THE BADGERAIRE

AMERICAN SOCIETY OF HEATING, REFRIGERATING, AND AIR CONDITIONING ENGINEERS, INC.

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A PURLICATION OF THE WISCONSIN CHAPTER OF ASHRAE

Volume Number IV _ January 2007

<u>January Program – Standard 62.1-2004 with Dennis Stanke</u>

Thursday, January 18, 2007

The January chapter meeting will be a code specific meeting focusing on Standard 62.1-2004 and ventilation requirements for acceptable indoor air quality. Our distinguished speaker for the evening will be Dennis Stanke. Dennis is a Staff Applications Engineer at Trane specializing in airside systems and controls, ventilation, indoor air quality, and dehumidification, he has written numerous applications manuals, engineering bulletins and Trane Engineers Newsletters as well as numerous published articles. You may also recognize him from his regular appearances in satellite broadcasts of Trane Engineers Newsletter Live.

An active ASHRAE member, Dennis currently has served as chairperson for SSPC62.1, the ASHRAE committee responsible for Standard 62.1-2004, "Ventilation for Acceptable Indoor Air Quality." He has also served on the ASHRAE Environmental Health Committee, Standards Committee, Publishing Council and Program Committee, and actively serves on the editorial board for the ASHRAE publication "IAQ Applications."

We will also have a pre-meeting program by Earl Rudolph from Calmac. Earl will be providing us with a general presentation on ice storage systems prior to our main program.

Program Location

Alioto's

3041 N. Mayfair Rd., Milwaukee, WI

 Registration:
 4:00 p.m. - 4:30 p.m.

 Pre Meeting Program:
 4:30 p.m. - 5:30 p.m.

 Cocktails:
 5:30 p.m. - 6:00 p.m.

 Main Program:
 6:00 p.m. - 7:00 p.m.

The program cost of \$20.00 will include dinner. Checks should be payable to the "Wisconsin Chapter of ASHRAE".

PLEASE MAKE YOUR RESERVATIONS ONLINE AT <u>WWW.ASHRAE-WI.ORG</u> OR TELEPHONE YOUR RESERVATION TO MAGGIE ROLL @ 414.778.7422. PLEASE HAVE YOUR RESERVATIONS IN BY CLOSE OF BUSINESS, MONDAY, JANUARY 15, 2006.



BADGERAIRE January, 2007

PRESIDENT'S COLUMN

Hello again. I hope each and every one of you has had a pleasant holiday season, and I wish you all the best for the New Year. I would like to pass along the appreciation of the ASHRAE Wisconsin Chapter to PMSMCA, and in particular Dajen Bohacek and Ruth Herrick, for allowing us to join them at their Holiday Party. I'm sure all who attended had an enjoyable evening.

There are two topics I would like to focus on this month. The first is our January Meeting. We are fortunate to have Dennis Stanke of Trane, also Chair of the ASHRAE Standard 62.1 Committee, as our featured speaker this month. Standard 62.1 focuses on ventilation, an increasingly important Building and HVAC issue as it relates directly to indoor air quality and building energy consumption. Having had the opportunity to see one of Mr. Stanke's presentations on Standard 62.1, I can tell you he is extremely knowledgeable about this topic and is also an excellent speaker. While the State of Wisconsin does not reference this standard, it has been incorporated into many state building codes and is also widely considered to define the standard of care for ventilation design. Before dinner we will be holding our first technical session of the year. Earl Rudolph of Calmac will be presenting a session on thermal storage. We plan to offer one PDH of continuing education credit for the technical session and another for the main program. Please add a note in the comments section of the meeting sign-up form if you would like to receive credit for attending either one or both of the presentations. I believe both of these presentations will be valuable and hope to see you all there.

The second topic I would like to focus on involves three ASHRAE Wisconsin Chapter Members who have recently been advanced to ASHRAE Life Members. Bob Zeman, of Tighe-Zeman, was advanced to Life Member Grade in 2005. Jay Jorgensen, of Miller Engineering, and James Steele, of Trane, were advanced to Life Member Grade in 2006. To achieve the grade of Life Member in ASHRAE one must be at least sixty-five years of age and have accumulated thirty years as a member in good standing with the society. I feel that it is very important that we recognize these individuals for their continued contributions and commitment to

our industry. We will be recognizing our new Life Members at our January Meeting. If you have worked with or know any of these three individuals please consider attending the meeting to congratulate them on this impressive accomplishment.

If you have questions about any of the information in this newsletter please feel free to contact me at any time. I look forward to seeing you at our meeting on January 18th. Thank you.

Corey Metzger Wisconsin Chapter of ASHRAE President corey-metzger@mchsi.com

<u>ATTENTION!</u> Saving Energy in Hydronic Systems

On March 15th, 2007 the Wisconsin ASHRAE Chapter is please to announce they will be sponsoring a day-long seminar on Saving Energy in Hydronic Systems. The featured speaker for the seminar will be Roy Ahlgren, the Director of the ITT Fluid Handling's Training & Education Department, teaching courses in steam and water system through ITT Bell & Gossett's Little Red Schoolhouse in Morton Grove, Illinois. He is a past chairman of the ASHRAE Technical Committee TC6.1 Hydronic and Steam Equipment and Systems. Roy is also the author of many booklets and articles on Fluid Handling topics.

With the recent and continued push within ASHRAE to design and incorporate energy efficient systems; this seminar will assist in energy saving techniques through pumping applications. This practical course will be a great opportunity to focus on pump fundamentals, hydronic systems, pump selection, parallel & series pumping, system control, system balance, primary-secondary pumps, air management, open and closed systems, and the use of variable flow systems.

The seminar will start at 8 am with registration and refreshments beginning at 7:15 am. Handouts will be provided and food and beverages will be served for the entire day.

Seminar Location:

BADGERAIRE January, 2007

Doubletree Hotel 18155 W. Bluemound Road Brookfield, WI

Prices:

Full-Day Attendance - \$75 ASHRAE Member (\$100 Non-ASHRAE Members or at the door)

Half-Day Attendance - \$40 ASHRAE Member (\$50 Non-ASHRAE Members)

To sign up for this seminar, please email or call David Grassl at (414) 266-9231 or david.l.grassl@gasai.com. Payment is due upon registration.

ASHRAE Research:

Engineer's Role in Creating Sustainable Best Practice

Last time we discussed sustainability in terms of the dynamic relationship among economic prosperity, environmental stewardship, and social opportunity. Some view the scope well beyond the role of engineers – economic impact ok, environmental stewardship maybe, but social opportunity?

We could draw on our personal responsibility or our responsibility as members of our local community to demonstrate our role in acting in a sustainable manner – meeting our needs and aspiration without denying future generations the choice to meet their needs and aspirations. But, let focus on our professional role.

Remember Bill Coad telling us last year that he considered energy efficient design a matter of professional ethics. Our system designs will be in place for decades with their designed-in energy use burden placed on those future members of our community. Our challenge is to meet today's need while maximizing the utility of our buildings. That goes beyond energy performance alone.

Measuring building sustainability is the target of the U.S. Green Building Council LEED Rating Systems (www.usgbc.org). They provide guidelines to best sustainable practices in six categories:

- of a building by its location and layout
- Water Efficiency reduce potable water use for building systems and landscaping
- **Energy & Atmosphere** optimize energy efficiency of time to be involved in our industry. building systems by design, commissioning, and performance verification; and, minimize environmental As always, please send me your thoughts and comments. impact by alternative energy choices and management of refrigerants

4. **Materials & Resources** – reduce, reuse, and recycle building components and materials and source locally where possible

- 5. Indoor Environmental Quality maximize indoor air quality by choice of materials and designs that ensure excellent ventilation, thermal comfort, systems controllability, and access to daylight and views of the exterior environment.
- **Innovation in Design** exceptional performance of identified best practice or innovative solutions to high performance green building design.

While energy efficiency is a key engineering contribution, using the USGBC definition, engineered solutions play a critical role in Water Efficiency, Energy & Atmosphere, Indoor Environmental Quality, and Innovation in Design. The engineer plays a central role in achieving high performance in green building designs. ASHRAE Standards 90, 55, and 62 are primary references for the LEED Rating Systems.

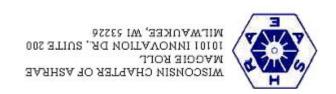
The ASHRAE Research Strategic Plan 2005 – 2010 recognizes this role in identifying its plan as "Navigation for a Sustainable Future" with specific goals to be achieved. The plan is organized in five categories of research:

- **Energy & Resources** achieve 30% reduction in building energy use by 2008, 50% by 2012, and 70% by 2015 while achieving an additional 25% reduction through use of renewable energy sources.
- **Indoor Environmental Quality** implement improvements in occupant well-being and comfort that yield 25% productivity improvement by 2015.
- Tools & Applications improve the productivity of the design process by 25% by
- **Equipment, Components, and Materials** improve environmental impact of materials, O&M productivity, and reduce energy use of HVAC/R auxiliary equipment by 50% by 2015
- 5. Education & Outreach – get the good story

1. Sustainable Sites – minimize the environmental impact This is an agenda that recognizes the critical role of the engineer in creating our sustainable future. I encourage you all to investigate it further for the opportunity it presents to you and your business. This is really a great

Jude Anders, RP Chair

Email: judeanders@sbcglobal.net



MEETING DATE / THEMES	LOCATION	TOPIC	SPEAKER
January 18, 2007 Evening Meeting	Alioto's	Standard 62.1 – 2004	Dennis Stanke
February 15, 2007 Lunch Meeting	MSOE	Wisconsin Code Review	Randy Dahmen of the Wisconsin Dept. of Commerce
March 15, 2007 All day Seminar	Doubletree Hotel	Energy Savings in Hydronics	Roy Alghren
April 19, 2006 Evening Meeting	TBA	Evaporative Cooling Techniques	TBA
May 17, 2007 Evening Meeting	TBA	TBA	TBA
June Evening Meeting	Pettit Center	Pettit Center Tour and Ice Skating	TBA

All meetings will be held the third Thursday of every month, except December.

^{*}Please note: This is a tentative schedule; topics may be subject to change.