January Meeting
Tuesday, January 14, 2014
Main Meeting:
DOAS: Design vs. Actual Operation
Approved for 1.0 PDH
Speaker: Jason Burbank
Tech Session:
Chilled Beam Application, Design & Selection for DOAS Systems
Speaker: George Hoekstra

Meeting Manager:
Dan Denisi
dandenisi@yahoo.com

Where:
Embassy Suites, Waltham, MA

Meal:
Baby Field Green Salad
Chicken
Chocolate Decadence Cake with Berry Coulis

Time:
5:30—6:15  Technical Session
5:30—6:00  Social/Registration
6:15 – 7:00  Dinner
7:00 – 8:00  Main Presentation

Cost:
ASHRAE Boston Members:  $40
Non–Members / Walk-Ins:  $50
ASHRAE Student Members:  Free

A Dedicated Outside Air System (DOAS): Design vs Actual Performance

A dedicated outside air system (DOAS) with heat recovery and demand controlled ventilation is an integral part of the energy performance anticipated in a LEED Gold Campus Police Station. Measurement and verification efforts showed building energy use at 1.7 times predicted and pointed to the DOAS as underperforming in comparison to the energy model. This presentation describes the system design features, their initial successes and failures, and the eventual performance levels obtained.

Please register online whether pre-paying with credit card / PayPal or paying with cash or check at meeting at www.ashraeboston.org. RSVP by noon on Thursday, January 9.

If you have any questions, you may contact Mark LaFrance, Attendance Chair, at ashraebostonattendedance@outlook.com.

Thank You
PRESIDENT’S MESSAGE

By: Teri Shannon

The Boston Chapter December meeting was our annual joint meeting with ASPE, and it was again well attended. Paul Delude of Griswold Controls provided a discussion on flow control as well as a demonstration using a working model. Steve Nicholas, Research Promotion Chair, provided an update on where the Chapter stands with our RP goal and made a call out for volunteers on the Research Promotion Committee. Please see the meeting recap in the newsletter for more details.

This month’s meeting will be held on Tuesday, January 14, and will be on a case study on Dedicated Outdoor Air Systems (DOAS) which will compare design vs. actual performance. Jason Burbank of UMass Amherst will be our speaker. January will be a Membership Promotion Night along with YEA Night. We look forward to having you join us.

As we come into the New Year, we have many exciting events to look forward to including:

- **Tech Sessions** – We will continue to provide technical sessions prior to each monthly meeting. The Chapter is open to suggestions on topics and speakers for these sessions. Please feel free to contact me with your input.

- **New Product & Energy Show** - The Boston Chapter’s Biennial Product Show will be held Tuesday, April 8. Along with the exhibit of products, there will be six (6) one hour seminars during the day. If you wish to reserve a booth, contact Jeff Schultz at jschultz@eypae.com.

- **ASHRAE Webcast** – “Buildings in Balance: IEQ and Energy Efficiency” – April 17, 1:00 PM – 4:00 PM. We are working on details to host this event to our members – stay tuned for details.

- **Harpoon Brewery Tour** – We are currently working on scheduling a refrigeration tour at the Harpoon Brewery, to be held in April. Stay tuned for details.

- **Product Guide** – The 2014 Product Guide is currently in progress and is scheduled to be published electronically in early April. If you wish to have your line card included, please contact Nick Ramondo at nramondo@brplusa.com.

Finally I would to mention that the Boston Chapter has many committees that can use volunteers. If you are interested in becoming more involved with Boston ASHRAE, assisting on a committee is a great way to start! Please contact me for the list of available committees and opportunities.

As always, I am open to your questions, comments and/or suggestions, so please do not hesitate to contact me. I look forward to seeing everyone at the upcoming meetings.

Teri Shannon, President

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**December Trivia**

**Question A:** Who is the largest VAV box manufacturer?

**Answer:** The Carrier Corporation - Syracuse, NY.

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EDITOR’S NOTE

By: Stephanie Lafontaine

Materials for the February newsletter are due by **January 17, 2014**. Please submit employment/want ads in .pdf, .doc or .jpg format. A company logo may also be included. Please send me any ideas you would like to share or include in next month’s issue. Please see the website for additional information www.ashraeboston.org.

For more information, please call or e-mail me at: (857) 221-5942, northeastaire@gmail.com
Meet the January Speakers

Main Dinner Presentation: Jason Burbank, UMass Amherst

Jason Burbank serves as Campus Energy Engineer for the UMass/Amherst Physical Plant providing engineering support to the maintenance and operation of campus energy systems. A licensed mechanical engineer in Massachusetts he has been with the University since 1985. He holds a Bachelor’s degree from WPI and a Master’s degree from UMass/Amherst, in mechanical engineering. He regularly teaches an upper level engineering course in building HVAC systems and energy analysis.

Technical Session: George Hoekstra, Barcol Air

George Hoekstra pursued his engineering degree while working full time as a consulting engineer in Switzerland. He graduated from the Engineering School in Bern Switzerland with a degree in HVAC design. George worked for 2 major consulting firms in Bern, Switzerland for 10 years before joining Barcol-Air in 1996 as Import and Export Sales Manager. From 1999 to 2001 he was on a two year assignment to develop a US market for radiant products as Business Development Manager for the U.S. in Rockford, IL at the Barbara Colman headquarters. After this, George returned to Europe to take on another assignment as the Barcol-Air UK Business Unit Manager for 18 months in Slough, England. In 2003, George joined Barcol-Air AG in Switzerland as the Business Development Manager and served this position for 7 years. In 2010, George came to Barcol-Air Ltd in Oxford, CT where he currently serves as the Vice President and Chief Technical Officer.

January Technical Session Information

Chilled Beam Application, Design & Selection for DOAS Systems

George Hoekstra will be presenting on chilled beam design for DOAS applications. He will be focusing on applications, selection options, and chilled beam technology available – along with how to utilize the available technologies. George will also discuss conceptual pitfalls to avoid when designing systems.

Employment Ads

ASHRAE Boston Chapter – Employment Ads

The NorthEastAire is published monthly, September through June. It is posted on the Chapter website at www.ashraeboston.org. A link is sent each month to all members of the Chapter, currently over 900.

Newsletter Rate: $200 for 1/4 page, $400 for 1/2 page, $800 for full page

Website Rate: $300 per calendar month

Format: Word format, company logos in .jpg or .gif

Deadline for February Newsletter: January 17, 2014

Any questions, please contact Stephanie Lafontaine, Newsletter Editor at 857-221-5942 or nordeastaire@gmail.com
The Boston ASHRAE Chapter had yet another good turnout for this month’s Chapter meeting at the Embassy Suites in Waltham, MA. Members and guests kicked off the evening’s event by gathering in the lobby to socialize as they prepared for a special joint meeting between ASHRAE and ASPE.

As dinner concluded, Chapter President, Teri Shannon, started the main program by welcoming the ASPE members in attendance followed by general Chapter announcements – including confirmation of next month’s meeting on Tuesday, January 14th. After recognizing ASHRAE Boston’s past presidents in attendance, Teri welcomed Steve Nicholas, Research Promotion Chair, to the podium to make announcements as this month’s meeting also served as Research Promotion Night. Rich Dean, former ASPE Boston Chapter President, was introduced and expressed his gratitude towards continuing the ASHRAE/ASPE joint meetings. Amongst the ASPE members were four other past presidents of the ASPE Boston Chapter.

The floor was then turned over to Griswold Controls Representative, Paul Delude, who gave a presentation on “Improving HVAC System Efficiency Through Total Flow Control”. The focus was on pressure independent control valves and how a pressure independent system can result in a large reduction in flow, which in turn can decrease pipe sizes and pump energy consumption. Mr. Delude prepared a live demonstration of how a system operates with pressure independent control valves compared to pressure dependent controls valves.

Teri Shannon wrapped up the December meeting with her closing remarks and a gift for Paul Delude.

Photos by Mark Leonard
ASHRAE Offers First Opportunity To Comment On Proposed Guideline For Commissioning Existing Systems, Assemblies

Dec 16, 2013

Contact: Jodi Scott

ATLANTA – With functional changes and occupant productivity driving the need to commission existing facilities, ASHRAE is developing a guideline that addresses the commissioning process. The guideline is now open for public input.


The proposed guideline is open for public comment from Dec. 6 until Jan. 20, 2014. For more information, visit www.ashrae.org/publicreviews.

“The most fundamental difference between new and existing building commissioning besides the obvious – one is new construction, one is existing – is that the function of the space may have changed substantially since it was designed,” Bill Dean, chair of the committee writing Guideline 0.2, said. “Related to that is that the building occupants are people with a voice and opinion as opposed to the theoretical occupant in new construction represented by the architect or owner. A great deal of the focus in the past was on energy savings being used to fund building improvements; now we are seeing functional changes and occupant productivity driving the need to commission existing facilities.”

Commissioning of existing systems also should result in energy and cost savings. Dean referenced a 2009 study from Lawrence Berkeley National Laboratory that suggests a median 16 percent energy savings with a 1.1 year payback for energy based existing building commissioning. The study noted “commissioning is arguably the most cost-effective strategy for reducing energy, costs and greenhouse-gas emissions in buildings today.”

Commissioning also impacts occupant comfort and assists in repurposing buildings. The quantifiable non-energy benefits are often equal to or greater than energy savings. Guideline 0.2P is a process guideline that is intended to be applied to any type of facility.

For example, we envision technical requirement guides being written to cover building envelope, elevators, fire alarm systems, smoke control, lighting electrical, plumbing, site infrastructure and district heating and cooling, etc.” Dean said. “The same ASHRAE committee is currently developing the technical requirements for a proposed standard on existing HVAC&R systems (1.2P, The Commissioning Process for Existing HVAC&R Systems).”


ASHRAE also is working on several other guidelines related to commissioning: Guideline 1.2P, The Commissioning Process for Existing HVAC&R Systems; Guideline 1.3P, Building Operation and Maintenance Training for the HVAC&R Commissioning Process; and Guideline 1.4P, Procedures for Preparing Facility Systems Manuals.

December Trivia
Question C: What would seal class “A” do for you in a ductwork specification?
Answer: Meant for ducts at 4” pressure and higher, it requires all joints/seams and duct wall penetrations to be sealed.
New York City is not only home of this year’s Winter Conference, and the sports capital of the world, it’s hosting Region 1 Dinner time! Please join the members of Region I for an evening of dining in the Big Apple. Johnny Utah’s, home of Manhattan’s original mechanical bull, has redefined the urban cowboy experience. The restaurant boasts an authentic Southwestern menu and impressive cocktail list. Each attendee will order from the prefix menu and will be responsible for their own check...dinner price will be $40 plus Tax and Gratuity. All cocktails extra.

Dinner selections include Marinated Chicken, Steak, or fresh jumbo shrimp Fajitas, and Slow Cooked Baby Back Ribs ...also featured are the Appetizers of Chicken Wings, and Sliders that may be your new savory favorite. For sides Mac n’ Cheese or French Fries.

Enjoy a tasty meal and if you’re up for it – the mechanical bull awaits....

RSVP: Frank Rivera Jr. by January 15th at frivera@mechheat.com

http://www.johnnyutahs.com/
Well, it’s finally true. We do not have to worry about the Y2K problem on our computers any longer. This was just made official.

Phew!

We are quite sure more of you are worried about H2N3 anyway.

With Good Reasons!

It is sort of funny how things grab our attention, and then pass with time.

Speaking of time, we all flipped another calendar year into the history books.

As we move forward into a new year, we would like all of you to think about our history and how far we have all come as individuals, as a local chapter, as a society and as a nation- in the HVAC market. We look forward to ever more efficient products and revolutionary new concepts in 2014.

We look forward to our position as leaders in the ever changing HVAC world. ASHRAE is such a fascinating group to belong. I for one am proud to be a small part in all of this.

I will simply say it is people like you that have made ASHRAE Boston so much fun for me for over 30 years. We look forward to seeing you all at the next monthly meeting.

If any of you have something of a historical interest, please feel free to contact me on that old fashioned telephone or the new fashioned email system. You can bet I’ll be in contact with you.

Thanks

January Historic Trivia

For you trivia buffs out there...The questions for January 2014:

A. Who invented the variable frequency drive?
B. How many BTUs are in a ton?
C. What was the first refrigerant ever used?
D. What is an SWSI Fan?
E. The 1990 Clean Air Act focused on reductions of what pollutants?
F. Would it ever be “normal” to run high pressure steam at a velocity over 15,000 FPS?
G. How much does a gallon of water weigh?
H. What is the velocity pressure of air moving at 3,000 FPM?
I. What is a boiler horsepower?

Go ahead and take a SWAG at these questions. Answers will be published next month. I’ll bet many of you “Google” the questions and look for an answer.

Answers to December’s trivia are located throughout the newsletter!

December Trivia
Question D: Who invented the butterfly valve?
Answer: Karl Adams (1960).
Happy Holidays and a Happy New Year, Boston ASHRAE members; hopefully everyone is enjoying this time of the year and all the family and friends that accompany it.

The next chapter meeting is on Tuesday, January 14th in Waltham and is on “DOAS: Design vs. Actual Operation.” This month’s meeting is a Membership Promotion and YEA night. Please remember to invite any co-op students and anyone who is interested in joining the local Chapter.

As Always, I would like to remind everyone to keep your contact and bio info on your ASHRAE profiles up to date to ensure proper delivery of notices and information. The contact info on your ASHRAE profiles is the main method of providing Society and Chapter news to you, including meeting notices and dues renewal notices.

Also, if you have any questions about your ASHRAE membership, renewing your membership or are looking to become more involved with the Boston Chapter please feel free to contact me at dandenisi@yahoo.com.

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 [$68 Adults, $58 Teen, $48 Junior/Senior] at either ski resort by presenting an ASHRAE membership card, picture ID, and voucher. The regular prices are $87/$69/$56.

Contact Ed Waldman, ewaldman1@verizon.net, if you would like any vouchers. The change this year is that the voucher is a PDF that I can e-mail to you, but they have become stricter about showing your ASHRAE card when you purchase the tickets. 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.
BOSTON CHAPTER - BEHIND THE SCENES

By: William Tang

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 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 10, 2013

Meeting Schedule Update – The January meeting will be held on Tuesday, January 14th. PDH is available for Main Session.

Technical Tours - CTTC will hold a technical tour at Harpoon Brewery in conjunction with YEA in April. Date TBD.

New Chapter Banner – Jim Armstrong will assist Bill Garvey with purchasing the new chapter banner.

50/50 Raffle - BOG voted to proceed fund raising with a 50/50 raffle to benefit Research Promotion.

Registration Software – BOG has formed a registration software research committee. Bob Persechini, Stacie Suh, and Dan Carrington volunteered as committee members.

Transportation Committee – Dan Carrington volunteered to run the Transportation Committee. The main objective of this committee is to help members without a car to find ways to attend meetings.

Committee Updates

Research Promotion chair Steve Nicholas explained the benefits of research promotion, a vital source to publish ASHRAE standards.

Student Activity chair Dan Diorio will set up a meeting with the scholarship recipient and will inform the BOG once the date has been confirmed.

YEA chair William Tang informed the BOG that YEA attended a technical tour at the BROAD Institute on December 11th. A holiday gathering took place afterwards. William Tang also informed the BOG that YEA has received tremendous response from members to support FBMS.

The New Product & Energy Show – February will be the deadline to update the Product Roster which will be published prior to the show in April. The show will include a Smoke Control seminar.

The scholarship application will be available on the ASHRAE Boston website. Disbursements will be made at the beginning of the second semester. Teri Shannon will post the scholarship application on LinkedIn to reach a wider audience.

BOG has been informed that emails for meetings have gone into junk mail or have been disregarded due to the email not being sent from a personal email account. Teri Shannon will change the email format.

December Trivia

Question E: What is the melting point of copper?
Answer: 1981°F.
STUDENT ACTIVITIES

By: Dan Diorio

Just like that, we’re half-way through the ASHRAE-Boston season! But there will be no letting up after the New Year as we push for our Student Activities PAOE points. We’re currently sitting at 820 points. Solid student chapter turnout has been helping that out and once we schedule our facility tours, presentations, and other student activities, we’ll really start racking up points!

Like last year, I want to once again stress the importance of getting more entries into the Society’s 2014 Student Design Project Competition. Please let me know if you happen to have 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 2014 ASHRAE Society Winter Conference in New York City. 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 at the January 14th meeting.

December Trivia

Question F: How many types of fans are there?

Answer: There are four main types, with subcategories unto those.

ASHRAE BOSTON
UPCOMING EVENTS

Visit http://www.ashraeboston.org/upcoming-events/calendar.html for more information.

January Meeting
When: January 14, 2014
Where: Embassy Suites, Waltham

February Meeting
When: February 11, 2014
Where: Embassy Suites, Waltham

March Meeting
When: March 13, 2014
Where: Embassy Suites, Waltham

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.

AFE Chapter 74-Worcester Area-Central MA
UPCOMING EVENTS


USGBC MASSACHUSETTS CHAPTER
UPCOMING EVENTS

Visit www.usgbcma.org for more information.

IFMA BOSTON CHAPTER
UPCOMING EVENTS

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

AEE NEW ENGLAND CHAPTER
UPCOMING EVENTS

Hello YEA!

December was a busy month for YEA. We kicked off the month off with a technical tour of the BROAD Institute project. Brian Pasquale and Steve Tafone of Suffolk Construction volunteered their time and shared some of their construction challenges of the 12-story, 400,000 SF laboratory / office facility. One of the main construction challenges is to cantilever the building over an existing garage. The project also includes a 30,000 SF vivarium, chemistry labs, a connecter to 7CC with conference rooms, biology labs with robotics, and administrative space.

Throughout the month, YEA collected donations for Father Bill’s and MainSpring – a non-profit organization that helps people who are homeless or at risk. We had another successful year of collections and couldn’t have done it without the tremendous and generous outpour of support from our members. We would like to use this opportunity to thank the following companies for their efforts in the donation drive:

- Air Industries, Inc.
- Capitol Engineers
- Allied Consulting Engineering Services
- Engineered Solutions, Inc.
- Andelman and Lelek Engineering, Inc.
- RDK Engineers
- Bard, Rao + Athanas Consulting Engineers
- Stebbins-Duffy, Inc.
- Cannon Design
- WSP Group

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

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

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**December Trivia**

**Question G:** What is the enthalpy of steam at 60 psi?

**Answer:** 1,182 BTU/LB.

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### Presidential Award of Excellence

**Boston Chapter - 2013-2014**

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<tr>
<th>Chapter Members</th>
<th>Membership Promotion Points</th>
<th>Student Activities Points</th>
<th>Research Promotion Points</th>
<th>History Points</th>
<th>Chapter Organization Points</th>
<th>Chapter Technology Transfer Points</th>
<th>Grassroots Government Affairs Points</th>
<th>Chapter PAOE Point Totals</th>
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JOIN AN ASHRAE BOSTON CHAPTER COMMITTEE!

As you know, from reading NorthEastAire and attending the monthly meetings in Waltham, the Boston Chapter of ASHRAE has several working committees that make the chapter function, coordinate technical and social events for its members, and support ASHRAE at a Society level.

The Boston Chapter is always looking for members with an interest in becoming more involved with the operation of the Chapter. The easiest way to get started is to join a committee. Aside from the continuing thrill of directly contributing to the Chapter, becoming a part of a committee provides an opportunity to understand the inner workings of this 1000-member professional organization.

Below is a list of the current committees that are looking for help and perhaps a chairperson in the near future. If any of the committees seem to be of potential interest to you, please contact the listed committee chair – and welcome to the inside of the Boston Chapter!

**Membership Promotion** – Attract new members and retain the existing members by reviewing Society generated reports and meeting attendance. – Dan Denisi

**Research Promotion** – Communicate the value of ASHRAE Society sponsored research while encouraging local industry business and members to contribute. – Stephen Nicholas

**Chapter Technology Transfer** – Coordinate and promote opportunities to pass along technical information to chapter members including direct involvement with the selection of the monthly meeting topics. – Michael Gilroy

**Historical** – Maintain an active history of the Boston Chapter and of the progression of the local industry. – Eric Edman

**Refrigeration** – Promote local activities and relay information specific to the refrigeration specialized industry. – Steve Tafone

**Roster & Product Guide** – Gather and update member information and local HVAC product representative line cards for this bi-annual publication. – Teri Shannon

**New Product & Energy Show** - Become an integral part of the Boston Chapter’s biggest fundraiser by helping to coordinate product display booths, technical sessions, and the overall planning of this large event! – Jeffery Schultz

**Publicity** – Highlight the activities of the Chapter using various media outlets and provide the newsletter with photographic stories of all Chapter events. – Mark Leonard

**Attendance/Reception** – Coordinate invitations to all Chapter events including the monthly meetings, greet and register attendees, and maintain accurate records of attendance and payment. – Mark LaFrance

**Grassroots Government Activities** – Keep the Boston Chapter up-to-date with current and relevant information regarding industry related government activities. We are looking to add 6 YEA members to the committee this year! – Steve Rosen

**Student Activities** – Provide opportunities for exciting and educational activities related to HVAC/R to local students of all levels including the promotion of the industry as a potential career path. – Dan Diorio

**Finance** – Team up with the Chapter Treasurer to maintain the Chapter budget and record of all financial transactions.

**Newsletter** – Create and edit the monthly newsletter, NorthEastAire, by compiling articles from Chapter committees and Society. – Stephanie Lafontaine

**Special Events** – Plan and coordinate all of the Chapter’s events including the monthly meetings, technical sessions, golf outing, and tours.

**YEA** – Attract the Young Engineers in ASHRAE to maintain Chapter membership by developing mentoring programs and sponsoring social and networking events geared toward the younger crowd! – William Tang

**Webmaster** – Lead the continuous maintenance of the Chapter website by working with our outside web designer to keep the site interactive, current, and cutting-edge. – Steve Rosen

**Sustainability** – Educate the Boston Chapter members on ways that you can enhance your operation and design practices utilizing sustainability! – James Armstrong
WEBMASTER’S NOTES
By: Steve Rosen

We hope you are enjoying the new ASHRAE Boston website! If you have not been there yet now is a good time to do so!

This screenshot below was from our Homepage indicating the November Meeting.

Please visit every month to register electronically for the monthly meetings.

You can register as a Member or Non-Member; this will facilitate our process and you will no longer have to wait in line at the venue to register!

www.ASHRAEBoston.org

December Trivia

Question H: How many pounds are in a bucket of steam?

Answer: This question was intended to raise some laughter and we got several inquiries as to how big a bucket. I guess we succeeded. There is no such thing as a bucket of steam.
Grassroots Government Affairs
By: Steve Rosen

I’m sure you have heard of the Affordable Care Act, also known as Obama Care.

Have you heard of the U.S. Memorandum for the Heads of Executive Departments and Agencies on Federal Leadership on Energy Management?

Didn’t think so, too many words, and no catchy title!

Maybe it should have been called Obama Power?

Last month, on December 10th, 2013 President Barack Obama sent a new memo to the heads of federal agencies and departments that establishes new goals for renewable energy as well as new energy management practices.

Of particular interest may be section 3 of the memo, “Building Performance and Energy Management”, in which agencies are required to continue installing building energy meters and sub-meters (as required by the National Energy Conservation Policy Act), install water meters where cost-effective and appropriate, enter energy and water metered data into Portfolio Manager, publicly disclose annual benchmark energy performance data through the U.S. Department of Energy’s web-based tracking system, and incorporate the Green Button data access system/program into report, data analytics and automation, and processes.

As agencies seek to implement these new and continuing requirements, ASHRAE may be able to be of assistance through our technical expertise, standards, and guidance. To this end, preliminary discussions have begun to obtain more information.

If you have further interest, you can read the full text here: Memo

Next moth I’ll tell you about the Green Button!

December Trivia
Question I: Would a condensing boiler need a drain in the flue?
Answer: Most certainly. Probably good to have an acid neutralizing system as well.
Society news
ASHRAE Joins Effort to Promote Better Prepared Workforce

ATLANTA – ASHRAE has accepted an invitation from the U.S. Department of Energy (DOE) to join an effort that will improve building performance through a better prepared workforce. The goal is to advance the skill sets of engineers and other professionals involved in building design, operation and commissioning.

Under DOE leadership, a Board of Advisors has been created for the Commercial Workforce Credentialing Council (CWCC). This Board will be led by the National Institute of Building Sciences (NIBS) with the participation of ASHRAE and other credentialing and professional development organizations. They will work to establish a set of voluntary national guidelines to improve the quality and consistency of commercial building workforce credentials.

The Better Buildings Workforce Guidelines will reduce the confusion and uncertainty around workforce credentialing; lower costs; and support better credentials, better workers and better buildings. The Guidelines will set an industry-validated Job Task Analysis (JTA) for each job title, as well as certification schemes (blueprints) and learning objectives for training programs.

Initially the Guidelines will address commercial building workforce training and certification programs for five key energy-related jobs: energy auditor, commissioning professional, building/operations professional, facility manager and energy manager.

Three of ASHRAE’s certification programs are part of this initial development:
- Commissioning Process Management Professional
- Building Energy Assessment Professional
- Operations & Performance Management Professional

Once implemented, industry certification programs must then receive accreditation from the American National Standards Institute (ANSI) in order to be recognized by DOE as meeting voluntary guidelines for the Better Buildings Workforce. This accreditation provides independent verification that the certifications are developed, maintained and administered according to the highest standards of the testing industry. ASHRAE has already begun the process of seeking ANSI accreditation in anticipation of this requirement.

“ASHRAE’s involvement in this process is very important,” William “Bill” Bahnfleth, ASHRAE president, said. “Participating in the development of the Guidelines gives us a voice in how the workforce of our industry will be developed. These Guidelines will ensure that quality services are provided by professionals with recognized certifications to increase consumer confidence in the service provided and ultimately to ensure the quality of our future building stock.”

ASHRAE representatives recently attended an initial workshop to bring together industry stakeholders; explain the purpose of the newly created CWCC; discuss high-level questions; and provide input into the composition of the subject matter expert committees.

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. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow’s built environment today.

December Trivia
Question J: What is 780 CMR?
Answer: 780 CMR is better known as the Massachusetts State Building Code.

Three of ASHRAE’s certification programs are part of this initial development:
- Commissioning Process Management Professional
- Building Energy Assessment Professional
- Operations & Performance Management Professional
ASHRAE Learning Institute

Seminars & Courses at ASHRAE’s Winter Conference and AHR Expo in New York, NY

2 WAYS TO REGISTER
Internet:  www.ashrae.org/newyorkcourses
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

Commercial Building Energy Audits NEW!
Saturday, Jan 18 – 8:00 a.m. to 3:00 p.m.

Healthcare Facilities: Best Practice Design & Applications
Saturday, Jan 18 – 8:00 a.m. to 3:00 p.m.

Significant Changes to Standard 90.1-2010 and IECC-2012 NEW!
Tuesday, Jan 21 – 9:00 a.m. to 4:00 p.m.

Energy Modeling Best Practices and Applications
Tuesday, Jan 21 – 9:00 a.m. to 4:00 p.m.

Effective Energy Management in New and Existing Buildings
Wednesday, Jan 22 – 9:00 a.m. to 4:00 p.m.

Operations and Maintenance of High-Performance Buildings
Thursday, Jan 23 – 8:00 a.m. to 3:00 p.m.

Complying with Standard 90.1-2013 NEW!
Thursday, Jan 23 – 8:00 a.m. to 3:00 p.m.

Introduction to Building Enclosure Commissioning NEW!
Thursday, Jan 23 – 8:00 a.m. to 3:00 p.m.

Half-Day Short Courses

$159/$119 ASHRAE Member -- Earn 3 PDHs/AIA LUs or .3 CEUs

Electric Rates, Rules and Regulations NEW!
Saturday, Jan 18 – 12:00 p.m. to 3:00 p.m.

Laboratory Design: The Basics and Beyond
Sunday, Jan 19 – 9:00 a.m. to 3:00 p.m.

Air-to-Air Energy Recovery Applications: Best Practices
Sunday, Jan 19 – 9:00 a.m. to 3:00 p.m.

Mathematical Optimization Techniques and their Applications:
to HVAC&R Systems and Components
Sunday, Jan 19 – 9:00 a.m. to 3:00 p.m.

Combined Heat & Power: Design through Operations
Monday, Jan 20 – 8:30 a.m. to 11:30 a.m.

High-Performance Building Design: Applications and Future Trends
Monday, Jan 20 – 8:30 a.m. to 11:30 a.m.

IAQ Best Practices for Design, Construction and Commissioning NEW!
Monday, Jan 20 – 8:30 a.m. to 11:30 a.m.

Commissioning for High-Performance Buildings
Monday, Jan 20 – 2:45 p.m. to 5:45 p.m.

Designing High-Performance Healthcare Facilities NEW!
Monday, Jan 20 – 2:45 p.m. to 5:45 p.m.

Exceeding Standard 90.1-2013 to Meet LEED® Requirements NEW!
Monday, Jan 20 – 2:45 p.m. to 5:45 p.m.

Data Center Energy Efficiency
Tuesday, Jan 21 – 1:00 p.m. to 4:00 p.m.

Fundamentals and Applications of Standard 55 NEW!
Tuesday, Jan 21 – 1:00 p.m. to 4:00 p.m.

Design of Commercial Ground Source Heat Pumps NEW!
Tuesday, Jan 21 – 1:00 p.m. to 4:00 p.m.

Applications of Standard 62.1-2013: Multiple Spaces
Equations and Spreadsheets NEW!
Wednesday, Jan 22 – 9:00 a.m. to 12:00 p.m.

Troubleshooting Humidity Control Problems
Wednesday, Jan 22 – 1:00 p.m. to 4:00 p.m.

HVAC Design Training

March 17 – 19, 2014 — Level I - Essentials — Atlanta, GA and Toronto, Canada
March 20 – 21, 2014 — Level II - Applications — Atlanta, GA

HVAC Design: Level I – Essentials - Registration is $1,239, $989 (ASHRAE Member)
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 - Registration is $829, $679 (ASHRAE Member)
In two days, gain an in-depth look into Standards 55, 62.1, 90.1, and 189.1 and the Advanced Energy Design Guides. Training will focus on a range of 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 Certification Programs

Receive the recognition you deserve by earning an ASHRAE Certification at the 2014 ASHRAE Winter Conference and AHR Expo.

Take advantage of ASHRAE’s special administration of the certification examinations on January 23, 2014. All exams will begin at 9:00 a.m. (candidates must report to the testing room at 8:30 a.m.). These exams are being offered in conjunction with the 2014 ASHRAE Winter Conference and AHR Expo in New York City. Refresh your knowledge in preparation of earning an ASHRAE certification with learning opportunities at the show and conference.

For more information, visit www.ashrae.org/NYCExams

Hot Products from ASHRAE

Latest Edition of Standard 90.1 Now Available as a Redline

Priced from $135 (Members Pay $115)
Available now in I-P or SI units

Use the redline to instantly identify updates in the 2013 revision of Standard 90.1.

This expanded document compares the 2013 edition to 2010, ensuring you know exactly what changes have been made from one edition to the next.

It’s an indispensable reference for engineers and other professionals involved in the design of buildings and building systems. Select the redline upgrade in print or digital format to receive two documents; the clean, active version of the standard and the redline version.

About Standard 90.1-2013: Energy Standard for Buildings Except Low-Rise Residential Buildings (ANSI approved; IES co-sponsored)

provides the minimum requirements for energy-efficient design of most buildings. Learn more

About Redlines: A redline document is a quick, easy way to compare all the changes between the active standard and the previous version. Redlines allow users to instantly identify additions, deletions, and other formatting and content changes. Learn more

Visit www.ashrae.org/bookstore to learn more about this and other outstanding ASHRAE publications!
ASHRAE Conferences 2013-2014
Attend to See What’s New, Learn New Skills, Earn PDHs, Network with Peers

ASHRAE IAQ 2013: Environmental Health in Low Energy Buildings
Oct. 15-18, 2013 | Vancouver, BC, Canada
www.ashrae.org/IAQ2013
Comprehensive overview presented via papers.

Co-organizer:

ASHRAE 2014 Winter Conference
Jan. 18-22, 2014 | New York, NY
Jan. 21-23, 2014 | AHR Expo
www.ashrae.org/newyork

Bookstore Sponsor:

First International Conference on Energy and Indoor Environment for Hot Climates
Feb. 24-26, 2014 | Doha, Qatar
www.ashrae.org/hotclimates
Papers focused on arid and humid hot climates.

Organized by:

High Performance Buildings Conference
April 7-8, 2014 | San Francisco, Calif.
www.hpblmagazine.org/hpb2014
State-of-the-industry presentations

Efficient, High Performance Buildings for Developing Economies
April 24-25, 2014 | Manila, Philippines
www.ashrae.org/Developing2014
First ASHRAE conference on this topic.

Organized by:

Co-sponsor:

Endorsed by:

ASHRAE 2014 Annual Conference
www.ashrae.org/seattle
2nd Annual Research Summit presented.

2014 ASHRAE/IBPSA-USA
Building Simulation Conference
Sept. 10-12, 2014 | Atlanta, Ga.
www.ashrae.org/Simulation2014
Single collaboration of Energy Modeling and SimBuild Conferences.

Organized by:

Get Updated on Current Trends and Make Industry Connections at an ASHRAE Conference!
www.ashrae.org/conferences
<table>
<thead>
<tr>
<th>Date</th>
<th>Main Meeting/ Tech Session</th>
<th>Speaker</th>
<th>PDH Credits</th>
<th>Meeting Manager</th>
<th>Location/ Special Night</th>
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<tbody>
<tr>
<td>September</td>
<td>Tecogen Tour &amp; Presentation, “CHP for Commercial Industrial Applications”</td>
<td>Stephen LaFaille</td>
<td>-</td>
<td>Mark LaFrance</td>
<td>Embassy Suites, Waltham</td>
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<td>Tuesday, September</td>
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<td><a href="mailto:markla@htseng.com">markla@htseng.com</a></td>
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<td>September 10, 2013</td>
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<td>October</td>
<td>Smoke Control (Main Meeting)</td>
<td>Nathan Birmingham RJA</td>
<td>1.0</td>
<td>Steven Tafone</td>
<td>Embassy Suites, Waltham</td>
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<td>Tuesday, October 8</td>
<td>CFD Modeling for Engineers (Tech Session)</td>
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<td><a href="mailto:stafone@suffolkconstruction.com">stafone@suffolkconstruction.com</a></td>
<td>Membership Promotion</td>
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<td>October 8, 2013</td>
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<td>November</td>
<td>ASHRAE Building Energy Labeling Program (Main Meeting)</td>
<td>William Bahnfleth</td>
<td>1.0</td>
<td>Dan Diorio</td>
<td>Embassy Suites, Waltham</td>
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<tr>
<td>Tuesday, October 12</td>
<td>ASHRAE 90.1-2010, IECC 2012 and LEED v4 (Tech Session)</td>
<td>Michael Pulaski and Chris Schaffner</td>
<td></td>
<td><a href="mailto:daniel.diorio.2@bc.edu">daniel.diorio.2@bc.edu</a></td>
<td>Student Activities YEA</td>
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<td>November 8, 2013</td>
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<td>December</td>
<td>Improving HVAC Efficiency Through Total Flow Control</td>
<td>Paul Delude Griswold Controls</td>
<td>1.0</td>
<td>Stacie Suh</td>
<td>Embassy Suites, Waltham</td>
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<td>Tuesday, December 10</td>
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<td><a href="mailto:Stacie@stebbinsduffy.com">Stacie@stebbinsduffy.com</a></td>
<td>Research Promotion Joint Meeting with ASPE</td>
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<td>December 10, 2013</td>
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<td>January</td>
<td>DOAS: Design vs. Actual Operation</td>
<td>Jason Burbank</td>
<td>1.0</td>
<td>Dan Denisi</td>
<td>Embassy Suites, Waltham</td>
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<td>Tuesday, January 14</td>
<td>Chilled Beam Application, Design &amp; Selection for DOAS Systems</td>
<td>George Hoekstra</td>
<td></td>
<td><a href="mailto:dandenisi@yahoo.com">dandenisi@yahoo.com</a></td>
<td>Membership Promotion YEA</td>
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<td>January 14, 2014</td>
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<td>February</td>
<td>Designing AC Refrigeration Systems—Lessons Learned</td>
<td>Steve Tafone</td>
<td>TBA</td>
<td>TBA</td>
<td>Embassy Suites, Waltham</td>
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<td>Tuesday, February 11</td>
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<td>Past President’s Night History</td>
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<td>February 11, 2014</td>
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<td>March</td>
<td>ASHRAE Standard 189.1-2009 for High Performing Green Buildings</td>
<td>Thomas Lawrence</td>
<td>TBA</td>
<td>Mike Gilroy</td>
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<td>Thursday, March 13</td>
<td>Distinguished Lecturer</td>
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<td><a href="mailto:mpg@hrplusa.com">mpg@hrplusa.com</a></td>
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<td>March 13, 2014</td>
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<td>April</td>
<td>New Product &amp; Energy Show</td>
<td>N/A</td>
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<td>Jeffrey Schultz</td>
<td>Lantana’s, Randolph</td>
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<td>Tuesday, April 8</td>
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<td>TBA</td>
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<td><a href="mailto:jschultz@eypae.com">jschultz@eypae.com</a></td>
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<td>April 8, 2014</td>
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<td>May</td>
<td>Installation of Officers</td>
<td>N/A</td>
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<td>Dan Diorio</td>
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<td>Tuesday, May 13</td>
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<td><a href="mailto:daniel.diorio.2@bc.edu">daniel.diorio.2@bc.edu</a></td>
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<td>May 13, 2014</td>
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<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>
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<tr>
<td>Monday, June 2</td>
<td>Research Promotion</td>
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<td><a href="mailto:wgarv@aol.com">wgarv@aol.com</a></td>
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<td>June 2, 2014</td>
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2013-2014
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North Andover, MA 01845

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CONTACT STEPHEN NICHOLAS NOW! at 978-682-9993 or snicholas@airinds.com

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