



# 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.*



## ASHRAE Dinner Meeting December 13, 2007

### Past Presidents Night Annual Cribbage Tournament

### Update on ASHRAE Standards and Guidelines

#### Victoria Inn

1808 Wellington Avenue

5:00 pm - Social Hour

6:00 pm - Dinner

7:00 pm – Presentation

**Overview:** Long time Chapter members and Past Presidents, Dieter Bartel and Bert Phillips will share their experiences as volunteers on ASHRAE Standards, Guidelines and Technical Committees. Many ASHRAE members know of and use the standards and handbooks that ASHRAE produces, but do not realize that the expertise comes from the grass roots membership of our Society, people like you. Dieter and Bert will speak about specific committees on which they are currently serving and provide information how one goes about getting actively involved in a committee of particular interest.

Dieter Bartel is a Governor of the Manitoba Chapter of ASHRAE. He has served ASHRAE Manitoba in many positions including as President in 1989-90. Dieter has also served Region as Regional Vice Chair of Membership Promotion. He is employed by Manitoba Hydro as a Commercial Energy Specialist.

Bert Phillips, P.Eng., MBA, current Buffalo Tales editor, served as Chapter President in 1994-95. Bert is currently Regional Vice Chair of the Chapter Technology Transfer Committee. He is an engineering consultant with UNIES Ltd.

### Annual Cribbage Tournament

The annual Cribbage Tournament will follow the Update on ASHRAE Standards and Guidelines. All are welcome to participate in this friendly, three game tournament, regardless of skill level.

To contribute to the prize table, please contact Tom Beggs Agencies 953-1900 [tombeggs@mts.net](mailto:tombeggs@mts.net) 477 Kensington. Tom and his staff will arrange for pick-up or delivery.

## President's Message – David Stones, P. Eng.



least a rest during the holiday.

*A killer whale on the 2007 CRC/Alaska Cruise doing us proud*

Seasons Greetings.

This is the season of time pressures, so my message will be brief. Many of you are very busy with work, planning for the coming holiday or a winter vacation. Regardless, December is busy. Forget the rush on December 13. Join us for an evening of camaraderie and games at the Past-Presidents' night and cribbage tournament.

Our Chapter recently met with representatives of BOMA and BEMM to discuss collaboration with ASHRAE Manitoba for a two-day seminar in April 2008, as a continuation of the Better Buildings series. These seminars have been well attended in the past and are very worthwhile.

I look forward to seeing you on December 13, otherwise have a merry Christmas or at

## Thermostatic Steam Traps and Water Hammer

Lifted from the November 2007 issue of the Regina Chapter Newsletter *Pile of Bones*

Most thermostatic steam traps are balanced-pressure traps. They have a bellows filled with an alcohol/water mixture with an atmospheric boiling point lower than water. As the steam pressure in the trap changes, the boiling point of the mixture in the trap bellows changes with it. These traps will always discharge condensate about 20 °F lower than the temperature of the steam at the inlet to the trap.

If the steam pressure/temperature is high, say 10 psig and 240 °F, the traps will discharge condensate at about 220 °F. This condensate will flash back to steam in atmospheric condensate return lines and cause problems, one of them being water hammer. So, if you've got thermostatic traps and water hammer, try turning the steam pressure down. All that's required in most steam terminal units is 1 psig (215 °F).

## Coming Events

### 2007 – 2008 ASHRAE Manitoba Supper Meeting Dates

**January 17 – Sustainable Building Solutions**; February 7; March 13 – Distinguished Lecturer Julian de Bullet; April 10; and our year end social evening, sometime in May or June.

**ASHRAE Winter Meeting, New York City, January 19-23, 2008** – four days of terrific technical sessions and forums including “Lessons Learned in Sustainable Design Highlighted in ASHRAE Roundtable” in which two of New York’s best-known owner/developer firms, along with the engineering designers who bring their projects to reality, discuss the challenges, opportunities and successes in delivering new green high-rise towers that add to New York City’s skyline and grace the covers of engineering trade magazines. High-Performance Buildings: Lessons from the Leaders takes place 11 a.m.-12:30 p.m. Tuesday, Jan. 22. Learn about owner motivations, technical challenges, design choices and trade-offs, costs for these projects, and perspectives about whether the expectations set early in the design process have been met once the buildings are occupied.

Attend the Joint Region X and XI Dinner on Monday the 21<sup>st</sup> of January at 7pm. The Le Rivage restaurant is less than a mile from the hotel. It has a cozy French country atmosphere offering traditional French cuisine and offers a four-course dinner including an appetizer, salad, entree and dessert with coffee for \$35.00 per plate plus tip and gratuity.

And don’t miss the **ARI trade show**, the greatest HVAC equipment and services exhibition in the world.

**Commercial Geexchange System Design Course, March, 2008** - For details, go to [www.mgea.ca](http://www.mgea.ca) or contact Inez Miller at (204) 470-6647 or [inez@mgea.ca](mailto:inez@mgea.ca)

**2008 CRC** will be May 7-10, 2008 at the Fantasyland Hotel in the West Edmonton Mall. Golf on May 7<sup>th</sup>; Technical Seminars on the morning of May 8<sup>th</sup>, in conjunction with our chapter’s bi-annual Tradeshow followed by an orientation session, the first Caucus and Welcome Party; May 9<sup>th</sup> is meetings, workshops, the President’s Luncheon and Dinner Banquet; May 10<sup>th</sup> is more meetings and workshops, the Awards Luncheon and a Wrap-Up Party. Companion tours include a guided shopping tour of some of Edmonton’s most unique and obscure shops, and tours of the local attractions. Registration and accommodation details will be presented as they become available.

## Water Reuse Guidelines and Standards in Canada

In Canada, there is a growing interest in applying sustainable water management and using water more efficiently. Water reuse is one technique that is gaining momentum. However, water reuse projects are often difficult to implement since an appropriate regulatory framework has not been in place.

The Canadian Council of Ministers of the Environment’s Committee on Health and Environment is developing *Canadian Guidelines for Household Reclaimed Water*. These national guidelines are a tool to address health and safety concerns associated with reusing water and will assist in the development of appropriate regulatory frameworks.

Wastewater, or sewage, that is treated to serve another purpose that is beneficial to society is called reclaimed water. The guidelines have a narrow focus as it is the first initiative in this area. They only cover the water quality and risk management issues of using reclaimed water where the water source is household greywater or wastewater (i.e. from sinks, toilets, showers, washing machines, etc.) and the end use is toilet and urinal flushing, either on-site or at a nearby residential or commercial location. These guidelines are regarded as a first step to a much more comprehensive program for reuse of water in Canada.

The Guidelines should be finalized later this year and will be posted at: [http://www.hc-sc.gc.ca/ewh-semt/water-eau/reclaim-recycle/index\\_e.html](http://www.hc-sc.gc.ca/ewh-semt/water-eau/reclaim-recycle/index_e.html). For your information, the Canadian Standards Association (CSA) has developed the necessary accompanying standards for dual plumbing, CSA Standard #B128 ([www.csa.ca](http://www.csa.ca)). CMHC is currently developing a technology verification protocol for reuse systems.

**Always Think.....** Bert Phillips

At our November supper meeting, Distinguished Lecturer Victor Goldschmidt analyzed the science that links CO<sub>2</sub> from human influences to global warming. His analysis pointed out uncertainties and raised doubts on the culpability of CO<sub>2</sub> as a greenhouse gas threatening the welfare or even survival of future generations. He repeatedly said “**Always think as engineers**” and “**Be good stewards of the earth**”.

**Keep thinking.** Write the costs and consequences of each scenario in the two by two grid analysis below. For example, in the upper left cell (i.e., global warming is imagined and we don’t take any action) your comment might be “nothing has been ventured, nothing lost.” Your lower right cell might say “spent trillions, took appropriate action which reduced damage from CO<sub>2</sub> induced global warming”.

	Global warming is not real	Global warming is real
We don’t take action		
We take action		

**Think about the economic damage** that may occur if the lower left cell turns out to be reality (i.e., we spend trillions to address global warming which is not a real threat). Also **think about any long term benefits**. Many efforts aimed at reducing global warming improve energy efficiency. Side benefits are reduced energy demand and reduced pollutant emissions.

Now consider the consequences of ending up in the upper right cell (i.e., doing nothing in the face of a real threat) and **think about** how you want **future generations** to think about you?

Remember Mr. Goldschmidt’s closing words “**Always think**” and “**Be good stewards of the earth**”.

## Research Promotion – Stirling Walkes, Chapter RP Chair

In 2006-2007 Peter Gryc led a Research Promotion effort that raised \$12,883, 63% more than the Manitoba goal, thanks to the following contributors:

### Major Contributors

<b>Manitoba Hydro</b>	<b>\$2000</b>
<b>Tom Beggs Agencies</b>	<b>\$1000</b>
<b>BEMM</b>	<b>\$1000</b>
<b>Midwest Engineering Ltd.</b>	<b>\$1000</b>
<b>Price – Winnipeg Sales Office</b>	<b>\$1000</b>
<b>Trane Service Agency</b>	<b>\$1000</b>
<b>BPL Sales Limited</b>	<b>\$1000</b>
<b>E.H. Price Limited</b>	<b>\$1000</b>
<b>Hydron-Aire</b>	<b>\$500</b>
<b>Nova 3 Engineering</b>	<b>\$500</b>
<b>Airdronics</b>	<b>\$250</b>

### Honour Roll and Other Contributors

(Honor Roll \*- at least \$100 personal or \$150 corporate)

M2 Engineering*	Dieter Bartel*	Bert Phillips*
Robert Bisson*	Peter Gryc*	David Stones*
Sergio Almeida*	George Marchildon*	Stirling Walkes*
Russell Lavitt*	Corey Nation*	Bornhorst Mechanical*
MCW Consultants*	Daryl Friesen*	R-G Sales*
Earth Tech Canada*	Appin & Associates*	Enersol Distributing*

Please help us meet our 2007 – 2008 target of \$10,000. **Two easy ways you can earn Honor Roll Recognition.....**

- Set aside 30¢ a day for ASHRAE Research  
or
- Donate \$10/month from September through June, the primary months of the RP Campaign

Honor Roll donors have their names published in the ASHRAE Journal and during the Chapter's Recognition Night. Better than that, they know they are supporting the research that supports them.

An authorization form for this monthly or bi-monthly charge may be found through your Chapter RP Chair (Stirling Walkes, [swalkes@smseng.com](mailto:swalkes@smseng.com)) or by contacting ASHRAE RP staff at Headquarters in Atlanta. Please ask for Candace DeV Vaughn or Patricia Adelman, 404/636-8400.

**Did you know** ASHRAE Research not only supports ASHRAE standards, but other important standards for the built environment that are written by other organizations. Earlier this year, submissions were made to the NFPA Smoke Management Committee to make changes to NFPA 92B, Standard for Smoke Management Systems in Malls, Atria and Large Spaces based on the results obtained in RP-1247. NFPA 92B is the standard used throughout North America for the design of atria smoke management systems.

## ASHRAE Manitoba Chapter Officers

President	David Stones	Wardrop Engineering	272-1331	<a href="mailto:dstones@shaw.ca">dstones@shaw.ca</a>
President-Elect	Sergio Almeida	The Trane Company	632-1543	<a href="mailto:salmeida@trane.com">salmeida@trane.com</a>
Vice-President				
Secretary	Daryl Friesen	Midwest Engineering	989-3636	<a href="mailto:daryl@midwesteng.com">daryl@midwesteng.com</a>
Governor	Dieter Bartel	Manitoba Hydro	477-7717	<a href="mailto:dbartel@hydro.mb.ca">dbartel@hydro.mb.ca</a>
Governor	Derek Bishop	Siemens Building Technologies	774.3411	<a href="mailto:derek.bishop@sbt.siemens.com">derek.bishop@sbt.siemens.com</a>
Governor	Robert Bisson	Public School Finance Board	945-8452	<a href="mailto:rbisson@gov.mb.ca">rbisson@gov.mb.ca</a>
Governor	Corey Nation	E.H. Price Ltd.	982-2222	<a href="mailto:CNation@price-hvac.com">CNation@price-hvac.com</a>

### Committee Chairs

Treasurer	George Marchildon	Public School Finance Board	945-0207	<a href="mailto:gmarchildo@gov.mb.ca">gmarchildo@gov.mb.ca</a>
Programs	Johann Baetsen	E.H. Price Ltd.	661-7829	<a href="mailto:johannb@price-hvac.com">johannb@price-hvac.com</a>
Membership	Jesse Sandhu	SMS Engineering	775-0291	<a href="mailto:jsandhu@smseng.com">jsandhu@smseng.com</a>
Student Activities	Peter Gryc	SMS Engineering	775-0291	<a href="mailto:pgryc@smseng.com">pgryc@smseng.com</a>
Chapter History	Robert McDowall		284-6678	<a href="mailto:robertmcdowall@mts.net">robertmcdowall@mts.net</a>
CTT	Russell Lavitt	SMS Engineering	775-0291	<a href="mailto:rlavitt@smseng.com">rlavitt@smseng.com</a>
Research & Promo	Stirling Walkes	SMS Engineering	775-0291	<a href="mailto:swalkes@smseng.com">swalkes@smseng.com</a>
Honours & Awards	Dieter Bartel	Manitoba Hydro	477-7717	<a href="mailto:dbartel@hydro.mb.ca">dbartel@hydro.mb.ca</a>
Refrigeration	Asitha Gajaweera	Pace Industrial	582-4620	<a href="mailto:asithag@paceindustrial.com">asithag@paceindustrial.com</a>

### Other

Roster				
Homepage Editor	Russell Lavitt	SMS Engineering	775-0291	<a href="mailto:rlavitt@smseng.com">rlavitt@smseng.com</a>
Accommodations	David McNeil	Emco Ltd.	925-9630	<a href="mailto:DMcNeil@emcoltd.com">DMcNeil@emcoltd.com</a>
Special Events	Tom Beggs	Tom Beggs Agencies	953-1900	<a href="mailto:tombeggs@mts.net">tombeggs@mts.net</a>
Newsletter Editor	Bert Phillips	UNIES Ltd.	633-6363	<a href="mailto:phillips@unies.mb.ca">phillips@unies.mb.ca</a>

## ASHRAE REGION XI OFFICERS

Director & Regional Chair	Traci Hanegan	Coffman Engineers, Spokane	<a href="mailto:hanegan@coffman.com">hanegan@coffman.com</a>
Assistant Regional Chair	Bill Dean	NRC, Saskatoon	<a href="mailto:Bill.Dean@nrc.ca">Bill.Dean@nrc.ca</a>
Technology Transfer	Bert Phillips	UNIES Ltd.	<a href="mailto:phillips@unies.mb.ca">phillips@unies.mb.ca</a>
Membership Promotion	Russell Lavitt	SMS Engineering	<a href="mailto:rlavitt@smseng.com">rlavitt@smseng.com</a>
Student Activities	Bruce Dobbs	NW Natural Gas, Portland	<a href="mailto:bruce.dobbs@nwnatural.com">bruce.dobbs@nwnatural.com</a>
Resource Promotion	Norm Grusnick	ECCO	<a href="mailto:normang@shaw.ca">normang@shaw.ca</a>
Nominating Committee	Dale Carter	Dec Design, New Westminster	<a href="mailto:Dale@decdesign.ca">Dale@decdesign.ca</a>
Nominating Committee	Doug Dunford	Portland	<a href="mailto:Dwdunford@aol.com">Dwdunford@aol.com</a>
Regional Historian	Ivan Hall	ESC Automation, Edmonton	<a href="mailto:ihall@escautomation.com">ihall@escautomation.com</a>
Treasurer	Rob Craddock	Inland Metal Manufacturing, Regina	<a href="mailto:rob@inlandmetal.ca">rob@inlandmetal.ca</a>
Web Page Editor	Joseph Korus	Coffman Engineers	<a href="mailto:korus@coffman.com">korus@coffman.com</a>
CRC Chair, 2008	Shanon Warner	Cohos-Evamy, Edmonton	<a href="mailto:WarnerS@cohos-evamy.com">WarnerS@cohos-evamy.com</a>

ASHRAE, founded in 1894, is an international organization of 55,000 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.

Statements in this publication are not expressions of the Society or of the Chapter. Articles may be reproduced without permission. Please credit the source.

Visit ASHRAE Manitoba at [www.ashraemanitoba.ca](http://www.ashraemanitoba.ca).

Visit ASHRAE at [www.ashrae.org](http://www.ashrae.org).