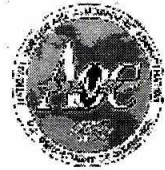




NOAA P-3 N43RF
RAINEX - CHECKOUT FLIGHT #3



Flight ID: 050823I

Sensor or system	Number or Name
INE	2
Accelerometer	2
Temperature Probe	1
Dew Point Probe	2 (Edgetech)
Altitude (for vertical wind)	Radar Altimeter 159
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage 1281
Time Source	Micro 99
Constants File	CO3051.CON

Notes:

There were no time/data gaps during the flight.

The King Liquid Water Sensor was inoperative during the entire flight.

All other instrumentation worked optimally.

The selected aircraft INE positions were not renavigated with respect to GPS.

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	1012.2 mb	1010.9 mb
Corrected Tower Pressure	1012.7 mb	1011.3 mb

Flight Director: A. Barry Damiano (813) 828-3310 ext. 3073

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

AOCWF1

Flt ID: I050823	From: KMCF	To: KMCF
Flt No: 05-045	Blk In: 2017	ATA: 2006Z
ETD: 1800Z	Blk Out: 1740Z	ATD: 1751Z
ETE:	Blk Time: 2:37 (2.6)	Flt Time: 2:15 (2.3)
Sponsor Org: HRD	Program: RAINEX	Purpose: CHECKOUT FLT WITH NRLP3

AOC Personnel

AC: FEAR STRONG	Sys Eng:
CP: NELSON	Data Sys: LYNCH
Nav: SIEGEL SIEGEL	Radar:
FE: KLIPPEL	GPS/BT: OLNEY
FD: DAMIANO / MAYEAUX	Cld Phys:
Avionics:	

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
SMULL, B	PI	U of W
HENCE, D	RADAR	U of W
GAMACHE, J	RADAR	HRD

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

box N/S **MPN-159** 1-1.5 hr duration
 60km separation for parallel
 15 minute leg length
 12.5 ~~12~~ K alt
 turn at 84°+85°W
 used 232
 during flt

28°N LAT **W45RF**
 2725' **NRLP3**

met.psv.edu/~arnott
 1 report/ecgenifs
 NO K LW

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

AOCWF2

Flt ID:

6050823

Time Off:

1751Z

Time On:

2006Z

A/C (Take Off)

Wx Station (Take Off)

A/C (Land)

Wx Station (Land)

Pressure

1012.2

29.92 / 1012.7

1010.9

29.88 / 1011.3

Number

Data Disposition / Date / Quality

Flt Lvl Tapes

2

Radar Tapes

1

Cloud Physics Tapes

Video Tapes

AXBT

AXCP

AXCTD

Dropsondes

Video

Forward

Left Side

Right Side

Down

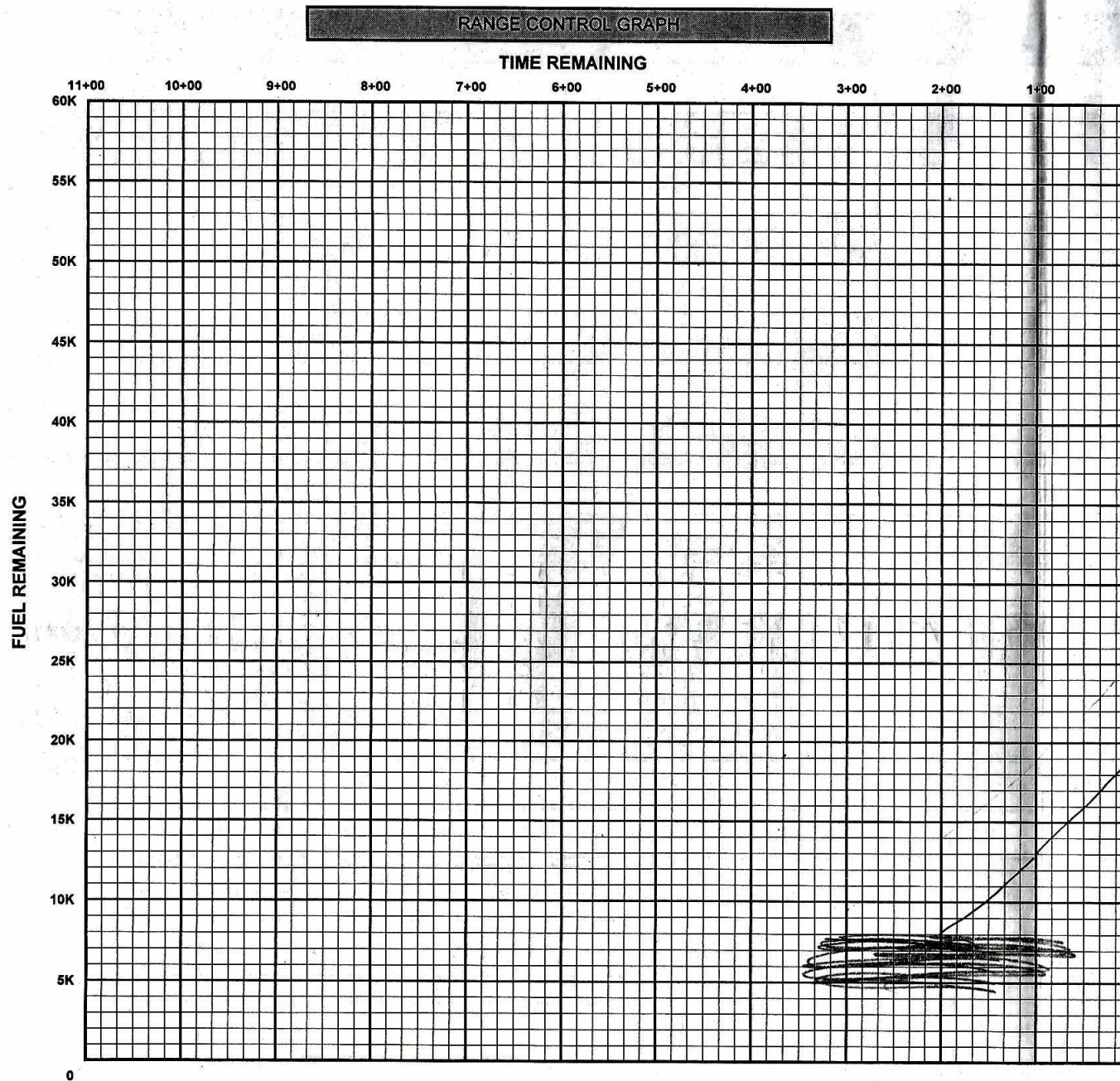
Remarks

Time On

Time Off

Rate

Remarks



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	2+00
ENROUTE FUEL (6K 5K 4 5K RULE)	11.0
RESERVE AT DESTINATION	8.0
REQUIRED RAMP	19.0
ACTUAL RAMP FUEL	25.3

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		

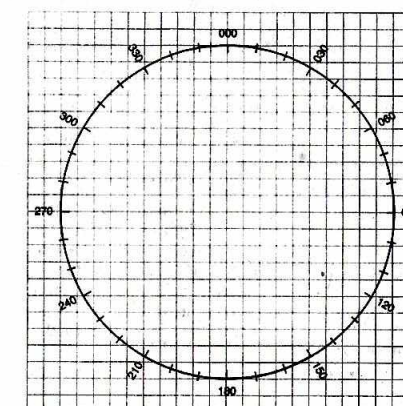
F-FACTOR	PRESS ALT	200	250	300	350
	10,000	1.0	1.0	.99	.99
	20,000	.99	.98	.97	.97
	30,000	.97	.96	.95	.94
	40,000	.96	.94	.92	.90

TRUE AIRSPEED CROSS-CHECK						
TIME	IAS	PRESS ALT	"F" FACTOR	EAS	OAT	TAS ITAS
1835	214	125	X	X	113	204 254

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			

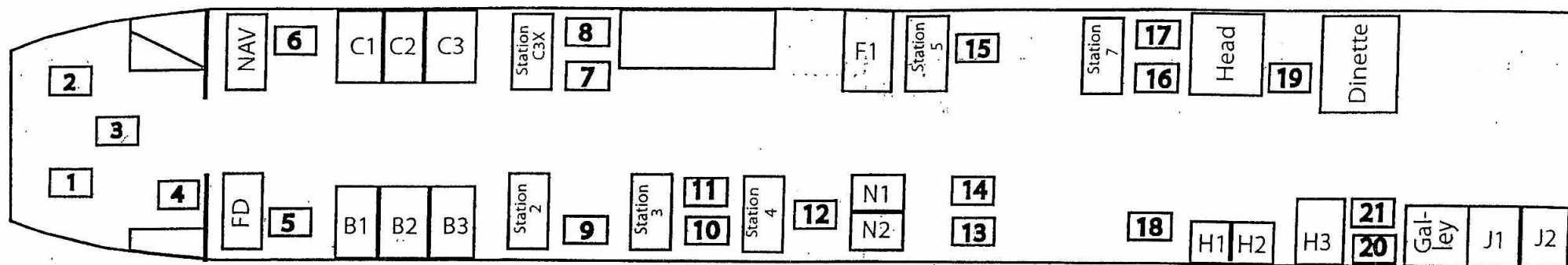


[illegible]

050823I	TIME	LAT	LON	PS	SP	TA	TD	TK	RA	WD	WS	WZ	Comment
	180824	27.53.46	-83.38.34	631.6	1009.8	5.4	-1.1	284.8	4022.0	150.2	4.2	-.2	appching start pt
	181323	27.59.82	-84. 1.92	631.6	1009.7	4.9	1.3	265.2	4016.0	134.4	2.9	-.1	strt e/w leg
	182533	27.57.78	-85. 2.22	631.8	1009.2	4.8	1.9	270.1	4007.0	77.5	3.6	-.0	end e/w leg 15
deg roll													
	182849	27.50.22	-85. 0.42	631.9	1009.1	4.7	2.5	78.7	4005.0	70.0	3.2	.0	strt w/e leg
	184130	28. 0.30	-83.59.94	629.9	1009.1	5.0	2.2	85.2	4037.0	160.0	2.9	.5	end w/e leg 30
deg roll													
	184319	27.57.06	-84. 0.12	630.1	1009.4	4.9	1.8	275.3	4036.0	125.5	3.4	.4	strt e/w leg
	185530	27.59.64	-85. 0.48	630.0	1008.8	4.8	.9	273.3	4029.0	90.9	3.4	.3	end e/w leg 30
deg roll													
	190410	27.40.14	-84.31.38	630.2	1008.2	5.0	3.2	114.8	4027.0	111.2	1.9	.2	both glbstr quit
	191146	27.25.20	-83.59.70	630.2	1007.9	5.0	.2	123.0	4020.0	106.6	1.5	-.2	end se leg to
nrlp3 ip													
	191340	27.22.26	-84. 4.80	630.2	1007.9	5.1	.8	278.9	4023.0	58.3	1.7	.1	heading w
	192446	27.24.78	-84.59.70	630.4	1007.2	5.3	2.4	273.5	4018.0	72.3	3.7	-.0	end w leg turn
for KMCF													
	195338	27.38.16	-82.37.56	918.8	1011.1	24.3	20.1	85.5	850.0	88.5	2.0	.1	on appch to KMCF
	200606	27.51.12	-82.31.08	1007.8	1008.0	33.1	24.0	220.1	2.0	279.7	10.2	5.2	land

NOAA AIRCRAFT OPERATIONS CENTER

Flight ID 1050823



1. ~~FERRELL~~ STRONG
PILOT

2. NELSON
COPILOT

3. KLIPPEL
FLIGHT ENGINEER

4. SMULL
STATION 1

5. DAMIANO
FLIGHT DIRECTOR

6. SIEGEL
NAVIGATOR

7. _____
STATION C3X

8. MAYEAUX
STATION C3X

9. _____
STATION 2

10. GAMACHE
STATION 3

11. HENCE
STATION 3

12. LYNCH
STATION 4

13. _____
PROJECT SEAT

14. _____
PROJECT SEAT

15. OLNEY
STATION 5

16. _____
STATION 7

17. _____
STATION 7

18. _____
STATION 8

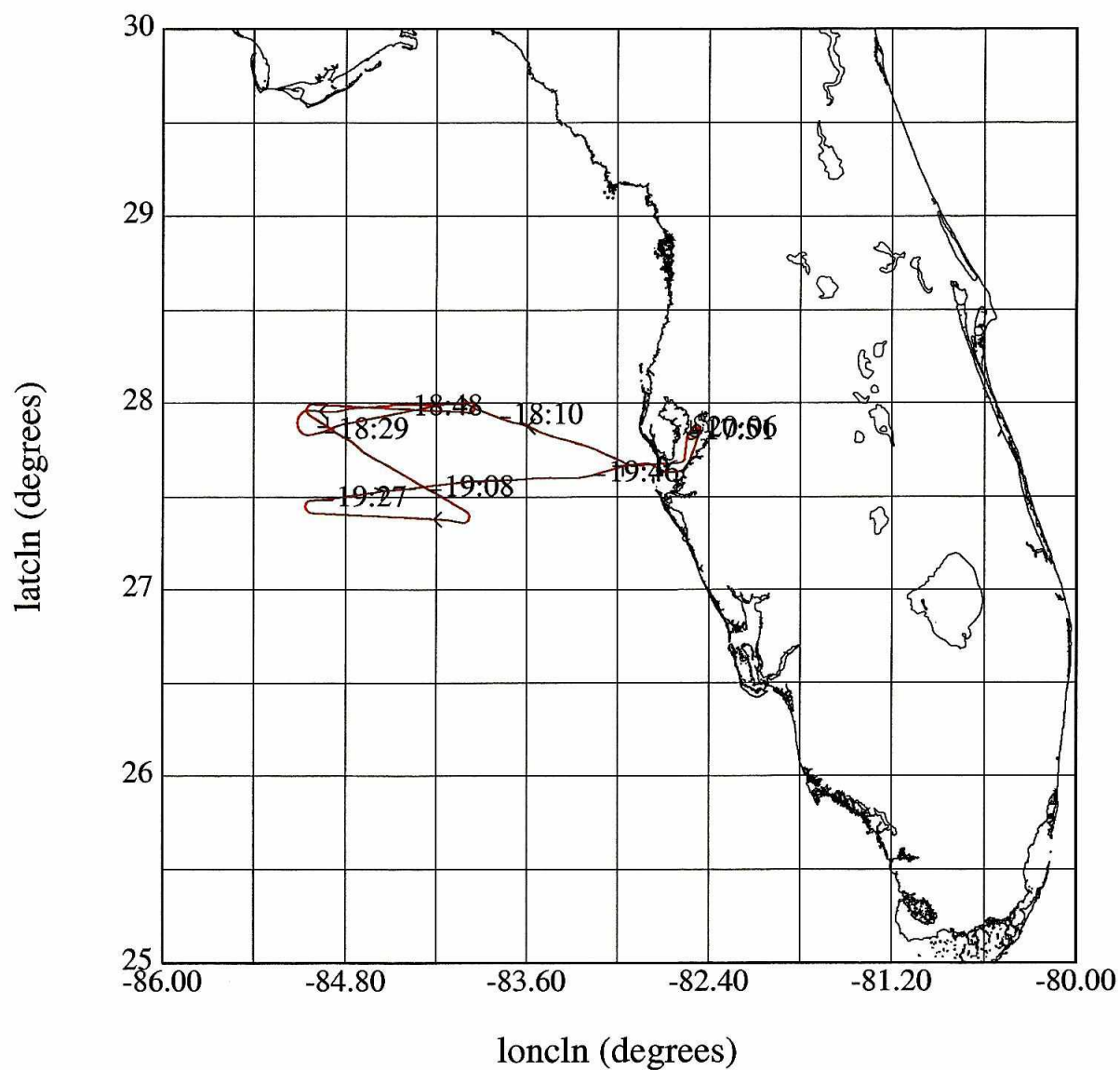
19. _____
DINETTE

20. _____
GALLEY

21. _____
GALLEY

RAINEX Checkout Flt #3

08/23/2005 UTC, 17:51:00-20:06:00



	mean	sigma	min	max
latln (degrees), 1 s/sec	27.75	0.20	27.36	28.01
lonln (degrees), 1 s/sec	-83.98	0.83	-85.11	-82.45