

BUFFALO TALES

Newsletter of the Manitoba Chapter The Manitoba Chapter of the American Society of Heating, Refrigerating and Air Conditioning Engineers was chartered in September 1935. It is the second oldest ASHRAE Chapter in Canada. ASHRAE Manitoba is part of ASHRAE Region XI and covers ASHRAE members in Manitoba and Northwest Ontario.

Shaping Tomorrow's Built Environment Today



ASHRAE Supper Meeting Victoria Inn, 1808 Wellington Avenue Thursday April 12, 2012 Real World Energy Savings Through Proactive Defrost and VFD Fan Control

5:00 pm - Cocktails

6:00 pm – Dinner

7:00 pm - Real World Energy Savings Through Proactive Defrost and VFD Fan Control

Brian Dolin will discuss energy savings through the use of proactive defrost. His review of evaporator frosting will answer the questions:

- Why and how does frosting happen?
- How does frosting affect system efficiency?
- How has frosting traditionally been controlled and removed?
- How can the frost be used to increase efficiency?

He will discuss a new method of defrost control that improves system efficiency and minimizes system downtime. Case studies will be provided to demonstrate the benefit. VFD fan control will be touched on to suggest further energy savings.

Brian J Dolin is an award winning technical author who has been published in a number of languages. He has given presentation in Europe, Africa, North and South America and Asia. Active in the HVAC&R industry since graduating from Rutgers in 1974, Brian is a member of ASHRAE and RSES and is NATE and EPA certified. He held positions as Product Manager of Sporlan's Electronic products department and Director of the Mechatronics Products Group before joining KE2Therm Solutions as Senior Training Manager. KE2Therm based in Washington MO offers electronically based energy saving products to the HVAC&R industry.

CONFIRM YOUR ATTENDANCE by noon April 10, 2012 by emailing Stephen Norsworthy at <u>ashrae.mb@gmail.com</u>. Indicate any special meal requirements (vegetarian, allergies, etc.) ASHRAE dinner meetings are open to all. Non member cost is \$45. The cost for a first time guests accompanied by an ASHRAE Manitoba member is \$25. Pre-registration is required. To pre-register or to get information on the cost of ASHRAE events, e-mail <u>ashrae.mb@gmail.com</u> or visit <u>www.ashraemanitoba.ca</u>.

President's Message

This Buffalo Tales marks the last ASHRAE Manitoba Chapter dinner meeting for the 2011-2012 season. Our April 12th meeting will be our refrigeration night and a presentation by Brian Dolin from KE2Therm in Washington MO.

ASHRAE Manitoba will be hosting the Chapter Regional Conference (CRC) for Region XI and registration is now open. Please visit the website and sign-up for the great events and seminars. This year's windup will be held in conjunction with the wrap-up event of the CRC. Please see below for more details. Ron Jarnagin, the current ASHRAE Society President, will be attending. I would like to personally thank Russell Lavitt, our CRC Chair, and his committee for the work they have done and for the work that will take place.

At the end of June, I will officially pass the ASHRAE



Manitoba Chapter banner and bell to 2012- 2013 Manitoba Chapter President Corey Nation of E.H. Price. Please help me give him a warm welcome in what will be an exciting year. I would also like to thank my board members for their dedicated commitment and hard work throughout this season.

Hopefully we'll see you at the dinner meeting on April 12th and again at the CRC and wind-up in May.

Coming Events

April 19, 2012- ASHRAE Free WebCast - "Dedicated Outdoor Air Systems: A Path to Balancing Energy and IEQ" - This webcast will describe the role of DOAS in the overall HVAC system, and discuss various DOAS equipment configurations and applications. From understanding DOAS system characteristics, to avoiding pitfalls and challenges unique to DOAS applications, the webcast is a must see for discerning owners and designers alike The Webcast will be live on April 19 and available to view as an archived file until May 3 2011. For registration details visit www.ashrae.org/doaswebcast.

April 24, 2012 – 11th Annual Better Buildings Conference & Exhibition, Winnipeg Convention Centre - the premier event for promoting sustainable design practices, highlighting successful projects in Manitoba, and showcasing products and services related to the buildings industry. For more information, visit the Better Buildings Conference and Exhibition website.

May 11 - 14, 2012 – Region XI CRC in Winnipeg – This is where incoming ASHRAE chapter officers learn the ropes for their new duties. Russell Lavitt and the organizing committee have already started planning the event, but it's not too late for you to get involved, too. For details, go to the CRC website http://ashraemanitoba.ca/2012xi-conference/

There was an offer hidden in the March newsletter. Dieter found it so now Bert owes him a beer.

June 23 – 27, 2012 – ASHRAE Annual Meeting in San Antonio Texas –a fun town. If you want to have a good time in between learning sessions or learn between good time sessions, be there. <u>http://www.ashrae.org/membership--conferences/conferences/san-antonio-conferences</u>

October 1-3, 2012 – Energy Modeling Conference – Tools for Designing High Performance Buildings in Atlanta, will guide building design professionals using currently available building and energy modeling tools on what does and does not work and provide 'workarounds' to improve the results when the modeling tool is not be capable of modeling unique or hybrid buildings or energy systems. For more information, visit <u>www.ashrae.org/EMC2012</u>

November 11 to 14, 2012 – The 7th International Conference on Cold Climate HVAC in Calgary – will provide strategies by which scientists, designers, engineers, manufacturers and other decision makers in cold climate regions can achieve good indoor environmental quality (IEQ), with a minimum use of resources and energy. For more information, go to www.ashrae.org/ColdClimate. For additional information, contact meetings@ashrae.org.

The first testicular guard, the "Cup," was used in Hockey in the 1870's. Helmet use didn't become common until the 1970's. Why did it take men 100 years to realize that the brain is also important? Was it too many head hits or too much testosterone? Enjoy the playoffs!

Operation and Maintenance Guideline from ASHRAE Now Available

ASHRAE Guideline 32-2012, *Sustainable, High Performance Operation and Maintenance*, provides guidance on optimizing operation and maintenance of buildings to achieve the lowest economic and environmental life cycle cost without sacrificing safety or functionality. It gives facility managers and building operating staff a strong foundation on which to improve performance of all buildings, not just new ones.

The guideline applies to the ongoing operational practices for buildings and systems with respect to energy efficiency, occupant comfort, indoor air quality, health and safety. These systems include the building envelope, HVAC&R, plumbing, complementary energy systems, and utilities and electrical systems. ASHRAE Guideline 32 helps building owners and managers evaluate and eliminate the wasted energy caused by poor operating procedures. The elimination of non-value producing energy helps protect our environment while saving the building owner money.

The guideline contains recommendations and checklists for three levels of building oversight: senior managers, facility managers and technicians. ASHRAE Guideline 32, *Sustainable, High-Performance Operations and Maintenance* costs \$69 (\$59, ASHRAE members). For more information or to order visit <u>www.ashrae.org/bookstore</u>

ASHRAE 90.1 - 2010 - Data Center Addenda AP Out for Public Review

Standard 90.1 Addenda AP (highlighted below) proposes PUE (Power Usage Effectiveness) as an alternative "non-modeling" compliance path to conformance with Chapter 6 of 90.1, the building energy standard. The PUE values in 90.1 are DESIGN calculations and may be in the form of a hand calculation or other calculation tools as either a peak or annualized value. This alternate path through 90.1 requires demonstrating "equivalency" to the current prescriptive path requirements, which require economizers. The proposed requirements for PUE values needed to be aggressive to meet criteria enforced by the 90.1 committee.

This alternative compliance path will enable highly innovative data center designers to continue pushing the boundaries of new cooling technology without being bound by prescriptive based regulation. Without an alternative compliance path, many innovative forms of cooling technology will no longer be an option where the 2010 edition of 90.1 is adopted by the States, the IECC, and/or the DOE. The 90.1 white paper on TC9.9's website (<u>http://tc99.ashraetcs.org/</u>) includes additional background information on 90.1 and its applicability to Data Centers.

If this issue matters to you, take some time to submit public review comments on this industry revolutionizing proposal by clicking on the following link and following the "Instructions for Commenters" (<u>http://www.ashrae.org/standards-research--technology/public-review-drafts</u>). Login is required using your existing ASHRAE user name and password. If you don't have one, you will be able to create it. Scroll down until you see this: BSR/ASHRAE/IES Addendum ap to ANSI/ASHRAE/IES Standard 90.1-2010, Energy Standard for Buildings Except Low-Rise Residential Buildings.

It's a long list, so make sure you select the correct one.

ASHRAE Technology Awards Highlight Outstanding Building Projects

The ASHRAE Technology Awards recognize outstanding achievements by members who have successfully applied innovative building design. Their designs incorporate ASHRAE standards for effective energy management and indoor air quality. The awards communicate innovative systems design to other ASHRAE members and highlight technological achievements of ASHRAE to others around the world. Winning projects are selected from entries earning regional awards.

If you have designed an innovative project, consider submitting it for an ASHRAE Technology Award. Winners get international recognition including being written up in the ASHRAE Journal. This is publicity and recognition you can't easily buy, but you can earn. For details on how to enter or for more information on past winners go to <u>http://www.ashrae.org/members/page/1646</u>

Help Wanted - Assistant Editors for Buffalo Tales

I have been the editor of Buffalo for most of the past 20 years. In the future I have travel plans that will conflict with my ability to assemble newsletters in a timely for some months. So, I am looking for one or more assistant editors to cover during my absences. The newsletter would also benefit from new views and more variety. This is a chance for you to test drive the position and determine if it strikes your fancy.

On any Friday or Saturday night I'll put money on more kisses beginning with Miller Lite than with a gift of roses or jewelry.

ASHRAE Manitoba Chapter Officers

President	Johann Baetsen	Epp Siepman Engineering	453 1080	jbaetsen@eppsiepman.com
President Elect	Corey Nation	EH Price	982 2222	coreyn@price-hvac.com
Vice President	Stephen Norsworthy	SNC-Lavalin Inc.	786 8080	stephen.norsworthy@snclavalin.com
Secretary	Mark Windeatt	Engineered Air	632 8535	mark.windeatt@engineeredair.com
Treasurer	Doug Castor	EH Price	982 2220	DougC@price-hvac.com
Board of Governors	Sergio Almeida	Geo-Xergy Systems Inc.	255 5959	sergio@geoxergy.com
	Robert Bisson	Public Schools Finance Board	945 8452	robert.bisson@gov.mb.ca
	Peter Gryc	SMS Engineering Ltd	789 2346	pgryc@smseng.com
	Daryl Friesen	Midwest Engineering Ltd	989 3636	daryl@midwesteng.mb.ca
Technology Transfer	David Surminski	Price Industries	661 7866	DavidS@price-hvac.com
Membership	Stephen Norsworthy	SNC-Lavalin Inc.	786 8080	stephen.norsworthy@snclavalin.com
Research Promotion	Jesse Sandhu	Tetra Tech	954 6902	Jesse.Sandhu@tetratech.com
Student Activities	Scott Hammond	SMS Engineering Ltd	789 2323	shammond@smseng.com
Honors and Awards	Vacant			
Newsletter Editor	Bert Phillips	UNIES Ltd	633 6363	phillips@unies.mb.ca
Homepage Editor	Stephen Norsworthy	SNC-Lavalin Inc.	786 8080	stephen.norsworthy@snclavalin.com
2012 CRC Chair	Russell Lavitt	SMS Engineering Ltd	789 2312	rlavitt@smseng.com
Programs	David Surminski	Price Industries	661 7866	DavidS@price-hvac.com
Refrigeration Chair	Brian Blahey	Lowe Mechanical Services	233 3292	bblahey@lowecanada.com
Accommodations	Stephen Norsworthy	SNC-Lavalin Inc.	786 8080	stephen.norsworthy@snclavalin.com
Chapter History	Robert Bisson	Public Schools Finance Board	945 8452	robert.bisson@gov.mb.ca
YEA	Scott Hammond	SMS Engineering Ltd	789 2323	shammond@smseng.com
Special Events	Corey Nation	EH Price	982 2222	coreyn@price-hvac.com

ASHRAE Region XI Officers

Director & Regional Chair Assistant Regional Chair Technology Transfer Membership	Erich Binder Kevin Marple Eileen Jensen Murdoch MacPherson	Erich Binder Consulting Benz Air Engineering Bonneville Power MacPherson Engineering	Calgary Portland Portland Regina	erich.binder@worleyparsons.com kmarple@benzco.com nejensen@bpa.gov m.macpherson@mac-eng.ca
Student Activities	Doug LeCren	Colt Engineering	Anchorage	douglas.lecren@nanworleyparsons.com
Young Engineers in ASHRAE	Tariq Amlani	Stantec		tariq.amlani@stantec.com
Resource Promotion	Ray Sieber	Sask. Research Council	Regina	sieber@src.sk.ca
Nominating Committee	Norm Grusnick	ECCO Manufacturing	Langley	ngrsnick@eccomfg.com
	Kevin Marple	Benz Air Engineering	Portland	kmarple@benzco.com
Regional Historian	Bill Dean	National Research Council of Canada	Saskatoon	bill.dean@nrc-cnrc.gc.ca
Treasurer	Rob Craddock	Inland Metal Manufacturing	Regina	rob@inlandmetal.ca
Web Page Editor	Kathy Habke	SAC ASHRAE	Calgary	chapter.administrator@sac-ashrae.com
2012 CRC Chair	Russell Lavitt	SMS Engineering Ltd	789.2312	rlavitt@smseng.com

ASHRAE needs you, but more importantly you need ASHRAE. ASHRAE always has room for more professionals, just like you. For information regarding ASHRAE membership, contact Manitoba Membership Chair Stephen Norsworthy (<u>ashrae.mb@gmail.com</u>) or visit ASHRAE Manitoba at <u>www.ashraemanitoba.ca</u>

ASHRAE, founded in 1894, is an international organization of 50,000 persons. Its sole objective is to advance through research, standards writing, publishing and continuing education the arts and sciences of heating, ventilation, air conditioning and refrigeration to serve the evolving needs of the public. Visit ASHRAE at <u>www.ashrae.org</u>. Statements in this publication are not expressions of the Society or of the Chapter.

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