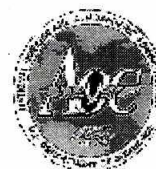




NOAA P-3 N43RF RAINEX - CHECKOUT FLIGHT #1



Flight ID: 050817I

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 several time/data gaps during this flight:

184543Z – 184552Z, 184615Z – 184618Z, 184622Z – 184626Z, 184801Z – 184851Z
and 190251Z – 190310Z.

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

RA-159 was corrected for spurious spikes during the time frame 2051Z – 2135Z. A combination of RA-232 and Pressure Altitude values were used to replace the erroneous output.

The selected aircraft INE positions were not re-navigated 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	1014.8 mb	1012.4 mb
Corrected Tower Pressure	1015.1 mb	1012.3 mb

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

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

AOC-WF1

Flt ID: 1050817	From: KMCF	To: KMCF
Flt No: 05-	Blk In: 21 2203	ATA: 2154Z
ETD: 1800Z	Blk Out: 1745Z	ATD: 1757Z
ETE:	Blk Time: 4:18 (4.3)	Flt Time: 3:57 (4.0)
Sponsor Org: HRD	Program: RAINEX	Purpose: TEST FLT WITH NRL P3 FOR COMMS

AOC Personnel

AC: CHAY CHAY	Sys Eng:
CP: SILAH SILAH	Data Sys: LYNCH
Nav: SIEGEL	Radar:
FE: KLIPPEL KLIPPEL	GPS/BT: SANS SOURCE
FD: DAVIDIANO	Cid Phys: DAVID
Avionics:	

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
ROGERS, R	PI	HRD
SMULL, B	ASST. PI	UW
GAMACHE, J	RADAR	HRD
BLACK, M.	ASST. PI	HRD
BELL, M	OBS (RADAR)	NCAR/EOL
HAGEN, A	OBS	HRD
OTERO, S.	OBS	HRD
WALSH, E	SRA	NOAA/NASA

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

TIM LING **NCAR TELH ON NRLP3** **PROPSWBB** **INE1, DET #2** **RA159 spikes**

FLA Bay **CONV** **5min trial** **then parallel** **NO DATA SYS** **1544Z** **NRL** **MAX 250 KTS**

42013 **Legs** **5 minutes** **TRAIL BOX** **(4HR)** **123.05 VH** **304.8 UH** **8K, 12K 2 miles** **110 mi formation** **10 12K** **30 SE NW** **BODY** **(BIO)**

770.16 **82.35** **8500** **SIDE/SIDE** **(235) 350/240** **NO KING-LW** **5FMR too high** **↑ 20 Hts but no whitecaps**

422 PM **2P** **785**

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

AOCWF2

Flt ID: I050817 Time Off: 1757Z Time On: 2154Z

	A/C (Take Off)	Wx Station (Take Off)	A/C (Land)	Wx Station (Land)
Pressure	<u>1014.8</u>	<u>29.99</u> / <u>1015.1</u>	<u>1012.4</u>	<u>29.91</u> / <u>1012.3</u>

	Number	Data Disposition / Date / Quality
Flt Lvl Tapes	<u>82</u>	
Radar Tapes	<u>1</u>	
Cloud Physics Tapes		
Video Tapes	<u>4</u>	
AXBT		
AXCP		
AXCTD		
Dropsondes	<u>3</u>	<u>2 RAINEX ; 1 codeless (AOC)</u> <u>1 RAINEX sonde no launch detect</u>

Video

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

Remarks

RL587 NPL P32023Z
got lost LF data
2100Z got it back

NOAA • AOC • SED
N43RF AVAPS DROP LOG

Project : Hurricane '05 / RAINEX

Mission : RAINEX / TEST

Flight ID : 0508171

Take Off : _____

Landing :_____

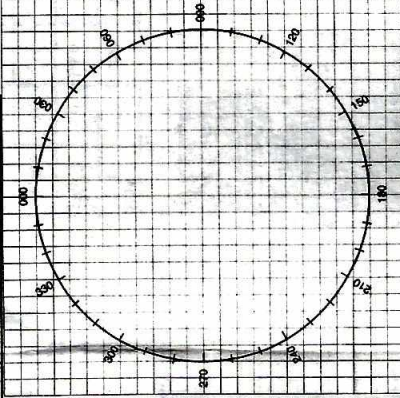
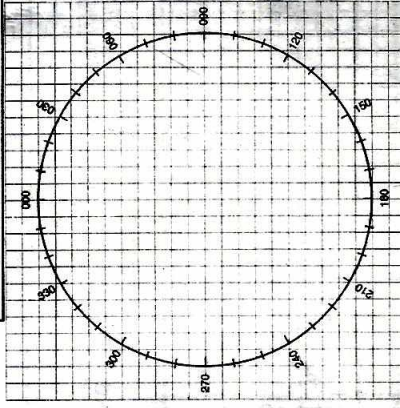
Flt Dir : _____

Launcher S/N: _____

[illegible]

R
A
R

PAGE 1 OF 1

[illegible]

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**

- 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 DESIRED

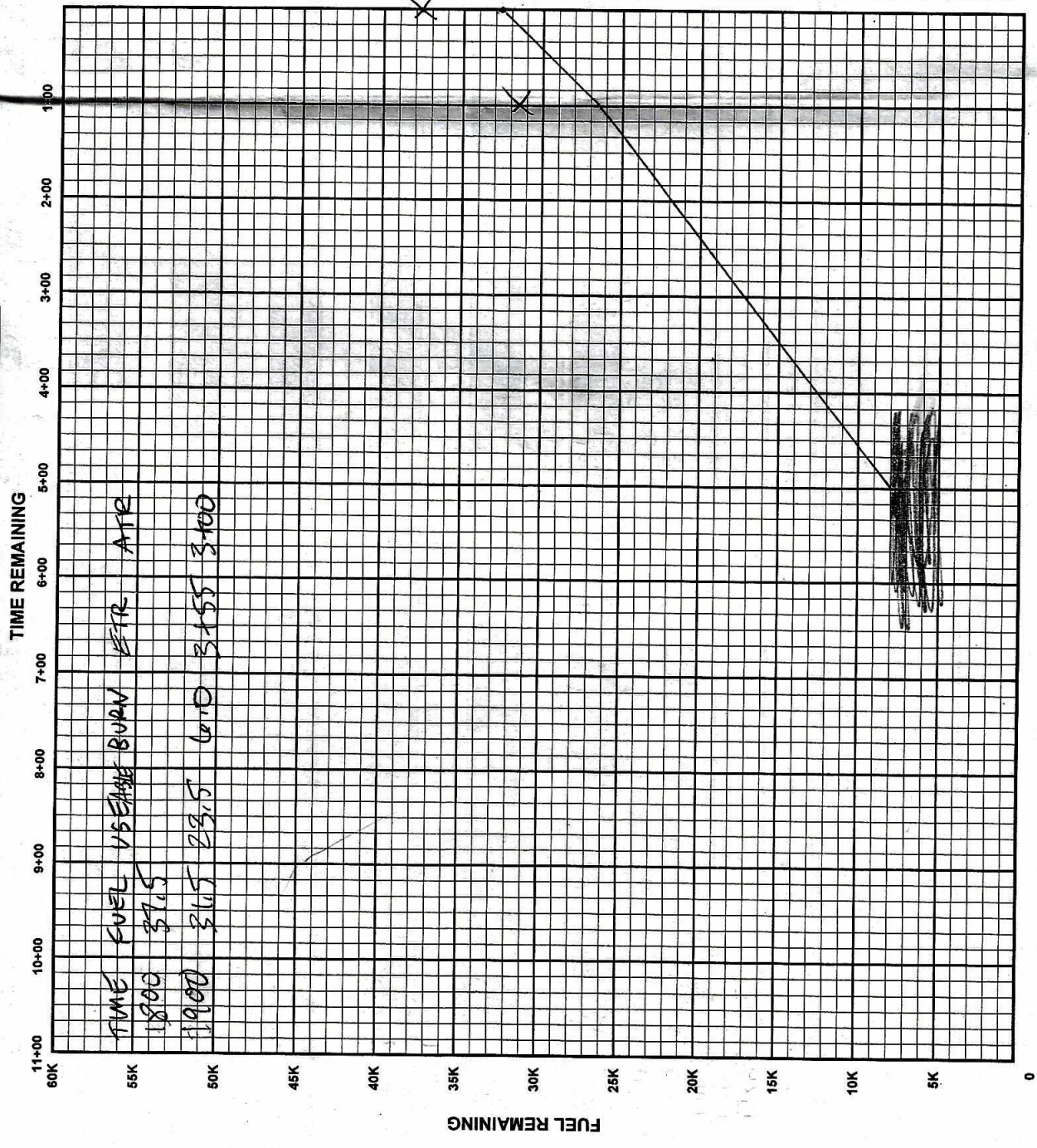
- PILOT INTENTIONS
- WE HAVE _____ ENDURANCE REMAINING

[illegible]

~~Seemed happy~~, but they not acknowledged

[illegible]

RANGE CONTROL GRAPH



ENROUTE FUEL	5700
ENROUTE TIME	24.5
ENROUTE FUEL (50K/50.45K/RULE)	8.0
RESERVE AT DESTINATION	32.5
REQUIRED RAMP	37.5
ACTUAL RAMP FUEL	

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		

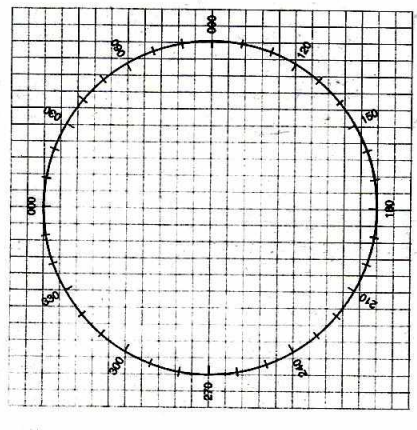
POINT OF SAFE RETURN		4 ENG	3 ENG
ETP DISTANCE (TO DEPARTURE)			
ENROUTE TIME (TO DEPARTURE)			
BURN RATE (LBS/HR)	4500	5500	
FUEL REQUIRED			
RESERVE AT DEPARTURE			
PSR FUEL			

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

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

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

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

DISTANCE REMAINING

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

T-FACTOR		200	250	300	350
PRESS	ALT				
	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
1934	207	125	X		7	254	258
			X				

Buoy 42013 27°09'
82°57'

http://www.ndbc.noaa.gov/data/realtime2/42013.txt

YYYY	MM	DD	hh	mm	WD	WSPD	GST	WVHT	DPD	APD	MWD	BARO	ATMP	WTMP	DEWP	VIS	PTDY	TIDE
2005	08	18	11	10	190	10.0	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM
2005	08	18	10	10	MM	0.0	0.0	MM	MM	MM	MM	1014.0	MM	MM	MM	MM	-0.9	MM
2005	08	18	09	10	MM	0.0	0.0	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM
2005	08	18	08	10	100	2.0	2.0	MM	MM	MM	MM	1014.4	MM	31.6	MM	MM	-1.8	MM
2005	08	18	07	10	220	10.0	MM	MM	MM	MM	MM	1014.9	MM	31.6	MM	MM	-0.9	MM
2005	08	18	06	10	070	5.0	MM	MM	MM	MM	MM	1016.0	MM	MM	MM	MM	+0.0	MM
2005	08	18	05	10	MM	0.0	0.0	MM	MM	MM	MM	1016.2	MM	MM	MM	MM	+1.1	MM
2005	08	18	04	10	360	3.0	4.0	MM	MM	MM	MM	1015.8	MM	31.9	MM	MM	+1.4	MM
2005	08	18	03	10	340	3.0	3.0	MM	MM	MM	MM	1015.8	MM	32.0	MM	MM	+1.6	MM
2005	08	18	02	10	300	4.0	4.0	MM	MM	MM	MM	1015.1	MM	32.0	MM	MM	+1.6	MM
2005	08	18	01	10	290	4.0	4.0	MM	MM	MM	MM	1014.4	MM	32.2	MM	MM	+0.9	MM
2005	08	18	00	10	270	3.0	3.0	MM	MM	MM	MM	1014.2	MM	32.3	MM	MM	+0.5	MM
2005	08	17	23	10	240	2.0	3.0	MM	MM	MM	MM	1013.5	MM	32.5	MM	MM	-0.8	MM
2005	08	17	22	10	250	3.0	3.0	MM	MM	MM	MM	1013.5	MM	32.7	MM	MM	-1.4	MM
2005	08	17	21	10	250	2.0	2.0	MM	MM	MM	MM	1013.7	MM	32.9	MM	MM	-1.9	MM
2005	08	17	20	10	220	2.0	2.0	MM	MM	MM	MM	1014.3	MM	32.8	MM	MM	-1.8	MM
2005	08	17	19	10	220	2.0	2.0	MM	MM	MM	MM	1014.9	MM	32.5	MM	MM	-1.2	MM
2005	08	17	18	10	260	2.0	2.0	MM	MM	MM	MM	1015.6	MM	32.3	MM	MM	-0.4	MM
2005	08	17	17	10	MM	0.0	0.0	MM	MM	MM	MM	1016.1	MM	MM	MM	MM	+0.5	MM
2005	08	17	16	10	MM	0.0	1.0	MM	MM	MM	MM	1016.1	MM	31.8	MM	MM	+0.8	MM
2005	08	17	15	10	150	1.0	1.0	MM	MM	MM	MM	1016.0	MM	31.6	MM	MM	+0.9	MM
2005	08	17	14	10	MM	0.0	1.0	MM	MM	MM	MM	1015.6	MM	31.5	MM	MM	+0.6	MM
2005	08	17	13	10	140	2.0	2.0	MM	MM	MM	MM	1015.3	MM	31.4	MM	MM	MM	MM
2005	08	17	12	10	090	3.0	4.0	MM	MM	MM	MM	1015.1	MM	31.4	MM	MM	+0.3	MM
2005	08	17	11	10	080	3.0	3.0	MM	MM	MM	MM	1015.0	MM	31.3	MM	MM	+0.3	MM
2005	08	17	10	10	190	MM	MM	MM	MM	MM	MM	MM	0.0	MM	MM	MM	MM	MM
2005	08	17	09	10	040	3.0	4.0	MM	MM	MM	MM	1014.8	29.8	31.3	MM	MM	-1.9	MM
2005	08	17	08	10	060	5.0	5.0	MM	MM	MM	MM	1014.7	29.8	31.3	MM	MM	-2.1	MM
2005	08	17	07	10	010	3.0	3.0	MM	MM	MM	MM	1015.8	29.7	31.4	MM	MM	-1.5	MM
2005	08	17	06	10	340	5.0	5.0	MM	MM	MM	MM	1016.7	29.5	31.4	MM	MM	-0.9	MM
2005	08	17	05	10	MM	0.0	1.0	MM	MM	MM	MM	1016.8	29.5	31.4	MM	MM	-0.3	MM
2005	08	17	04	10	260	1.0	2.0	MM	MM	MM	MM	1017.3	29.8	31.5	MM	MM	+0.9	MM
2005	08	17	03	10	MM	0.0	1.0	MM	MM	MM	MM	1017.6	MM	31.4	MM	MM	+2.0	MM
2005	08	17	02	10	340	4.0	5.0	MM	MM	MM	MM	1017.1	MM	31.5	MM	MM	+1.6	MM
2005	08	17	01	10	340	3.0	3.0	MM	MM	MM	MM	1016.4	MM	31.7	MM	MM	+1.2	MM
2005	08	17	00	10	280	4.0	5.0	MM	MM	MM	MM	1015.6	MM	31.9	MM	MM	-0.0	MM
2005	08	16	23	10	300	4.0	5.0	MM	MM	MM	MM	1015.5	MM	31.9	MM	MM	-0.7	MM
2005	08	16	22	10	300	3.0	4.0	MM	MM	MM	MM	1015.2	MM	32.1	MM	MM	-1.8	MM
2005	08	16	21	10	300	3.0	3.0	MM	MM	MM	MM	1015.8	MM	32.5	MM	MM	MM	MM
2005	08	16	20	10	270	3.0	3.0	MM	MM	MM	MM	1016.2	MM	32.3	MM	MM	MM	MM
2005	08	16	19	10	MM	0.0	1.0	MM	MM	MM	MM	1017.0	MM	32.1	MM	MM	-1.0	MM
2005	08	16	18	10	MM	0.0	0.0	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM
2005	08	16	17	10	230	8.0	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM
2005	08	16	16	10	090	2.0	3.0	MM	MM	MM	MM	1018.0	MM	31.4	MM	MM	+0.0	MM
2005	08	16	15	10	MM	0.0	0.0	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM
2005	08	16	14	10	110	4.0	MM	MM	MM	MM	MM	1018.3	MM	MM	MM	MM	+1.4	MM
2005	08	16	13	10	120	4.0	MM	MM	MM	MM	MM	1018.0	MM	MM	MM	MM	+1.3	MM
2005	08	16	12	10	110	3.0	3.0	MM	MM	MM	MM	1017.4	29.6	31.2	MM	MM	MM	MM
2005	08	16	11	10	090	3.0	3.0	MM	MM	MM	MM	1016.9	29.8	31.2	MM	MM	+0.0	MM
2005	08	16	10	10	100	3.0	3.0	MM	MM	MM	MM	1016.7	29.8	31.2	MM	MM	-0.3	MM
2005	08	16	09	10	220	13.0	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM
2005	08	16	08	10	040	6.0	6.0	MM	MM	MM	MM	1016.7	30.0	31.2	MM	MM	-1.5	MM
2005	08	16	07	10	070	6.0	7.0	MM	MM	MM	MM	1017.0	30.1	31.2	MM	MM	-1.7	MM
2005	08	16	06	10	020	5.0	5.0	MM	MM	MM	MM	1017.2	30.5	31.2	MM	MM	-1.5	MM
2005	08	16	05	10	010	5.0	6.0	MM	MM	MM	MM	1018.2	30.6	31.2	MM	MM	+0.0	MM
2005	08	16	04	10	360	4.0	4.0	MM	MM	MM	MM	1018.7	30.9	31.3	MM	MM	+0.9	MM
2005	08	16	03	10	360	4.0	5.0	MM	MM	MM	MM	1018.7	MM	31.4	MM	MM	+1.6	MM
2005	08	16	02	10	360	4.0	4.0	MM	MM	MM	MM	1018.3	MM	31.5	MM	MM	+1.2	MM
2005	08	16	01	10	020	2.0	2.0	MM	MM	MM	MM	1017.8	MM	31.6	MM	MM	+0.7	MM
2005	08	16	00	10	320	1.0	2.0	MM	MM	MM	MM	1017.1	MM	31.7	MM	MM	-0.4	MM
2005	08	15	23	10	330	3.0	3.0	MM	MM	MM	MM	1017.1	MM	31.8	MM	MM	-0.7	MM
2005	08	15	22	10	330	4.0	5.0	MM	MM	MM	MM	1017.1	MM	31.9	MM	MM	-0.9	MM
2005	08	15	21	10	330	4.0	4.0	MM	MM	MM	MM	1017.5	MM	32.1	MM	MM	-1.0	MM
2005	08	15	20	10	320	2.0	3.0	MM	MM	MM	MM	1017.8	MM	32.1	MM	MM	-1.0	MM
2005	08	15	19	10	040	2.0	2.0	MM	MM	MM	MM	1018.0	MM	31.8	MM	MM	-1.2	MM
2005	08	15	18	10	110	2.0	2.0	MM	MM	MM	MM	1018.5	MM	31.6	MM	MM	-0.6	MM
2005	08	15	17	10	080	4.0	4.0	MM	MM	MM	MM	1018.8	MM	31.4	MM	MM	+0.0	MM
2005	08	15	16	10	030	3.0	4.0	MM	MM	MM	MM	1019.2	MM	31.3	MM	MM	+0.6	MM
2005	08	15	15	10	360	3.0	4.0	MM	MM	MM	MM	1019.1	MM	31.2	MM	MM	+0.7	MM
2005	08	15	14	10	010	4.0	4.0	MM	MM	MM	MM	1018.9	MM	31.1	MM	MM	+1.4	MM
2005	08	15	13	10	010	2.0	2.0	MM	MM	MM	MM	1018.6	MM	31.1	MM	MM	+0.9	MM
2005	08	15	12	10	130	2.0	3.0	MM	MM	MM	MM	1018.4	MM	31.1	MM	MM	+1.3	MM
2005	08	15	11	10	MM	0.0	1.0	MM	MM	MM	MM	1017.5	MM	31.1	MM	MM	MM	MM
2005	08	15	10	10	050	1.0	2.0	MM	MM	MM	MM	1017.7	MM	31.1	MM	MM	MM	MM
2005	08	15	09	10	070	2.0	2.0	MM	MM	MM	MM	1017.1	MM	31.2	MM	MM	-1.0	MM

EXTRAP
Pressure from
Flt level
2-3 mib
too low
9K + 12K
was flt alt.

050817I	TIME	LAT	LONG	PS	SP	TA	TD	TK	RA	WD	WS	WZ	Comment
175712	27.50.88		-82.31.32	1016.3	1826.2	32.7	24.5	39.7	5624.0	202.9	5.3	-1.1	t/o
181025	27.30.24		-82.50.82	739.5	1013.8	13.6	4.7	221.8	2745.0	84.3	3.3	-.4	offshore at 9k
181719	27. 8.28		-83. 1.50	739.9	1013.9	13.5	1.7	338.7	2737.0	104.3	2.9	-.7	orbiting for
nrlp3													
183448	27.25.08		-82.57.36	740.0	1013.2	14.1	.0	168.4	2735.0	101.9	3.3	-.5	ne box at 8.5k
183854	27. 8.64		-82.57.06	740.3	1013.6	13.7	1.6	181.1	2731.0	92.7	3.6	-.4	ovr buoy
184135	26.57.84		-82.57.24	740.1	1013.3	14.1	-2.2	180.0	2733.0	104.0	2.2	-.6	se box at 8.5k
184851	26.55.20		-83.27.90	740.2	955.4	14.1	-2.4	287.8	2207.0	234.7	53.8	1.3	E sw box at 8.5k
185532	27.22.50		-83.30.00	740.4	1012.7	14.1	3.2	1.8	2728.0	99.3	1.9	-.2	nw box at 8.5k
190258	27.25.08		-82.57.60	740.4	1013.9	13.2	4.3	89.6	2731.0	93.0	2.3	-.4	end 8.5k box ne
190509	27.28.56		-82.57.06	675.3	1012.5	9.8	-9.7	241.3	3498.0	117.1	1.5	-.2	climbing to 12.5k
at ne													
191117	27.25.26		-82.57.06	632.4	1012.2	6.3	-9.0	175.1	4038.0	138.2	2.1	-.8	ne box at 12.5k
191816	26.55.50		-82.57.78	632.4	1011.3	6.4	-3.6	224.3	4036.0	116.4	4.2	.4	se box at 12.5k
192455	26.56.28		-83.29.94	632.8	1011.4	6.5	-4.4	332.2	4032.0	128.3	4.3	-.4	sw box at 12.5k
193132	27.25.08		-83.29.28	632.7	1011.2	6.6	-6.7	46.5	4031.0	165.9	3.7	-.4	nw box at 12.5k
193750	27.25.02		-82.59.22	632.8	1011.5	6.7	-12.2	89.9	4031.0	156.6	3.5	-.7	end box 12.5k ne
194148	27. 9.42		-82.57.48	632.7	1011.4	6.4	-4.4	180.0	4033.0	147.1	3.0	.0	rainex and
codeless sondes ovr buoy													
194931	27.10.14		-82.57.48	632.7	1011.4	6.4	-4.3	17.6	4032.0	147.7	3.3	-.1	rainex backup
sonde													
195732	27.31.56		-83.14.94	632.7	1011.3	6.6	-5.9	324.4	4032.0	159.7	2.6	.0	wind L in
formation start													
200735	28. 8.10		-83.43.86	632.7	1011.5	6.1	-2.4	325.2	4030.0	182.2	4.5	-.2	end first L leg
200830	28. 8.58		-83.47.76	633.0	1011.2	6.4	-2.1	234.4	4028.0	174.2	4.1	-.5	turn
201024	28. 3.78		-83.55.08	632.7	1011.1	6.3	-2.5	233.7	4030.0	179.0	4.6	-.2	start second leg
of L													
202039	27.37.74		-84.34.86	632.8	1011.3	6.1	-2.3	233.8	4026.0	147.2	3.6	-.4	end of second leg
of L													
211025	29.34.92		-82.22.14	657.5	1008.5	8.0	1.1	309.8	3687.0	225.2	5.4	-1.0	end n/s leg w of
cbs													
211810	29.14.94		-82.13.62	657.3	1006.8	9.2	1.6	164.2	3690.0	250.2	4.1	.2	second pass of
cell southbound													
212213	28.58.38		-82. 8.40	657.7	1008.6	8.5	-1.6	165.0	3688.0	299.2	3.3	-1.0	lgt turb wnd
shift													
213005	28.25.80		-82. 2.10	657.2	1008.2	7.8	.6	192.3	3685.0	117.5	2.4	.2	end cb leg light
turb													

215409	27.50.70	-82.31.56	1012.5	2769.8	30.3	22.6	39.6	9976.0	296.6	6.0	2.8	land
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E - indicates erroneous output due to data system problem

(Aug. 16 Update-JAM)

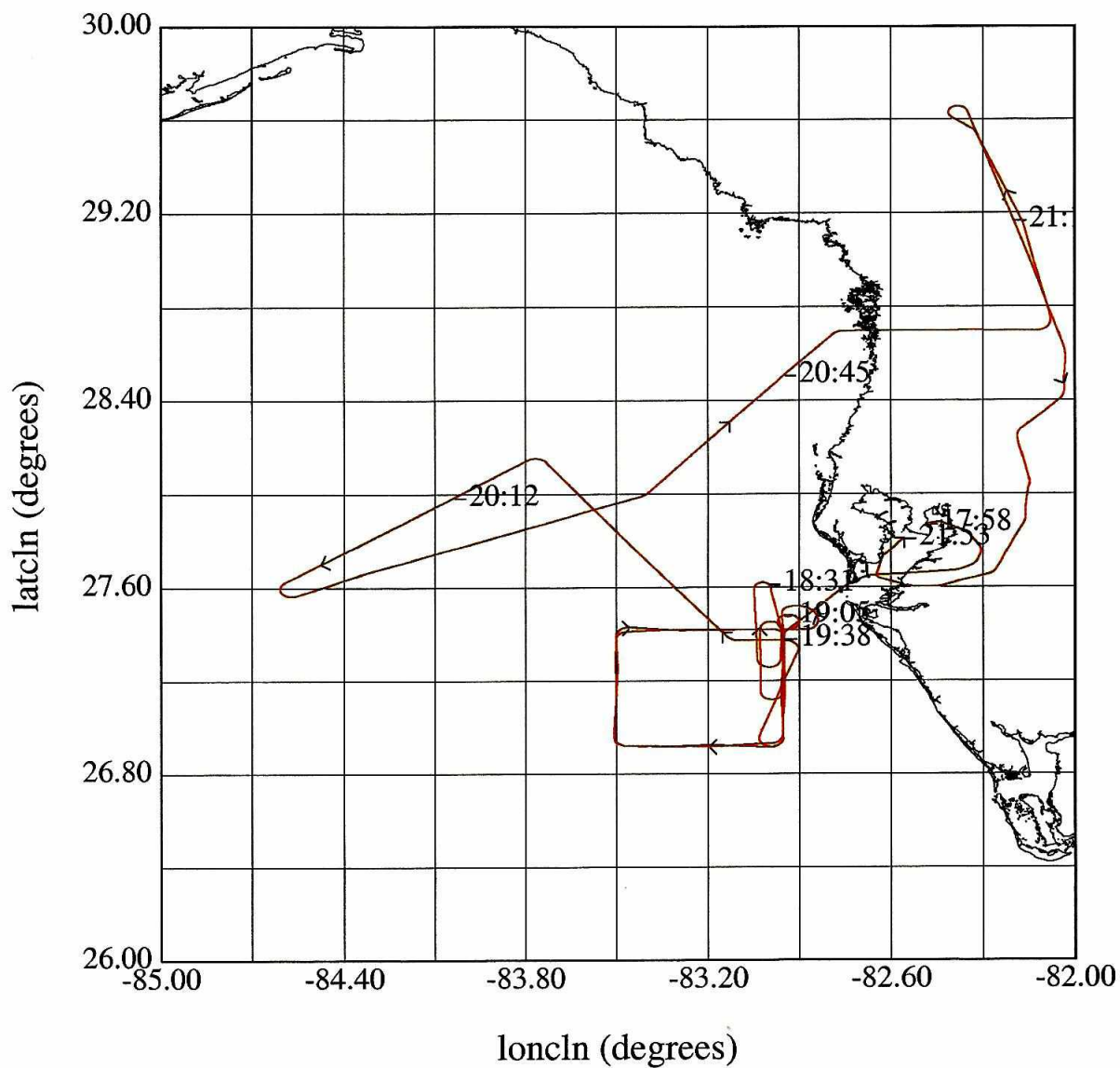
Tasks for NRL/AOC RAINEX Coordination Flight
Wednesday, 17 August

1. Complete test of all real-time communications components including:
 - In-trail formation flight of all aircraft in the vicinity of a convective area to collect data in similar environment for comparison (can be done simultaneously with #4 below)
 - Relay of LF radar data from NOAA-43 to the ground and received at the ROC;
 - Compositing and retransmission of image from the ROC to the NRL P-3;
 - Estimate of transmission and relay times from the NOAA aircraft through the ROC to the NRL aircraft;
 - Relay of real time flight-level data (especially position) from all aircraft to the ground and received in the ROC;
 - Satellite voice communication between each P3 aircraft and ROC
 - Chatroom capabilities and test (including usage protocols)
 - Radio science frequency selections and test among all aircraft
2. Transfer of flight-level dataset to ROC
 - Confirm procedures for the transfer of flight-level data to ROC both during and after the flight
3. Dropsonde test and intercomparison including:
 - Simultaneous drop from three aircraft to confirm no frequency interference;
 - Drops in close proximity (altitude, position and environment) to permit data comparisons;
 - Establish procedures for transfer of dropsonde data to the ROC following aircraft mission
4. Tail Doppler radar test and intercomparison including:
 - Test of ELDORA radar repairs;
 - Horizontal in trail pass by convection with LF at same PRF, tilt, etc.
 - Horizontal spread on both of sides of convection with N-42 100 km from target and N-43 and NRL close on either side of the target. NOAA 42 and 43 should be on the same side of the convection.
 - Confirm procedures for the transfer of complete Doppler radar data to removable disks on the NOAA aircraft;
 - Establish procedures for transferring removable disks from a/c after flight to computer in Tampa/AOC
 - Test procedures for transfer of all Doppler radar data from Tampa/AOC to the ROC (NOAA data via removable disks to ftp) and (Subset of ELDORA data via ftp and complete dataset via courier)
5. In situ flight level intercomparison
 - Intercomparison legs along and cross wind (including reverse track if there is time) to compare winds, temperatures, etc from all aircraft

8K, 12K

RAINEX Test Flight N43RF

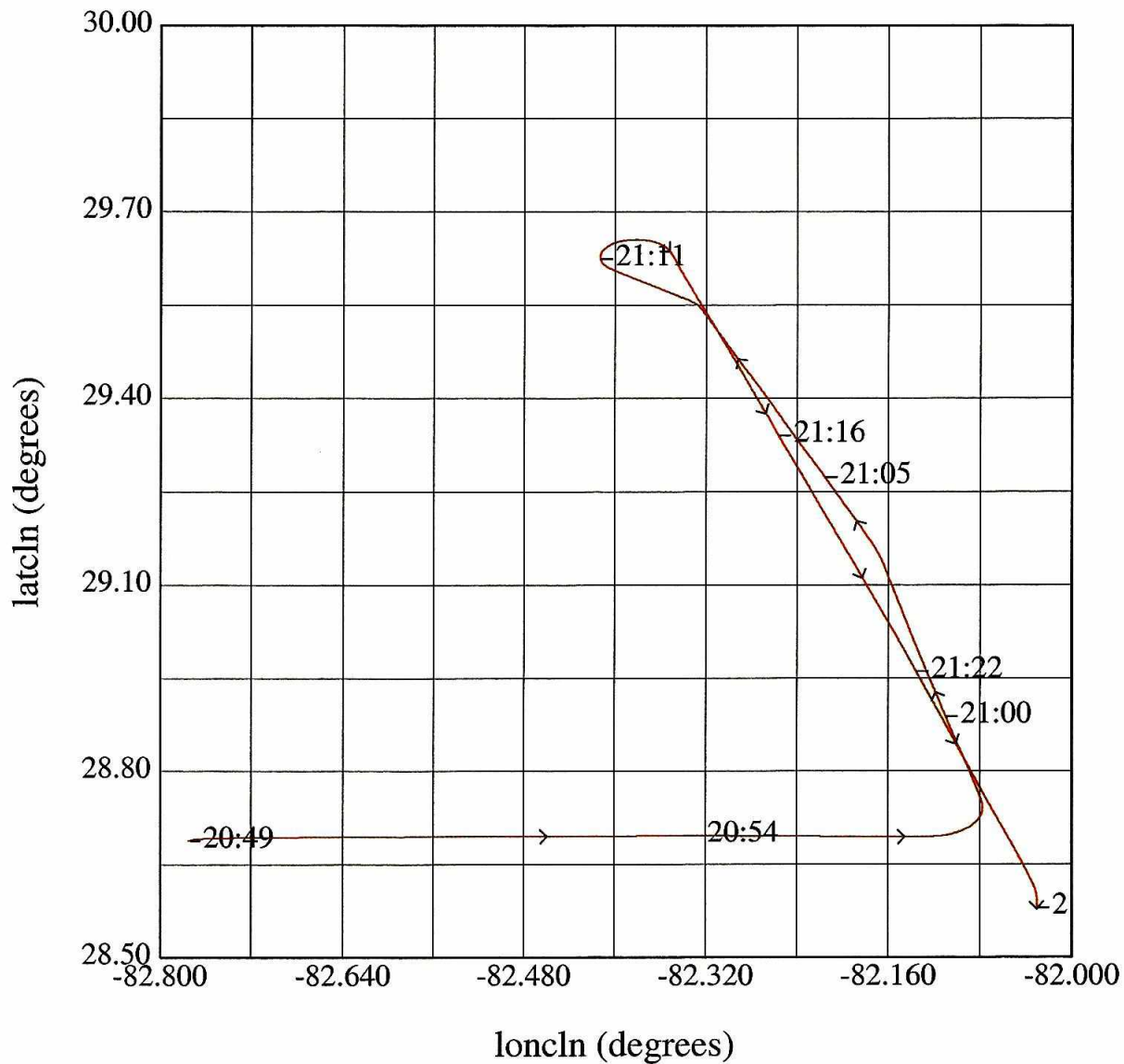
08/17/2005 UTC, 17:58:00-21:53:00



	mean	sigma	min	max
latcln (degrees), 1 s/sec	27.80	0.69	26.91	29.66
loncln (degrees), 1 s/sec	-82.99	0.61	-84.61	-82.03

RAINEX Test Flight N43RF

08/17/2005 UTC, 20:49:00-21:28:00



	mean	sigma	min	max
latcln (degrees), 1 s/sec	29.06	0.33	28.58	29.66
loncln (degrees), 1 s/sec	-82.25	0.16	-82.78	-82.03