January Meeting

Tuesday, January 8, 2013

High-Performance Run around Energy Recovery Systems

Speaker: Rudolf Zaengerle, Ph.D., President, Konvekta USA

Approved for 1.5 PDH’s

Please note that this will be a 90 minute presentation.

Membership Promotion Night &

YEA Night

Please see page 3 for additional meeting information.

Meeting Manager:

Teri Shannon
tshannon@dac-hvac.com

Where:

Embassy Suites, 550 Winter Street, Waltham, MA

Time:

5:30 – 6:00 Social / Registration
6:00 – 7:00 Dinner
7:00 – 8:30 Meeting

Meal:

Cheese Tortellini with Basil Cream Sauce
Classic Chicken Picatta
Red Velvet Cake

Cost:

ASHRAE Boston Members: $35
Non-Members / Walk-Ins: $45
ASHRAE Student Members: Free

RSVP Deadline and RSVP Cancellation for this meeting is 12:00pm on Friday, January 4, 2012

Please RSVP to Mike Gilroy at mpg@brplusa.com. Upon receiving RSVP, a confirmation email will be sent back to confirm your reservation. If you do not receive a confirmation email, please RSVP again.

You can also RSVP and pay in advance using PayPal on the ASHRAE Boston Chapter Website:

http://www.ashraeboston.org/meeting-registration.html

Thank You

Statements made in this publication are not expressions of the Society or of the Chapter and may not be reproduced without special permission of the Chapter.
Have you ever thought of sustainability in existing facilities? Do you know the value of sustainability and how it will benefit a facility ... and are you aware of what an ambitious undertaking it is. Most consultants don’t always think of the facilities managers’ busy schedule which doesn’t allow for them to learn about sustainability and or the implementation of sustainability in existing facilities.

Creating a Baseline and a Plan for Sustainable Initiatives requires you to work closely with the facilities staff and leads you through the planning phase of a sustainable initiative. You will come out of this getting a better understanding of a facilities benchmark or measuring stick for their current operation and environmental footprint. It requires the team to develop a plan to reduce that impact and articulate that plan to all the stakeholders within a facility.

Best Practices for Sustainable Implementation, require you to develop strategies to successfully accomplish your sustainable initiative goals. This also requires you to develop rubrics for measuring your accomplishments in strategic areas including energy, water, supply chain, IEQ, and others.

If you have any subjects you are looking for us to address reach out to any of our members or directly to Jim Armstrong @ jarmstrong@siemens.com. Our objective is to educate our membership in sustainability. Thinking with the end in mind and balancing the systems to meet the loads of the buildings.

FREE SUNDAY RIVER & SUGARLOAF DISCOUNT SKI VOUCHERS, SAVE $18 PER ADULT TICKET

The Boston Chapter is participating in the Sunday River/Sugarloaf corporate voucher program again this year. Each voucher entitles you to purchase up to four discounted lift tickets [$67 Adults, $58 Teen, $47 Junior/Senior] at either ski resort by presenting an ASHRAE membership card, picture ID, and voucher. The regular prices are $85/$69/$56. Contact Ed Waldman 508-405-1554, ewaldman1@verizon.net, if you would like any vouchers. There is no charge for the vouchers and there are no blackout dates. Complete rules below:

How To Use Vouchers

1. Bring your corporate voucher to any participating resorts ticket window.
2. Present your voucher, photo ID, and valid ASHRAE membership card to the ticket seller. In the absence of the individual member, immediate family members defined as spouse and children, must present some form of ASHRAE identification, plus a photo ID in order to receive the discount.
3. Each person expecting the corporate pricing must be present with the corporate voucher holder at the time of ticket purchase. The ticket seller will take the voucher in exchange for up to 4 lift tickets.
Meet the January Meeting Speaker

Speaker Information:

Rudolf Zaengerle is the President of Konvekta’s North American operation; a subsidiary of the Swiss based Konvekta AG.

He holds a Master of Mechanical Engineering degree and a PhD in Business Administration, both from the Swiss Federal Institute of Technology, Zurich. He has also studied at Harvard Business School. He was an Assistant Professor at the Swiss Federal Institute of Technology’s Energy Sustainability & Urban Planning Institute before he relocated to the USA more than 20 years ago to manage Swiss technology businesses in North America.

Presentation Information:

High-Performance Run around Energy Recovery Systems

HVAC systems are among the greatest energy consumers of large buildings - in particular lab buildings and hospitals with 100% outside air. European high-performance 'run around energy recovery systems' (RAERS) with advanced control software are operating at efficiencies of net 70-90% (based on annual energy consumption for heating and cooling), taking into account the additional electricity needed for glycol pumps and added fan power to compensate for air pressure drop in the coils.

While the thermodynamics of an energy recovery system are relatively simple, it is critical that high performance systems operate at optimum performance under varying operating parameters. With several variable input parameters (outside air/supply air/return air temperatures; air volumes; glycol volumes & temperatures), controlling and optimizing a system requires a numerical simulation based controller that allows variable amounts of heat transfer fluid to be circulated throughout the system.

In multi-functional systems, additional heat and/or cold is introduced into the glycol circuit, either to boost the heating/cooling capability of the energy recovery system from waste heat/cold sources, or to control the supply air temperature to the building to eliminate the need of separate heating/cooling coils in the supply air handlers. These features add yet another level of complexity to the controller function.

Notice to Members (and Non-Members)

In an effort to clean up our meeting mailing list, we are asking that all ASHRAE members log in and ensure their information is current and up-to-date, especially the e-mail address. We would like to minimize the amount of returned mail notices that are received plus ensure that our members are receiving the meeting notices in a timely manner. We will soon be switching to sending emails only to members at the email addresses that are listed with ASHRAE. If you are not sure that you have recently updated your information (especially email address!) please take a minute login to http://www.ashrae.org/ with your membership card and update your information. For those that are no longer members, please consider re-upping or follow the new mailing list procedure below.

For all non-members, if you wish to continue receiving notices of the meetings you must opt in by sending a specific request to remain on the mailing list. Please send your request to Enrique de los Reyes at Enrique.de.los.Reyes@mail.ashrae.org. Again this will help to keep our mailing list up-to-date. As of October 30, all non-members who have not requested to be on the mailing list in this manner will be removed from the list.

Thank you in advance for your assistance.

Regards,

Dan Denisi
Membership Promotion Chair

Enrique de los Reyes
Membership Promotion Committee

Mike Gilroy
Attendance Chair
Meeting recap

December Meeting

By: Teri Shannon

Our December meeting was a joint meeting with the ASPE (American Society of Plumbing Engineers) Chapter; our thanks to them for hosting the meeting at Lantana’s in Randolph. The speaker, Mr. Dale Powell of the Copper Development Association (CDA), provided a thoughtful presentation on the antimicrobial properties of copper and the use of it in HVAC systems.
By 1810, international trade conditions picked up. Tudor was not someone who gave up on an idea easily, so he made a second attempt at shipping ice to Havana. He built a “new and improved” ice storage facility in Havana, and was granted a monopoly on the sale and distribution of ice for 6 years. Within a short amount of time, gross sales were close to $9,000.00. However, even with this success, Tudor suffered significant financial issues. Between 1809 and 1813, Frederic made three trips to debtor’s prison and found himself spending a significant portion of his free time hiding from the Sheriff.

In 1816, Tudor built another new ice house in Havana. It was to be double the size of the facility it was replacing. It could hold approximately 150 tons of ice. His customers on the island nations were primarily coffee house owners, who used the ice to make ice cream. Sales for the first year of the new ice house were projected to be $6,500.00. During this same time-frame, the Cuban government renewed his monopolistic ice license.

Tudor made an attempt to expand his Caribbean ice distribution business to Jamaica, at a projected cost of $7,500.00. However, the ship transporting the ice was wrecked off the cost of Port Royal. Frederic was somewhat philosophical about the loss; he noted that even though he lost the ice, he saved the cost of the payment to the shipping company due to the unsuccessful delivery. He also opened an ice house in Charleston, South Carolina, even though he didn’t receive exclusivity from the local government. He spent close to $10,000.00 to obtain land and construct an ice house; prices for ice ranged from 8-1/3 (!) cents per pound for small household quantities, with a 4% discount for larger orders. He also sold insulating ice blankets for $1.00 at the ice house so that customers could get their purchases home with little loss of product. The success of the Charleston operation led Tudor to open an ice house in Savannah, Georgia in 1818.

Tudor’s financial situation appeared to be improving, so much so that he noted to one of his investors that he expected to sell close to $38,000.00 worth of ice by years’ end. However, nine short months later, Tudor was once again facing time in debtor’s prison. This could have been in part due to the depression which ran from 1819-1820. By 1821, Tudor considered his ice business on the verge of failure and imminent collapse, and past his ability to resurrect it. As a result of the previous 17 years of financial stress, Tudor suffered a nervous breakdown in 1822. His brother-in-law, Robert Gardiner, who believed in Fredric’s obsession, helped nurse him back to health, and managed the business in Fredric’s absence.

In 1833, Frederic was fully recovered and was once again thinking big. He had been contacted by a local businessman from Calcutta, India about the possibility of procuring a shipment of his ice. Part of the agreement was to have local interests construct the ice houses to Fredric’s specification if he would deliver the ice. As a result, Fredric’s investment and financial exposure was significantly reduced and he quickly accepted the offer. In short order, Fredrick loaded a ship (the “Tuscany”) with 200 tons of ice and sent it across the seas for Calcutta, India. The natives referred to the ice as “crystal blocks of Yankee coldness”. This venture turned out to be enough of a success that it reopened the trade routes between India and Boston and help to save (for a short time) the fortunes of the port of Boston’s East India commerce.

Next month: The competition grows
MEMBERSHIP PROMOTION

By: Dan Denisi

Happy New Year ASHRAE Boston, I hope the start of a new year is going very well for each of you. The next Boston Chapter meeting is Tuesday January 8th and the topic is “High Efficiency Run around Energy Recovery Systems.” January’s meeting is a membership and YEA promotion night. As always, please remember to extend an invitation towards anyone you think would be interested in attending the monthly meetings.

I would also like to encourage all members to verify that your online ASHRAE bio is current and up-to-date, particularly your e-mail address. As this is the main method of providing Society and Chapter news to you, including meeting notices and dues renewal notices, it’s important the chapter have the correct information on file.

As a side note, the Membership Promotion Committee could use some additional volunteer(s). If you are looking to become more involved with the Boston Chapter and not quite sure how, please contact me at dandenisi@yahoo.com with any and all questions.

May everyone continue to have a safe and enjoyable New Year.

STUDENT ACTIVITIES

By: Dan Diorio

We are unofficially halfway through the ASHRAE season. After the New Year, we need to make our push for Student Activities points! The easiest way to do that is to continue to have good student member turnout at the monthly meetings. There are still 4 meetings left. We’ll rack up the rest of our points with student activities this coming spring.

Given that we’re at the midway point of the season, it’s a good time for a check-in! I’ve been working on planning activities, but how are you guys doing? If you recall, I stressed the importance of getting more entries into the Society’s Student Design Competition. Please let me know if you’ve registered and started working. I would really be interested in seeing what you’re working on and I would be glad to offer help. Otherwise, go to the Student Zone page on the ASHRAE Society website (www.ashrae.org) to get more information about how to participate. Good luck!

There’s still time to register for the 2013 ASHRAE Society Winter Conference. Take a look at the Student Guide for the event on the Student Zone page. There are several technical seminars and facility tours geared toward students.

Please drop me a line at daniel.diorio.2@bc.edu if you’re interested in helping out with the Student Activities Committee or to suggest ideas for student activities. Happy Holidays. See you after the New Year.

2012 Product Guide

The updated edition of the Product Guide directory has been posted on the ASHRAE Boston website at www.ashraeboston.org.

The Product Guide includes a cross referenced list of local engineers, representatives, wholesalers, contractors and affiliated organizations engaged in the HVAC field.

Please look out for the email from our committee next year for more information on electronic 2013 Roster & Product. Any questions, please contact Stacie Suh at stacie@stebbinsduffy.com and Teri Shannon at tshannon@dac-hvac.com.
Did you know that 100% of the money donated to Research Promotion actually goes towards Research? In fact our Region receives over $4 toward research projects and grants for every $1 donated to ASHRAE Research Promotion.

ASHRAE has a general fund that pays for the remaining expenses, such as salaries, travel, reimbursements, etc. So when you donate to ASHRAE Research, every dollar actually goes into the funding of research development that gives us the information we use on a daily basis from the ASHRAE Handbooks and various other standards and information material that ASHRAE supplies!

This year our Chapter Goal is $21,055, slightly up from the previous two years. Please help out the Chapter by donating to ASHRAE Research Promotion today, no amount is too small.

Mission: To improve the quality of life and to answer tomorrow's questions through research TODAY.

Over $2 million is raised annually to help fund $16 million in research projects and student grant-in-aides. There are over 80 research project and student grant-in-aides going on.

Research is used to update the Society's standards and guidelines.

Contributions come from more than 6,700 members, non-members, and companies. 100% of all funds raised go directly to research projects that support the HVAC&R industry.

Active research projects are conducted all around the world at various universities and organizations.

ASHRAE is qualified 501(c)3 and all contributions are tax deductible.

Please fill out the form in this newsletter and mail it to me with whatever contribution you can make or you can go to the ASHRAE Boston website at www.ashraeboston.org.

Mailing Address: BR+A Consulting Engineers
c/o Patrick Duffy
311 Arsenal St.
Watertown, MA 02472

Click on the Donation Form under Research & Promotion, or go there directly with this link: http://www.ashraeboston.org/researchpromo/donation-form.html

Credit card payments can also be made when via Society's ASHRAE website via this link: https://xp20.ashrae.org/secure/researchpromotion/rp.html

I would like give a big THANK YOU the following members and Companies for making donations to RP!

**SY 2012 – 2013 December Donors**

Robert G. Andrews, Jr., PE
Michael Daigneault
Paul J. Hanbury, PE
Kirschner Associates, Inc.
Every month, prior to the Main Program, the Boston Chapter of ASHRAE’s Board of Governors meet to discuss Chapter business. This article, based on the Secretary’s Meeting Minutes, shall serve as an informative summary for members as to what is happening behind the scenes of the Boston Chapter. Please feel free to contact me with any questions or for additional information.

Meeting Date: December 11, 2012 at 4:45 PM

The following items were discussed at the Board of Governors meeting that took place at Embassy Suites in Waltham.

Current BOG and Committees
Per Region 1, all committee should seek two other members to have total of three members involved in each committee.

Redesign of Boston Chapter Website
Steve Rosen (Website Committee Chair) is working with the web designer to redesign the website.

Product and Roster Guide
The committee will setup a conference call to discuss the 2013 product and roster guide.

YEA
By: Siobhan Carr

Hello YEA!

Stacie and I would like to thank all of you for helping us lead a very successful toiletetry drive for Father Bill’s Place! We were able to make a wonderful contribution to an organization that was in great need!

We hope you enjoyed your holidays and we would like you to know we are working on some exciting new activities for our group to participate in! Please let us know if you would like to become more involved in our group! And do not be afraid to reach out to fellow young engineers who might not be familiar with YEA just yet.

YEA events are held throughout the year and we would really appreciate your input. Please feel free to send ideas and comments to BostonYEA@gmail.com.

Be sure to join Young Engineers in ASHRAE (YEA) on Facebook! www.facebook.com/ashraeYEA#!/ashraeYEA

Do you get the ASHRAE YEA Connection Newsletter? Be sure to subscribe to the newsletter for up to date information on YEA events. To subscribe please contact youngengineers@ashrae.org.

Presidential Award of Excellence
Boston Chapter - 2012-2013

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<tr>
<th>Chapter Members</th>
<th>Membership Promotion Points</th>
<th>Student Activities Points</th>
<th>Research Promotion Points</th>
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<th>Chapter Organization Points</th>
<th>Chapter Technology Transfer Points</th>
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Congress Passes Federal Building and Industrial Energy Efficiency Bill

Last week the U.S. House and Senate passed the American Energy Manufacturing Technical Corrections Act (H.R.6582), offering up a victory to building energy efficiency advocates. The bill has been presented to the President, who is expected to sign it into law. The bill contains several provisions of specific interest to ASHRAE, including:

Coordination of Research and Development

Requires the U.S. Department of Energy (DOE) to establish collaborative R&D partnerships to promote the commercialization of new industrial energy and water efficiency technologies and processes.

Best Practices for Advanced Energy Metering

Requires DOE to coordinate with the U.S. Department of Defense and U.S. General Services Administration to issue a report on best practices for the use of advanced energy metering in federal facilities and equipment.

Federal Energy Management and Data Collection

Requires federal buildings to publish energy and water consumption data on an individual facility basis and improve energy and water management.

Several of these provisions were drawn from the Energy Savings and Industrial Competitiveness Act (S.1000), also known as Shaheen-Portman, which ASHRAE has been significantly involved with. For additional information contact Mark Ames, ASHRAE Manager of Federal Government Affairs, at mames@ashrae.org or 202-833-1830.

Senate Finance Committee Holds Hearing on Building Energy Efficiency Tax Issues

This week the U.S. Senate Finance Committee held a hearing on several commercial, residential, and industrial energy and water efficiency tax provisions that are up for possible alteration and extension, including 25C (existing home energy efficiency improvement credit), 45L (new home energy efficiency credit), and 179D (commercial building energy efficiency deduction). The 179D deduction is of particular interest to ASHRAE because energy savings over Standard 90.1-2001 are used to qualify for the deduction.

Specific proposals discussed at the hearing included:

- Commercial Building Modernization Act (S.3591)
- Cut Energy Bills at Home Act (S.1914)
- Expanding Industrial Energy and Water Efficiency Incentives Act (S.3352)

All three bills were introduced by Senators Olympia Snowe (R-ME) and Jeff Bingaman (D-NM) – both of whom are retiring at the end of this year. This change in leadership, combined with broader discussions of tax policy overhaul, have created additional room for debate over how to best incentivize the private sector to invest in building energy efficiency. This week’s hearing served as a forum for discussing these issues, which will play prominently in the next Congress that begins next month.

For additional information on the hearing, including witness testimony, visit http://ow.ly/g57UP.
Senior Mechanical Engineer

Integrated Design Group is a 65+ person architecture and engineering firm specializing in data center design. Nine years young, the firm is revolutionizing the way people think about and design data centers. Integrated Design Group's outstanding growth this year includes several new clients, many great projects for existing premier clients and recognition this year by the Boston Business Journal Pacesetters, Building Design & Construction's Giants, Inc. 500/5000 and Zweig White Hot Firms lists.

We are currently seeking a Mechanical Engineer with BSME or equivalent degree and 10+ years of experience in HVAC design. The ideal candidate will be detail-oriented, and have good verbal and written communication skills and critical thinking ability. Central plant systems, comfort and process HVAC systems. Data centers and critical facilities is our main business focus. Willingness to design in autocad/3d and assume progressive responsibility is a must. We offer above average benefits, salary, and opportunity in a growth industry.

Integrated Design Group offers competitive salaries and an outstanding benefits package which includes medical insurance, a 401(k) with company contribution, Short-Term and Long-Term Disability Insurance, Life Insurance, Bonus Opportunities, Professional Development compensation, and more. Please read more about us at www.idgroupae.com.

Please Email a cover letter and resume to resume@idgroupae.com.
**ASHRAE BOSTON**

**UPCOMING EVENTS**

Visit www.ashraeboston.org/index.html for more information.

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**January Meeting**
When: January 8, 2013
Where: Embassy Suites, Waltham

**February Meeting**
When: February 12, 2013
Where: Embassy Suites, Waltham

**March Meeting**
When: March 6, 2013
Where: Embassy Suites, Waltham

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**Sustainable Performance Institute**

**UPCOMING EVENTS**
Visit http://sustainable-performance.org/events for more information. All event location is at 38 Chauncy St, 7th FL, Boston, MA 02111.

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**AFE Chapter 74-Worcester Area-Central MA**

**UPCOMING EVENTS**

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**USGBC MASSACHUSETTS CHAPTER**

**UPCOMING EVENTS**
Visit www.usgbcma.org for more information.

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**IFMA BOSTON CHAPTER**

**UPCOMING EVENTS**
Visit http://www.ifmaboston.org/events.html for more information.

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**AEE NEW ENGLAND CHAPTER**

**UPCOMING EVENTS**

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**IBPSA BOSTON CHAPTER**

**UPCOMING EVENTS**

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**WEBMASTER’S NOTES**

By: Steve Rosen

- The ASHRAE Boston website www.ASHRAEBoston.org will be redesigned as we start our second century!
- After our 100th Anniversary Gala Celebration (photos on the website!) this past August, our website designer Donna Harrington of Avant-garde Graphics, Inc. will be revamping our website!
- We will be keeping the site current with information. Check back often!
- On the Employment page (under the Chapter Updates section), not only will you see job opportunities, but we are now accepting resumes to post for free from any ASHRAE member in good standing looking for work!
- Let employers find you on the ASHRAE Boston website! We will continue this year to post past meeting presentations for our members to review, and our Chapter is continuing our efforts to reduce waste by eliminating printed handouts at our meetings. As always you will also be able to link to the following:
  - Chapter officers and committee chairs contact information (who’s who)
  - Chapter monthly meeting info (when, what, where)
  - Region I website and view the Chapter history
  - Sign up for the e-mailed newsletter
  - ASHRAE membership information
  - Current chapter newsletter, past newsletters
  - Upcoming events and future meetings
  - Other functional Chapter committee pages
  - Membership, RP, SA, Programs, CTT
  - Most recent and past BOG/Meeting minutes
  - Online monthly meeting payment system
Society News

Chiller Efficiency Improvements Proposed for Standard 90.1

ATLANTA – Chiller efficiencies for air and water cooled chillers would be boosted to more than 20 percent under a proposed addendum to the ASHRAE/IES energy standard.

Proposed addendum ch to ANSI/ASHRAE/IES Standard 90.1-2010, Energy Standard for Buildings Except Low-Rise Residential Buildings, changes the requirements for air and water cooled chillers as defined in section 6.4.2.1 and the efficiency requirements listed in table 6.8.1C. This change is a continuation of the efficiency improvements that were implemented in 2010 by further improving the efficiency requirements, according to Dick Lord, a member of the committee who developed the proposal through a working team of the Air-Conditioning, Heating, and Refrigeration Institute (AHRI) chiller section.

Addendum ch is open for public review from Nov. 30, 2012-Jan. 14, 2013. For more information, visit www.ashrae.org/publicreviews.

In 2010, a Path B was added to the standard for part load intensive water cooled chillers. Proposed addendum ch would expand Path B by adding requirements to include air cooled chillers. Also as part of this change, efforts were made to bring the efficiency requirements for water cooled positive displacement and centrifugal chillers together while considering the available technology, and to chillers to be applied at other application conditions where one technology may better suited than the other. If approved, the new efficiency requirements would go into effect on Jan. 1, 2015.

The proposed efficiency requirements in addendum ch increase annual energy savings to 23.1 percent vs. Standard 90.1-2004 and 8.3 percent vs. Standard 90.1-2010. In 2010, the overall weighted average savings resulted in a 16.2 percent improvement in chiller annualized energy use vs. Standard 90.1-2004.

Lord noted the average payback was calculated at 6.3 years, given some units that exceed the scalar limits. Chiller manufacturers are aware of this and know that redesign and cost reduction will be required, but do support the proposal, he said. Lord also noted that we are reaching maximum technological limits at a component level and that in the future the industry will have to look at the full HVAC system for further improvements. AHRI is in the process of forming a new working group to address systems approaches for efficiency improvements and will work closely with Standard 90.1.

In addition, improvements also were made to the requirements to clarify their use. AHRI has recently updated the AHRI 550/590 rating standard that is used for the rating of chillers and its certification program. As part of this effort, AHRI developed a hard metric standard with slightly different rating conditions than the inch pound (I-P) ratings and have released it as AHRI 551/591. For the International System of Units (SI) rating, the change was reflected in the ratings as well as revising the reference to the AHRI rating standard to include AHRI 551/591.

The Standard 90.1 committee also opted to exclude chillers when the leaving condensing temperatures are greater than 115F from the equipment efficiency requirements of Table 6.8.1C. This proposed clarification stems from the fact that high-lift, heat reclaim chiller applications often use a different compressor and sometimes a different refrigerant. The intention of using heat reclaim chillers is to increase system efficiency, but the effect on overall system efficiency cannot be assessed at standard cooling design conditions, Lord said. AHRI is developing rating requirements, test procedures and certification for heat reclaim chillers as well as heat pump chillers.

ASHRAE, founded in 1894, is a building technology society with more than 50,000 members worldwide. The Society and its members focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability within the industry. Through research, standards writing, publishing and continuing education, ASHRAE shapes tomorrow’s built environment today.

For Release: December 12, 2012 Contact: Jodi Scott/Public Relations/678-539-1140 or jscott@ashrae.org
Society news

ASHRAE Learning Institute
Seminars & Courses at ASHRAE’s Winter Conference and AHR Expo in Dallas, TX

2 WAYS TO REGISTER
Internet: www.ashrae.org/dallascourses
Phone: Call 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)

Full-Day Professional Development Seminars
$485/$395 ASHRAE Member -- Earn 6 PDHs/AIA LUs or .6 CEUs

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<td>The Commissioning Process in New &amp; Existing Buildings</td>
<td>Saturday, Jan 26</td>
<td>8:00 a.m. to 3:00 p.m.</td>
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<tr>
<td>Complying with Standard 90.1-2010</td>
<td>Tuesday, Jan 29</td>
<td>9:00 a.m. to 4:00 p.m.</td>
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<tr>
<td>Data Center Energy Efficiency</td>
<td>Saturday, Jan 26</td>
<td>8:00 a.m. to 3:00 p.m.</td>
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<tr>
<td>Energy Modeling Best Practices and Applications: HVAC/Thermal</td>
<td>Tuesday, Jan 29</td>
<td>9:00 a.m. to 4:00 p.m.</td>
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<tr>
<td>Healthcare Facilities: Best Practice Design &amp; Applications</td>
<td>Saturday, Jan 26</td>
<td>8:00 a.m. to 3:00 p.m.</td>
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Half-Day Short Courses
$159/$119 ASHRAE Member -- Earn 3 PDHs/AIA LUs or .3 CEUs

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<tr>
<td>Air-to-Air Energy Recovery Fundamentals</td>
<td>Sunday, Jan 27</td>
<td>2:00 p.m. to 5:00 p.m.</td>
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<tr>
<td>Humidity Control: Applications, Control Levels and Mold Avoidance</td>
<td>Sunday, Jan 27</td>
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<tr>
<td>Optimization of HVAC Systems &amp; Components: Techniques &amp; Real-World Examples</td>
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<td>Commissioning Process &amp; Guideline 0</td>
<td>Monday, Jan 28</td>
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<tr>
<td>Evaluating the Performance of LEED®-Certified Buildings</td>
<td>Monday, Jan 28</td>
<td>2:45 p.m. to 5:45 p.m.</td>
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<tr>
<td>Air-to-Air Energy Recovery Applications: Best Practices</td>
<td>Monday, Jan 28</td>
<td>8:30 a.m. to 11:30 a.m.</td>
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<tr>
<td>Energy Management in New and Existing Buildings</td>
<td>Tuesday, Jan 29</td>
<td>9:00 a.m. to 12:00 p.m.</td>
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<tr>
<td>Application of Standard 62.1-2010: Multiple Spaces Equations &amp; Spreadsheet</td>
<td>Monday, Jan 28</td>
<td>8:30 a.m. to 11:30 a.m.</td>
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<tr>
<td>Combined Heat &amp; Power: Design through Operations</td>
<td>Monday, Jan 28</td>
<td>8:30 a.m. to 11:30 a.m.</td>
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<tr>
<td>Optimization of HVAC Systems &amp; Components: Techniques &amp; Real-World Examples</td>
<td>Tuesday, Jan 29</td>
<td>9:00 a.m. to 12:00 p.m.</td>
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<tr>
<td>Understanding Standard 189.1-2011 for High-Performance Green Buildings</td>
<td>Monday, Jan 28</td>
<td>2:45 p.m. to 5:45 p.m.</td>
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<tr>
<td>Avoiding IAQ Problems</td>
<td>Tuesday, Jan 29</td>
<td>9:00 a.m. to 12:00 p.m.</td>
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<tr>
<td>Introduction to Ultraviolet Germicidal Irradiation (UVGI) Systems</td>
<td>Monday, Jan 28</td>
<td>2:45 p.m. to 5:45 p.m.</td>
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<tr>
<td>Designing Toward Net Zero Energy Commercial Buildings</td>
<td>Tuesday, Jan 29</td>
<td>1:00 p.m. to 4:00 p.m.</td>
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<tr>
<td>Understanding &amp; Designing Dedicated Outdoor Air Systems</td>
<td>Tuesday, Jan 29</td>
<td>1:00 p.m. to 4:00 p.m.</td>
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<tr>
<td>Laboratory Design: The Basics and Beyond</td>
<td>Tuesday, Jan 29</td>
<td>1:00 p.m. to 4:00 p.m.</td>
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HVAC Design Training
Jan 14-18, 2013 • Jan 30-Feb 1, 2013 (Level I only) • Mar 18-22, 2013 • Jun 3-7, 2013 • Aug 12-16, 2013

HVAC Design: Level I - Essentials
Gain practical skills and knowledge in designing, installing and maintaining HVAC systems that can be put to immediate use. The training provides real-world examples of HVAC systems, including calculations of heating and cooling loads, ventilation and diffuser selection using the newly renovated ASHRAE Headquarters building as a living lab.

HVAC Design: Level II - Applications
Developed by industry-leading professionals, the workshop provides participants with advanced level information about designing, installing and maintaining HVAC systems that can be put to immediate use. Participants will gain an in-depth look into Standards 55, 62.1, 90.1, and 189.1 and the Advanced Energy Design Guides, as well as a range of other HVAC topics including: HVAC equipment and systems; energy modeling; designing mechanical spaces; designing a chiller plant; and BAS controls.

Visit www.ashrae.org/hvacdesign to register
ASHRAE Society Updates November 2012

Dallas Conference News

ASHRAE Conference in Dallas – Advance Registration Ends December 31!

Advance registration for ASHRAE's 2013 Winter Conference, Jan. 26-30, Dallas, Texas closes on Dec. 31. The technical program features more than 200 sessions addressing energy conservation; facility management; standards, guidelines and codes; HVAC&R systems and equipment; HVAC&R fundamentals and applications; and refrigeration. One particular track of note is Industrial and Transportation Ventilation, focusing on the industrial and manufacturing sector prevalent in Texas. The full Technical Program offers the opportunity to earn a year's worth of PDHs, NY PDHs, AIA LUs and LEED AP credits and runs Jan. 27-30.

Visit the YEA Hospitality Suite in Dallas!

Attention young professional members age 35 and younger! You are invited to visit the YEA Hospitality Suite on Sunday, Jan. 27, from 4-7 p.m. The suite offers social and networking opportunities and light refreshments will be served.

For more information on Young Engineers in ASHRAE and their activities, please visit www.ashrae.org/yea.

Student/ Young Engineers in ASHRAE (YEA) Mixer, 5:00 – 6:30 PM, FREE w/Registration

As students transition from college to the professional world, this opportunity to meet and greet young professionals in ASHRAE provides students with the opportunity to get in-depth information about the industry and growth opportunities within ASHRAE. Food, drinks and prizes will be available. The Student/YEA mixer is Saturday January 26.

Shop the ASHRAE Merchandise Store Online and in Dallas

The ASHRAE Merchandise store has added several new items to both the online store and the live location at the Dallas Winter Conference. If you need gifts for a chapter event or for a colleague, the ASHRAE Merchandise Store is the place to shop.

Here are some new items you can buy today!

ASHRAE Sport Cup - $10
ASHRAE Baseball Cap in Pink and Stone! - $15 each
ASHRAE Men's Black Golf Shirt - $30
ASHRAE Men's Blue Golf Shirt - $30

See what's new at www.ashrae.org/merchandise
ASHRAE Honors and Awards – Opportunities for Recognition of Outstanding Achievements

Submitted by J. Thomas Sobieski,

2012-13 Honors and Awards Committee Personal Awards Subcommittee Chair

Each year, ASHRAE recognizes professionals who are making strides in the industry. Do you know that ASHRAE’s awards fall into six categories?

1. Personal Honors
2. Personal Awards for General Society Activities
3. Personal Awards for Specific Society Activities
4. Paper Awards
5. Society Awards to Groups or Chapters
6. Chapter and Regional Awards

There are two important deadlines for submission of nominations to the Society Honors & Awards (H&A) Committee:

December 1:
Honorary Member
Fellow
F. Paul Anderson
Distinguished Public Service
Hall of Fame
Pioneers of the Industry

May 1:
Louise & Bill Holliday
Distinguished Fellow
Andrew T. Boggs Service
Distinguished Service (DSA)
Exceptional Service (ESA)
Distinguished Fifty-Year Member

There are other Awards, such as the E. K. Campbell Award of Merit, the Lincoln Bouillion Award and the John F. James International Award to name a few, that are recommended by selecting bodies other than the H&A Committee. Details such as criteria, selecting body, other deadlines, required documentation and nomination forms about all awards can be found at http://www.ashrae.org/honors in easy to read text, via spreadsheet and PowerPoint format. If you need additional information, guidance and/or have a question(s), please feel free to contact Rosy Douglas at ASHRAE Headquarters, rdouglas@ashrae.org.

Are you aware that you can “self nominate” for the Distinguished Service Award (DSA) and the Exceptional Service Award (ESA)? Since these awards are granted on the basis of a point count for service to ASHRAE, you are the most knowledgeable person to determine your past services to the Society. Just be sure that your “bio” (ASHRAE Biographical Record) on the website is up to date and accurate (no double counts such as points for member and chair of the same committee for the same time period) and that your “bio” list starts and end dates for each activity.

Remember that members can only be recognized for services and/or outstanding technical achievements by the granting of ASHRAE Honors and Awards if members take the time and effort to make nominations. For forms and information, visit the H&A Web page at www.ashrae.org/honors.
<table>
<thead>
<tr>
<th>Date</th>
<th>Main Program</th>
<th>Speaker</th>
<th>PDH Credits</th>
<th>Meeting Manager</th>
<th>Location</th>
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<tbody>
<tr>
<td>September</td>
<td>LEED Platinum Building Tour</td>
<td>TBD</td>
<td>N/A</td>
<td>Stephen Nicholas</td>
<td>Weston Corporate Center</td>
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<td>Tuesday, September 18, 2012</td>
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<td>October</td>
<td>Refrigeration - The Now and Future and Engineering Challenges &amp; Sustainable Solutions in Supermarkets</td>
<td>Steve Friedman &amp; Mark Cambria</td>
<td>2.0</td>
<td>Stacie Suh</td>
<td>Embassy Suites, Waltham</td>
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<tr>
<td>Tuesday, October 9, 2012</td>
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<tr>
<td>November</td>
<td>SMACNA Facility Tour</td>
<td>John Hamilton</td>
<td>N/A</td>
<td>Bob Persechini</td>
<td>SMACNA Boston, Dorchester</td>
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<td>Tuesday, November 13, 2012</td>
<td>History/Research Promotion</td>
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<td>December</td>
<td>Soldering &amp; Brazing of Copper Piping Systems</td>
<td>TBD</td>
<td>TBD</td>
<td>Dan Diorio</td>
<td>Lantana’s, Randolph</td>
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<td>Tuesday, December 11, 2012</td>
<td>Joint Meeting with ASPE</td>
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<tr>
<td>January</td>
<td>High Efficiency Run around Energy Recovery Systems</td>
<td>Rudolf Zengerle</td>
<td>1.5</td>
<td>Teri Shannon</td>
<td>Embassy Suites, Waltham</td>
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<td>Tuesday, January 8, 2013</td>
<td>Membership/YEA</td>
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<td>February</td>
<td>Energy Efficient Design with Electronically Controlled Pumps</td>
<td>Bill Reid</td>
<td>TBD</td>
<td>Stephen Nicholas</td>
<td>Embassy Suites, Waltham</td>
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<td>Tuesday, February 12, 2013</td>
<td>Past President’s/YEA</td>
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<td>March</td>
<td>Organic Rankine Cycle</td>
<td>TBD</td>
<td>N/A</td>
<td>Jim Armstrong</td>
<td>Embassy Suites, Waltham</td>
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<td>Wednesday, March 6, 2013</td>
<td>Joint Meeting with AEE</td>
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<tr>
<td>Saturday, March 9, 2013</td>
<td>Student Night/Research Promotion</td>
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<tr>
<td>April</td>
<td>Upcoming Challenges to LEED Energy Credits</td>
<td>Chris Shaftner</td>
<td>TBD</td>
<td>Bob Persechini</td>
<td>Embassy Suites, Waltham</td>
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<tr>
<td>Tuesday, April 9, 2013</td>
<td>Student Night/Membership Promotion</td>
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<tr>
<td>May</td>
<td>Installation of Officers</td>
<td>TBD</td>
<td>N/A</td>
<td>Teri Shannon</td>
<td>TBD</td>
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<tr>
<td>Tuesday, May 14, 2013</td>
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<tr>
<td>June</td>
<td>Golf Outing</td>
<td>N/A</td>
<td>N/A</td>
<td>Bill Garvey</td>
<td>Halifax Country Club, Halifax, MA</td>
</tr>
<tr>
<td>Monday, June 3, 2013</td>
<td>Research Promotion</td>
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</tbody>
</table>
### OFFICERS

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siobhan@andelmanlelek.com
**ASHRAE RESEARCH**

**ASHRAE Boston Chapter Contributors**

<table>
<thead>
<tr>
<th>Individual Contributors</th>
<th>Corporate Contributors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allan Ames</td>
<td>Paul J. Hanbury, PE</td>
</tr>
<tr>
<td>Darcy Carbone</td>
<td>Sarah Maston</td>
</tr>
<tr>
<td>Michael Carr</td>
<td>Dhanbir Nayar, PE</td>
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<tr>
<td>Michael Daigneault</td>
<td>Stephen Nicholas</td>
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<tr>
<td>Abigail Day</td>
<td>Leslie Norford</td>
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<tr>
<td>David DeMoura, PE</td>
<td>Roselin Osse</td>
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<td>Kimberly DeYoung</td>
<td>Paul Padua</td>
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<td>Dan Diorio</td>
<td>Jennifer Paige</td>
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<td>Richard Dirienzo</td>
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<td>Patrick Duffy</td>
<td>Steven Rosen</td>
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<td>Gary Elowitz</td>
<td>Albert Santoro</td>
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<td>William Garvey</td>
<td>Teri Shannon</td>
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**CALL Pat Duffy NOW!** at 617-925-8253, or [pjd@brplusa.com](mailto:pjd@brplusa.com)

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Name:_____________________________________________________________________________________________

Company: __________________________________________________________________________________________

Address: ___________________________________________________________________________________________

TEL: _____________________________________________________

**Individual contributions of $100 or more and Corporate contributions of $150 or more receive this year’s Commemorative Coin and Honor Roll Contribution status.**

<table>
<thead>
<tr>
<th>INDIVIDUAL</th>
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<td>Other: _________</td>
<td>Other: _________</td>
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</tbody>
</table>

**NorthEastAire**

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