

Mid-Columbia Chapter of
the American Society of
Heating, Refrigerating and
Air Conditioning

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January 2008

The

Tumbleweed



<http://www.midcolumbia.ashraechapters.org>

Bert Phillips Presentation on Controlling Contaminants with Pressure Differentials at Christmas Dinner

The Mid-Columbia Chapter of ASHRAE held its Christmas dinner on December 11th at the Shilo Inn in Richland. Thirteen Mid-Columbia ASHRAE members and friends attended the meeting. The event started with a social half hour and a fantastic fully catered dinner. Mr. Phillips, ASHRAE Distinguished Lecturer, gave an insightful presentation on how to control contaminants movement between spaces with air pressure differential.

Mr. Phillips started the presentation with the introduction of air movement fundamentals. He then used a few excellent example projects to illustrate how to use ventilation to control contaminants in buildings. Examples included preventing building moisture problems using crawl space ventilation and reducing the risk of TB passing from the flop house area into service offices in a homeless shelter. Mr. Phillips also presented a

simple and effective method to determine the airflow differential needed to achieve target pressure differentials in hospital rooms that are to be pressurized or depressurized to keep germs in and out.

Mr. Phillips is also serving as the ASHRAE Region XI Vice Chair for Technology Transfer. At the end of the presentation, he introduced the ASHRAE Technology Awards Program to the attendees. This program, applying to new and retrofit applications in seven categories, provides an opportunity for members to gain recognition for their projects as well as to set an example for the engineering community on how to apply sound and innovative engineering concepts to practice.

Don't Miss This Month's Event

January 15, 2008

Ultra Efficient Chilled Water Plants

Details on page 3

HUD, USDA Required to Reference Standard 90.1 under New Energy Bill

WASHINGTON, D.C. – The U.S. Departments of Housing and Urban Development (HUD) and Agriculture (USDA) would be required to meet energy efficiency requirements in ASHRAE/IESNA Standard 90.1 under the federal energy bill signed into law by President Bush on Wednesday.

Under existing law, HUD and the USDA are required to write energy-efficient standards for public and assisted housing and housing with federally insured mortgages. Such standards have to be at least as stringent as ANSI/ASHRAE/IESNA Standard 90.1-1989, Energy Standard for Existing Buildings Except Residential, and Council of American Building Officials (CABO)-1992. When either 90.1 or CABO is updated, the agencies have a year to revise their standards, but this has rarely taken place.

Under the new law, HUD and USDA will be required to implement standards at least as stringent as Standard 90.1-2004 or the 2006 International Energy Conservation Code (IECC) for all new

construction and rehabilitation of public and assisted housing and housing with federally insured mortgages. Upon revision of 90.1 or IECC, HUD and the USDA have one year to update their standard to meet or exceed the revised requirements. If they do not do so within a year, all new and rehabilitation of housing covered by the federal standard will need to meet the revised IECC or 90.1, following a positive determination by the U.S. Department of Energy and HUD/USDA determination that it would not negatively impact availability or affordability of housing.

"This provides additional validation of the importance of energy savings in Standard 90.1 and also provides a baseline for all public and assisted housing and federally insured mortgage property in all states," Doug Read, ASHRAE director of government affairs, said.

Inside this issue:

Message from the President	2
This Month's Event	3
Program Calendar (2006-2007) TBD	3
Mid-Columbia ASHRAE Board and Committee Chairs	4
Future ASHRAE Meeting Dates	4



Message from the President

By Lois Payne

Another new year is here and we are ready for another trip around the sun but my, last year went by so quickly! Yet I have many happy memories from the ASHRAE Spring CRC to my recent visit in Mexico. The ASHRAE 2008 Winter Meeting is now near; I hope all who attend enjoy their visit New York City January 19-23. It seems like we are all on the go – go – go.

We have received one nomination for the ASHRAE nominee for Tri-City Engineer of the Year. I would like to remind everyone to please put the Engineers Banquet on your February calendar to support our Mid-Columbia Chapter nominee. The Mid-Columbia IEEE Chapter will be sponsoring the banquet. Please RSVP to me soon if you are available to sponsor an Engineering college student to go with you to the Engineer's Banquet in February.

Happy New Year!

Lois Payne

ASHRAE Supports Strengthened Building Code Enforcement

WASHINGTON, D.C. - ASHRAE has lent its support to legislation to strengthen building code enforcement, the Community Building Code Administration Grant Act of 2007.

The legislation, introduced by Sen. Mary Landrieu of Louisiana and Rep. Dennis Moore of Kansas, would provide federal grants to building departments to enhance public safety. The grant would provide \$100 million over five years to help local governments hire, train and equip code officials, including building and fire inspectors.

Moore spoke at a recent Congressional staff briefing, hosted by ASHRAE, which focused on Standards in the U.S. Economy: Energy Efficiency and Safety in Our Buildings.

ASHRAE Publishes User's Manual for Standard 62.1

ATLANTA – A manual to help users navigate the changes in ASHRAE's 2007 ventilation standard is now available.

The Standard 62.1-2007 User's Manual provides users with a better understanding of the design, installation and operation requirements in ANSI/ASHRAE Standard 62.1-2007, Ventilation for Acceptable Indoor Air Quality.

The standard, published last year, contains new requirements for separation of environmental tobacco smoke (ETS) spaces from ETS-free spaces, clarification of humidity control design requirements, and the inclusion of new rates for high-rise residential occupancies.

The manual provides guidance for designers and contractors to clarify the require-

ments, explains why the requirements are included (in some cases), and how to comply," Roger Hedrick, vice chair of the 62.1 committee, said.

The cost of the user's manual is \$69 (\$55, ASHRAE members). To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, or visit at www.ashrae.org/bookstore.

ASHRAE, founded in 1894, is an international organization of some 50,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.



This Month's Event

Tuesday, January 15, 2008

Ultra Efficient Chilled Water Plants

Speaker: **Terry Herron**

Description:

The presentation will be on "Ultra Efficient Chilled Water Plants": Achieving less than 0.45 kW per ton using an all variable speed plant utilizing "Hartman Loop" technology. Current typical chilled water plant design and "Best in Class" technology will be discussed.

About Terry Herron:

Mr. Terry Herron received an AAS Degree in HVAC&R from North Seattle Community College. Terry has over 28 years of professional experience in Hydronic Heating & Cooling Applications as a Manufacturer's Rep in both Seattle and Spokane.

Terry is a Past President of Inland Empire Chapter ASHRAE (1992/93) and has served as the Committee Chair for Membership Promotion for both the Inland Empire and Puget Sound Chapters. Terry also served as Committee Chair for Research Promotion for Inland Empire Chapter ASHRAE. Terry was named the Engineer of the Year by the Inland Empire Chapter ASHRAE in 1993

Since 1999, Terry has held the position of Sales Engineer for Mechanical Sales, Inc. based in Spokane, WA

Location: Clarion Inn
1515 George Washington Way
Richland, WA

When: 12:00 noon

Cost: \$20.00 Lunch and Program

RSVP: Jay Ashbaugh at (509) 735-1589 jpashbaugh@meierinc.com
Please RSVP by January 11, 2008 if you plan to attend.

Program Calendar (2007–2008)

September 11, 2007: *Low NOx Burners 101, Don Williams*

October 16, 2007: *Data Center Design, David Toralez*

November 13, 2007: *All-Climate Air-to-Air Heat Pumps, Greg Jordan*

December 11, 2007: *Controlling Contaminants with Pressure Differentials, Bert Phillips, ASHRAE DL*

January 15, 2008: *Ultra Efficient Chilled Water Plants, Terry Herron*

February 22, 2008: *Engineers Week Banquet*

March 9, 2008: *TBD, Kent Peterson, ASHRAE President*

April 16, 2008: *Characteristics and Competencies of Outstanding Leaders, Barry Benator, ASHRAE DL*

May 13, 2008: *TBD*

June ??, 2008: *Mid-Columbia ASHRAE Golf Tournament to benefit ASHRAE Research.*

Mid-Columbia ASHRAE Chapter

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The Mid-Columbia Chapter of the American Society of Heating, Refrigerating and Air Conditioning Engineers was chartered in 1981 in Richland, Washington. We are part of ASHRAE Region XI and represent ASHRAE members in Eastern Washington State.

Help Sponsor our Website with a Business Card Ad

How would you like to place your business card in front of more than seventy eastern Washington ASHRAE members? For a low \$10 an issue, we can place your business card with company logo in a prominent location in our newsletter.

Interested??? Contact
Mark Simon at (509) 377-8713
msimon@energy-northwest.com

Important Notice About Future Meeting Dates

The dates for the Winter and Annual Meetings in 2008 and 2009 are:

- **2008**, Jan. 19-23 in New York, and June 21-25 in Salt Lake City, Utah.
- **2009**, Jan. 24-28 in Chicago, and June 20-24 in Louisville, KY.



See the light...

...and learn to think outside traditional boundaries of building systems design



WHEN: March 26th-27th, 2008

WHERE: Seattle University, Pigott Hall

FOCUS: A comprehensive educational event that provides practical and technical information that participants can take back to their offices and apply to their projects.

PREVIEW: Sneak peek at the program

- sustainable healthcare facility design
- evaluating the carbon footprint of your project
- designing low exergy systems
- innovative cooling technologies
- radiant system case studies
- the big picture behind water efficiency
- optimizing interior and exterior lighting systems
- daylighting strategies
- green specifications and utilizing MasterFormat 2004
- BIM from contractor to consultant
- designing systems for sustainable operations and energy efficiency
- latest in ASHRAE resources
- the business side of green design
- product and technology expo

OFFERED BY: Puget Sound Chapters of ASHRAE and IEEE.

REGISTRATION: Open January 2008

Engineering **Vision** 2030

Education and innovation that empowers engineers to build a sustainable future.

