N43RF ERROR SUMMARY
3.5 ENGINE WATER INGESTION

Flight ID: 20150610I1

Sensor or system	Number or Name
INE (for wind derivation)	INE1
Accelerometer	AccZfilterI-GPS.1
Temperature Probe	TTM.1
Dew Point Probe	TDM.1X (Buck)
Static Pressure	PSM.2
Dynamic Pressure	PQM.2
Altimeter (for Vert. Wind)	ALTGPS.3 (NOVATEL)
Project Directory	/acdata/2015/MET/20150610I1

Notes:

There were no data gaps.

Take-off was delayed over an hour due to a severe thunderstorm over the field.

The uncorrected NOVATEL altimeter output (AltGPS.4) and corresponding LAT/LON values exhibited numerous upward/downward spikes throughout the flight.

Radar Altimeter #2 (AltRa.2) had missing (nan) values inflight during the time periods 211141Z – 211151Z and 211154Z – 211200Z.

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.
However dewpoint sensor #1 (TDM.1 [Buck]) displayed erroneous output during the following time periods: 200819Z – 200843Z, 202619Z – 202709Z, 202810Z – 202813Z, and 205253Z – 211617Z. For these time periods, TDM.1 values were removed and replaced with dewpoint sensor #2 (TDM.2 [EdgeTech]) ouput,

TDM.1 = TDM.2

Prior to landing TDM.1 output became excessively warm between 212550Z – 213042Z. The erroneous data was removed and replaced using statistical techniques.

All other instrumentation worked optimally.

SPECIAL NOTE!!! The variable names DPJ_GSZ, DPJ_ASZ and DPJ_WSZ 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 (1948Z) KMCF	**Landing (2133Z) KMCF**
Aircraft Static Pressure	1013.2mb	1014.0mb
Corrected Tower Pressure	1013.4mb	1013.7mb

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