



For Immediate Release
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BELFORT INSTRUMENT COMPANY

Baltimore, MD –February 4, 2009. The Belfort Instrument Company, founded by Julian Friez in Baltimore, Maryland over 130 years ago is still developing new Meteorological Instruments that will accurately and reliably measure environmental phenomena for those applications where data quality and integrity matter to the end user. We are highlighting three new instruments at this year's 89th annual AMS meeting.

New Aerovane:

In the 1800's Belfort Instrument Company produced an innovative wind vane and cup anemometer based on the 1846 design of Thomas Romney Robinson to record wind direction and speed through closure of electro-mechanical contacts that became the standard for wind measurement throughout the late 1800's and early 1900's. In the 1930's the company, (Then known as the Friez Division of Bendix Aviation Corporation), developed the Aerovane used for aviation wind measurements because it most accurately measured wind speed and direction components critical to aircraft take-off and landing decisions on U.S. Navy Aircraft Carriers. Its measurements technology was based on motor generators that produced a voltage proportionate to wind speed and servo motors that indicated wind direction. With the introduction of the first Automatic Surface Observation Systems in the 1980's Belfort produced a modern version of the cup and vane wind measuring system using rheostat direction sensors and optical wind speed encoders.

Today, while many wind measurement applications have drifted toward ultrasonic wind instruments Belfort chose to refine its basic aerovane design using modern aeronautical design techniques, new manufacturing technologies and state of the art sensors to produce a new "Digital Aerovane" **model AEDA 140.**

Why go back to a basic windmill type anemometer design? It most accurately translates the kinetic energy of the wind into a measurement that predicts the lifting components of wind speed and direction as they affect aircraft performance. It samples a 175 square inch cross section of air (vs. 0.2 square inches for some ultrasonic sensors) to more accurately represent average wind speed without errors caused by particles, micro turbulence and precipitation.

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It is aerodynamically designed to give response times adequate to portray variable wind conditions for all but the most refined wind studies.

It uses modern digital electronic sensors to output serial digital wind direction data to better than ½ degree over the entire 360 range and wind speed to tenths of a mile per hour over a range of 1-150 mph. It can be heated to eliminate ice and snow accumulation and it is sealed so tight it will work under water as well as in the air. For those that believe you can't have moving parts and be reliable, Belfort stands behind the reliability of this new design with a 10 year warranty. Come talk to us-we know wind.

New Precipitation Instrument:

In the late 1800's, Belfort Instrument Company produced early versions of precipitation gauges, still in use today- a bucket with a certified calibrated yardstick. It introduced tipping bucket rain gauges and produced the Fisher Porter type weighing precipitation gauges in the 1930's that are still in use today, (we still supply the paper tape for the data output). Our Universal weighing rain gauge using optical sensors has been employed throughout the world from the 1970's. The company introduced a three sensor weighing rain gauge as part of a competition in the mid 1990's to design an all weather precipitation gauge for the USNWS. This design has been reconfigured into the new series **AEPG precipitation gauges** using company proprietary software to translate output from three strain gauges into accurate representation of accumulated precipitation. Precision heated inlet orifices assure collection of freezing rain and snow. State-of-the-art U.S. manufacturing processes have made it possible to sell this gauge at half the price of most competitors. Come talk to us we understand precipitation measurement

New Visibility Sensor:

In early 1990's Belfort was the first US company to produce a high quality compact visibility sensor based on forward scattered light for use in the aviation industry. It became the standard instrument used in the first Automatic Surface Observation Systems at all major US airports. This design used flash tube technology to generate light pulses that were interpreted by solid state sensors and digital electronics to indicate the amount of obscuration rain, fog, snow and dust may create at airports.

In the late 1990's Belfort produced the first all solid state visibility sensor to reduce costs and improve reliability and maintainability of the original product. Today using more sophisticated signal processing and manufacturing technologies Belfort has designed and introduced the **AEVIS 6500** that carries on the tradition of accurate visibility measurement at 1/5 the cost of the original design. Come to the booth and chat we us about visibility measurement.

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Still Kicking after 130+ years:

At the Belfort Instrument Company we continue to compete as the oldest U.S. meteorological instrument company. We were recently asked to replace the wind display in the lobby of the Empire State Building in New York. A historical architect found our name in some early design documents.

We expect to complete the new display by early 2009. For all these years our motto has been “The Standard of Measurement” and we are committed to providing our customers with high quality product to meet the most demanding requirements of the meteorological community. Come see us at **Booth 628** often old timers know what they are talking about.

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About Belfort Instrument Company:

Belfort is a leading provider of weather instruments to the government, professional meteorology and aviation markets. From wind sensors for the Wright Brothers to state-of-the-art weather instruments for the ASOS (Automated Surface Observation System) platform and all US Navy aircraft carriers, Belfort continues to set the “Standard of Measurement” for the industry. The Belfort Instrument Company celebrated its 125th year in business in 2001! For more information about Belfort Instrument and DigiWx, see our web sites at www.belfortinstrument.com and www.digiwx.com.