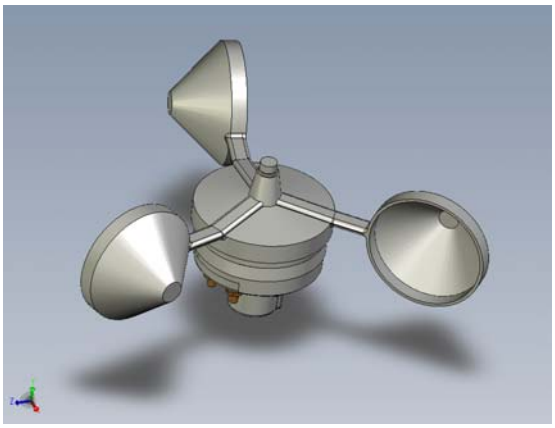
SECONDWIND

Second Wind Inc. 366 Summer Street, Somerville, MA 02144 USA • 617 776-8520 • Fax 617 776-0391 • www.secondwind.com

C3 ANEMOMETER VIBRATION ISSUE RESOLVED IN 2009

May 19, 2010



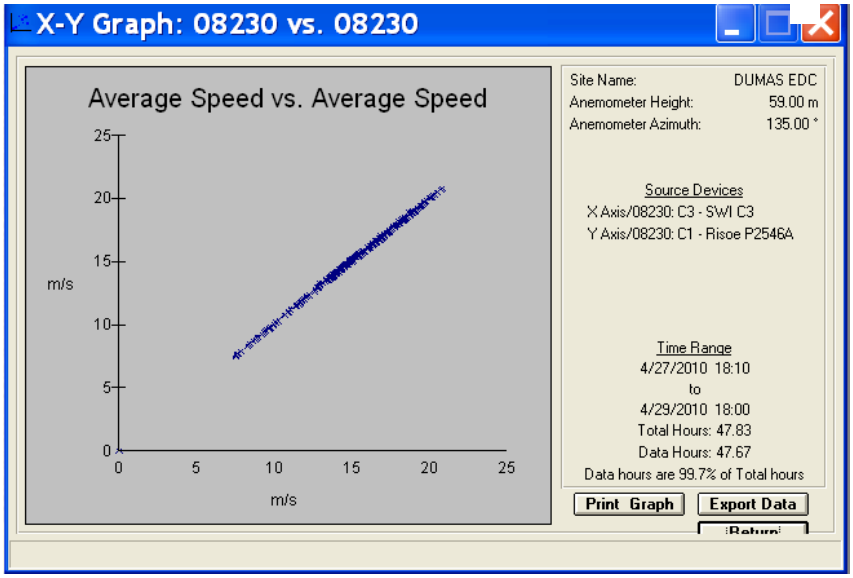
C3 Background In 1980 the Maximum #40 anemometer was selected by Second Wind Inc. for its rugged design, reasonable accuracy, and excellent repeatability. After years of supply directly from Maximum, Second Wind was required to purchase the product from a competitor, NRG Systems. NRG renamed it the NRG #40. In 2007, Second Wind chose to manufacture its own version of the design, the C3. The designs are virtually indistinguishable.

Vibration Problem In recent years a problem became apparent with the anemometers of this design. In normal operation, the bearings and rotating shaft wear in and form a uniform and fine distribution of PTFE and rotation is smooth. In some cases, however, it is possible for the PTFE to become non-uniform and vibrations can result. Because the rotating assembly is mounted on O-rings, the vibrations can cause significant motions. If the system goes into resonance, significant energy is transferred from the rotor and slows it. The result is measurement error. For the C3, the overall incidence of the vibration-induced motions and concomitant errors is low, in the single digits of percentage for all of the sensors we have supplied through 2009.

QC Program In 2009, Second Wind implemented a quality control program to identify and remove the individual sensors that had an increased tendency to develop these problems due to normal variations in manufacturing tolerances. In 2009, several hundred units were removed from production as a result.

Engineering Program In 2009 our engineering program eliminated the root cause this problem, insufficient damping in the bearing system. All SWI C3 sensors now use an O-ring in the base that is designed to provide significantly more damping. All of our sensors that exhibited the vibration problem are repaired when this component is replaced. This includes sensors that have been operating in the field for over a year. The root cause and solution to this problem agree with the findings of NRG Systems reporting on the NRG/Max 40 anemometer at the Windpower 2009 Conference.[i]

Field Test Results In late 2009 SWI began a field test program. As of May, 2010 we have reviewed field test data from over 60 C3 anemometers running for more a than four months each. The data from these units confirms that there is no longer any problem from vibration. This X-Y plot compares the C3C to the WindSensor P2546A. Both sensors were calibrated in the same MEASNET wind tunnel. The two compare to within 0.5% on average.



Please contact Second Wind Inc. for more information on this subject.

[i] "Investigation of the NRG #40 Anemometer Slowdown".Presented 7 May 2009 by Steven Clark, Mechanical Engineer, NRG Systems, Inc. AWEA WINDPOWER Conference and Exhibition 2009, Chicago, IL