

CLEVELAND ASHRAE NEWSLETTER

MARCH 2007



MARCH MEETING

NEO Expo

March 21, 2007

Times: 12:00PM-8:00PM

12:00-1:30PM Set Up (Exhibitors Only)

1:30 Start of Expo

2-3PM Variable Refrigerant Flow Seminar

3-3:30PM Break - With Appetizers 3:30-4:30PM Boiler Seminar 4:30-5PM Break - With Appetizers 5-6PM Controls Integration Seminar

6-6:45PM **Break - With Beef Carving Station** 6:45-7:45PM **AMCA/Fan Performance Seminar**

7:45PM End of Show/Awards

8PM Tear Down

Location: Quality Inn & Suites • 4742 Brecksville Road

Richfield, OH 44286

R.S.V.P. @ (216) 373-0315 by 12:00 Noon on Friday, March 16th for Reservations.

Northeast Ohio ASHRAE is proud to present its 1st Engineering and Technology Expo, aka, *The NEO Expo*. The Expo is open to anyone interested in attending. There will be no admission charge. Every one hour educational seminar attended will earn you one PDH credit. These sessions are an easy way to meet the Ohio PDH requirements for Professional Engineers. While there, you also have the opportunity to see the latest products of our industry and your fellow ASHRAE members. We look forward to your attendance at *The NEO Expo*.

This Month's Sponsor





THE PRESIDENT'S CORNER

BY KEN BORAH





March 5, 2007

The NEO expo is nearly here, and I know there are many local chapter ASHRAE members working very hard to make sure it is a success. Their efforts will make this a very special event. We already have a record number of vendors signed up. The seminars being presented have real content to them. PDH credits will be available for any seminars attended. And to top things off, prizes will be given away throughout the day. The event will be well attended by the Cleveland communities, engineers and students.

And of course, we are planning on having "BEEF" among other fine foods.

Lastly, I would like to encourage everyone to attend the last three local chapter events (after NEO). The April meeting is a regular chapter meeting at Harry's, the May meeting is Past President's night, and the

June Golf Outing is always a good time. We have had great turnouts for the events this year, and I would like nothing more than for this to continue.

See you all soon. Until then, stay warm, smile often and enjoy life's journey.

OFFICERS & COMMITTEE CHAIRMEN

2006-2007 Officers and Board of Governors

President Ken Borah
President Elect Ken Wissner
Treasurer Matt Nelson
Secretary Frank Eisenhower

Board of Governors

Robert Laneve Brian Chambers Andrew Tenhundfeld

Committees and Chairs

Chapter Technical
Transfer Committee Rob Laneve

Programs Robert J. Laneve (CTTC)

 Refrigeration (CTTC)
 Richard B. Long

 Gov't Activities (CTTC)
 Matt Nelson

 Membership & Roster
 Billy Kodosky

 Product Directory
 Daniel J. Bacik

 Research Promotion
 Terry Kretch

 Newsletter
 Andrew Tenhundfeld Matt Morgan

Scott K. Jordan

Richard B. Long

Student Activities

Historian Fred H. Hollman

Dave Deschler

Science Fair Steven R. Armstrong
Meeting Host Shawn Beres
Scholarship Fund Scott K. Jordan

(Sal Triana & Richard B. Long Jerald K. Cohen Gary Gardiner

Golf Outing Louis A. Bentzen

Ken Borah

Engineer's James G. MacMillan Week

Special Events Mike Denk (December Social)

Budget & IRS Fred H. Hollman Compliance

Sunshine Fund James W. Wickert



NEO EXPO SEMINARS



Timeline: 2-3PM - Variable Refrigerant Flow Jami Billman

3:30-4:30PM - Boiler Types and Applications Duane Rolkosky

5-6PM - Controls Integration Jeremy Niederjohn 6:45-7:45PM - AMCA/Fan Performance Pete Neitzel

Topic: Controls

Speaker: Jeremy Niederjohn

Jeremy Niederjohn is currently a Regional Account Manager at Johnson Controls. He has worked at Johnson Controls for the past six years in various product management and sales roles. Prior to his current position, he was product manager for Metasys Controllers. He has a Bachelor of Science degree in Mechanical Engineering and a Masters Degree in Business Administration both from Marquette University in Milwaukee, Wisconsin.

Jeremy will present an overview on the integration of HVAC controls and hospital medical systems through wireless technology.

Topic: Variable Refrigerant Flow Speaker: Jami Billman

Jami Billman, Internal Sales Engineer for Daikin AC (Americas), Inc. has been in the HVAC industry since January of 2004. She attended college at Purdue University in West Lafayette, Indiana from 1999 until 2003 and holds a Bachelor of Science degree in Industrial Engineering with a minor in Business Management. Upon completion of her undergraduate studies, Jami began working in the service division of Johnson Controls, Inc. with a focus in operations and service sales. With exposure to both sides of the business, she later decided to concentrate on service sales and moved into a representative position with York International covering the Downtown Dallas non-residential market. Jami joined Daikin's Internal Sales Team in October of 2006 providing technical and applications support for Daikin's external sales team along with manufacturers' rep firms and distributors. She currently resides in Grapevine, TX and is a member of ASHRAE, Women in HVACR and ACCA.

Variable Refrigerant Flow Technology provides an alternative method to traditional systems for comfort cooling and heating applications. Developed in Japan in 1982, VRF Technology has been widely used in the International market. Today, it is emerging quickly in North America due to rising concerns with energy consumption and the environment.

The VRF system is a Direct Expansion System with the ability to connect multiple evaporators to a single condensing unit. The output of the equipment varies depending on the required load of the facility being conditioned. Refrigerant flow from the condensing unit to each evaporator is regulated by two means: varying compressor capacity and an electronic expansion valve for each indoor evaporator. Combining these two features enables efficient performance and precise individual control, resulting in operational cost savings and absolute comfort.

Topic: Boiler Types and Applications Speaker: Duane Rolkosky

Duane Rolkosky has been with Cleaver-Brooks for 29 years. He started in the Engineering Department as an Electrical Drafter. Duane has held various positions in the Engineering Department working with our manufacturing locations and vendors.

He moved to Sales Engineering in 1999 and to Regional Sales in 2003. He currently holds the position of Regional Vice President and covers the Western region of the United States, the states of Ohio & Rhode Island and parts of Kentucky & Massachusetts.

Duane will focus on what new boiler technologies/products are available and their applications.

Topic: AMCA Testing, Ratings and System/Component Interactions Speaker: Pete Neitzel

Mr. Neitzel is currently the Vice President of Engineering and Manufacturing for Greenheck Fan Corporation. He is responsible for aligning Greenheck's investments in plant, equipment and systems. He provides leadership and expertise to Greenheck's business divisions in the area of product development, engineering, and manufacturing. Pete has been with Greenheck Fan for over 30 years, holding numerous positions during that time.

Pete is directly responsible for research and development, advanced manufacturing engineering, in-house tooling and equipment design and manufacture, engineering and manufacturing information systems, sales and operations planning, purchasing and shipping. Additionally, he is responsible for worldwide manufacturing strategies and supply chain development. He holds six patents for various HVAC product and system designs.

Pete is an active member of the Air Movement and Control Association, International. He serves on numerous technical committees and assists with the development of many of its publications and standards. Pete chaired the AMCA Technical Committee on Sound (1986-1994), AMCA Engineering Standards Committee (1993-1996) and the Air Movement Division (1998-2000). He was elected to the AMCA Board of Directors in 1999. He is past 2005-2006 President. Currently, Pete is the 2006-2007, Chairman of AMCA International's Board of Directors.

In addition, Pete contributes to the development of standards for ASHRAE, UL and ASTM.

His presentation will focus on:

- What is the Air Movement and Control Association?
- What value does this Association provide to its members and the market?
- Testing standardization and standards development
- · Independent, third-party testing
- Air system component application and system design research
- Certified Ratings Program
- Website
- Air System Component and Equipment Testing and Rating
- Component and System Interaction System Effects Discussion



NEO VENDORS



Confirmed exhibitors attending Expo:

Johnson Controls Air Control Products Preferred Piping Systems PM Equipment Eierdam and Associates The Mark Elliott Company Carrier Corporation The Craun Liebing Co. Mussun Sales Inc Northrich Company Wadsworth Slawson DB Johnson Company Jacco and Associates Pier Associates Jackson & Sons Siemens Building Tech Mastroianni and Associates Reid Industrial Sales Ketchum and Walton Story Equipment RL Deppmann Gardiner Trane Midwest Spec., LLC G & B Electric Co. Grinnell Mechanical Products The Marsh Company Allied Equipment

Prizes to be raffled off at the Expo!

Grand Prize: National and Local ASHRAE Dues Paid In Full

1st Prize: \$125 ASHRAE Gift Certificate

2nd Prize: Local ASHRAE Dues Paid In Full

3rd Prize: \$50 Gift Certificate to Local Restaurant/Shop



IN THE NEWS...



Promising to Exceed All Expectations!



The SOLAR 2007 National Conference, with the theme "Sustainable Energy Puts America to Work" and co-presented by the American Solar Energy Society and Green Energy Ohio, is scheduled in Cleveland from July 7-12, 2007 at the Cleveland Convention Center. Register online at www.solar2007.org.

By Christina Panoska

SOLAR 2007 is the 36th Annual National Solar Energy Conference – the largest and most inclusive renewable energy conference held in the U.S. each year. It includes a technical conference, hands-on workshops, tours of renewable energy sites, consumer-oriented presentations and a 'Renewable Products and Services' exhibit featuring more than 100 national and regional companies.

Cleveland is a perfect home for SOLAR 2007 with the city's on-going commitment to sustainable growth and a global vision for the future. Situated in this robust and industrialized setting, the conference focuses on the economic development opportunities with the growth of the renewable energy industry.

The conference theme is "Sustainable Energy Puts America to Work" and we're proud to feature Rosie the Riveter on the conference logo. Targeting this theme for the first time, we will engage a diverse group of stakeholders who are currently exploring Ohio's enormous potential for job creation in manufacturing, distributing and installing clean energy technologies.

There are plenty of opportunities during the week-long conference to learn how renewable energy can work for you. Besides registering for the full conference program, you can attend Public Day on July 8th that features consumer-oriented presentations and free access into the Exhibit Hall, or sign-up for a workshop or tour to get more in-depth information. Read about all these exciting activities during SOLAR 2007 in the sidebar.

As planning for the conference proceeds, we are breaking records!

The Exhibit Hall sold out before the end of 2006, and proposals and abstract submittals have also exceeded our expectations. Since we are experiencing so much interest in SOLAR 2007, we have outgrown our original location at the Renaissance Hotel.

We are now excited to hold the conference at the Cleveland Convention Center. This historic and architecturally-appealing venue will accommodate this successful growth and cultivate the opportunities that fuel our nation's economic engine and continue our path to climate recovery. Working together, as Rosie says, "We Can Do It."

Christina Panoska is program manager for Green Energy Ohio and Local Chair for the SOLAR 2007 conference. Email at Christina@greenenergyohio.org.



Get Involved!

For more information, and to register online, visit the conference website at: www.solar2007.org.
Sign-up for the full conference, one-day, or single workshops & tours.

CONFERENCE PROGRAM

Monday-Thursday, July 9-12th

Includes plenary sessions, forums, technical sessions and business meetings. Forums and technical sessions are 90-minute sessions on a focused topic. Plenary sessions feature prominent leaders in the renewable energy and economic development communities.

SPECIAL EVENTS

(You do not have to register for the full conference to sign-up for a special event)

Workshops: Saturday and Sunday, July 7-8th

Detailed information in a structured format during four to eight hour sessions. Separate registration required. Some topics include:

- Solar Hot Water Design
- Building Integrated Solar
- Green Buildings & Energy Efficiency
- Find Your Dream Job
- Women's Solar Installation
- Small Wind Power

Tours: Saturday and Sunday, July 7-8th Highlighting local attractions and renewable energy installations. Separate registration required. Tours include:

- Downtown Cleveland Tour
- NASA Glenn Research Center Tour
- 'Cleveland from the Water' Evening Cruise
- Ohio Amish Country Tour
- Oberlin College and Community Tour
- Northwest Ohio Technology Tour
- Central Ohio Sustainable Sites Tour, featuring lunch at Ohio Governor's Residence

Social Event: Tuesday evening, July 10th Scheduled at the Rock & Roll Hall of Fame. Included in the full conference registration, or it can be registered separately.

EXHIBIT HALL: Sunday-Tuesday, July 8-10th Staffed displays of renewable energy products and services by more than 100 renewable energy companies. Free.

PUBLIC DAY: Sunday, July 8th

Free access to the Exhibit Hall and the opportunity to participate in dozens of free consumer-oriented lectures held throughout the day.

GEO ANNUAL MEETING: Sunday, July 8th GEO members, partners and the public are invited to learn about GEO programming for 2007-2008 and congratulate recipients of the GEO Recognition Awards.



IN THE NEWS...(CONTINUED)



Announcing the 2007 Satellite Broadcast: Indoor Environmental Design

It's time once again folks to look ahead in our calendars to block out some time to attend a great discussion put on by the best ASHRAE society has to offer. Here's a description right from society's pages:

"This free broadcast will present specific solutions to the everyday challenges of achieving indoor environmental quality within real-world budget constraints. Speakers will describe how you can provide ventilation air that helps protect the building from mold risk, how to avoid the three most common mistakes in ventilation system design and operation, how to achieve all three goals of IAQ, thermal comfort and noise control at lower cost through better air distribution decisions, and how to provide comprehensive filtration without breaking your budget."

Thankfully again we have the great pleasure of hosting this free event at WKYC TV-3, with lunch provided by the local chapter. Reservations are required and space will limit attendance, so call Matt Nelson at 440-243-3535 now to insure your spot. Also, as in the past, we are extending an open invitation if this topic should interest someone you know, find out if they can attend and check with me to make sure that there is availability and to get them on the list. Last but not least, this is a three hour course that would qualify for three continuing professional development (CPD) hours. Hope to hear from you soon.



FEBRUARY MEETING RECAP



Our February 19th meeting was well attended with 60 members. Mr. Pete Johnson, of Siemens Building Technologies, provided an enlightening presentation on "ASHRAE Standard 62" and the utilization of the IAQ Procedure. Although his opening comments were rather alarming (i.e. remember the building fire alarm?!) our meeting settled down and eventually Pete was able to discuss the implementation of the IAQ procedure for the Brunswick Schools Performing Arts Center. This project was awarded an ASHRAE Technology Award in 2006 and was featured in the ASHRAE Journal May 2006 issue.

ASHRAE 62 allows two procedures for calculating the required ventilation air for a building, the Ventilation Rate Method and the IAQ Procedure. The ventilation rate method calculates the ventilation air based upon a prescribed CFM rate per person. At times, this can over-ventilate a space...wasting energy. Ventilation rate systems generally use standard efficiency filters and flush the space to maintain acceptable IAQ.

The IAQ procedure is a systematic review of the specific potential contaminants in the space and an investigation of the proper filtering systems to remove those contaminants. Typically, high efficiency filters are used along with some sort of chemical cleaning. For the Brunswick project, the IAQ procedure was successfully utilized to minimize OA, improve IAQ, reduce energy and create less maintenance.

Thank you Pete for sharing your insights and congratulations again on receiving the ASHRAE Technology Award. All Members are encouraged to submit projects for consideration of an award.



CHAPTER CALENDAR

March 21, 2007 NEO Expo

Location: Quality Inn in Richfield

April 16, 2007 ASHRAE Structure Location: Harry's Steakhouse

April 18, 2007
ASHRAE Satellite Broadcast
Indoor Environmental Design
Location: WKYC TV-3 (Reservation Required)

May 21, 2007 ASHRAE Jeopardy Location: Harry's Steakhouse

June 2007
ASHRAE Golf Outing