

U.S. Dep't. of Commerce / NMAO / NOAA / Aircraft Operations Center

FLT ID: 20110908H1	From: KMCF	To: KMCF
Flt No: 11 -	In: 2038 Z	On: 2031Z
ETD: 13 Z	Out: 1239 Z	Off: 1248 Z
ETE: 8 + 15	Blk Time: + 8.0 Hrs	Flt Time: 7 + 43 7.7 Hrs
Sponsoring Org: IARD	Program: Ocean Heat Content	Purpose: (PFI)

AOC Flight Crew

Aircraft Commander: Newman	Data System: Bosko
Co-Pilot: Kibbey / Kerns	AVAPS: Richards
Navigator: Sloan /	System Engineer: Paul
Flight Eng: Heysteck / Klippel	AA:
Flight Director: Damiano / Williams	AA:
Avionics: Olney	Crew Chief:

Participating Scientists / Visitors

(14)

Name (Last, First)	Activity on Aircraft	Affiliation
Jaimes, Benjamin	PI	UM/RSMAS
McCaskill, Claire	Scientist	UM/RSMAS

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

Recco Times

Fix #

Fix Time

Storm Name: N/A

Mission ID: WXWKA TRAIN

U.S. DEPT OF COMMERCE / NMAO / NOAA / AIRCRAFT OPERATIONS CENTER

FLT ID: 20110908H1

TIME OFF: 1248 Z

TIME ON: 2031 Z

	A/C - Takeoff	WX Station - Takeoff	A/C - Land	WX Station - Land
Pressure	1013.0	1013.4	1012.1	1012.1

ATIS - Takeoff 1155 36004 105m CR 21/21 2994

ATIS - Land 1955 27004kt UNL SCT060 SCT200 30/23 A2990

Data Source	Number	Data Disposition / Date / Quality
Flight Level Tapes		
Radar Tapes		
Cloud Physics Tapes / Cds		
Video Tapes/DVDs		
Dropsondes	13	Good: 10 Bad: 3 ϕ Sent
AXBT	19	
AXCP	24	
AXCTD	14	
SONOBUOY		70 total instruments

REMARKS:

TD 2+3 16-17 ontaxi, 1 = 21

defaults TT1, TD 2

- SFMR SE winds ~ 19kts of TBW



NOAA P-3 N42RF Error Summary

Gulf Ocean Heat Content

8 Sep 2011



Flight ID: 20110908H1

<u>Sensor or system</u>	<u>Variable Name</u>
Inertial (for wind derivation)	ine2
Accelerometer	acci2
Temperature Probe	tt1
Dew Point Probe	tdm2
Altitude (for vertical wind)	alti1X
Static Pressure	psfX
Dynamic Pressure	pqf2
Constants file	/acdata/adc/42_11v5.adc
Flight Directory	/acdata/2011/MET/20110908H1

Local Met Data:	<u>Takeoff</u> (1248Z)	<u>Landing</u> (2031Z)
Aircraft Static Pressure	1013.1 mb	1012.1 mb
Tower Pressure	1013.4 mb	1012.1 mb

Notes

There was a data gap from 132358Z – 132641Z. Directly after this gap, alti1 exhibited erroneous data for several seconds before it came back online. Due to this alti1 was replaced with the novatel GPS altitude data, altnv1, for the following time: Alti1 = Altnv1 from 132626Z-132724Z.

All ine1 and acci1 values spiked after this gap as well, so ine2 and acci2 were used as default for calculating wind derivations.

Fuselage static pressure, psf, exhibited 3 downward spikes of 10mb, each spike lasting 2-3 seconds. The following techniques were used to replace each of the 3 spikes using wingtip static pressure:

171210Z – 171213Z : $psf = psw + 3.27$

181103Z – 181106Z : psf spike removed and replaced with statistical techniques

185847Z – 185850Z : $psf = psw + 3.32$

Dynamic pressure pqf1 contained a minor offset from the other dynamic pressure sources from 155518Z – 155528Z, because of this pqf2 was selected as default.

There were periods where the dewpoint temperature exceeded the ambient temperature resulting in RH values > 100%. This was likely due to heavy rain, a wet-bulb effect on the total temperature sensor, and/or an artificial warming of the dewpoint sensor as it tried to burn off excess moisture. Corrections were not made to the data.

AXBT channels 1 and 2 worked properly, where channel 1 had slightly cooler responses for the first 2 hours.

Flight Director:
Phone #:

Jessica Williams/Barry Damiano
(813) 828-3310 ext. 3140



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Psf and psw were within 0.5mb of station pressure on takeoff and landing.

All other instruments appeared to work optimally.

A total of 70 instruments were dropped from the aircraft internally:

13 Dropsondes, 10 were good, 3 were fast falls.

19 AXBT's

24 AXCP's.

14 AXCTD's

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0 10min bly BT
0A 5min bly BT

1	24.9	-84.13	BT-test
2	24.575	-84.32	BT "
3	24.25	-84.5	CP
4	24.25	-85	CP, Sonde Fastfall
5	24.25	-85.5	CT, Sonde - backup
6	24.25	-86	BT
7	24.25	-86.5	CT
8	24.25	-87	CP
9	24.25	-87.5	BT - TURN
10	24.5	-87.5	CP
11	24.75	-87.5	CT/BT
12	24.75	-87	CP, SONDE
13	24.75	-86.5	CT
14	24.75	-86	CT, Sonde
15	24.75	-85.5	BT
16	24.75	-85	CP
17	25	-85	CP
18	25.25	-85	BT
19	25.25	-85.5	CP
20	25.25	-86	CT BT
21	25.25	-86.5	CP
22	25.25	-87	CP
23	25.25	-87.35	CT
24	25.25	-87.75	CP
25	25.25	-88.25	CP, Sonde
26	25.25	-88.75	BT
27	25.25	-89.25	CP
28	25.25	-89.75	CP
29	25.25	-90.25	CT, Sonde
29.5			BT
30	25.25	-90.75	CP
31	25.75	-90.75	BT
32	26.25	-90.75	CT, Sonde - Fastfall, Sonde backup - FF
33	26.75	-90.75	BT, Sonde
33.5			CP
34	27.25	-90.75	CP, Sonde
35	26.9	-90.96	CT
36	26.6	-91.14	CP
37	26.3	-91.32	BT
38	26	-91.5	CP, Sonde → backup bt
39	26	-91	BT
40	26	-90.5	CT, BT
41	26	-90	CP
42	26	-89.5	CP, Sonde, BT
43	26	-89	BT
44	25.875	-88.5	CT, Sonde
45	25.75	-88	BT

13 sondes
3 FF
10 Good

19 BT's
24 CP's
14 CTO's

185

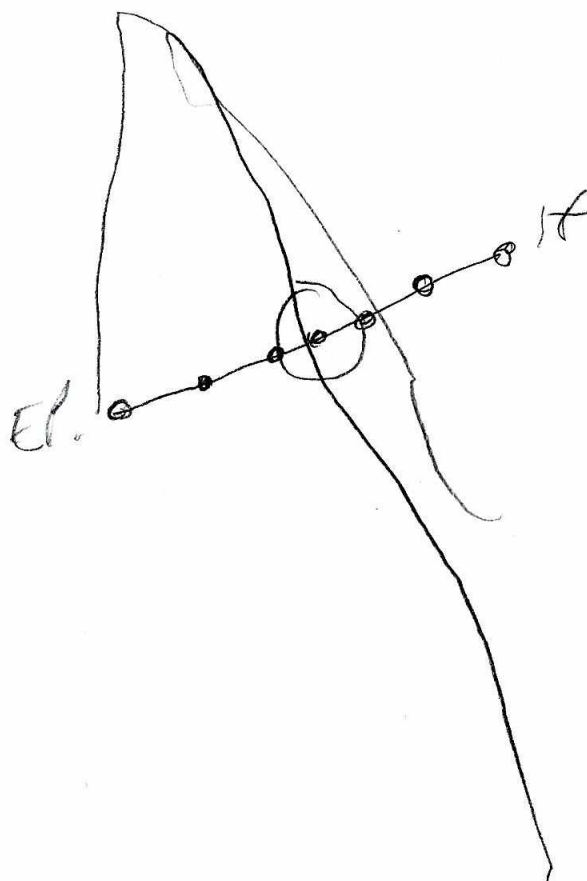


04 1345

03 1656Z
1300Z

46	25.75	87.5
47	25.75	-87
48	25.75	-86.5
49	25.75	-86
50	25.75	-85.5

CP
 BT, CP
 CT
 CP, BT
 CT



Playback Log

Flight Number 2011090841

Takeoff Time 9:00 AM

Storm

AXBT/AXCP Contract Number

Landing Time

Probe Seq. Number	AXCP AXBT AXCTD	Channel Number	Serial Number	Actual Drop Time	Actual Lat Deg Min	Actual Long Deg Min	SST	MLD	H20	H26	Comments
0	1854 1854	16/12	10069110								
1	1854	12	10069110	CP							
2	1854	14	10069110	CP							
3	1854	16	10069110	CP							
4	1854	12	10069110	CP							
5	1854	14	10069110	CP							
6	1854	16	10069110	CP							
7	1854	12	10069110	CP							
8	1854	14	10069110	CP							
9	1854	16	10069110	CP							
10	1854	12	10069110	CP							
11	1854	14	10069110	CP							
12	1854	16	10069110	CP							
13	1854	12	10069110	CP							
14	1854	14	10069110	CP							
15	1854	16	10069110	CP							
16	1854	12	10069110	CP							
17	1854	14	10069110	CP							
18	1854	16	10069110	CP							
19	1854	12	10069110	CP							
20	1854	14	10069110	CP							
21	1854	16	10069110	CP							
22	1854	12	10069110	CP							
23	1854	14	10069110	CP							
24	1854	16	10069110	CP							
25	1854	12	10069110	CP							

Playback Log

2011090841

9:00 AM

Storm

AXBT/AXCP Contract Number

Landing Time

[illegible]

N42RF AVAPS DROP LOG

Lead Tech: Joe Bosko

Project: Hurricane 2011

Mission: Ketra?Flight ID: 20110908H1

Take Off: _____

Landing: _____

Flt Dir: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	102 535 238	7	0	1400	TMR		Fast Fall / No repack	X
2	103 573 013	2	0	1410			Repack chute	✓
3	102 535 225	3	+ .4	1456			Re-pack chute	✓
4	102 525 017	4	+ .7	1511			Repack chute	✓
5	102 525 163	1	+ .4	1626	SCP	PFI	No Repack - Screen Flipped	✓
6	102 525 158	1	Ø	1656	SCP	PFI	Repacked Chute	✓
7	102 535 134	1	+ .5	1724	SCP	PFI	Fast fall - Chute fluffed & repacked	X
8	102 515 027	2	Ø	1726	SCP	PFI	FAST FALL Chute fluffed & repacked	X
9	102 535 115	3	+ .5	1732	SCP	PFI	Chute fluffed & repacked	✓
10	102 535 142	1	+ .4	1741	SCP	PFI	chute fluffed & repacked	✓
11	103 115 338	1	+ .8	1807	SCP	PFI	flipped screen	✓
12	102 535 187	1	+ .6	1840	SCP	PFI	Flipped screen	✓
13	102 515 022	1	+ .6	1855	SCP	PFI	Flipped screen	✓
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								

2011 0908 H1 OHC

1248 - 2631

132358 - 132640

alt 2 not sur man alt 1

axbt ch 2 worked best

~~was~~ slightly cooler + 2 matche bouys best

DPG bt3 24 16 86 01

PSF Spikes 124344 - on taxi

171210 - 171213 -

PSF spikes 4 maps
spike rep psf w psw +2.31 24

181103 - 181106

psw spike /

ptf/ptr - rep w/ psw +4.9

185847 - 185850 -

ptf/ptr (48+49) w/ psw +3.32 04-055

~10 mb spikes

[ptr spike -173851 -173900
175853 -175856] > ptr only

pgf1 →

155518 - 155528
use pgf2

171208 - 1713

ps 1656002 - 165716 - splice down - alt help adjustment

pgf2

Alt > 100

15

dropouts

132627 - 132639
132641 - 132714

gap!
fixes!

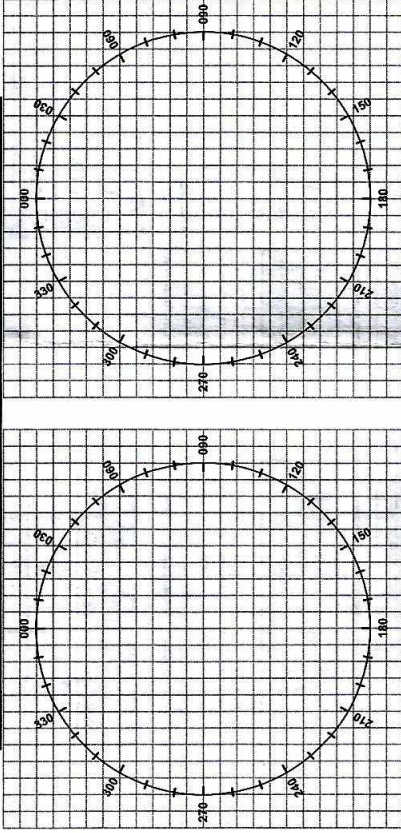
rep alt 1 w alt 2 132626 - 132704

~~acc 2~~ →
acc 2

maskal 2 - ~~usr~~ vs 2 correct.

HOUSTON 129.4 / 6577 / 8846 / 8918 / 11396 / 13297
ADAMS 135.775
281-236-5560 KZHU 315-334-6316 / 6364

CLEARANCES			
FREQ	ALT	HDG	OTHER
			AWY 22 080
			17000 / 119.65 / 2101
		132.35	MIA
		170.6	12132.2



POSITION REPORT

1. POSITION 37 35 132

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 243.0 VHF/VOICE 121.5 MF/VOICE 2182 KHZ HF/CW 8364 KHZ MF/CW 500 KHZ

MAYDAY, MAYDAY, MAYDAY THIS IS NOAA, 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

TIME	FIX TYPE	POSITION	INS 1 POSITION	K ERR	INS 2 POSITION	K ERR	VAR +E=>	TH	DR +R=>	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS
1234	START	M 27.57 W 82.50																		1238 COM
1239	TAXI																			
1242	I																			
1248	T/O																			HS 222 COR 770 1222
	IV																			124/2240
1252	III																			1404 270
1306	O	M 27.17 W 83.14					194 -1	194	2.2	192	261	240	14	124	275	SHARON	70NM	+17-	1324	DEU FOR WX APR.
1324	HMV	LOSS OF MV 2																		
1324	HMV	IFA STARTS																		
1337	COM																			044 8-64
1341	MISSION	START	28.95 / 16.0 / 60.5	2A / 5000 PA																
1359	O	M 24.19 W 84.50					254 -3	251	+7	280	203	211	4	84	204					
1413	COMM	POS REF TO KZHU																		
1426	O	M 24.14 W 84.55					256 -2	251	+4	258	194	217	17	54	206					
1507	COMM	POS REF TO HY AMAL																		
1526	O	M 24.19 W 85.00					000 -3	357	+4	001	225	216	11	84	217					

u714v
120.35
350.75

[illegible]