

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

Flt ID: 20120608H1

Time Off: 1649Z

Time On: 1815Z

A/C (Take Off)

Wx Station (Take Off)

A/C (Land)

Wx Station (Land)

Pressure

1013.7

2994 / 1013.3

1012.61

29.94 / 1013.1

Number

29-26

Data Disposition / Date / Quality

Flt Lvl Tapes

Radar Tapes

Cloud Physics Tapes

Video Tapes

PSM.1 1010.6

PSM.2 1013.7

first turning onto runway 4 for takeoff

AXBT

PSM.1 1009.9

PSM.2 1012.1

first turning off runway 4 after landing

AXGP

AXCTD

Drop 3 no VTA + Bogus 6 A

Dropsondes

3

3 ~~Drop~~ Drops 1 and 3 new ~~sonde~~ sonde firmware
Drop 2 regular

video

Forward

Left Side

Right Side

Down

Remarks

Time On

Time Off

Rate

Remarks

Critical items in different windows

2.13

3.96

1013.63

35

28

AGC

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

George Delgado said he calibrated the Vainila PCAB before the flt and found a +0.6m bias in the digital output. He will do the analog cal and in theory he will expect the analog output + digital output to be the same.

20 seconds to ~~the~~ lead to drop first drop.

Load Monitoring ~~off~~ check 7k
Decided not to do it.

Run ASPEN then SAVE (UPPER LEFT CORNER) to DESKTOP FOLDER. In WMM hit tempshop button then open folder with WMO.TXT

BUOY 28°30' N
84°31' W

551 25.9



N42RF ERROR SUMMARY CHECKOUT FLIGHT



Flight ID: 20120608H1

<u>Sensor or system</u>	<u>Number or Name</u>
INE (for wind derivation)	INE1
Accelerometer	AccZfilterI-GPS.1
Temperature Probe	TTM.1
Dew Point Probe	TDM.2
Static Pressure	PSM.2
Dynamic Pressure	PQM.2
Vert. Wind	AltI-GPS.1
Project Directory	/acdata/2011/MET/20120608H1

Notes:

There were four data gaps before takeoff: 163213Z – 163318Z, 1163549Z – 163550Z, 163552Z and 163830Z.

Between 164853Z – 172539Z and between 173137Z – 181507Z the measured dynamic attack pressure (PQALPHA.1) generated erroneous data. For both time periods the erroneous data was removed and replaced by applying a static offset to the measured fuselage dynamic pressure (PQM.2) using the following equations,

$$PQALPHA.1 = PQM.2 + 1.4, \text{ for the first data gap}$$

$$PQALPHA.1 = PQM.2 + 0.5, \text{ for the second data gap}$$

During the flight there were instances where dewpoint temperature values exceeded derived ambient temperature values resulting in humidity values above 100%. These situations occurred during heavy precipitation events.

All other instrumentation worked optimally.

There were three (3) GPS dropsondes deployed...2 good 1 bad.

SPECIAL NOTE!!! The variable names dpj_wgs, dpj_was and dpj_wz in the netCDF file represent vertical ground speeds , vertical air speeds and vertical wind speeds, respectively, computed using Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

Takeoff(1649Z) Landing(1815Z)

Aircraft Static Pressure	1013.7mb	1012.1mb
--------------------------	----------	----------

Corrected Tower Pressure	1013.3mb	1013.1mb
--------------------------	----------	----------

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

GPS - quality 9

Flt Lnd data

no COM1 and ERROR

ALL good

Trad D right on to buoy
good smooth leg
steady

low run

172715-1732 25

PSURF = 1014.0

172715-172800

1013.6

PSURF

RS 2-3° deviate at low alt
than TA.0

TD M.1 went too warm

~~data~~
during low level run

TT1 OK TTADU

diff $< 1^{\circ}\text{C}$
TT2 very noisy down low

Both RA tracked each other
very well no
large excursions

TD M.1 very noisy &
3 large excursions

TD M.3 OK but large
excursions several times

TT2 quite noisy
with a few significant
excursions

alt - Trad D image

no PLAB

2.96

PS.1 1010.9

PS.2 1013.9

T/O

PSM.1 1009.9

PSM.2 1012.1

3, landing

PA.2 & PA.3
good

PA.5 diff 4-6°C
ABS

ANTE-GPS.2

to 00

817-581-2505

1800

DROPS
 DROP 1 CA -1.05 at 570 SPLASH GPS 18.46 m CH 2 174420
 1012.54 TA 24.17 6 174843

NEW

Baros 1250 Z
 1013.9

1613.5 ac 28.330
 - 9.8 84.509

209/5.1
 10027 mm

TA 23.6
 WT 25.9

DROP 2 CA 7.14 GPS 18.64 174438
 SPLASH 1011.93 TA 24.03 174914

Variable RS 984 1012.9 CH 1 199/3.7 m/s
 660x TEM-5H 28.334 85 10.26
 84.49487

DROP 3 (GA in "D" file did not change) CH #3 174453
 Raw SPLASH 1012.14 GPS 18.74 7 174948
 17.57

NEW 3018.48 no TA Both channels
 1013.2
 28.332
 84.467

10.42

28.500
 84.517

NA 5FC W/O/Ws

when from PRRZ

PLAD 1011.3 before top

~~1682~~ ~~1633~~ 1759 110
 1733-1738 1802 120
~~1725~~ ~~1737~~ 90
 10
 50

NOAA • AOC • SED N42RF AVAPS DROP LOG

Lead Tech: Joe Bosko

Project: Hurricane 2012

Mission: TESTFlight ID: 20120608H1Take Off: 1655Landing: 1816Flt Dir: DAMIANO

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	114625075	2+6	0	1744	man	AOC		✓
2	11955025	1+5	0	1744	man	AOC		✓
3	114615210	3+7	0	1744	man	AOC	Geo ALT 3000 METERS AT SPATH	
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								