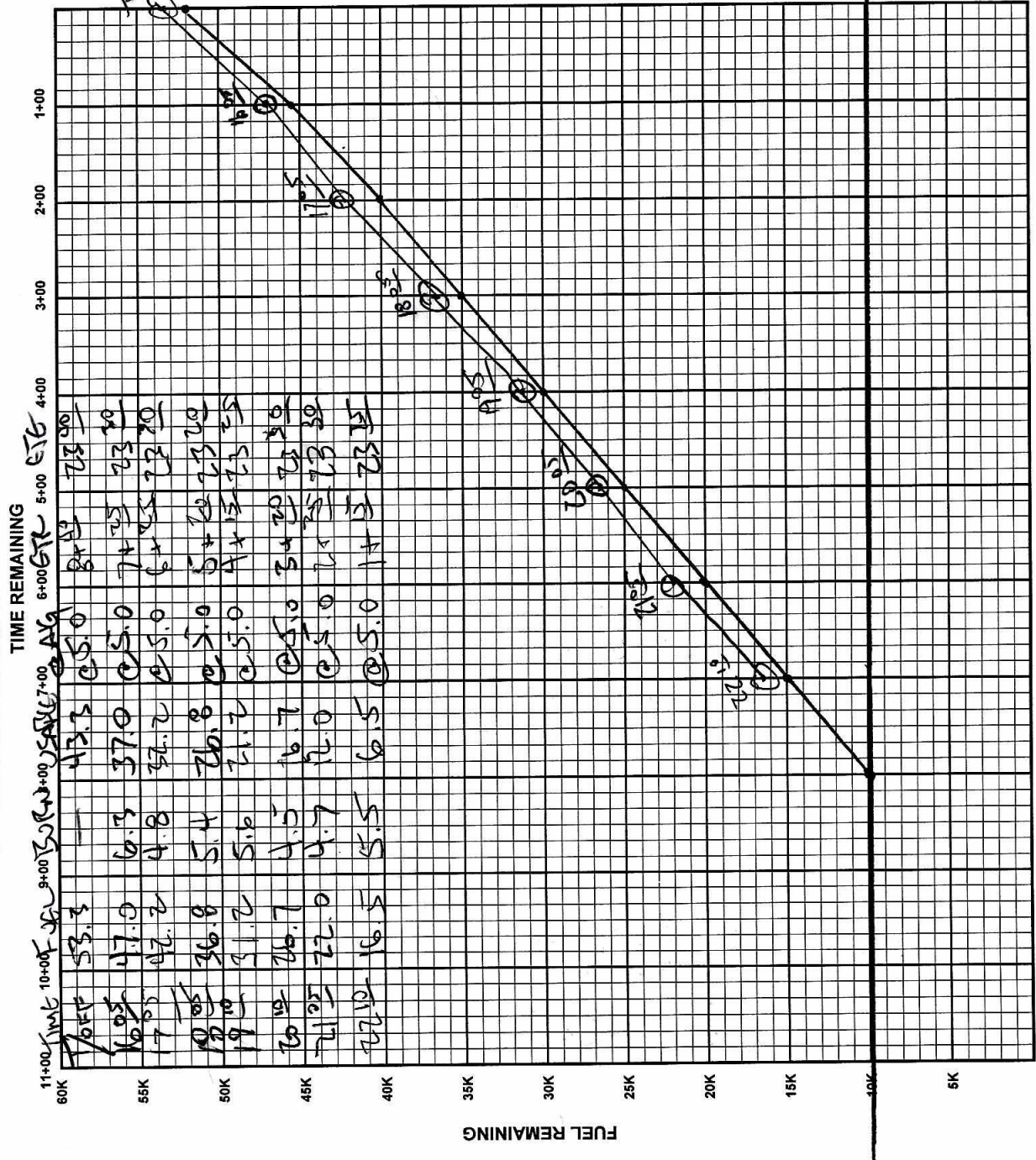
MOE DWS 1000 1650

2107 26 23 73 43

DTA ETR

1200  
100 1650 134.8

RANGE CONTROL GRAPH

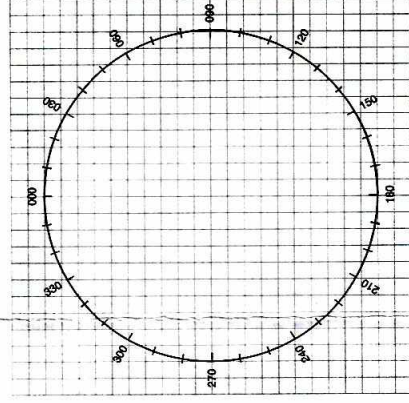


ENROUTE FUEL	
ENROUTE TIME	8+00
ENROUTE FUEL (6K 5K 4.5K RULE)	42.0
RESERVE AT DESTINATION	10.0
REQUIRED RAMP	52.0
ACTUAL RAMP FUEL	53.3

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	5500

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



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

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

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

DISTANCE REMAINING

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



MISSION PREFLIGHT LOG

DESTINATION: KJRF → KJRF  
 AIRCRAFT COMMANDER: LT SLAH  
 FLIGHT DIRECTOR: SKERRAN  
 SCHEDULED / ACTUAL TAKEOFF Z: 1500 Z, 1503 Z  
 DATE OF TAKEOFF: 24 SEP 04

WP	LAT / LON	RTE	MH	VAR +E=>	TH	DR +R=>	TRK	GS	WD	WS	ALT	TAS	LEG / TOT DIST	LEG / TOT TIME	PROP ETA	ETA	ATA	REMARKS	INS PERFORMANCE	
																			INS 1	INS 2
KJRF	28-13.1 081-52.6														1500	1503			2021	2021
SGT	29-57.5 081-20.3		124	SW	119	-	119	280	L	V	1500	280	32	1507	1507	1510			2021	0
HPDC	29-13.3 079-09.1		116	SW	111	-	111						133	1533	1533	1536	1546		2052	2052
MARY	27-50.0 075-57.0		123	7W	116	-	116						183	1613	1613	1616	1629		2052	2052
IR	26-59.0 074-00.0		126	9W	117	-	117	240	CD	700	500	240	120	1624	1624	1624	1624		2052	2052
EXE	26-06.0 073-06.0		144	10W	134	-	134						88	1651	1651	1659	1721		2052	2052
STIFF	27-36.3 078-38.8		285	11W	274	-	274	280	L	V	1800	280	120	1501	1501	1502	1512		2052	2052
MRS	27-40.7 080-29.7		280	7W	273	-	273						182	1620	1620	1622	1622		2052	2052
BAX	27-27.2 082-08.1		267	5W	262	-	262						193	1637	1637	1639	1642		2052	2052
LMF	27-51.7 082-30.8		325	4W	321	-	321	200	V		800	200	191	1647	1647	1649	1652		2052	2052

TERMINAL ERRORS	INS 1		INS 2	
	DELTA LAT	DELTA LON	DELTA LAT	DELTA LON
	-2.5	+3.3	-2.1	+2.3
RGS	2	0	0	0
RADIAL ERROR	6	3	3	3

REMARKS

53  
 6  
 7  
 8  
 9

