

# Pile of Bones

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## MAY 2010

### President's Message

by Greg Fluter

Another ASHRAE year is coming to an end...wow, has the past year ever flown by fast!

Thanks to everyone who came out to listen to the student presentations last month. I thought all 3 presentations were interesting and were very well done. I'd also like to thank Marie Iwaniw from the UofR for assisting us to organize this.

For this month's meeting we have a couple of speakers from within our own Chapter. Shawn Wedewer, from Saskatchewan Research Council, will be here to give a presentation on a commercial cogeneration project that has recently been installed in Regina. As well, Jerry Boulanger will be giving a short technical session.

The Chapters Regional Conference (CRC) is being held in Regina this year and gets underway this week. Thanks to our members who registered for either the Conference and/or the Technical Session. On Thursday afternoon (this week) there will be a Welcome Reception and Trade Show that is open to anyone to come out to. Please mark it on your calendar and make an effort to come out to

visit the supplier's and vendor's displays. Also, if you see Wayne Hydeman at the show, please be sure to thank him for organizing the Trade Show on behalf of the Chapter and for raising lots of sponsorship money for the event.

Trevor has organized this year's ASHRAE Research Golf Tournament to be held out at Sherwood Forest, just west of Regina, on Thursday, June 3 starting at 1:00pm. Golf will be followed by steak supper at 5:00pm. Cost is \$65 per person or \$35 if you want to just come out for supper. Please see his invitation attached and feel free to bring your spouse / partner with you. As always, it will be a fun day. To RSVP, contact Trevor Hobman or Ted Cooke.

Finally, I'd like to thank everyone for another successful year in our Chapter. I hope you enjoyed the presentations, tours, seminars and other events that were organized for you this year. We had a pretty good turnout for most meetings which indicates strong support for our Chapter. We look forward to another good year next year.

See some of you at CRC, and hopefully the rest of you next Wednesday.

## Meeting Notice! Wednesday May 12, 2010

**Hotel Saskatchewan  
Radisson Plaza  
2125 Victoria Avenue  
Regina, Sk.**

**5:00 -Social/Cocktails**

**5:30 – Shawn Wedewer &  
Rob Craddock –  
Presentation on  
Cogeneration System  
installed at the Inland Metals  
Regina Shop & Office**

**Jerry Boulanger – Delta T  
and How to Get**

**6:45 - Dinner**

**7:30 - Chapter Meeting**

### PLEASE NOTE:

2010 ASHRAE Regina Research Golf Tournament is coming up on June 3, 2010 at Sherwood Forest Country Club!

Please see the attached flyer, and RSVP to Trevor Hobman or ted Cooke if you plan to attend.

## Technical Program for May

### **Our May meeting will be on Commercial Cogeneration and Delta T and How to get it.**

Our first presentation will be Shawn Wedewer from SRC and Rob Craddock from Inland metals will be describing the cogeneration system installed in the Inland metals Regina shop and office.

Our next presenter will be Jerry Beoulanger from J-Clan services. His presentation will be on Delta T for Heating and Cooling systems and the different ways to attain a large Delta T for efficient pumping.

## 2009/2010 Meetings and Events Schedule

September 9, 2009: Darron Rempel - Chilled Beams and Displacement Ventilation

October 14, 2009: Darren Alexander (TWA Panel Systems) – Radiant Sails & Stanley Mumma, Distinguished Lecturer (DL) - DOAS Systems & Radiant Panels

November 18, 2009: CSC & HDA Engineering Ltd. - Saskatchewan Disease Control Laboratory Tour

December 10, 2009: Christmas Social – Dinner and Entertainment at the Lazy Owl on the U of R Campus

January 12, 2010: Presidential Visit, President Gord Holness

February 10, 2010: George Reed

March 8, 2010: Variable Refrigerant Flow Systems - Julian R. de Bullet (McQuay International) DL

April 14, 2010: Student Night

**May 12, 2010: Shawn Wedewer - SRC presentation - Commercial Cogeneration  
Jerry Boulanger - J-Clan Services - Delta T and How to Get it**

June 3, 2010: ASHRAE Research golf tournament (Sherwood Forest)

## Board of Governors for the Regina Chapter

**President:** Greg Fluter

**Past President:** Ted Cooke

**President Elect & Chapter Technology**

**Transfer Chair:** Heric Holmes

**Vice President & Newsletter:** Jason Danyliw

**Membership:** Rob Craddock

**Research Promotion:** Ted Cooke

**Treasurer:** Kris Pockett

**Secretary:** Carla Spriggs

**Student Activities:** Dean Nagel

**Historian:** Jerry Boulanger

**Ways & Means:** Trevor Hobman

## Committee Chair Reports

### President Elect & Chapter Technology Transfer Chair

*by Heric Holmes*

We will be having two presentations this month. The first will be a commercial cogeneration system hosted by Shawn Wedewer and Rob Craddock, the second presentation will be about Delta T in Chilled water systems and will be presented by Jerry Boulanger.

Last month's meeting was the CTTC awards. There were some fine presentations and I would like to thank all of the students and members that attended.

Next month is ASHRAE golf. I hope to see everyone out.

***Heric Holmes***

*President Elect and Chapter Technology Transfer Chair*

## **Membership Promotion Chair**

*by Rob Craddock*

Membership Application:

[http://www.ashrae.org/docLib/20080710\\_MemberAssocAffilApp.pdf](http://www.ashrae.org/docLib/20080710_MemberAssocAffilApp.pdf)

Application to upgrade membership:

[http://www.ashrae.org/docLib/20080710\\_108.pdf](http://www.ashrae.org/docLib/20080710_108.pdf)

***Rob Craddock***

*Membership Promotion Chair*

## **Past President & Research Promotion Chair**

*by Ted Cooke*

This year, like all years, the ASHRAE Regina Chapter is in search of ASHRAE Research donations from any members and industry associates. We have managed to set donation amount records for our chapter over the last few years, and I think we can yet again break the previous donation record set with the gracious members that we have!

If you would like to make a research donation, please contact me at [tcooke@hdaeng.com](mailto:tcooke@hdaeng.com), and any and all research donations (of any amount) are appreciated!

***Ted Cooke***

*Past President & Research Promotion Chair*

## **Ways & Means Chair**

*by Trevor Hobman*

Our 2010 ASHRAE golf tournament is fast approaching. The following are the confirmed details:

**Date:** Thursday June 3, 2010

**Location:** Sherwood Forest Country Club (west of Regina)

**Tee-Off Time:** 1:00 p.m.

**Dinner:** 5:00 p.m.

**Cost:** \$65 per person (\$25 per person for supper)  
**Includes:** 9 holes of golf, power cart, steak dinner

Spouses and significant others are encouraged to come out to golf or just join us for supper. Please contact myself or Ted Cooke if you want to donate prizes.

To register, please fill out the attached registration form and fax to (306) 757-8024; attention Trevor Hobman.

We look forward to seeing all members out on the course to support the Chapter!

***Trevor Hobman***

*Ways & Means Chair*

## **Vice President & Newsletter Chair**

*by Jason Danyliw*

**Regina Chapter Email Address:**

<mailto:ashraeregina@accesscomm.ca>

**Regina Chapter Website Address:**

<http://regina.ashraechapters.org/>

## **ASHRAE HVAC&R Industry eNewsletter**

If you wish to subscribe to the ASHRAE HVAC&R Industry eNewsletter, e-mail [subscribe-enews@ashrae.org](mailto:subscribe-enews@ashrae.org) with "Subscribe this address to The HVAC Industry eNewsletter" in the e-mail subject line.

## **ASHRAE Learning Institute**

The ASHRAE Learning Institute is offering on-line courses. There are 2 ways to register:

**1. Internet :** <http://www.ashrae.org/onlinecourses>

**2. Phone:** Call toll-free at 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)

**NOTE:** You may register up to 24 hours prior to an online seminar. Course times are in Eastern US Time Zone.

## **Dates Confirmed for Next Satellite Broadcast/Webcast**

None confirmed at this time.

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

### **Changes to Decrease Energy Use in Elevators, Parking Garages Proposed for Standard 90.1**

ATLANTA – Going down? Energy use in buildings could drop with a proposed requirement to Standard 90.1 regulating ventilation and cab lighting in elevators.

Proposed addendum *df* to ANSI/ASHRAE/IESNA Standard 90.1-2007, *Energy Standard for Buildings Except Low-Rise Residential Buildings*, takes a first step in addressing inefficiency of ventilation fans and cab lighting, both of which often operate 24/7, regardless of load or occupancy. The addendum is one of 12 proposed addenda to the standard currently out for public comment.

The American Council for an Energy-Efficient Economy and the European E4 Committee estimate elevator energy use to be in the range of 2 to 5 percent of total building electric consumption. Proposed addendum *df* would require cab lighting systems to have efficacy of not less than 35 lumens per watt; that cab ventilation fans for elevators without air conditioning shall not consume over 0.7 W\*s/L at maximum speed; and that when stopped and unoccupied with doors closed for over 15 minutes, cab interior lighting and ventilation shall be de-energized until required for operation.

“Two to 5 percent of building energy consumption is significant; beginning to realize those savings using this addendum is an important step,” Drake Erbe, chair of the 90.1 mechanical subcommittee, said.

Also open for public review is proposed addendum *di*, which sets requirements for parking garage ventilation. In 1999, the standard required garage ventilation fan systems with a total design capacity greater than 30,000 cfm to have either an automatic control capable of staging fans or modeling fan volume or an automatic control

*Public Comment Open Until May 24*

### **ASHRAE Guideline Addresses Interactions Affecting Indoor Environmental Quality**

ATLANTA – A proposed guideline, currently out for public comment, would provide guidance on achieving good indoor environments by considering the interactions of air quality and thermal conditions as well as lighting and acoustics.

ASHRAE Guideline 10P, *Interactions Affecting the Achievement of Acceptable Indoor Environments*, calls attention to many interactions that designers might not have previously recognized or understood. The guideline opened for public comment on April 9 and remains open until May 24.

“The guideline summarizes what research and experience have taught us about the complex interplay of the wide range of factors that determine occupants’ reactions to the buildings they inhabit,” Hal Levin, chair of the committee writing the guideline, said.

Levin explains that the guideline is intended to help users understand and use existing documents that deal with indoor environments, including the ASHRAE standards related to ventilation and indoor air quality and thermal conditions with a more complete understanding of the impacts of the indoor environment on occupants.

“It can provide assistance to building design professionals and building operators by making them aware of the major interactions that have the potential to impact the indoor environment,” he said. “We believe the guideline will help draw attention to the narrowly-defined scopes of the widely-used standards and the significance of interactive effects in determining the acceptability of an indoor environment.”

The draft of Guideline 10P is available for comment only during its public review period. To read the guideline or to comment, visit [www.ashrae.org/publicreviews](http://www.ashrae.org/publicreviews).

capable of shutting off fans or reducing fan volume when the garage is not in use.

The 2007 ASHRAE *Handbook, HVAC Applications*, recommends “if permitted by local codes, the ventilation airflow rate should be varied to conserve energy.” The proposed flow rates and concentrations in the addendum are from the International Mechanical Code requirements.

“The energy savings depends on the hours of operations and the use profile of the garage,” Erbe said. “In garages that have morning and afternoon peaks and low usage during the day, the Handbook documents savings of 60 percent of fan power.”

Below is a listing of proposed addenda to 90.1 currently open for review:

**Public Review April 9-May 9, 2010:**

- 90.1 *ck* allows for more flexibility in meeting ventilation requirements by referencing the Standard 62.1 definition of system ventilation efficiency and not the variables used in the Standard 62.1 multiple-spaces equation.
- 90.1 *db* provides an exception for certain systems serving laboratory spaces from the design airflow rate requirement in Appendix G. In addition it clarifies that the system fan power shall have the same proportion as in the proposed design.
- 90.1 *de* splits the “generic lobby” from common elevator lobbies in the lighting power density (LPD) tables with adjusted LPDs to reflect specific space needs for elevator and non-elevator lobby spaces. In addition, this removes the fitness center audience seating from the LPD table.
- 90.1 *df* takes a first step in addressing ventilation and cab lighting in elevators regardless of occupancy.
- 90.1 *dg* adds a definition for the term “field-fabricated fenestration” used in section 5.4.3.2, consistent with an official interpretation approved by the Standard 90.1 committee and similar language in California’s Title 24
- 90.1 *dh* clarifies the credit for on-site renewable energy and site recovered energy in Section 11 and Appendix G.

- 90.1 *di* sets requirements for parking garage ventilation.
- 90.1 *dk* adds clarity and instruction to the users of Appendix C, the envelope trade off option, for new skylighting and daylighting requirements that were added in addendum *al*, *bc* and *bn*.
- 90.1 *dl* gives instruction to the users of Appendix C, the envelope trade off option on how to model the base envelope design and the proposed envelope design on how to comply with the cool roof provisions of Section 5.
- 90.1 *do* attempts to clearly establish the goals and requirements of the lighting system to ensure that owners are provided all the information necessary to best use and maintain the lighting systems.

**Public Review from April 9-May 24, 2010:**

- 90.1 *dj* limits the fan energy allowance for energy recovery devices to values that approximate the results of the economic analysis performed for the previously approved addendum *e*, with some allowance to permit adequate pressure drop for products near the minimum recovery effectiveness of 50 percent. A separate allowance is also created for coil runaround loop systems.
- 90.1 *dn* shows changes in Appendix G relative to addendum *cj* (warehouses) to 90.1-2007.

The proposed addenda to ASHRAE/IESNA Standard 90.1 are available for comment only during their public review period. To read the addenda or to comment, visit [www.ashrae.org/publicreviews](http://www.ashrae.org/publicreviews).

If no comments are received on these addenda, they likely will be incorporated into the 2010 version of the standard slated to be published this fall. If comments are received, the substance and volume of those comments will determine whether they are incorporated into the 2010 standard.

**ASHRAE Lends Support to Federal Buildings Personnel Training Act of 2010**

ATLANTA – Federal legislation introduced Thursday, on Earth Day, will provide training for Federal building personnel in the areas of building operations and maintenance, energy management, safety and design functions

The Federal Building Personnel Training Act of 2010 was introduced by Reps. Russ Carnahan (D-Mo.) and Judy Biggert (R-Ill.) and Sen. Tom Carper (D-De.) and Susan Collins (R-Me.). It is supported by 33 leading organizations involved in the design, construction, operation and maintenance of buildings and by the High-Performance Buildings Congressional Caucus Coalition (HPBCCC), a private sector building coalition established and chaired by ASHRAE. The HPBCCC supports the High-Performance Buildings Caucus of the U.S. Congress, which is co-chaired by Carnahan.

The legislation would help provide Federal workers with the necessary training to construct and maintain environmentally sound buildings. Federal workers would be able to be trained in a series of core competencies relating to building operations, maintenance, energy management and safety and future performance. Workers would take courses and be able to obtain licenses and certification for their efforts.

“This is an important piece of legislation for the design, construction, operation and maintenance of our nation’s Federal buildings,” Gordon Holness, ASHRAE president, said. “The Federal government sets an example for the rest of the nation and its efforts are a visible example of what can be accomplished in building and maintaining energy efficient buildings with high indoor environmental quality.”

Doug Read, ASHRAE program director of government affairs, noted that ASHRAE played a critical role in drafting this bipartisan legislation. ASHRAE will work with myriad organizations such as NIBS, the U.S. Green Building Council and the American Institute of Architects, on behalf of this measure. “The bill is a bipartisan example of the way the Federal Government can set an example for the rest of our country in developing and maintaining environmentally efficient buildings in accord with

Standard 90.1, which sets minimum energy requirements for buildings,” Read said.

## **ASHRAE Government Affairs Update**

### **Congress Back in Session**

The House and Senate returned from recess and are back in session.

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## **EARTH DAY CELEBRATION**

ASHRAE will be among the attendees at the Capitol Hill Climate & Clean Energy Reception to be held on Capitol Hill in the Rayburn House Office Building B338/339. Members of Congress and other leaders are expected to be at this reception. The Reception will celebrate Earth Day, provide details on the Presidential Executive Order for federal government entities to reduce their carbon emissions and to prepare for future Congressional debates on comprehensive clean energy and climate legislation. The Climate Change Leadership Forum that is hosting the event can be contacted at [capitolhill@climateleadership.net](mailto:capitolhill@climateleadership.net) and the website is [www.climateleadership.net](http://www.climateleadership.net).

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## **WORKSHOP ON COMMISSIONING NEW AND EXISTING BUILDINGS IN THE FEDERAL SECTOR**

The Alliance to Save Energy in collaboration and with the General Services Administration will host a workshop on commissioning new and existing Federal buildings on May 21<sup>st</sup> from 9AM to 4:30 PM. The American Institute of Architects (AIA) and ASHRAE will cosponsor the event. Given that Federal managers for building construction, renovation and ongoing operations face formidable challenges in achieving a high level of energy performance, this workshop will help provide information and resources to enhance the consistency and quality of commissioning for Federal buildings. There will be an examination of case studies, best practices, impediments to achieving higher energy performance and also peer interaction across agencies. In order to be well prepared for the event, agenda and background

materials will be sent to you several weeks beforehand. The location is the AIA Boardroom located at 1735 New York Avenue, NW in Washington, DC. If you wish to attend, please email Tom Simchak at the Alliance to Save Energy – [tsimchak@ase.org](mailto:tsimchak@ase.org).

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The Energy Foundation and NASEO will be hosting a **“Building Energy Code Coordination and Strategic Implementation Workshop”** on Monday, April 26 and Tuesday, April 27, 2010. This **“invitation only”** Workshop will be held at the Sofitel Lafayette Square Hotel, 806 15<sup>th</sup> Street NW, Washington, DC 20005.

Attendance at this two-day Workshop will be limited to approximately 50 key stakeholders that represent federal, state, national and regional organizations involved in energy codes, along with advocates for code stringency and enforcement. Representatives of code and standards development bodies will be invited.

#### Workshop Purpose:

To improve coordination and strategic use of resources that support code adoption and implementation. Unprecedented levels of assistance have been provided to the energy codes sector by the federal government, foundations, and other sources. To ensure effective use of resources, key groups will convene, share strategies for the coming year, identify gaps in resources, eliminate redundancies where possible, and establish mechanisms for enhanced collaboration.

Together the Workshop attendees will identify the issues and needs, and the resources and other assistance required for a comprehensive national strategy that will accomplish the shared goal of increased adoption and compliance with the latest energy codes. If you have any questions regarding this important strategic Workshop, please contact Brian Henderson ([bhenderson@naseo.org](mailto:bhenderson@naseo.org)).

#### Travel Support

NASEO is able to provide travel support to state and local officials on a first come, first served

basis. Additional information about the agenda and logistics is included below.

#### Workshop and Hotel Registration

Please act today and sign up to attend this April 26-27, 2010 Building Energy Code Road Map and Strategy [Workshop!](#)

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### **FORMATION OF A NATIONAL SCIENCE AND TECHNOLOGY COUNCIL COMMITTEE ON DOCUMENTARY STANDARDS**

The Office of Science and Technology Policy has just posted a blog announcing the formation of a new National Science and Technology Council committee on documentary standards co-chaired by NIST Director Dr. Gallagher. Here is the link to the blog written by CTO Aneesh Chopra: <http://www.whitehouse.gov/blog/2010/03/24/providing-leadership-standards-address-national-challenges>

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### **HIGH- PERFORMANCE BUILDING WEEK**

HPBCCC and HPB&EER Members,

As you may know, June 13-19, 2010 is High-Performance Building Week. Building on the successes of last year’s Inaugural celebration, we are in the process of scheduling additional activities. Caucus Co-Chair Biggert (with Co-Chair Carnahan) is taking the lead on introducing a resolution supporting the week. The tentative schedule appears below. Once it is finalized we’ll send everyone the details and invite them to participate.

June 14	Press Event/Congressional Site Visit
June 15	Briefing on Introduction to High-Performance Buildings (both House and Senate)
June 15	Reception
June 16	CEO/President/Chair Congressional Visits

June 17            HPB&EER and HPBCCC  
Meetings

June 18            Briefing on Partnership to NZEBs  
(ZECBC) (both House and Senate)

You are encouraged to make your members aware of the week and ask them to contact their state, local and federal representatives on behalf of high-performance building issues. Attached is a flyer on the week, potential content for an article in your newsletters, e-mails, and magazines, and an FAQ document. A joint press release also will be developed as we get closer. Please share these with relevant publications and membership staff.

New this year, we will be inviting leadership of the HPBCCC member organizations to participate in Congressional Visits (and attend any other events). A formal invitation will be sent out once the date is finalized. Please make your leaders aware of this opportunity. Beyond being an opportunity to support high-performance building issues generally, it can be a forum for discussing your particular organizational issues. In advance of the visits, a letter will be sent to Members of Congress to make them aware of the week.

Please let me know if you have any questions. Details will be posted at [www.hpbccc.org/hpbweek](http://www.hpbccc.org/hpbweek) which is currently being updated to reflect this year's activities.

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***Jason Danyliw***  
*Vice President & Newsletter Chair*

## **Regional XI Executive**

### **Director & Regional Chair**

Erich Binder – Southern Alberta Chapter

### **Assistant Regional Chair**

Traci Hanegan – Inland Empire Chapter

### **Nominating Delegate**

Kevin Marple – Oregon Chapter

### **Nominating Alternate**

Norm Grusnick – B.C. Chapter

### **CTTC RVC**

Eileen Jensen – Oregon Chapter

### **Student RVC**

Doug LeCren – Alaska Chapter

### **Membership RVC**

Russell Lavitt – Manitoba Chapter

### **Regional Treasurer**

Rob Craddock – Regina Chapter

### **Regional Historian**

Tim McGinn' – Southern Alberta Chapter

### **Research Promotion RVC**

Ray Sieber – Regina Chapter

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