



THIN-AIR BULLETIN

American Society of Heating, Refrigeration, and Air Conditioning Engineers NM Chapter Region IX Albuquerque, NM

February Meeting 2015

Building Energy Quotient

This month we will be teaming up with the Association of Energy Engineers to present a topic of interest to both groups. Please note that the meeting will NOT be held at Pappadeaux. You must sign up online and indicate your lunch choice as described on [our website](#). [Follow this link to sign up](#).

LOCATION: Trane SW

5501 San Diego Avenue Northeast, Albuquerque NM 87113

WHEN: Tuesday, February 17, 2015

TIME: 11:30AM to 1:00 PM

COST: \$15 for members, \$20 for guests

Speaker: Ron Jarnagin

Building Energy Quotient (bEQ) is a building energy rating program that provides information on a building's energy use. Two separate workbooks, one evaluating *As Designed* potential and the other assessing *In Operation* performance, form the foundation of bEQ. bEQ rests on ASHRAE methodologies and standards and the experience of qualified practitioners. These characteristics distinguish bEQ and assure owners that they are receiving reliable and consistent results and recommendations.

bEQ is developed by ASHRAE, a not-for-profit organization of engineers and other specialists dedicated to the advancement of building technology for the public's benefit. A select committee of building design and performance professionals familiar with the Energy Star and European Union labeling programs created the Workbooks and established program criteria. bEQ was further enhanced and validated using ASHRAE's broad technical resource network consisting of building energy modeling experts, energy assessors and representatives from utilities, government, and the advocacy community.

About the Speaker:

Mr. Jarnagin has been involved in energy-related research and development activities for over 35 years. His background is diverse, including work in the areas of fluid flow, power plants, automotive and transportation systems, HVAC systems, energy use in buildings, smart grid activities, and energy standards development. Mr. Jarnagin has served on numerous utility, government, and business advisory boards, lending his expertise to solving their respective energy problems. He served on the faculty in the Department of Mechanical Engineering at the University of Florida for 10 years, and has been with Pacific Northwest National Laboratory for the past 20 years.

Mr. Jarnagin is active in standards development activities, both nationally and internationally. He chaired ASHRAE's Standard 90.1 committee for 4 years, providing the leadership to successfully complete a comprehensive revision to that standard in 1999. In addition, he chaired the International Standards Organization (ISO) TC 205, Building Environment Design. He chaired a multi-disciplinary team made up of members of four organizations that produced the first Advanced Energy Design Guide (AEDG) for Small Offices which won 3 national awards from sustainability organizations in the U.S. In addition, he served as chair or vice chair of 3 additional AEDGs. Mr. Jarnagin is active in ASHRAE, having served on the Board of Directors as a Director-at-Large, and served as an ASHRAE Vice President as well. He also served as the Chairman of ASHRAE's Technology Council, which has stewardship for all of ASHRAE's research, standards, and technical committees.

(continued on page 2)

About the Speaker (continued from page 1)

Mr. Jarnagin chaired the Sustainability Roadmap Ad Hoc committee that developed ASHRAE's Sustainability Roadmap and the Sustainability Oversight Committee charged with managing the implementation. He chaired ASHRAE's Vision 2020 Committee and served on the Strategies for a Global Environment Committee in addition to leading the ASHRAE Building Energy Labeling Committee. He is a member of the ASHRAE Headquarters Renovation Committee that undertook a multi-million dollar renovation of the headquarters building in Atlanta with the goal of achieving a LEED-EB Gold rating as well as making the headquarters a Living Laboratory showcase that can be utilized by the members.

Currently Mr. Jarnagin was part of a U.S. delegation to China, assisting the Chinese Ministry of Science and Technology in planning for a Hydrogen Economy in China. As one of the activities in support of the Chinese effort, Mr. Jarnagin participated in the design of an innovative, renewable energy based hydrogen refueling station that was constructed to serve the 2008 Beijing Olympics. Mr. Jarnagin has also worked with the Chinese Association of Refrigeration representing ASHRAE to help in the development of HVAC product standards for China.

During his career at PNNL, Mr. Jarnagin has worked extensively in the Building Energy Standards and Commercial Equipment Standards programs, and managed the Building Energy Standards Program for a number of years. He has served as a Technical Group Leader, Business Team Leader, and has lead several teams preparing bids for large government solicitations.

Mr. Jarnagin has received the Distinguished Service Award from ASHRAE, was recognized as the 2004 NSPE Engineer of the Year in Tri-Cities, WA, received 2003 AEE Special Recognition award for service to industry and 1999 Presidential Award from IESNA. He holds graduate degrees in Mechanical Engineering from the University of Florida and Accounting from Louisiana State University. He is also a decorated U.S. Navy veteran of Vietnam having served with the river patrol forces there.

[Sign up online here](#) and indicate lunch options as described on [our website](#).

From Membership

Did you know that ASHRAE Members are on Twitter? Use #myashrae to see what other members from around the world are up to.



Does your employer help you to support ASHRAE? If not, please let us know. The employer benefits are too many to list.

We need 6 more new members before the end of May to meet our goals for this year. Please let me know if you are interested and need to know more before committing.

Please feel free to contact me with any questions

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From the History Books

January 1995



President: Al Guera
President Elect: Harold Trujillo
Secretary: Steve Willard
Treasurer: Don Schedlbauer

The program featured Mark Domzalski, CRS Serrine Engineers. He spoke about "Doing Business with the Semi-conductor Industry." This speaker also attended a Santa Fe lunch meeting.

ASHRAE Society sponsored the IAQ Symposium in Denver on October 22-24, 1995.

Student Activities at UNM Science Fair

March 12-14, 2015 will be the 55th Central NM Science & Engineering Research Challenge, to be held on UNM Main Campus. The New Mexico Chapter of ASHRAE is sponsoring two, \$100 awards for the event.

We are looking for 2-3 volunteers to act as special awards judges. Special Award judging will take place on Friday, March 13, 2015 from 12:00pm (registration) until 3:45pm (close of judging; students dismissed).

Below is a link to the event website.

<http://stemed.unm.edu/FAQ.aspx>

Interested parties please RSVP to Jerry Hine at wjhine@hotmail.com by March 4th.



Job Postings

Find up-to-date postings or how to post at newmexicoashrae.org/jobs/

Date posted: 1/23/2015

Job Title: Facilities Maintenance Technician 4

Company: Los Alamos National Laboratory

Link: [Click here for job link](#)

Contact: Tom Cordova (505) 667-1943

Short Description:

Lead trouble-shooting and repair efforts on commercial grade heating, ventilating, and air conditioning (HVAC) systems and multi-zone systems that incorporate pneumatic, electronic, and/or programmable logic controls. Review drawings and plans for HVAC modifications, and lead the installation of components that require controls programming and linkage to Building Automation Systems.



News: Around New Mexico

Roswell man looking to convert old downtown warehouse into interactive children's museum

*Updated: 01/19/2015 6:22 PM | Created: 01/19/2015 5:33 PM
By: Lauren Hansard, KOB Eyewitness News 4*

A Roswell man is committed to building an interactive children's museum that would be located downtown in a renovated warehouse. The massive warehouse in downtown Roswell, built in the 1930's, has sat empty for years. But Roswell Mayor Dennis Kintigh says that's all about to change thanks to one Roswell native who is making a difference.

Continued on next page

Bond C for Higher Education Passes with 60% at Midterm Elections

On Nov 4, 2014, the general midterm elections included Bond C for Higher Education. This bond will provide \$140M to fund facilities for colleges and universities throughout the state, including CNM, UNM, NM Tech, NMSU, NM Junior College, San Juan College, Santa Fe Community College, and Navajo Community College. The bond passed with 59.87% of the votes, unlike in 2012 when it was defeated [2]. Bond C is expected to create an estimated 1,400 jobs in construction, architecture, engineering, and related fields [1].

Sources: [1] [Abq Journal](#) [2] [Election Results](#)

"Roswell man..." Continued from previous page

"We've come a long ways in just a few months, and I give all the credit to Trey Nesselrodt," said Kintigh.

"I want to make an effort because I think that if we don't do something, then who's going to do it? And if not now, then when?" said Trey Nesselrodt.

Nesselrodt is transforming the huge 15,000-square-foot space into an interactive children's museum. There are multiple sketches of what the museum would look like.

"We're hoping it's going to be a space, science, technology-type museum that's interactive," said Nesselrodt.

It would be the first museum of its kind in Roswell, and the city is on board.

"Well it does a number of things," said Kintigh. "Number one, it's going to be something for children to learn about science and mathematics. Second thing is it's going to have an impact in this part of Roswell."

There are also plans to fix up another warehouse on the property. Nesselrodt wants to turn the adjacent warehouse into an organic food market and restaurant. Kintigh says renovating the site will drastically improve the area.

"The potential here is for this to be a game-changer for this area of Roswell," said Kintigh, "and that's what we want to do."

Nesselrodt says he's doing it for the next generation.

"[I'm] trying to make it a better place; that's really what we're trying to do is build it up so that our kids can have something to be proud of," said Nesselrodt.

As for when it will open: "This is something that's coming a long way pretty quickly," said Kintigh.

Kintigh says they are hoping to have the museum open to the public in 2016. The city is also discussing the idea of using the space to display artwork.

Kintigh says the city has a lot of art, but nowhere to put it. Only one-eighth of the city's collection is currently on display, according to Kintigh.

Bloomfield city leaders looking at cutting cord from Farmington, starting city's own power utility

*Updated: 01/22/2015 6:59 PM | Created: 01/22/2015 6:54 PM
By: Devin Neeley, KOB Eyewitness News 4*

BLOOMFIELD, NM -- City leaders in Bloomfield are looking to cut the cord. They are exploring the option of creating their own electricity—then selling the power.

"It is a way to be able to finance our future as far as projects that citizens told us that they want," said David Fuqua, City Manager of Bloomfield.

Currently, residents of Bloomfield get their power from the City of Farmington Electric Utility.

"The businesses and residents, in their monthly power bill, sent anywhere from \$10 to \$12 million annually to Farmington," said Fuqua.

That all could change if city leaders decide to buy the infrastructure from Farmington and create the new power company.

"For a town our size, that's phenomenal if we could keep that here," Fuqua said.

While officials at the City of Farmington say losing those customers will have a minimal impact, the move could bring more businesses and money to improve the quality of life in Bloomfield.

Officials are aiming to have rates the same or lower than what customers currently pay.

While creating the new utility could take up to about a year and a half, analysts for the city say this is the perfect time to get into the business of power. Even further down the road, Bloomfield could produce its own power.

"That would be the end goal - to have a generation plant, to not have to purchase it from outside vendors and pay the extra expense."

The city should know in the next few weeks if comparable rates are possible and the city council could vote to move forward as early as March. Residents would have to vote for a general obligation bond and to actually create the utility before it becomes a reality.



News

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Feb 4, 2015

Contact: Jodi Scott, Public Relations
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Record Attendance Set for ASHRAE Winter Conference, AHR Expo

ATLANTA – Attendance at the recent ASHRAE Winter Conference and AHR Expo exceeded expectations with record numbers shown for both. The 2015 ASHRAE Winter Conference, was held Jan. 24-28, with the AHR Expo held Jan. 26-28, Chicago.

ASHRAE broke records for attendance at a Winter Conference with 3,018 attendees. Attendance this year was higher than the past six Winter Conferences, except Las Vegas 2011. Attendees came from more than 60 countries.

The Expo claimed the title for the best-attended event ever held in Chicago. Preliminary figures for the world's largest HVACR marketplace show that more than 61,000 total attendees, including 42,400 visitors, took part. Five Chicago records were shattered by the 2015 event:

- Total number of registered attendees – 61,990
- Number of visitors – 42,400
- Net square footage – more than 480,000
- Number of exhibiting companies – over 2,100
- Number of international exhibitors – 592

For ASHRAE, a major item of note at the Conference was recognition by the Green Building Initiative (GBI) on ASHRAE achieving the highest rating, of four Green Globes, on their international headquarters. Through a months-long process, GBI's Green Globes Assessor worked with ASHRAE staff to document the building's sustainable management practices. Only 3 percent of projects assessed by GBI achieve four Globes certification.

Also taking place was launch of ASHRAE's and the United Nations Environment Programme (UNEP) OzonAction's fourth biennial work plan for 2015-2016, based on a global cooperation agreement signed in 2007. The ASHRAE-UNEP cooperation agreement was developed to achieve several international goals, including the sustainable phase-out of ozone depleting substances in refrigeration and air-conditioning applications; maximizing the climate benefits of using low-global warming potential alternatives including aspects of energy saving in buildings; as well as facilitating the transfer and adoption of sustainable and feasible technologies to developing countries.

The Conference's Technical Program ranked high in attendance, focusing on big projects, the big picture and big impacts with the intent of presenting big results for engineers, contractors, manufacturers and building professionals. Individual top-attended sessions in the technical program were seminars related to Lab Safety and Fire Alarm Response; Controlling a Minimum Impact Data Center; Design of Safe, Healthy and Energy Efficient Air Distributions for Hospitals; ASHRAE Design Guide for Tall, Mega Tall and Super Tall Building Systems; Refrigeration for Craft Brewing; Is Air-to-Air Energy Recovery Mutually Exclusive with Demand Control Ventilation and/or Airside Economizers?; Fan and System Integration for Maximizing Energy Efficiency Design; Hydronics 101: Design Basics and Complying with Standard 90.1; and Walgreens' Pursuit of a Net-Zero Store; as well as a Conference Paper Session on Using Solar to Improve Efficiency; and a Technical Paper Session on Energy Efficient, Hydronic HVAC Systems.

Also offered were a combined 20 Professional Development Seminars and Short Courses from ASHRAE Learning Institute. The most popular offerings were Complying with Standard 90.1-2013: HVAC/Mechanical; Designing High-Performance Healthcare HVAC Systems; and Design of Commercial Ground Source Heat Pumps.

Publications new to the ASHRAE Bookstore were sold at the Conference, including Load Calculation Applications Manual, 2nd ed.; the Chilled-Beam Design Guide with REHVA; Geothermal Heating and Cooling: Design of Ground-Source Heat Pump Systems; and Data Center Design and Operation: ASHRAE Datacom Series CD.

The 2015 ASHRAE Annual Conference takes place in Atlanta, Ga., June 27-July 1, 2015. The 2016 ASHRAE Winter Conference takes place Jan. 23 - 27, Orlando, Fla., with the AHR Expo being held Jan. 25-27.

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ASHRAE, IAQA Approve Consolidation

Feb 5, 2015

Contact: Jodi Scott, Public Relations
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ATLANTA – A consolidation between ASHRAE and the Indoor Air Quality Association has been finalized by both organizations. The consolidation was approved by the Boards of Directors for ASHRAE and IAQA at ASHRAE’s recent 2015 Winter Conference in Chicago.

“We are excited about the opportunities presented by this consolidation,” ASHRAE President Tom Phoenix said. “It opens the door to alignment of ASHRAE and IAQA programs to create high-impact resources for building professionals around the globe.”

“This is an historic event for both associations and has great promise for growth and development for both organizations,” IAQA President Kent Rawhouser said. “The opportunities and possibilities for members are only limited by our own imaginations. IAQA and ASHRAE are committed to growing and developing the IAQA brand. The consolidation will open new avenues for programs and benefits for our members.”

In July, ASHRAE announced it had agreed in principle to join forces with the IAQA, combining resources to improve indoor air quality in the built environment. Since August, the two groups have been undergoing a period of due diligence. That diligence was completed earlier in January.

Under the consolidation, IAQA will become a part of the ASHRAE organization while maintaining its own brand and Board of Directors. IAQA will operate independently within ASHRAE’s organizational structure.

The Indoor Air Quality Association (IAQA) is a nonprofit organization dedicated to bringing practitioners together to prevent and solve indoor environmental problems for the benefit of customers and the public. IAQA was established in 1995 and is the nation’s largest indoor air quality trade association with over 2,600 members and more than 20 local chapters across the United States and Canada. More information is available at www.iaqa.org/news and at www.ieso.org.

ASHRAE, founded in 1894, is a global society advancing human well-being through sustainable technology for the built environment. The Society and its more than 50,000 members worldwide focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow’s built environment today. More information can be found at www.ashrae.org/news.

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