



N42RF ERROR SUMMARY

SENEX 2013 KMQY

16 June 2013



Flight ID: 20130616H1

<u>Sensor or system</u>	<u>Number or Name</u>
Static Pressure Probe	PSM.2
Dynamic Pressure Probe	PQM.2X
Total Temperature Probe	TTM.1
Dewpoint Temp. Probe	TDM.2X
Vertical Accelerometer	AccZfilterI-GPS.1
Altimeter	AltIGPS.1
INE Selection	1
Differential Attack Pressure Probe	PDALPHA.1
Differential Sideslip Pressure Probe	PDBETA.1
Dynamic Attack Pressure Probe	PQALPHA.1
Dynamic Sideslip Pressure Probe	PQBETA.1
Flight Directory	acdata/MET/2013/20130616H1

Local Met Data:	<u>Takeoff</u> (1516Z)	<u>Landing</u> (2147Z)
Aircraft Static Pressure	1000.9mb	998.0mb
Tower Pressure (corrected)	999.2mb	996.3mb

Notes:

Total Measured Dewpoint #2, the primary dewpoint sensor, recorded erroneous data during different periods throughout the flight. TDM.1 was used to directly substitute values for TDM.2 during the following times:

15:21:35Z – 15:46:10Z

16:28:08Z – 16:32:05Z

18:25:58Z – 18:35:42Z

19:13:08Z – 19:15:18Z

20:34:58Z – 20:38:17Z

21:19:40Z – 21:47:30Z

At 19408Z, there was a spike in Measured Dynamic Pressure from the fuselage (PQM.2).

PQM.2 was modified by substituting values from PQM.1 with the equation:

TDM.3 was unavailable for this flight.

After the aircraft returned to MacDill AFB, a few instruments that were installed on N42RF were removed and calibrated in the AOC calibration laboratory. The final Quality Control data sets use the post project calibration coefficients for determining the output of the instruments.

The following parameters that have been updated from the original data set follow.

PDALPHA.2 - Radome Attack Differential Pressure Measured

PDBETA.2 - Radome Sideslip Differential Pressure Measured

PDALPHA.1 - Fuselage Attack Differential Pressure Measured

PQALPHA.1 - Fuselage Attack Dynamic Pressure Measured

PDBETA.1 - Fuselage Sideslip Differential Pressure Measured

PQBETA.1 - Fuselage Attack Dynamic Pressure Measured

PQM.3 - Measured Fuselage Dynamic Pressure, Two Sources --co-pilot

PQM.4 - Radome Dynamic Pressure Measured

TTM.1 - Measured Total Temperature Degree

TTM.2 - Measured Total Temperature Degree

Any derived value using the outputs from the measured parameters listed above have changed slightly from the values measured in real-time.

See SENEX_READ_ME.txt for file information.

Flight Director:

Phone #:

Ian Sears

(813) 828-3310 ext. 3039