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Winter 2009

## Father and son entrepreneurs create wine cellar cooling system

The founders of Air Innovations, father-and-son licensed professional engineers Larry and Michael Wetzel, have spent most of their careers designing and manufacturing niche market air conditioning and refrigeration equipment. They are also both passionate about collecting fine wines. It became only a matter of time before they applied their expertise in both subjects to building a better wine cellar cooling system.

The result is Wine Guardian®, a commercial-grade unit sold in North America and Europe, first introduced by the company in 1998.

The Wetzel family's first wine cellar was hand-dug by Larry and a teenaged Mike under their 1820's farmhouse foundation, utilizing the natural coolness and humidity from the earth and stone surrounding it. From that date forward, wine cellars became an essential part of their future residences.

The first attempt at providing artificial cooling came about in Larry's 1989 house renovation and involved using a home air conditioner — still the basic framework for many wine cooling units today. It soon became apparent that the unit couldn't adequately keep the recommended 55 degrees nor could it provide a level of humidity. It was also cumbersome and noisy. After studying what was available for



Air Innovations President and CEO Mike Wetzel (left) and Larry Wetzel, chairman, are personally involved in preserving their customers' valuable wine investments

purchase, the Wetzels determined they could build a better product, and soon Wine Guardian was born.

Larry, an active member of the international burgundy wine organization, the Confrérie des Chevaliers du Tastevin, has a WG-controlled 900-bottle cellar in his Cazenovia, New York home and another 200-bottle cellar in his second home on Nantucket. Mike, who lived in Strasbourg, France for several years and is particularly knowledgeable about the wines of the Alsace, recently installed a 600-bottle Wine Guardian controlled cellar in his home on Skaneateles Lake, one of the wine-producing Finger Lakes in Central New York. ▲



## Air Innovations: The big picture

**Here is a brief overview on AI to better acquaint recently subscribed newsletter readers:** Air Innovations designs and manufactures specialized air conditioning systems and environmental control equipment for a variety of industries that are installed worldwide. The company, established in 1986, is known for its expertise in applications that require precise control of temperature, humidity, pressure and filtration. Air

Innovations' capabilities range from concept development to prototyping and testing, from made-in-the USA manufacturing to regulatory submissions and international distribution.

Air Innovations is a preferred small business provider to U.S. Department of Defense prime contractors. As such, the company undergoes rigorous supplier certification procedures. Several key Original Equipment Manufacture (OEM) customers, which are exclusive sole-sourced contracts, also have conducted on-site evaluations of AI's quality, production and financial capabilities and have certified the company for long-term (e.g., 10+ years) support of their needs in these areas. We are also proud of our repeat customers in the floral supermarket and wine cellar cooling industries, and for their referrals, which we consider the best example of the confidence they place in our technical capabilities and value-added partnership.

In-house, our company measures customer satisfaction in key business areas such as on-time delivery and quality and we have instituted a method for tracking vendors' work and issue scorecards on their quality. Throughout the company, *continues on back page*

## Floritech around the world

▶ A Floritech® Low Profile was recently installed by the Swiss floral company Blume 3000 in the Flughafen Kloten Shopping Center located in the **Zurich Airport**. Other recent installations include supermarkets in **Ecuador** and **Russia**.



▶ Here in **North America**, Floritech provides a variety of Always Open® floral coolers to major supermarket chains, including Low Profiles in island configurations, EuroVues and Wall of Colors for in-line or wrap-around layouts, and point-of-purchase Checkstands.

▶ FloritechEurope customer support team expands: Henrik Bloch Hansen is a new sales assistant working in FloritechEurope's **Copenhagen** office. Henrik previously worked for a floral distributor in Denmark and speaks Danish, German and English.

## Air Innovations in the community

The majority of Air Innovations' products are destined to go to markets outside of its regional headquarters. Nevertheless, the company maintains a strong sense of commitment to Central New York. In addition to the many personal volunteer activities of its employees, the company has a Charitable Contributions Committee (C<sup>3</sup>) that directs its support of community organizations and acknowledges employees' volunteer and fundraising efforts.

The committee's job is to coordinate company volunteer activities and establish guidelines for disbursement of funding. Since the beginning of our fiscal year (July 1), AI has sponsored a food drive on behalf of the Food Bank



of CNY, matched employee contributions in the annual Making Strides Against Breast Cancer Walk-A-Thon, and collected winter wish items for the Ronald McDonald House Charities of CNY.



The company also provides paid time-off for volunteering and administers a scholarship program to help defray the costs of college to any employee's child who is named a National Merit scholar.



Chairman Larry Wetzel remarked, "We are first of all members of our community, and we believe in giving back to the best of our abilities to make Central New York a better place to live and work." ▲

## Update on HEPAiRx product development

HEPAiRx® air purification and ventilation units continue to be tested in a variety of environments, including:



- Stennis Space Center in Mississippi where the U.S. Centers for Disease Control and National Aeronautics and Space Administration are conducting sampling in mobile homes used to shelter citizens displaced by natural disasters (installation shown above)
  - A pathology laboratory at a major medical university
  - Syracuse's Near Westside neighborhood, in conjunction with a Center of Excellence community redevelopment program
- Results of these testing programs will be released later in 2009.

In December, results of Clarkson University's HEPAiRx testing in the homes of 30 asthmatic children were presented to the U.S. Environmental Protection Agency and Syracuse Center of Excellence's Scientific Advisory Council. Technical papers summarizing the findings are being prepared for peer review. Highlights-to-date can be found at [www.airinnovations.com/hepairx](http://www.airinnovations.com/hepairx). HEPAiRx is a registered trademark of Air Innovations and patent pending. ▲

## AI expands OEM aerospace portfolio

An explosion-proof environmental control unit required to operate in a corrosive atmosphere and provide low humidity is being built by Air Innovations. The ECU, approximately the size of a Smart Car, is designed to control the atmosphere inside a cleanroom being used during the construction and payloading of a rocket. The rocket, over 200 feet high, is surrounded by enclosed scaffolding and decks during assembly. Because the cleanroom is located on the decks at the top of the rocket where the volatile fuel is located, everything inside it is required to be rated Class 1, Division 2 explosion-proof.



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When it is launched, the rocket will circumnavigate the earth traveling by way of the poles, and will carry national security, civil or scientific payloads.

The ECU posed several technical and design challenges. Because of the location of the launch pad near the ocean, humidity and corrosion from salt air had to be addressed. A large desiccant unit was incorporated into the design to control low humidity levels required by the client as well as using all copper tube/copper fin coils. The ECU also has carbon filtration and dual compressors. It is the largest air conditioner built by Air Innovations. ▲

# Contamination control unit rapidly deploys for emergencies

A contamination control unit developed by Air Innovations helps hospitals, clinics, extended care, and disaster centers quickly expand their ability to handle surge capacity for isolation, trauma and burn care as well as increase their preparedness for pandemic influenza. IsolationAir® rapidly deploys to create negative or positive pressure, improve air quality around patients and staff, and provide for patient and staff comfort by controlling temperature and humidity in the room. Because the unit wheels into place on an as-needed basis, plugs into 110-volt power and requires no tools for installation, it easily converts any standard-sized room—from health care to hotel to military base—into an isolation room for emergency services.

The patented unit meets or exceeds specifications for isolation space established by the Centers for Disease Control and Prevention, American Institute of Architects, and the American Society of Heating, Refrigeration and Air Conditioning Engineers.

The unit uses known and accepted technologies for filtering and purifying the air, including highly efficient HEPA filters and ultraviolet germicidal light. When used to create negative room

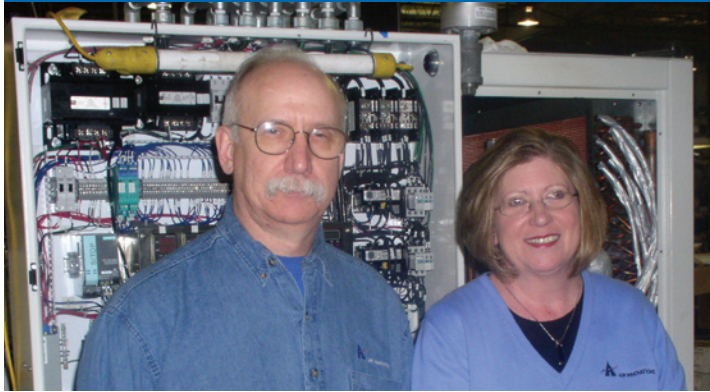
pressure, the unit will help prevent the escape of infectious diseases and reduce cross-contamination risks to hospital personnel and other patients. When used to create positive room pressure, the unit will help prevent airborne particles from infiltrating the isolation room and infecting immuno-compromised patients. In addition, IsolationAir will isolate the patient's room from the building's central system to reduce cross-contamination risks as well as continually operate when plugged into a room's emergency generator outlet.

To expedite installation, IsolationAir features ceiling adapters sized to fit most return or supply air grilles, flexible ducting to reach anywhere in the room, and snap on/off covers and duct connectors. Easy-to-use controls track unit performance. All required accessories are attached to the unit or accessible in slide-out trays.



The unit, which is designed to condition spaces up to 375 square feet, is ideal for hospitals' emergency preparedness plans because it deploys quickly and easily and saves the time and expense of undertaking building modifications or installing permanent isolation rooms that may otherwise have very limited use. IsolationAir is a registered trademark of Air Innovations, patented and ETL certified. ▲

## AIR INNOVATIONS EMPLOYEE NEWS



### Recognizing Workplace Excellence

Jim Penfield, manufacturing electrician, and Johnna Carney, material manager, tied for 2008 Employee of the Year honors for their outstanding customer service and corporate commitment. Manufacturing employees who were recognized for their help in reorganizing the factory to accommodate a large Air Innovations contract included: Frank Canestrare, Brian Clarke, Tom Cocopoti, Rick Couse, Alex Elsbree, Steve Miklajcyck (also November's Employee of the Month), Paul Monroe, Jim Penfield, Steve Ragonese, Sam Redden, Anson Reed, Dave Stastny, Kevin Striep, and Keith Wilson.

### AI welcomes three new employees:

- 1 Steve Ragonese, manufacturing assembler
- 2 Alex Elsbree, manufacturing assembler
- 3 Andrew Valencia, materials clerk

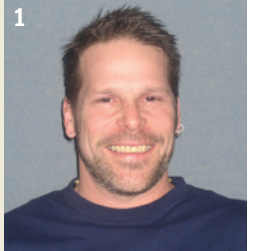
### Congratulations to AI employees reaching these important service milestones:

#### 15 YEARS

Rick Couse, warehouse manager  
Bruce Meissner, design engineer

#### 5 YEARS

Cheryl Gressani, director of business development



## Spotlight on Air Innovations' Board of Directors

AI Board of Directors members are chosen for their expertise in air conditioning and refrigeration technology and manufacturing. In this issue we feature John A. Rizzo.

**John Rizzo** is a lean six sigma (LSS) consultant for Moffitt Associates with 23 years experience in operations, finance, and sales/marketing. Before joining Moffitt, John led lean six sigma transformations at three manufacturing companies from the roles of director of operations, general manager, and president. John has worked or consulted in several different manufacturing and service industries including: precision metal working, pharmaceuticals, medical, electrical materials, air conditioning, textiles, and temporary staffing.

John has facilitated several hundred LSS kaizen events/projects. He is known as a passionate advocate for continuous improvement and is able to bring together individuals with different agendas. John has extensive experience in: strategy deployment, creating flow, material replenishment systems, total productive maintenance, value stream mapping, mistake proofing, quality function deployment, set up reduction, failure mode effects analysis, design for manufacturing, and supply chain optimization.

John holds a BS from the Schools of Engineering and Business at the University of Vermont. He earned an MBA and a Masters in Public Administration from Syracuse University. He is a Certified Purchasing Manager, is certified by the Association for Operations Management, and is high-level six-sigma black belt. He also has served as chairman for one of the largest manufacturing associations in the country. ▲



## Air Innovations: The big picture

*continued from front page*

we follow ISO-oriented guidelines for continuous process improvements.

Our most sophisticated products can be designed to hold close tolerances in temperature (to as precise as  $\pm 0.008^{\circ}\text{F}$ ) and humidity ( $\pm 0.5\%$ ). We offer a variety of filtration, cooling, and pressure control capabilities.

### Some examples of environmental control systems that AI custom builds for OEMs include equipment that:

- cools the sophisticated electronics in airport baggage screening devices around the world;
- keeps air cool and dry inside a medical testing device to ensure process chemical integrity; and,
- protects electronics in unmanned aerial vehicles from extreme temperature and humidity ranges during deployment in harsh outdoor conditions.

### Branded products include those that:

- condition critical environments in research laboratories, electronics and pharmaceutical companies — **AdvancAir®**;
- quickly create negative or positively pressurized hospital rooms to treat infectious disease, burn, trauma or immuno-compromised patients — **IsolationAir®**;
- condition the air in wine cellars — **Wine Guardian®**; and,
- keep cut flowers fresh longer — **Floratech®**.

Learn more about our specialized air conditioning and refrigeration solutions by visiting [www.airinnovations.com](http://www.airinnovations.com)



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**7000 Performance Drive  
North Syracuse, NY 13212**

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**Floratech®**

**HEPAir®**

**HEPAiRx®**

**IsolationAir®**

**Wine Guardian®**

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