

Meeting Notice

Tuesday April 11th, 2006

@ The Willows Golf & Country Club

Speaker: **Ryan Bannerman of SaskPower**

Topic: **Wind Generation & Alternative Energy Sources**

5:30 - 6:00	Cash Bar
6:00 - 6:45	Supper
6:45 - 7:15	Chapter Meeting
7:30 - 8:30	Dinner Speaker



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**Chapter Technology
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RESEARCH PROMOTION

If you would like to donate to this years goal, please contact Mike Osborn @ 242-3333 or m.osborn@cypressales.com

PROGRAM SPEAKERS

I am looking for suggestions for Meeting Speakers and Topics for our local Chapter Meetings for the 2006-2007 season. If anyone has an interesting topic, or knows someone that might be interested in Speaking at one of our Local Meetings, please contact Bruce Waldbillig @ 931-3316 or via email bwaldbillig@price-hvac.com

MEMBERSHIP NEWS

Previous Meeting Attendance: Many thanks to those who attended the March 2006 local chapter meeting and listen to the Distinguished Lecturer, Kent Peterson and his presentation on Chilled Water Systems. Those in attendance were;

Jack Scott	Doug Freeman	Mike Osborn	Chris Conley	Travis Clarke
Paul Khanna	Ryan MacGillivray	Bruce Waldbillig	Jeff Frie	Miles Bantle
Trent Washkosky	Keith Morson	Jonathan Bushman	Hector Drolet	Sid Charlton
Grant Jones	Linda Lin	Brad Chisan	Robert Bergen	Chuck Junek
Grant Roming	Ted Gaudet	Kelly Snider	Dean Buchholz	Bill Dean
Kent Pederson	Manfred Gerber	Kirk Campbell		

Rosters: Saskatoon Chapter 2005-2006 rosters are available for pick-up at all our local chapter meetings.

Web Site: New additions to our Web Site. Enclosed in this newsletter and available on our web page is a listing of the ASHRAE Standards and ASHRAE Books purchased by our local chapter. Each of the standards and books have links to the ASHRAE bookstore which will give a brief description of each publication. This list includes all the ASHRAE books. If you find something that may interest you or be a benefit to the local chapter, send a request to the local chapter president. This bookstore was created by the local membership for the local membership.

[ASHRAE Saskatoon Standards](#)

[ASHRAE Saskatoon Books](#)

The following is a list of books to be purchased and added to the library. Deadline for additions to this order is Thursday April 13th, 2006 and will be the only order for the year.

Principles of Heating, Ventilating and Air-Conditioning
Cooling and Heating Load Calculation Principles
Standard 62.1-2004 User's Manual
Standard 90.1-2004 User's Manual

Check our web page for all the latest news on our local chapter.

<http://www.saskatoon.ashraechapters.org>

Jeff A. Frie A.Sc.T.
Membership Promotion Chairperson

Energy Answers

Rob Dumont

What do you consider to be the top five Energy Efficient Homes built in Canada?

Mark Twain said that "It is not best that we should all think alike; it is a difference of opinion that makes horse races." The following are my own opinions. Others would vote for different horses.

My criteria for selection of the top five were as follows:

1. Breakthrough concepts
2. Deep green ideas
3. Widely publicized
4. Clearly more efficient than other homes of that era

As I was involved with one of the houses, I rank myself as a participant as well as an observer. Thus, my opinions are definitely biased.

Here are my picks:

1. Provident House, King City, Ontario.

This house, built in 1976, was a brainchild of Frank Hooper, Professor at the University of Toronto. It was designed for 100% active solar space heating using a 67 square metre active solar system and a 272 cubic metre water storage tank. I rank this building in the top five because of its dramatic performance goal. It took a lot of guts at that time to design a building for Canada's climate that could be 100% space heated by the sun.

2. Saskatchewan Conservation House, Regina, Saskatchewan.

This house, built in 1977, had several key persons involved. Bob Besant of the University of Saskatchewan (ASHRAE Fellow) was heavily involved in the design of the active solar system, the air to air heat exchanger, the grey water heat recovery unit, and the insulation system. Harold Orr of the National Research Council did some outstanding work with the air tightness details for the building. (It came in at 1.3 air changes per hour at 50 pascals on its first test and was very likely the tightest building in Canada at that time. It was later discovered that the motorized shutters for the south windows were a substantial source of air leakage. Once these holes were patched, the air tightness came in at 0.8 air changes per hour at 50 pascals- a particularly outstanding air tightness number, even when judged by today's standards.) David Eyre of the Saskatchewan Research Council was the manager who made the project happen. I was a grad student at the University of Saskatchewan at the time, and helped out with a number of things including the grey water heat exchanger and the house monitoring.

This house had some firsts for Canada: the first residential air to air heat exchanger using plastic heat transfer surfaces, the first well-sealed house, and the first greywater heat exchanger.

3. Brampton Advanced House, Brampton, Ontario

This house, built in 1989, was designed by Elizabeth White and Greg Allen. It used an integrated heat pump that was capable of space heating, water heating and ventilation. Very high insulation levels were used for southern Ontario. It was one of the first to very aggressively address the lighting and appliance energy consumption.

4. Waterloo Green Home, Waterloo, Ontario

This house was one of 10 demonstration houses built as part of the Canadian Advanced Houses Field Trials. Completed in 1993, this house was, in my opinion, the most innovative of the 10 houses. An enjoyable book "Green Home: Planning and Building the Environmentally Advanced House." by Wayne Grady documents the design and construction. Steve Carpenter and John Kokko of Enermodal Engineering were key design people involved with the project.

5. Toronto Healthy House, Toronto, Ontario

This 1994 duplex showcased a large number of renewable energy and conservation technologies, along with a very aggressive water efficiency program including rooftop capture, and water re-use. Chris Ives of CMHC was a key innovator.

All of the above houses represented significant advances on conventional construction. The next logical step in this chain of innovation would be to develop a house that was completely autonomous in its energy and water supply. A substantial barrier is the current relatively high cost of photovoltaic panels. Very aggressive electricity conservation measures would no doubt help in achieving such a challenging target.

I. Call to order

- Kirk Campbell called to order the regular meeting of the ASHRAE Saskatoon General Meeting at 6:59 p.m on March 14th, 2006 At the Willows Golf & Country Club.

II. Reading of minutes from last meeting

- The meeting minutes from the February 7th meeting were read by Bruce Waldbillig. Chris Conley made a motion to accept the minutes as read which was seconded by Brad Chisan.
- There were no changes or omissions
- A vote to accept the minutes as read or amended was passed unanimously

III. Reports

Treasurer – Ryan MacGillivray

- Account balances were noted and not published.
- Received student membership money from Paul Khanna for the SIAST Students
- Received income money from Jack Scott for the Curling Funspiel

Programs - Kirk Campbell

- Welcome Kent Peterson from Long Beach California who will be speaking about Chilled Water Systems
- A Speaker from SaskPower will be at our April Meeting talking about Alternative Energy Sources and the Wind Power Project.
- The Golf Tournament is booked for May.

CTTC – Chris Conley

- Received 3 book requests for our ASHRAE Library, have until March 24th to get your requests to Chris.
- Still looking for an instructor for our Fundamentals of Air System Design course.

Student Activities – Paul Khanna

- Bruce Dobbs our RVC for Student Affairs will be arriving in Saskatoon on April 11th
- Blake Erb a 3rd Year Engineering Student at the U of S received the \$ 3,000.00 ASHRAE Memorial Scholarship for the 2006-2007 Academic year.
- Jared Dean from SIAST Kelsey Campus will be receiving our local ASHRAE Scholarship
- Paul received 19 SIAST Student memberships

History – Jack Scott

- There was 12 participants at our local funspiel, the winning team consisted of Jack Scott, Bruce Waldbillig & Reg Hofmann.
- The Golf Tournament is Booked for Friday May 26th at the Willows, details to follow.
- The John Ross Curling Bonspiel scheduled for Edmonton has been cancelled, due to lack of teams.

Membership – Jeff Frie

- ASHRAE Rosters for 2005-2006 are available for pick-up
- Welcome new chapter member Charles Junek from Sask Housing Authority. Charles was originally assigned to the Ottawa Valley Chapter and Jeff is working on having his membership re-assigned to the Saskatoon Chapter.
- The phone campaign for Member delinquencies over 3 months is completed

Research Promotion – Mike Osborn

- The phone campaign for Research Promotion is 50% complete.
- There are still some ASHRAE coins to distribute to donors from last year.

IV. Unfinished Business from the Previous Meeting

- Chris Conley & Jeff Frie have not yet received the DVD from the ASHRAE Tradeshow in Chicago. They will review the information when it is received and advise if it's beneficial for our Chapter to purchase a copy for our Library.

V. New business

- Jeff Frie is in the process of listing all the standards and books purchased by our chapter. The list will be published on our local webpage with a link to SIAST's library. To find an ASHRAE publication in the SIAST library use the keyword search "ASHRAE SSSI" The list of standards and books will also have links back to the ASHRAE bookstore for a brief description of the publication. Any standards or books which are purchased or donated to the library will have a date or name recognition behind it. This should be available by the time the next newsletter is published.
- We are looking for nominations for our local BOG, please have your nominations to one of the BOG members before March 28th.

VI. Special Announcements

- Bill Dean announced that Blake Erb who received the \$ 3,000.00 ASHRAE Memorial Scholarship for the 2006-2007 academic year worked for him as a summer student. Blake was the only Canadian and participant from Region XI to receive 1 of the 9 awards given out. Congratulations!

VII. Adjournment

- Hector Drolet made a motion to adjourn the meeting. Meeting adjourned at 7:15 p.m.

Minutes submitted by: Bruce Waldbillig