



AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS INC.

LONDON CANADA CHAPTER #116
LondonCanada.AshraeChapters.org

NOV 28/2005

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Program

GEOTHERMAL HEAT PUMP TECHNOLOGY & THE POTENTIAL FOR ENERGY SAVINGS

Craig Fischbach
FHP Manufacturing Co.

Energy efficiency and the recent interest in "green buildings" (in particular Canada Green Building Council LEED Certification) has renewed interest in heat pumps. Heat pumps can exceed the requirements of ASHRAE 90.1 and have the ability to use environmentally friendly refrigerants.

FUTURE MEETINGS

Sunday Dec 11 - Special Event (ticket prepurchase required)
London Knights vs Guelph Storm (2pm Game Time)

Mon Jan 30/2006

Mon Feb 27/2006

Meeting - Monday Nov 28/2005

THE LAMPLIGHTER INN - THE OAK ROOM
591 Wellington Rd., London

>>> **NEW LOWER RATES FOR MEMBERS** <<<

London Chapter Members = \$25.00 Member's Meal Plan = \$125.00
Students = \$10.00 Others = \$35.00

RESEARCH PROMOTION NIGHT

CASH BAR ALL YOU CAN EAT BUFFET
5:15-Social 6:00-Dinner 7:15-Program

If you plan on attending, and are not contacted by the telephone committee, please advise:
Scott Turner (ph:652-1977 scott@somersepc.com)



President's Message

The October meeting was a success, although we would like to see a few more people attend. The speaker was Tom Mills with Spring Air and he discussed the changes to the NFPA 96 Standards.

The meeting this month will be same room as last months meeting, "The Oak Room". There seems to be some confusion trying to find the room; it is located near the main entrance to the Hotel Complex of Wellington Street. This month's speaker will be Craig Fischbach of Florida Heat Pump, he will be discussing heat pump technology and he will also touch on how heat pumps are being used in LEED buildings. This will be our last meeting of 2005 and we are looking forward to a good turn out.

This month's meeting will be ASHRAE Research night. We will be recognizing all the individuals and companies that have donated to ASHRAE Research in 2004/2005. Research is the foundation of ASHRAE and is the source of developing the ASHRAE Standards and the ASHRAE Handbooks. We would like to thank all the contributors to this worthwhile cause.

It is my understanding that there are a few tickets still left for the December social night, at the John Labatt Centre for a London Knights vs. the Guelph Storm. Tickets will be available at the meeting or by calling Scott Turner @ Somers Environmental Products (519) 652-1977, the seats will be sold on a first come bases.

I look forward to seeing you at the meeting.

Joe Claessens
London Canada Chapter President

Speakers Bio

Craig Fischbach FHP Manufacturing Co. (www-fhp-mfg.com)

Graduated with Bachelors of Mechanical Engineering for the University of Minnesota in 1972. Craig has been involved in the commercial US HVAC industry for a total 33 years and in the commercial water source heat pump industry for 26 years. He has served on ARI's Applied Packaged Products section for 8 years and was involved with the conversion from ARI Standards to ISO/ASHRAE/ARI Standard for Water Source Heat Pumps. Mr. Fischbach is presently the Eastern Region Commercial Sales Manager for FHP Manufacturing Co. FHP Mfg. is a US manufacturer of water source heat pump units. Their products are ISO/ASHRAE/ARI Certified for both geothermal and tower/boiler applications and are Underwriters Laboratories Listed for both the US and Canada.

SUN DEC 11 2:00pm

SPECIAL EVENT

London Knights vs. the Guelph Storm

Game tickets available for purchase at the Nov 28 meeting or from Scott Turner (email:scott@somerssep.com or phone: 519-652-1977).

Just \$30.00 (includes game ticket and snacks within the ASHARE London group booth during the game)

Pete Edmiston
Branch Manager



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Membership Recruitment Campaign 2005-2006

For each new member (including members, associate members, and affiliate members) that a current member recruits (as verified by the 'sponsors' member ID on the prospect's application), the recruiting member will receive the following incentives:

As with the current "Member-get-a-Member" campaign, the recruiter will receive an ASHRAE Gift Certificate for \$10 that can be used for ASHRAE logo merchandise, can be applied toward registration to any Society event (convention registration fee, seminar fee, short course, publications, etc.) or even toward annual dues.

The names of the recruiting members, Society-wide, each month will be included in a random drawing for that month. The monthly winner will receive an ASHRAE Gift Certificate with the value of \$40. For the monthly drawings, each entry name will be for only those that recruited a new member for the previous month. Winners will be announced in the month following the respective drawings. Certificates will be distributed by mail to the winners. Names will be held over only for the following grand prize drawing, but not for any of the other monthly drawings. NOTE: The more new members an existing member recruits, the greater their chances of winning.

One Grand Prize will be awarded at the end of the Society year. This again will be a random drawing of the recruiters' names that have been put into the "hat" during the entire 12 month campaign. The more new members an existing member recruits, the greater their chances of winning. The Grand Prize is a \$150 ASHRAE - Gift Certificate. The winner will be announced in the August 2006 Insights, as well as through a personal phone call from Membership Promotion Chairperson. The certificate will be sent to the Chapter President (or RVC MP) to award at the next chapter meeting (or the CRC).

Hope to see you at the meeting

Jason Vandenberghe
Membership Chair

ASHRAE WINTER MEETING and AHR EXPO

McCormick Place, Chicago

January 21-25, 2006

Conference information and registration forms are now posted on the www.ashrae.org web site.

October Meeting Summary

Last month Tom Mills of Spring Air Systems was able to share his experience and knowledge of some critical updates to the current release of NFPA 96 Code. I'm sure the ability to reduce energy in off peak hours will be of consideration of many future kitchen ventilation designs.

SOMERS ENVIRONMENTAL PRODUCTS INC.

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Resource Promotion Night - Mon Nov 28/2005

The Resource Promotion Campaign annually raises funds to support ASHRAE's research program. It is conducted by the Society's membership through local chapter volunteers and receives over 7,000 contributions each year from the membership and companies associated with the HVAC&R industry.

This annual support totals more than \$1.7 million annually and is matched dollar-for-dollar by ASHRAE from the proceeds of the annual winter AHR Exposition. Since ASHRAE pays all the fund raising expenses, 100% of every donor's invested dollar goes into the research program.

ASHRAE Research Canada is a registered non-profit organization in Canada. Contributions from Canadian businesses are deductible as allowed by law. Please consult your tax advisor

Members have several ways to submit individual or company contributions:

- a) with their dues payment
- b) mailing directly to ASHRAE in Atlanta
- c) by forwarding their contributions to their Chapter's Resource Promotion chair.
- b) on the www.ASHRAE.org web site (charge to a credit card in USA dollars)
{in the left menu, click the [Contribute Online](#) link}

Cheques should be made payable to [ASHRAE Research Canada](#)
and addressed to: ASHRAE Research Promotion, 1791 Tullie Circle, Atlanta, GA 30329.

2004-2005 Research Promotion Recognition Program

ASHRAE Research Canada and the London Chapter recognize and appreciate the support of last year's investors:

ASHRAE Research Partner
Union Gas, Chatham, Ontario

ASHRAE Corporate Investors

Abram Refrigeration
Airwaso London
Ambient Systems
Baymar Supply
Chorley & Bisset Ltd
Control Systems
Curney Mechanical
Drennan Refrigeration
Durrell Control Systems

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Somers Environmental Products
Trane Sales Agency London
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John Bisset
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Dennis Dawe
Owen Glendon

Peter Golem
Ron Granger
Scott Kuni
Andrew Piatek
Tom Pollard

Eric Shaw
Scott Turner
Derek Vakaras

The total investment made by London Chapter members and associates was \$8,989.00.



Why Invest in ASHRAE Research Canada

ASHRAE has been conducting research since 1919 and is now supporting HVAC&R research worldwide. ASHRAE Research has an annual budget of \$3 million, which supports over 70 active projects at any given time. Not only is every dollar invested in ASHRAE Research Canada being re-invested in Canadian projects, but ASHRAE Research is also investing an additional \$3 dollars in Canadian research projects.

ASHRAE Research Canada is addressing the global concerns of energy conservation, environmental controls, and indoor air quality (IAQ). Continuous investment is needed to help develop, validate, update and education the HVAC&R profession on new energy, IAQ, and refrigerant technologies. From the results of ASHRAE Research, HVAC&R engineering departments are provided with constantly updated handbooks, special publications, standards, guidelines, journals, forums, and technical bulletins.

For a list of current research projects and those being considered for funding, please go to the Technology section on ASHRAE Online (www.ashrae.org)

2005-2006 Commemorative Coin

Clarence Birdseye **(1886 - 1956)**

Although the practice of preserving food by freezing has been traced back to as early as 1626, and the first commercial venture in producing frozen food to 1875, Clarence Birdseye is credited with developing, refining, and making the quick freezing process workable and affordable for the home consumer.

On a six-week cruise of Labrador waters with a medical missionary group, he learned of the large profits being made from the breeding and trapping of foxes. In 1912, he left New York to spend the next five years traveling by dog sled and collecting furs for sale.

While in Labrador, Birdseye noted that food frozen in the extreme cold of midwinter were better than those frozen in the spring or fall. Watching the Eskimos' rudimentary quick-freeze methods, a process by which items are frozen at such a speed that only small ice crystals are able to form, he noted that quickly frozen fish retained flavor and texture better than fish frozen slowly.

Entering the wholesale fish business in 1922, he began experimenting with the process of quick freezing food. He later said, "My contribution was to take Eskimo knowledge and the scientists' theories and adapt them to quantity production." In 1923, with an investment of \$7 for an electric fan, buckets of brine, and cakes of ice, Birdseye invented and later perfected a system of packing fresh food into waxed cardboard boxes and flash-freezing them under high pressure.

With many retailers unable to afford to buy freezers during the Depression, Birdseye introduced an inexpensive freezer display case and leased it to them. The ability to distribute and sell frozen foods at the retail level marked the beginning of the frozen food industry. In 1944, with the leasing the first insulated railroad cars; nationwide frozen food distribution became possible.





ASHRAE - Engineering for Sustainability

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) has launched a new campaign emphasizing its role as “the engineering engine that drives sustainability.”

As part of ASHRAE’s stronger focus on its involvement in green buildings, the Society has introduced a new logo, theme, Engineering for Sustainability, and Website, www.engineeringforsustainability.org. These will be used to identify ASHRAE products and services related to sustainability.

“ASHRAE has long provided ‘engineering for sustainability’ by applying its diverse technology assets to the sustainability movement in energy efficiency, indoor environment and industrial processes,” Ron Jarnagin, chair of a committee developing a roadmap for sustainability for the Society, said. “With growing focus in the industry on the green movement, we need to emphasize that ASHRAE is the engineering engine that drives sustainability.”

Jarnagin noted that the Society’s recent efforts include publishing and working on the Advanced Energy Design Guide series, Standard 90.1, which contains a section guiding designers on how to meet requirements for building rating programs, and the ASHRAE GreenGuide, all part of an ASHRAE green “toolkit.”

Sustainability also is addressed through other standards and special publications, ASHRAE Journal articles, ASHRAE Learning Institute courses and in the ASHRAE Handbook.

Opportunities for involvement in shaping ASHRAE’s sustainability future include technical committees and local chapters.



ASHRAE Releases Proposed Cabin Air Standard for Public Comment

A proposed standard that will define air quality and comfort levels on airplanes has moved one step closer to publication. ASHRAE’s proposed standard 161P, Air Quality within Commercial Aircraft, is open for public comment until Nov. 7, 2005.

Also open for review until that date is the proposed companion guideline to the standard, Guideline 28P, Air Quality Within Commercial Aircraft. It provides supplemental information on air quality in air-carrier aircraft and on measurement and testing related to aircraft air quality.

The proposed standard would apply to commercial passenger air-carrier aircraft carrying 20 or more passengers. It is intended to apply to all phases of flight operations and to ground operations whenever the aircraft is occupied by passengers or crew members. No such standard encompassing ventilation, thermal comfort and filtration currently exists for aircraft.

“The environment aboard commercial aircraft is different than that found in other spaces commonly occupied by people,” Byron Jones, Ph.D., chair of the 161 committee, said. “While aircraft are operated with the comfort of passengers and crew in mind, their safety and health must always be paramount.”

Among the reasons aircraft cabin environments are unique are occupant activity levels range from almost completely sedentary (passengers) to active (flight attendants); passengers and crew make up a wide cross section of the general population; and aircraft must be regarded as both a public place (passengers) and a workplace (crew).

The proposed standard requires a minimum total air supply of 15 cubic feet per minute (cfm) and recommends 20 cfm per person. The requirement may be met with a mixture of outside air and filtered recirculated air or with 100 percent outside air. A minimum of 7.5 cfm per person of outside air is required.

In addition to ventilation requirements, the proposed standard addresses supply air quality and control and monitoring of contaminants to further ensure satisfactory air quality is maintained, according to Jones. Requirements for comfort factors, such as rate of change of cabin pressure, air temperatures and surface temperatures, and minimum and maximum air velocities, also are included.

An informative appendix supplements the requirements of the standard with background information on a variety of potential air contaminants, methods of measurements, references to standards and guidelines of allowable levels, and data for levels measured on aircraft.

Drafts of ASHRAE’s proposed standards and guidelines are available only during their related public review periods. To obtain electronic draft versions of the Standard 161P or Guideline 28 during the comment periods, log on to ASHRAE Online at www.ashrae.org/standards.



User's Manual Provides Better Understanding of ASHRAE 62.1

A new user's manual provides users with a better understanding of the design, installation and operation requirements in ASHRAE's ventilation standard.

The Standard 62.1 User's Manual explains the requirements of ANSI/ASHRAE Standard 62.1-2004, Ventilation for Acceptable Indoor Air Quality, and contains numerous examples of their application in an easy-to-follow question and answer format.

"Because the standard is written in code-intended language, such material could not be included in the standard itself, so the manual helps users better understand the intent and apply it to their work," Dennis Stanke, chair of the Standard 62.1 committee, said. "It helps users understand what Standard 62.1 requires and how those requirements can be met. It's a document that designers have needed for many years and will find useful for many years to come."

The manual includes a CD containing a spreadsheet to assist in the standard's new ventilation rate procedure calculations.

The manual was developed through ASHRAE research and partially funded by the National Institute of Standards and Technology, the Air-Conditioning and Refrigeration Institute and the U.S. Green Building Council.

The cost of the Standard 62.1 User's Manual is \$55 (\$44, ASHRAE members).

To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, by mail at 1791 Tullie Circle NE, Atlanta, GA 30329, or visit the ASHRAE.org Bookstore at www.ashrae.org.

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

