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

London, Canada Chapter No.116 (web site: LondonCanada.AshraeChapters.org)

SEPTEMBER 2003

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Historian John Kelly Ph (519) 453-3010 ikelly2@trane.com

Newsletter Scott Turner Ph (519)652-1977 scott@somersep.com

Golf Tournament Hugh Palser Ph (519) 471-9382 palserent@primus.ca Topic:

Optimizing Laboratory Ventilation Using Computational

Fluid Dynamics

Dr. Duncan Phillips, Speaker:

Rowan Williams Davies & Irwin Inc.

Consulting Engineers

The design of safe and cost effective laboratory facilities frequently relies on a best practices approach. However, in

some circumstances, complications arise for which additional analyses are required. In addition, with an increasing concern about the impact of the building and the activities within it on the health of the occupants and environment, understanding the performance of the mechanical systems within the occupied space is becoming more impor-

Computational fluid dynamics (CFD) is one approach to assessing the performance of a laboratory space. CFD is the numerical solution of the standard equations of fluid flow. Typical results of a CFD analysis include air speeds and temperatures in the simulated space. These results can be used to assess and optimize ventilation efficiency, human thermal comfort, the effects of reduced energy consumption and challenges to fume hood containment.

Tonight's presentation will provide a brief overview of the CFD process as it applies to Lab design. A number of case studies will be presented which highlight how CFD analyses generated information that was used to assess and improve the design within the laboratory.

Duncan Phillips is a CFD and Industrial Ventilation Specialist with RWDI. As part of RWDI's Computational Fluid Dynamics (CFD) team, he is responsible for solving industrial process and indoor environmental problems by analyzing fluid flow, and heat and mass transfer characteristics. Dr. Phillips joined RWDI in 2000 after completing his Ph.D. in Mechanical Engineering in 1998. He is a member of a number of Technical Committees at ASHRAE, and an Associate of RWDI since 2001.

> Location: The Lamplighter Inn 591 Wellington Rd., S.

Monday SEPTEMBER-29-2003 Social-5:15 pm

Meal Cost \$35.00. Or Meal Plan \$160.00

Dinner-6:00

Program-7:15 (Approx.)

BUFFET MENU

Students \$15.00

President's Message

It's the start of another season for ASHRAE London with plans underway for the upcoming year. Ideas that we are working on include another social event at the John Labatt Centre for a London Knights hockey game.

Over the summer, 7 members of the ASHRAE Board of Governors attended the Chapter Regional Conference (CRC) in Quebec. The ASHRAE La Ville de Quebec Chapter hosted representatives from each of the 9 Region II Chapters, as well as Mr Richard Rooley - Society President, Mr Darryl Boyce Society Vice President, and Mr Jean Bundock - Region II Director And Regional Chair. President Rooley discussed how ASHRAE is changing. He commented that our work in HVAC & R rates in the top 10 of importance on this planet. Our standards are used worldwide. Our membership is 85% North American with the majority of members in the age group of 40 to 55. We need to grow in the 20 to 40 group. The new Affiliate grade of membership is designed to help get younger members into the Society. He then elaborated about the "Boston Box". He went on to stress the importance of HVAC maintenance, an area very poorly addressed at this time. He talked about the evolution in technology - in 1975, slide rules, today, computers, 2020 - what will it be?

At the CRC, the London Chapter was recognized for significant improvement in membership, attendance, research promotion, education, chapter programs, and technology during the previous year. In particular, members of the London Chapter contributed \$8,126.00 to ASHRAE Research. It should be noted that all money collected in Canada is used within HVAC Research topics in Canada. Currently, there are projects at Natural Research Council of Canada, Vibro-Acoustics, Stantech Consulting, Ecotope, and Univ of Alberta.

ASHRAE Society has also been updating the web site at WWW.ASHRAE. ORG. More and more communications from ASHRAE will be posted on the web site before being within the ASHRAE Journal and Insights publications. You can subscribe to receive a weekly E-Newsletter under Membership Resources on the WWW.ASHRAE.ORG web site.

I would also like to thank the contributors to our newsletter who purchase ads last year. These funds help in chapter operations:

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See you at the meeting.

Tom Pollard, P.Eng **Chapter President** ASHRAE London Canada (Chapter #116) 248 HAMILTON CRESCENT DORCHESTER, ONT. NO. 1G1 PHONE: (518) 268-3166 (519) 268-3167 KAX: (519) 268-3165

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Tech Notes

Air-intake contamination

ASHRAE is proposing to set new minimum separation distance requirements to ensure that outdoor air on buildings intakes are not close to areas such as loading docks and combustion vents. When there is not enough distance between intakes and exhausts, the air entering a building can become contaminated. Addendum "aa" to ANSI/ ASHRAE Standard 62-2001 has been issued for review and public comment. For more details, visit www.ashrae.org

October 27th, 2003 Meeting Preview

Speaker: Stephen Carpenter, P.Eng., Enermodal Engineering

Sustainable Building Design and the LEED Green Building Rat Topic:

ing System

The traditional mechanical engineer's role in building design is to ensure that the systems meet the basic requirements for heating, cooling and ventilation. Increasing concern about environmental issues is now requiring that buildings be more sustainable including high levels of energy efficiency, superior indoor environment and minimum environmental impact. The advent of the LEED green building rating system means that designers can now quantify the sustainability of their designs. LEED is becoming widely used across North America and is a requirement for many federal government buildings. Mr. Carpenter will provide an overview of the LEED rating system and examples of sustainable building designs.

Stephen Carpenter is president of Enermodal Engineering of Kitchener, ON and an active ASHRAE member. Enermodal specializes in energy efficient and sustainable building design and has won two ASHRAE Technology Awards for their buildings. Mr. Carpenter was the first LEED Accredited Professional in Ontario and is providing sustainability consulting services on over \$1 Billion in building projects. He is also a contributing author to the recently approved ASHRAE Green Guide to Buildings.

November 24th, 2003 Meeting Preview

Speaker: Bill McCartney, Isotherm Engineering Ltd.

The Commissioning Process

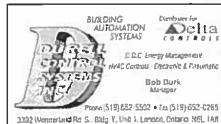
The commissioning process was first developed at an ASHRAE forum over 20 years ago and was outlined in ASHRAE Guideline-1 1989. The guideline was revised and published again in 1996. We are now going through the revision process again and working with ASHRAE to create Guideline-0 Total Building Commissioning, of which HVAC commissioning is a subsection. This discussion will focus on Guideline-1 1996 and the commissioning process as it pertains to the HVAC construction industry.

We will follow through the three basic sections - Documentation, Verification, and Technology Transfer.

Bill McCartney is a Partner at Isotherm Engineering in Mississauga. A former London ASHRAE chapter member, Bill has been a member of ASHRAE Technical Committee TC7.9 Building Commissioning and chaired TC7.3 Operating and Maintenance Management. Isotherm Engineering offers consulting services in investigation, reporting, design, commissioning and service of HVAC systems.

Membership:

This month is Student Night, the chapter would like to encourage all students who are interested to come out to the meeting September the 29th @ 6:00 pm at The Lamplighter Inn on Wellington St., the chapter would like to see all members who attend the meeting make the students feel welcome by introducing themselves sometime through out the night or invite some of the students to have dinner at your table. For those students who plan on joining ASHRAE there is only a \$8.00 fee per year as a student, which also ables you to buy ASHRAE handbooks for only \$39.00 any time during their student membership. The following is list of all chapters in region two and the numbers of current members



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Membership Cont'd

The following is list of all chapters in region two and the numbers of current members.

Quebec 150 members & 62 students Montreal 354 members & 118 students Ottawa Valley 314 members & 11 students Toronto 819 members & 49 students Hamilton 154 members & 5 students Halifax 108 members & 6 students **London 90 members & 32 students** NB / PEI 87 members & 11 students Windsor 60 members & 15 students

October Meeting - " Membership Night" the chapter would like to see members who plan on attending bring a guest with them, so they can see what potential ASHARE may have for them to become a member.

ASHRAE London Chapter Program 2003/2004 Table Top Tech Session **Organization** Speaker **Topic Date** Rowan, Williams, Da-Optimizing Lab Venti-Dr. Duncan vies & Irwin Inc. Con-Monday Sept. 29, 2003 **Phillips** lation Using CFD sulting Engineers Sustainable Bldg.Design Enermodal Engineer-Stephen Carand the LEED Green Monday Oct. 27, 2003 penter, P.Eng. ing Bldg. Rating System Isotherm Engineering The Commissioning Bill McCartney Monday Nov. 24, 2003 Ltd **Process** Dec - No Meeting Monday Jan. 19, 2004 Monday Feb. 23, 2004 Monday Mar. 29, 2004 Monday Apr. 26, 2004 Golf Tournament / Membership Promotion June 7, 2004





ASHRAE London Chapter

2003-2004

London Chapter I	<u>Rates</u>	
Chapter M	eal Plan (must be a society member)	\$160.00
	er October 31/2003 = \$175.00)	
Guest (nor	n-Society member)	\$35.00/meal
Table Top	Display	\$100.00
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	ase attach business card sample)	•
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		mail to:
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		Attn: Mr Joe Claessens
		1 Wortley Road
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		N6C 3N7
Street		
		
City	Postal Code	make cheques payable to:
()	()	ACUDAE Landan Chantan
Phone	Fax	ASHRAE London Chapter
E-Mail (newsletter an	d meeting notices will be sent by email)	
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Please return this completed form with your registration. Receipts will be issued at each monthly meeting.

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ASHRAE London Chapter

2003-2004

<u>London Chapter Rates</u>	
Chapter Meal Plan (must be a society member) (after October 31/2003 = \$175.00)	\$160.00
Guest (non-Society member)	\$35,00/meal
Student	
Table Top Display	
Corporate Ad in Newsletter (Please attach business card sample)	\$100.00/year
Please <u>Print</u> clearly	
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Business/Organization Name	London, Ont. N6C 3N7
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ASHRAE LONDON CANADA CHAPTER #116

October 27th, 2003 Meeting Preview

Speaker: Stephen Carpenter, P.Eng., Enermodal Engineering

Topic: Sustainable Building Design and the LEED Green Building Rating System

The traditional mechanical engineer's role in building design is to ensure that the systems meet the basic requirements for heating, cooling and ventilation. Increasing concern about environmental issues is now requiring that buildings be more sustainable including high levels of energy efficiency, superior indoor environment and minimum environmental impact. The advent of the LEED green building rating system means that designers can now quantify the sustainability of their designs. LEED is becoming widely used across North America and is a requirement for many federal government buildings. Mr. Carpenter will provide an overview of the LEED rating system and examples of sustainable building designs.

Stephen Carpenter is president of Enermodal Engineering of Kitchener, ON and an active ASHRAE member. Enermodal specializes in energy efficient and sustainable building design and has won two ASHRAE Technology Awards for their buildings. Mr. Carpenter was the first LEED Accredited Professional in Ontario and is providing sustainability consulting services on over \$1 Billion in building projects. He is also a contributing author to the recently approved ASHRAE Green Guide to Buildings.

(further details will be posted in the newsletter approx 1 week before meeting)

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

London, Canada Chapter No.116 (www.execulink.com/~tpollard/ashrae.html)

OCTOBER 2003

Board of Governors& Committee Chairs

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Newsletter Scott Turner Ph (519)652-1977 scott@somersep.com

Golf Tournament Hugh Palser Ph (519) 471-9382 palserent@primus.ca **Topic:** Sustainable Building Design and the LEED Green Building Rating System

Speaker: Stephen Carpenter, P.Eng., Enermodal Engineering



The traditional mechanical engineer's role in building design is to ensure that the systems meet the basic requirements for heating, cooling and ventilation. Increasing concern about environmental issues is now requiring that buildings be more sustainable including high levels of energy efficiency, superior indoor environment and minimum environmental impact. The advent of the LEED green building rating system means that designers can now quantify the sustainability of their designs. LEED is becoming widely used across North America and is a requirement for many federal government buildings. Mr. Carpenter will provide an overview of the LEED rating system and examples of sustainable building designs.

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Location: <u>The Lamplighter Inn</u> 591 Wellington Rd., S.

BUFFET MENU

Meal Cost \$35.00, Or Meal Plan \$160.00 Students \$15.00 Monday October 27-2003

Social—5:15 pm Dinner—6:00

Program—7:15 (Approx.)

President's Message:

The London Chapter program for the upcoming year is being finalized. Within this newsletter is a complete list of upcoming speakers and topics. Be sure to mark your calendar of the meeting dates. Several of our meeting topics might be of interest to others (building owners, architects, designers) so be sure to let others know about your meetings.

There will also be a few additional activities that we are planning. A trip to see a London Knights hockey game at the John Labatt Centre is being planned for December. Be sure to attend the October meeting to find out additional information as we will have a limited number of tickets.

Last month's meeting was a student night for Univ. of Western Ontario and Fanshawe College (total attendance was 55). I would like to thank those corporations who have offered to sponsor a student (this allows the student to attend a chapter meeting and also membership in the ASHRAE Society). If your company would like to sponsor a student, please contact Scott Edmunds.

Research Promotion:

In this months report we would like to take this opportunity to thank all of the members and companies who have contributed to the Research Promotion Campaign last year.

The Research Campaign for 2002 –2003 was a good news bad news story. The bad news was that the society fell short of is goal by 10.2%, collecting \$1,545,579 of the \$1,734,575 target. The good news from Region II and the London chapter is that Region II was only one of the two Regions (there are 14 Regions) who exceeded their goal for last year.

Although ASHRAE did fail short of it's target goal last year, the thought of collecting more than 1.5 million dollars that funds research projects is nothing to be ashamed of, especially when you consider the organization is made up of volunteers. We should be proud of what we have accomplished.

We would like to recognize the following members and companies who made the Research promotion in London another success story.

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Program:

We had a strong turnout for our September meeting (55), despite it being the first meeting of the year. We had a number of UWO and Fanshawe students attend, and hopefully some of them will continue to attend for the rest of the year. Those that did attend last month enjoyed an entertaining talk by Dr. Duncan Phillips of RWDI in Guelph on the use of Computational Fluid Dynamics (CFD) in the design of laboratory spaces.

This month's meeting will feature Stephen Carpenter of Enermodal Engineering, speaking on Sustainable Building Design and the LEED green building rating system. This is becoming a hot topic in the industry, as Building Owners start to request their buildings be LEED certified.

November 24th, 2003 Meeting Preview

Speaker: Bill McCartney, Isotherm Engineering Ltd.

Topic: The Commissioning Process

The commissioning process was first developed at an ASHRAE forum over 20 years ago and was outlined in ASHRAE Guideline-1 1989. The guideline was revised and published again in 1996. We are now going through the revision process again and working with ASHRAE to create Guideline-0 Total Building Commissioning, of which HVAC commissioning is a subsection. This discussion will focus on Guideline-1 1996 and the commissioning process as it pertains to the HVAC construction industry.

We will follow through the three basic sections – Documentation, Verification, and Technology Transfer.

Bill McCartney is a Partner at Isotherm Engineering in Mississauga. A former London ASHRAE chapter member, Bill has been a member of ASHRAE Technical Committee TC7.9 Building Commissioning and chaired TC7.3 Operating and Maintenance Management. Isotherm Engineering offers consulting services in investigation, reporting, design, commissioning and service of HVAC systems.

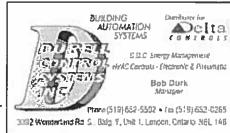
Special Thanks:

A special thanks to the following companies for sponsoring meals for the students from UWO and Fanshawe College:

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History:

LONDON CHAPTER PAST PRESIDENT TOM DRENNAN

London's ASHRAE President of 1990-1991, Tom Drennan remains an ASHRAE member and heads his family's business in London. A Londoner for almost all his life, Tom's family moved to the city when he was eight years old.

In 1972 his father, Tom Drennan Sr., founded Drennan Refrigeration. After earning a BA in Social Sciences at the University of Western Ontario, Tom joined his father's company in 1979.

Drennan Refrigeration has completed many industrial projects in London and across southern Ontario, including a large cooler and freezer building for Serca Foods in Toronto. Along with freezers for vegetables, Drennan Refrigeration has also built food-handling facilities for McDonald's.

In addition to refrigeration for food, Tom has also made refrigeration systems for arenas, including the twin pad for Sarnia's junior hockey arena.

When his father retired in 1996 Tom became head of the company. Tom's brother Alex also works for Drennan Refrigeration.

As well as being involved with ASHRAE Tom has also been a member of the International Institute of Ammonia Refrigeration. Tom continues to be a supportive member of ASHRAE London and is a regular attendee of chapter meetings.

ASHRAE London Canada Chapter

2003-2004 Meeting Program

Meeting	Topic	Speaker
Date		
September 29 2003	Use of Computational Fluid	Dr. Duncan Phillips, PhD, P.Eng.
	Dynamics in Laboratory Design	RWDI
October 27 2003	Sustainable Building Design and the	Stephen Carpenter, P.Eng.,
	LEED Green Building Rating System	Enermodal Engineering
November 24 2003	The Commissioning Process	Bill McCartney,
		Isotherm Engineering
January 19 2004	Underfloor Air Distribution	Andrew Clancy, P.Eng.,
		York International
February 23 2004	Security Bonds	Don Bere,
	in the Construction Industry	Stevenson & Hunt
March 29 2004	Tour of the new Engineering	
=	Laboratory Building at UWO	
April 26 2004	The Influence of the ASHRAE 90.1	Julian R. de Bullet,
	Energy Efficiency Standard	ASHRAE Distinguished Lecturer,
	on Design of Chilled Water Systems	McQuay International

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ASHRAE LONDON CANADA CHAPTER #116

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(further details will be posted in the newsletter approx 1 week before meeting)

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

London, Canada Chapter No.116 (www.execulink.com/~tpollard/ashrae.html)

Volume 1, Issue 3

NOVEMBER 2003

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Newsletter Scott Turner Ph (519)652-1977 scott@somersep.com

Golf Tournament Hugh Palser Ph (519) 471-9382 palserent@primus.ca **Topic:** The Commissioning Process

Speaker: Bill McCartney, Isotherm Engineering Ltd



The commissioning process was first developed at an ASHRAE forum over 20 years ago and was outlined in ASHRAE Guideline-1 1989. The guideline was revised and published again in 1996. We are now going through the revision process again and working with ASHRAE to create Guideline-0 Total Building Commissioning, of which HVAC commissioning is a subsection. This discussion will focus on Guideline-1 1996 and the commissioning process as it pertains to the HVAC construction industry. We will follow through the three basic sections – Documentation, Verification, and Technology Transfer.

Bill McCartney is a Partner at Isotherm Engineering in Mississauga. A former London ASHRAE chapter member, Bill has been a member of ASHRAE Technical Committee TC7.9 Building Commissioning and chaired TC7.3 Operating and Maintenance Management. Isotherm Engineering offers consulting services in investigation, reporting, design, commissioning and service of HVAC systems.

Location: <u>The Lamplighter Inn</u> 591 Wellington Rd., S.

BUFFET MENU

Monday November 24-2003

Social—5:15 pm

Meal Cost \$35.00, Or Meal Plan \$160.00 Students \$15.00

Dinner—6:00

Program—7:15 (Approx.)

President's Message:

The first two London Chapter meeting attendance for the season has been above average and we would like this to continue with the next meeting being a "BRING A GUEST NIGHT". Those members who bring a guest will be given a ticket for a draw to win 2 bottles of wine (one for the guest and one for the member). Please invite other local building industry and HVAC contractors, designers, owners, to the meeting. The Commissioning Process topic should be of interest to everyone as equipment may not work as expected unless setup properly.

I would also suggest you review the other program topics for the upcoming year:

Under-floor Air Distribution (Mon. Jan 19/2004) Andrew Clancy, P.Eng, York International

Security Bonds in the Construction Industry (Mon. Feb 29/2004) Don Bere, Stevenson & Hunt

ASHRAE 90.1 and the Design of Chilled Water Systems (Mon. April 26/2004)

Julian R. de. Bullet, ASHRAE Distinguished Lecturer, McQuay International

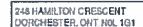
There is also planned a tour of a local business/site. If there is any topic that you would like to see, please let us know so we can arrange a speaker.

The October's meeting on LEED (Leadership in Energy and Environmental Design) Green Building Rating System was very interesting as Mr Stephen Carpenter, P.ENG., Enermodal Engineering, Kitchener Ontario explained the rating system and how some unique systems were used. It should be noted that the Canada Green Building Council (CaGBC) is developing its own standard. For more information see: www.cagbc.org/index.php or www.usgbc.org/LEED

Do not forget, as mentioned at the Oct meeting, a trip to see a London Knights hockey game at the John Labatt Centre has been scheduled for Dec 12 (the London Knights host the Erie Otters). If you have indicated that you would like a ticket, please see Derek Vakaras at the Nov meeting (be sure to bring your payment so you can get your ticket -\$12 /adult and \$10 /child).

See you at the meeting.

Tom Pollard, P.Eng **Chapter President** ASHRAE London Canada (Chapter #116) (web site: www.LondonCanada.AshraeChapters.org)



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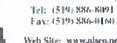


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Program:

We had another strong turnout at last month's meeting - about 45 people attended to hear Stephen Carpenter of Enermodal Engineering talk about sustainable design and the LEED green building rating program. The presentation was an entertaining one and Stephen shared with us lots of unique approaches to energy efficient HVAC design.

This month's meeting will feature Bill McCartney of Isotherm Engineering Ltd, speaking on the commissioning process. Bill's presentation should serve as a good introduction to commissioning, and since commissioning is becoming more and more common, should be of interest to owners and architects, as well as the consultants and contractors who are more closely involved with the process.

Tickets for the December 12th London Knights hockey game will be available for pickup at this month's meeting, for those who signed up to attend. Ticket prices are \$12 for adults, \$10 for children. We may be able to get a few more tickets if anyone else would like to attend.

January 19th, 2004 Meeting Preview

Speaker. Andrew Clancy, P.E., York International Corporation **Topic:** Under-floor Air Distribution Systems

Andrew is York's Business Development Manager for the Northeast Region. He is responsible for promoting under-floor air distribution systems to the market, with a focus on developing alliances throughout the construction industry. He will provide an introduction to under-floor air distribution systems and discuss their benefits in terms of energy efficiency, flexibility and cost.

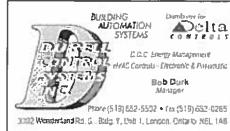
Resource Promotion:

This month the chapter will recognize all of the individuals and companies who made an investment in the Research Promotion Campaign last year. As I mentioned in last month's newsletter, our chapter and Region II exceeded the financial goals set out by society.

Our campaign for 2003 & 04 is on its way. Several companies and individuals (including the Chapters Board of Governors) have made early contributions of which we do appreciate. If you are considering an investment for this campaign, please consider making the investment before the end of 2003, if this timing does coincide with your year end, you can take advantage of the tax deduction much earlier as compared to waiting to 2004.

Once again, thank you for your past support of Resource Promotion, and we hope to see you on Monday night to be recognized. We hope we can count on your continued support again this year.

If I can be of any assistance to you regarding Resource Promotion or anything at the chapter level, please feel free to contact me.



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Daryl Somers - Chairman 2003-04 Ph. 652-1977

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

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Volume 1. Issue 4

JANUARY 2004

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Newsletter Scott Turner Ph (519)652-1977 scott@somersep.com

Golf Tournament Hugh Palser Ph (519) 471-9382

Topic: Sustainable Service Delivery Systems

Speaker: Andrew Clancy, P.E., York International Corp.

Last month about 50 people attended to hear Bill McCartney's presentation on the Commissioning Process. Bill shared with us his considerable expertise on the process and highlighted the benefits of commissioning and ways to ensure it is done properly.

This month's meeting will feature Andrew Clancy, P.E., Business Development Manager for York International Corporation, speaking on underfloor air distribution, Andrew has an extensive building sustainability background, and experience in consulting practice. Andrew is traveling from Pennsylvania to speak to our group, so please try to attend.

Underfloor air distribution is a growing force in the construction industry. More and more facility owners have recognized the benefits of installing an access floor into their buildings to reap the benefits of flexibility and cost savings involved with power, voice and data distribution. Many designers in the North American market have also begun to integrate the air distribution system into the raised access floor as well. In addition to the cost and flexibility benefits, improvements in energy usage and indoor air quality can also be gained.

After a brief introduction on the design practices that we have been using for a number of years, we will discuss the impact of service delivery systems, i.e.: air distribution, power, voice and data, on the sustainability of a facility, with a focus on the air distribution strategy. We will also address topics involving the integration of an access floor and underfloor air distribution into a facility.

Derek Vakaras P.Eng

Location: The Lamplighter Inn 591 Wellington Rd., S.

BUFFET MENU

Monday January 19-2004

Social-5:15 pm

Dinner-6:00

Program—7:15 (Approx.)

PROGRAM:

palserent@primus.ca

Meal Cost \$35.00, Or Meal Plan \$160.00

Students \$15.00

President's Message:

Hope everyone had a nice Christmas holiday, and now we have the winter weather to go with the season. I guess we have been spoiled within the warm weather at the end of 2003, and now 2004 has started off being much colder then normal.

The November meeting saw Mr Bill McCartney speak about the Commissioning Process which involves more then just doing air balancing. Bill spoke that sometimes it is beneficial to have a commissioning team involved during the design process to ensure that the proposed equipment will meet the requirements of the Owner, and to write the commission requirements during construction. Bill also had a number of photos that showed some problems with equipment (such as the deck built around the air conditioning unit).

We had a number of guests out to the meeting, and hopeful London Chapter Members will get their guests out to another meeting.

The January meeting topic on Underfloor Air Distribution (UFAD) has been written up within past ASHRAE Journals. This style of design is to provide a more comfortable work environment while reducing energy use. ASHRAE also has a UFAD design guide which can be purchased on-line at the bookstore section of the www.ashrae.org web site. The ASHRAE Journal (January issue) also has a article on "Checking on Complaints of Office Temperature" (as designers and contractors know - temperatures that are too cold and too hot ranked as No. 1 and No. 2 on a list of top 10 office complaints).

At the end of November, I also had the privilege of presenting the ASHRAE Award at the Univ. of Western Ontario Fall Awards Ceremony to Mr Daniel Polakoff who had the high mark for the 3rd year hvac course.

Tom Pollard, P.Eng **Chapter President**

National Engineers Week:

National Engineers Week 2004 will be celebrated February 22-28. Once again, thousands of your fellow colleagues from all engineering disciplines throughout the country will be taking part in this exciting event. You will have an opportunity to gain public recognition for the many ways that engineers have contributed to improving the quality of everyday life. Many of the outreach programs emphasize the importance of math and science to the "next generation" of children and young adults. Outreach efforts include Discover "E", mall events and contests. Special emphasis this year is being placed on going beyond U.S. borders. One program that fits this objective is Introduce A Girl to Engineering.

Introduce a Girl to Engineering Day will be held on Thursday, February 26th. The goals for this special program are:

Increase awareness and interest in engineering and technology among girls Educate girls and adults about the many opportunities available to women in these fields Create an appreciation among all young people of the importance of a diversity of perspectives in defining our technological future Dispel the myths that exist in our society regarding the interest and capabilities of girls and women in science and technology

The NEW web sile (www.eweek.org) can provide your local chapter or student branch with ideas for activities as well as organizational lips for hosting a public event on engineering. You may order an information kit through the NEW web site at https://shop. eweek.org/eweek/product.asp?dept%5Fid=1&pf%5Fid=001 or by phone at

412-741-1393. As always, these kits will provide you with interesting program ideas for your group.

In closing, remember that National Engineers Week 2004 can only be effective if we get strong participation from engineers and engineering students at the local level.

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History:

ASHRAE HISTORY REPORT PAST PRESIDENT DARYL SOMERS

Daryl graduated from the HVAC course at Niagara College in 1981. During college he was vice president of the student chapter of ASHRAE. After graduation Daryl was hired by Niagara Plumbing Supplies. At the time, the business was involved in the wholesale market, bid and specification, industrial and over the counter sales. Daryl was hired to begin the HVAC division.

His boss at the time, Jack Keon, was president of the ASHRAE Hamilton chapter and Daryl's involvement with ASHRAE Hamilton began at this time. Serving on the board of the Hamilton chapter for 5 years, he was president in 1992-93.

During his ten year tenure with Niagara Plumbing Supplies the HVAC division was firmly established. Daryl then worked for C.W. O'Dell Associates in Burlington for three years selling ventilation products.

In 1993 Daryl moved to London and started his own business, Somers Environmental Products. Somers Environmental Products has recently celebrated 10 years in business and now employs six people. Daryl served as president of the London ASH-RAE chapter 2001-02. He has been active in the London chapter for many years and is currently the research chair and assistant chair for the CRC 2005.

An Invite From The Windsor Chapter:

The Windsor Chapter would like to extend an invitation to the London Chapter for our February Meeting. We are excited to have as a DL, Richard Hayter, Associate Dean of Engineering at Kansas State University, and past President of the Association. His Topic will be "Technical Communications for the Practicing Professional". This meeting will be held at the Windsor Hilton on Riverside Drive on February 17th, 2004. Also as a Resource fundraiser the Chapter will be raffling off two ticket to the April 3rd, 2004 Detroit Red Wing/Columbus Blue Jacket game!

Upcoming Meetings:

2004

JAN. 24-28: ASHRAE 2004 Technical Conference & Winter Meetings, Anaheim Marriott and Anaheim Convention Centre, Anaheim, Calif.

JAN. 26-28: AHR INT'L EXPO 2004, co-sponsored by ASHRAE/ARI, Anaheim Convention Center, Anaheim, California. www.ahrexpo.com.

MARCH 4-6: FOCUS 2004, CIPHEX Ontario trade show, National Trade Centre, Exhibition Place, Toronto. www.focus2004.ca.

MAR. 25-27: CMX 2004, Canada's Mechanicals Exposition, Toronto Convention Centre, Toronto, Ont. www.cmxshow.com

JUNE 26-30: ASHRAE 2004 Annual Meeting & Technical Conference, Nashville, Tennessee. www.ashrae.org

2005:

FEB. 5-9: ASHRAE 2005 Technical Conference & Winter Meetings, Orlando, Florida. www.ashrae.org

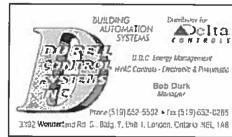
FEB. 6-8: AHR INTL EXPO 2005, the ASHRAE-ARI Expo, Orlando, Florida. www.ahrexpo.com.

JUNE 25-29: ASHRAE 2005 Annual Meetings & Technical Conference, Denver, Colorado www.ashrae.org

2006:

JAN. 14-18: ASHRAE 2006 Technical Conference & Winter Meetings, Chicago, III. JAN. 16-18: AHR INTL EXPO 2006, ASHRAE/ARI show and technical conference, Chicago, III.

JUNE 24-28: ASHRAE 2006 Annual Meeting & Technical Conference, Quebec City, Que.



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FEBRUARY 2004

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Newsletter Scott Turner Ph (519)652-1977 scott@somersep.com

Golf Tournament Hugh Palser Ph (519) 471-9382 palserent@primus.ca

PROGRAM:

<u>Topic:</u> Security Bonds for the Construction Industry

H O A A B

Speaker: Donald G. Bere, Stevenson & Hunt Insurance Brokers Ltd.

About 45 people attended last month's meeting. Our speaker was Andrew Clancy of York International, who spoke about underfloor air distribution. This is an up and coming technology that has been featured recently in the ASHRAE Journal, and also at the Winter Meeting in Anaheim. Andrew's presentation focused on the possible benefits of underfloor air distribution, which include lower energy usage and improved indoor air quality.

This month's meeting will feature Don Bere, Vice President of Stevenson & Hunt Insurance Brokers Ltd. Don plays an active role in the Construction and Surety Division, and is involved in the placement of construction insurance and construction surety. Don is a native Londoner and UWO graduate, and has obtained his Canadian Chartered Insurance Broker (CCIB) designation. He is very active in the community, and is or has been a president or chair of numerous community groups including the Jack & Barbara Hay Foundation, Kiwanis Club of Forest City London, the London Insurance Brokers Association, and the Town of Westminster Planning Board. Don's presentation will be part of a legal and business information segment of this year's program, and should be of interest to Owners, Contractors, Subcontractors and Consultants alike.

"Making the right choice to mitigate and manage risk on construction projects and selecting the most fiscally responsible option to ensure timely project completion are imperative to a successful project – and a sound business. Gambling on a contractor or subcontractor whose level of commitment is uncertain or who could become bankrupt halfway through the job can be an economically devastating decision. Surety bonds offer the optimal solution: providing financial security and construction assurance by assuring project owners that contractors will perform the work and pay specified subcontractors, labourers, and material suppliers." - 10 things you should know about surety bonding - www.sio.org

Location: <u>The Lamplighter Inn</u> 591 Wellington Rd., S.

BUFFET MENU

Monday February 23-2004
Social—5:15 pm

Dinner—6:00

Program-7:15 (Approx.)

Meal Cost \$35.00, Or Meal Plan \$160.00

Students \$15.00

President's Message:

ASHRAE Society has been busy with revising some of its information for members. You may have already received by email the new Society Connections newsletter (publish twice-monthly) and the HVAC&R Industry weekly newsletter. You can register to receive these new member benefits by signing up at www.ashrae.org, as well you can view the most recent eNewsletters or catch up on back issues online.

ASHRAE Society also has plans to update the nine course Fundamentals self-directed learning series over the next two years. The first revision will be to Fundamentals of Thermodynamics and Psychrometrics. It will be divided into two courses, Fundamentals of Thermodynamics, which will be completed by June 2004, and Fundamentals of Psychrometrics, which will be completed by September 2004. In addition, a new course, Fundamentals of Steam System Design, is being created. Other courses include hvac systems, heating and cooling loads, air system design, water system design, heating systems, electrical systems and building electrical energy use, hvac control systems, and refrigeration. Be sure to check the ASHRAE web site for the latest updates.

The local chapter is hoping to be able to have some local members view an ASHRAE satellite broadcast scheduled for April 14 on homeland security issues. The main theme is: What should be ASHRAE's role in homeland security? Topics will include risk assessment, chemical, biological and radiological (CBR) protection such as envelope tightness, ventilation systems, particle filtration and gas absorption, pressure relationships and building interior partitioning, and an update on building codes and standards as they relate to CBR. More information will be issued when it becomes available.

The January presentation by Andrew Clancy, who spoke on the benefits of using underfloor air distribution while also outlining some of the problems that might occur. Our February speaker, Don Bere, Stephenson & Hunt, will discuss Security Bonds in the Construction Industry.

ASHRAE eNewsletters

You can register online to receive these email newsletters (see: www.ashrae.org-> Education & Publications -> Enewsletters)

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- * new developments, meeting schedules, and other ASHRAE information
- * a lead story that investigates breaking industry news and a feature story that takes an in-depth look at an industry topic in every issue
- quick links to ASHRAE's online technical information, member-oriented content, and other site features

Society Connections

- * current news about ASHRAE
- * ASHRAE's new Discussion Forums on industry-related topics and the Soci-
- * the opportunity to dialogue with other members on a specific important topic or guestion pertaining to ASHRAE
- * quick links to read and discuss a technical article from ASHRAE Journal.
- * convenient links to online versions of departments from ASHRAE Insights

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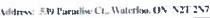
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ASHRAE Winter Meeting Update

This year's winter meeting was held in Anaheim, California and was well attended by the London Chapter. Peter Golem (Regional Vice Chair - Resource Promotion), Daryl Somers, myself and I'm sure a few others that I didn't see, were lucky enough to head South to warmer weather for the meeting. Technical Seminars this year included sessions on underfloor air distribution (chaired by Richard Rooley, Society President), introduction of the new ASHRAE GreenGuide, new developments in kitchen ventilation, new control ideas for improving VAV system performance, software tools for HVAC system performance diagnostics, numerous commissioning presentations, and at least 50 other forums, presentations and seminars. This was the first ASHRAE Society meeting that I have attended, and I recommend the experience to all members (especially at this time of year!).

National Engineers Week:

National Engineers Week 2004 will be celebrated February 22-28. Once again, thousands of your fellow colleagues from all engineering disciplines throughout the country will be taking part in this exciting event. You will have an opportunity to gain public recognition for the many ways that engineers have contributed to improving the quality of everyday life. Many of the outreach programs emphasize the importance of math and science to the "next generation" of children and young adults. Outreach efforts include Discover "E", mall events and contests. Special emphasis this year is being placed on going beyond U.S. borders. One program that fits this objective is $Introduce\ A$ G i r l t o E n q i n e e r i n q .

Introduce a Girl to Engineering Day will be held on Thursday, February 26th. The goals for this special program are:

Increase awareness and interest in engineering and technology a mong girls Educate girls and adults about the many opportunities available to women in these fields. Create an appreciation among all young people of the importance of a diversity of perspectives in defining our technological future. Dispel the myths that exist in our society regarding the interest and capabilities of girls and women in science and technology.

The NEW web site (<u>www.eweek.org</u>) can provide your local chapter or student branch with ideas for activities as well as organizational tips for hosting a public event on engineering. You may order an information kit through the NEW web site <u>at https://shop.eweek.org/eweek/product.asp?dept%</u> 5 F i d = 1 & p f % 5 F i d = 0 0 1 or by phone at

412-741-1393. As always, these kits will provide you with interesting program i d e a s f o r y o u r g r o u p .

In closing, remember that National Engineers Week 2004 can only be effective if we get strong participation from engineers and engineering students at the local level.



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2004 LONDON & AREA ASHRAE GOLF TOURNAMENT

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Monday June 7, 2004

Place:

Forest City National

16540 Robin Hill Road

London, Ontario

Tee Off:

Shot Gun Start @ 1:00pm

Scramble Format

4 SOMES ONLY/SOFT SPIKE ONLY

Cost:

Golf & Dinner \$135.00

Dinner Only \$45.00

- * Light Lunch Included
- * 4-star course
- * golf carts included
- * buffet dinner
- * limited spaces available

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London, Canada Chapter No.116 (www.execulink.com/~tpollard/ashrae.html)

March 2004

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Tpollard@execulink.com

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> Secretary Scott Turner Ph (519)652-1977 scott@somersep.com

Treasurer
Joe Claessens
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> Membership Jason Vandenberghe Ph (905)545-5479 Jasonv@aquatech.ws

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Historian John Kelly Ph (519) 453-3010 jkelly2@trane.com

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Newsletter Scott Turner Ph (519)652-1977 scott@somersep.com

Golf Tournament Hugh Palser Ph (519) 471-9382 palserent@primus.ca

PROGRAM:

Tour of Labatt Brewery, 150 Simcoe St., at 5:30 pm - sign up required

This month we'll be touring Labatt's recently upgraded Power House. The tour will include a look at their large new refrigeration plant, a tour of the new Bud Krausen Cellar, and a short Blue tasting in the Amber Lounge. A short business session and dinner will be held after the tour, at the Great West Steakhouse at 240 Waterloo St. Because of time constraints, the Tour will begin promptly at 5:30 pm, and we will meet outside at the Simcoe Street Entrance. Please arrive early and bring safety shoes and glassed if possible. We have until 6:45 at Labatt, and then dinner at Great West will be at 7 pm.

Labatt has requested tour attendance be limited to 40 people. If you would like to attend, please email me at derek.vakaras@chorley.com or contact me at 679-8660 to sign up.

April 26th, 2004 Meeting Preview - ASHRAE Distinguished Lecturer

Speaker: Mr. Julian R. De Bullet, 2002-2003 ASHRAE Vice President, McQuay Inter

national

Topic: ASHRAE 90.1 and Chilled Water System Design

Although the London Chapter was not scheduled to have an ASHRAE Distinguished Lecturer visit this year, HTS has arranged for Mr. Julian R. De Bullet, a former ASHRAE Vice President and current Distinguished Lecturer to speak at our April Meeting. Mr. De Bullet is a Senior Application Manager at McQuay International, and has been extensively involved at the highest levels of ASHRAE for many years. His presentation will include a description of how ASHRAE 90.1 has influenced the decision of whether to design variable flow chilled water systems. There will be a brief comparison of the differing design parameters, including a discussion of Chiller IPLV compared to Full Load Kw/ton. If time permits, Low Delta T syndrome will be discussed and solutions offered. We've been lucky to have Mr. De Bullet's attendance arranged for us outside of the Distinguished Lecturer process - I hope all of you can attend.

Derek Vakaras P.Eng

Tour Location: <u>Labatt Brewery, 150 Simcoe St.</u> <u>Meet Outside Simcoe St Entrance</u>

Monday March 29-2004

Tour Begins Promptly-5:30 pm

Dinner At Great West Steakhouse-7:00

President's Message:

The February meeting had Mr Donald Bere speak on construction bonding and surety requirements. Mr Bere explained that bonding provides the owner some assurance that the contractor has the necessary experience and resources to complete the project. It was explained that the contractor has to provide lots of information including previous project lists, the size of their firm, and banking information. The bonding company needs to ensure that they only provide construction insurance and surety to those construction companies that are able to prove they are suitably qualified.

The March meeting is our yearly tour night and this year we have the opportunity to visit the Labatt Brewery. The tour is limited in the number that can attend - be sure see other notes in this newsletter regarding registering. Past tours at Labatt Brewery have proven to be very popular (especially the taste testing at the end of the tour) so be sure to register early.

ASHRAE is also planning a satellite broadcast on Homeland Security for Buildings. The London chapter is arranging along with Trane London office to host the event to allow chapter members to view the broadcast. The April 14 broadcast is scheduled cover ASHRAE's reports, codes and standards as well as protecting buildings from chemical, biological, and radiological and associated threats. New buildings may need to consider possible terrorist attacks so the presentation may be of interest to engineers, contractors, and building owners.

The chapter will also be hosting its yearly golf tournament on Monday June 7/2004. Special thanks goes to Hugh Palser for again "volunteering" to organize the event. More details to follow once final arrangements have been confirmed.

The London chapter also requires new Board of Director's for the upcoming 2004-2005 year. If you can help in the London Chapter operations, we would welcome the assistance. Several current board members have assisted the chapter over the past few years, and we need some new members to fill some open chair positions. Please forward your name to Dennis Dawe (email: dennis.dawe@chorley.com) if you can assist in any way.

See you at the meeting.

Tom Pollard, P.Eng Chapter President ASHRAE London Canada (Chapter #116) 248 HAMILTON CRESCENT DORCHESTER, ONT, NO., 1G1 PHONE: (519) 265-3166 (519) 268-3167 FAX: (519) 268-3165

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Membership:

We would like to take the time to welcome all new members to the London Chapter, hopefully you have had the chance to come out to some of the meetings this year and have met some new colleagues, saw old friends or listened to one of the guest speakers . For the students who have joined this year, Ashrae is a great opportunity to network with people in the industry, be kept up to date on industry / technical standards and to support the HVAC&Rand engineering profession.

The following is the list of all the new members who joined this year:

Roy Armstrong Ehab Abu Ramadan Tyler Bell Jack Boken Jeremy Chessell Pamela De Melo Justin Downey Imran Esmail

Radoslav German Dennis Jacobs Wayne Lambert Christin Morrissev Ehsan Salem Randee Spencer **Gary Tannous** Chris Turnbull



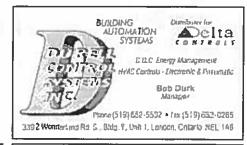
ASHRAE HISTORY REPORT PAST PRESIDENT CHARLES CLEMANCE

Charles began his career in the HVAC industry after graduating from Carleton University with a degree in mechanical engineering. Virtually his entire career has been in the area of plant and facilities engineering. After graduation, he worked for the government of Canada for approximately five years, at the Department of Communications research center in Ottawa.

Following his employment with the federal government, Charles joined 3M and moved to London in 1978. With Charles's involvement, chiller plants at 3M have been engineered to operate at high levels of efficiency. London being the headquarters for 3M's Canadian operations, he has been involved with 3M facilities across the country including construction of a new plant in Perth.

At the encouragement of John Bisset, Charles joined ASHRAE in 1983. He served for several years on the London chapter executive in various roles, and was president in 1988-89. Charles continues to be an active member of ASHRAE and regularly attends London chapter meetings.

For the past three years Charles has been a member of the TEGA panel that reviews papers submitted for the ASHRAE technical award. There are twenty-five to thirty-five papers submitted each year in ten categories. Papers are judged on the basis of demonstrated energy efficiency and technical innovation.



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2004 LONDON & AREA ASHRAE GOLF TOURNAMENT

Date: Mond:		
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Monday June 7, 2004

Place:

Forest City National 16540 Robin Hill Road

London, Ontario

Tee Off:

Shot Gun Start @ 1:00pm

Scramble Format

4 SOMES ONLY/SOFT SPIKE ONLY

Cost:

Golf & Dinner \$135.00

Dinner Only \$45.00

- * Light Lunch Included
- * 4-star course
- * golf carts included
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- * limited spaces available

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London, Canada Chapter No.116 (www.execulink.com/~tpollard/ashrae.html)

April 2004

Board of Governors& Committee Chairs

President Tom Pollard Ph (519) 685-2570 Tpollard@execulink.com

Vice President & Program Chair Derek Vakaras

Derek Vakaras Ph (519) 679-8660 derek vakaras@chorley.com

> Secretary Scott Tumer Ph (519)652-1977 scott@somersep.com

> > Treasurer

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kilmersw@home.com

Newsletter Scott Tumer Ph (519)652-1977 scott@somersep.com

Golf Tournament Hugh Palser Ph (519) 471-9382 palserent@primus.ca

PROGRAM:

Last month we had 26 people attend a tour of the Labatt Brewery. Our hosts presented both the brewery side of things and the cogeneration and refrigeration plants, and provided a tasting of Labatt Blue. We saw quite a lot of Labatt in a short period of time. I, for one, was relieved to hear that the cogeneration plant kept the brewery operational during last year's blackout.

This month's event, our last technical meeting of the year, will feature our best speaker of the year - Mr. Julian De Bullet of McQuay, ASHRAE Society vice president last year and current distinguished lecturer. In the past, we've been visited by some exceptional speakers as part of this program. This year we weren't entitled to a visit (normally funded by ASHRAE Society), but one of our members was able to arrange Mr. De Bullet's visit anyway. Since we've been lucky enough to have this arranged for us outside of the Distinguished Lecturer's program, I hope we can have an excellent turnout for the meeting.

April 26th, 2004 Meeting Preview - ASHRAE Distinguished Lecturer

Speaker: Mr. Julian R. De Bullet, 2002-2003 ASHRAE Vice President, McQuay Inter

national

Topic: ASHRAE 90.1 and Chilled Water System Design

Mr. Julian R. De Bullet, a former ASHRAE Vice President and current Distinguished Lecturer, will be speaking at our April Meeting. Mr. De Bullet is the Senior Applications Manager for McQuay International, and has been extensively involved at the highest levels of ASHRAE for many years. He is an internationally recognized expert in the HVAC&R field, with over 25 years of experience in the industry. His career has concentrated on the applied use of Chilled Water and All-Air systems as a manager of applied equipment sales and as a manager of a service/performance contracting operation.

His presentation will include a description of how ASHRAE 90.1 has influenced the decision of whether to design variable flow chilled water systems. There will be a brief comparison of the differing design parameters, including a discussion of Chiller IPLV compared to Full Load Kw/ton. If time permits, Low Delta T syndrome will be discussed and solutions offered.

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.

If you are not an ASHRAE member, but would like to attend, please contact Derek Vakaras at derek.vakaras@chorley.com or 679-8660.

Location: The Lamplighter Inn, 591 Wellington Rd., S.

BUFFET MENU

Meal Cost \$35.00, Or Meal Plan \$160.00

Students \$15.00

Monday April 26-2004

Social-5:15 pm

Dinner-6:00

Program-7:15 (Approx.)

President's Message:

As you may have noticed in other sections of this newsletter, we have ASHRAE distinguished speaker Mr. Julian R. de. Bullet, McQuay International, and an ASHRAE Vice President, coming to our April 26 meeting. Mr Bullet is on several ASHRAE technical committees, and has a long list of topics that he is qualified to speak on. We are privileged to have HTS Engineering arrange and sponsor the talk on ASHRAE 90.1 and Chilled Water system Design. Be sure to advise other office members so that they do not miss this special meeting.

The ASHRAE London Chapter is also involved in the Resource/Research Campaign. Our chapter's year to date contributions are down and below from previous years (currently only at 13% of our goal). Any amounts collected go to ongoing research projects and improving technical training courses that ASHRAE prepares. Please contact Daryl Somers (email: daryl@somersep.com) if you have a contribution.

Our end of year golf tournament is planned for June 7, 2004. Spaces are filling up fast and there are only a few openings left as I write this. If you would like to book a 4 some, please be sure to contact Hugh Palser (email: palserent@primus.ca).

The London chapter requires new members for its Board of Directors. If you can help in the London Chapter operations, we would welcome the assistance (this could be as simple as helping with phone calls for a meeting). Several current board members have assisted the chapter over the past few years, and we need some new members to fill some open chair positions. The current chapter bylaws only permit a president to sit for a maximum of 2 years, so a new president will be elected for next year. The election of chapter directors will close in April. Please forward your name to Dennis Dawe (email: dennis.dawe@chorley.com) if you can assist in any way.

Even though the chapter does not have meetings during the summer, the directors continue to plan the upcoming year. We need meeting ideas and speakers. If there is a topic that you are interested in and would like more information, please forward to an executive member so we can arrange a speaker.

See you at the meeting.

Tom Pollard, P.Eng Chapter President 248 HAMILTON CRESCENT DORCHESTER, ONT, NOL 1G1 PHONE: (519) 265-3165 (519) 266-3167 FAX: (519) 268-3165

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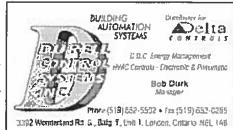
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Membership:

At this years annual ASHRAE golf tournament there will be membership forms at the registration table . For any new person who fills out a ASHRAE membership form at the golf tournament, they will have their name put in a draw for a chance to win a new golf bag, everyone else who signs up will receive a dozen golf balls .

Looking forward to seeing everyone at the tournament!

Jason Vandenberghe Membership Chair



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LONDON CANADA CHAPTER #116

londoncanada.ashraechapters.org

September 27/2004

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Vice President and Program

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Secretary

Scott Edmunds ph: 667-4108 sedmunds@uniongas.com

Treasurer

Scott Tumer ph: 652-1977 scott@somersep.com Student Affairs

Membership

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Historian

Eric Shaw ph: 964-0022 ewshaw@baymarsupply.com

Golf Tournament

Hugh Palser ph: 471-9382 palserent@primus.ca

Program

Mechanical Draft Fans Maintenance Issues, and Case Studies

David Hillis and Frank Frabotta, C.E.T. Baymar Supply Limited, Windsor, Ontario

The presentation will focus on fan failures due to abrasive environments. They will present (with pictures) common and not so common causes of draft fan failures due to poor/lack of maintenance procedures.

David and Frank will:

- discuss some of the causes of the premature failures in different cases experienced
- demonstrate some of the techniques used to diagnose problems with fans
- show the development of the scope of work involved in troubleshooting some of the more difficult cases experienced

Location

The Lamplighter Inn 591 Wellington Rd., London

London Chapter Members = \$30.00 or \$160.00 meal plan Students = \$15.00 Guests (all others) = \$35.00

Monday September 27/2004

Student Night

5:15-Social 6:00-Dinner 7:15-Program

We would ask that all chapter members in attendance make an extra effort to welcome the students by inviting them to your dinner table or introducing yourself sometime throughout the night.



ASHRAE LONDON CANADA CHAPTER #116 Page 2

September 27/2004

President's Message

I hope all of you had a terrific summer, despite the weather, and are looking forward to the start of another ASHRAE year. The Chapter Officers this year are Joe Claessens - Vice President & Program, Scott Turner - Treasurer, Scott Edmunds - Secretary, and myself. Joe is off to an early start in setting the program, which you can find at our website at:

Iondoncanada.ashraechapters.org

The highlight of this year will be an ASHRAE designated lecturer speaking on Mould Litigation in February, so mark your calendars.

In August, six members of the executive attended the Annual ASHRAE Region II Chapters Regional Conference (CRC). Our chapter received a number of awards for last year's performance, including a Special Citation for our Past President, Tom Pollard, and a Resource Promotion award for Daryl Somers. Peter Golem also received a Regional Award of Merit for his efforts at the regional level as Vice Chairman for Resource Promotion.

This is a big year for London, as we prepare to host the CRC next summer. Peter Golem and Daryl Somers will be looking for lots of volunteers to help out on various CRC committees - I expect you'll hear from them at the next few chapter meetings.

Our focus this year will be on promoting membership. For the first time in a number of years, membership at the chapter level declined a bit, despite a healthy increase in attendance at the meetings. In order to emphasize the value of chapter membership, the meal plan will be restricted to chapter members, not just ASHRAE society members, and we will be lowering the individual meal rate for chapter members to \$30 per meeting. The rate for guests will remain at \$35. To boost membership, I'd like all of you to consider inviting a guest to attend a meeting. Topics at a number of our meetings this year will appeal to a broad range of interests.

I hope to see you at the meeting on the 27th.

Derek B. Vakaras, P.Eng.

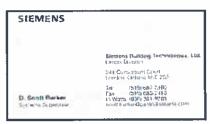
Student Night

September is Student Night so we would like all members to go up and welcome the UWO students to the meeting.

The Chapter would also like to request that corporate sponsors who wish to contribute the cost of \$35.00 to allow the students to attend a meeting and pay for their student membership contact Jamie Whitty - Student Affairs Chair or Scott Turner - Treasurer.















Presenter Bio's

Frank Frabotta, C.E.T. was born raised in Windsor, Ontario. He was awarded a Diploma of Technology of Mechanical Engineering Technology in the field of energy management from St. Clair College in Windsor, Ontario. Accordingly, he was warranted as a Certified Engineering Technician by the Ontario Association of Certified Engineering Technicians and Technologists. Frank's illustrious career started at Byrant Heating & Cooling Ltd., of Windsor, Ontario, under the tutorial skills of Mr. Lou Pantin. Frank started at Baymar Supply Limited, of Windsor, Ontario, Canada, as a partner. Frank is now senior partner and general manager. Frank is a family guy and currently lives in Windsor with wife Maria and two wonderful children, Peter & Sophia.

David Hillis, too, was born and raised in Windsor, Ontario, Canada. David's life has been spent in fan service, manufacture and design. Dave started his career at age 14 with part-time with Green-hill Mechanical Services Limited, of Windsor, Ontario. At age 19, he was registered as a trade millwright in the State of Michigan. David started his business career as a founder of Air Maintenance Services Limited, of Windsor, Ontario. Since then, he has owned:

Green-Hill Mechanical Services Limited, of Windsor, Ontario Valley Process Specialties Limited, of Sarnia, Ontario and D.J. Hillis & Associates Machinery Sales, Inc. of Westland, Michigan.

David is currently enjoying a life in sales and specialty services at Baymar Supply Limited, of Windsor, Ontario. David is also enjoying family life in Windsor, with wife Julie and daughter Rachel.

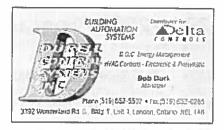
Tabletop Display

Thanks to Baymar Supply for sponsoring the tabletop display which will have a number of items on exhibit related to the meeting topic - Mechanical Draft Fans, Maintenance Issues, and Case Studies

2004-2005 Meeting/Meal Rates

The Chapter is offering those members that have paid their Chapter Dues to purchase a meal plan for \$160.00 or to pay at the door at the reduced rate of \$30.00. - NOTE -- your chapter dues must be paid up by the meeting. You can pay your Chapter Due with your Society Fees on the www.ashrae.org web site or contact Scott Turner (London Chapter Treasurer)

All others that pay a the door remain at:
Guests \$35.00 Students \$15.00



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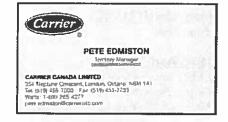
Wayne Glagerich

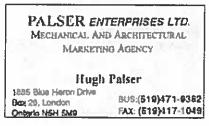
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Fax (519)662-2491

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2004-2005 Program Schedule

(Tentative - some speakers yet to be confirmed)

Mon. Sept 27/2004 (Student Night)

Large Fan Balancing and Case Histories Mr Dave Hillis and Mr Frank Frabotta - Baymar

Mon. Oct 25/2004 (Resource Promotion Night)

Applied Variable Volume Pumping (Modern HVAC Systems)
Mr Phil Searle - ITT Industries

Mon. Nov 29/2004

Variable Refrigeration Flow Technology Mr Anton Woimarans - Mitsubishi

Mon. Jan 31/2005 (Student Night)

Air Quality - ASHRAE Standard 62 Mr Gord Cook- Venmar

Mon. Feb 21/2005 (Resource Promotion Night)

Indoor Air Quality and Mold - Legal Issues and Liability
Concerns for Engineers and Related Industry Professionals
Mr Christopher McDonald - Shook Hardy and Bacon, L.L.P
*** Distinguished Lecturer ***

Mon. March 21/2005

Tour (tba)

Mon. April 25/2005

LEED and Recent Development Support Green Building in Canada Mr Mark Mitchell - Keen Engineering Canada Green Building Council

Mon. June /2005

London & Area ASHRAE GOLF TOURNAMENT





Business Card Ads

The Chapter would like to thank the following companies who had business card ads in the 2003-2004 newsletters:

Erie Sheet Metal

Siemens Building Technologies Ltd

Johnson Controls Ltd

Durrell Control Systems Inc

Mech-Mart

Palser Enterprises

Somers Environmental Products Inc.

Trane Canada

Northern Industrial Fans & Blowers

EFI Ironross

Carrier Canada Limited

Daymar Supply Limited

Those that would like to continue their business cards ads for the 2004-2005 year should contact Tom Pollard.



LONDON CANADA CHAPTER #116

londoncanada.ashraechapters.org

October 25/2004

Board of Governors & Committee Chairs

President

Derek Vakaras ph: 679-8660 derek.vakaras@chorley.com

Vice President and Program

Joseph Claessens ph: 672-8511 joe@smyliecrow.com

Secretary

Scott Edmunds ph: 667-4108 sedmunds@uniongas.com

Treasurer

Scott Turner ph: 652-1977 scott@somersep.com Student Affairs

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John Kelly ph: 453-3010 jkelly2@trane.com

Student Activites

Jamie Whitty ph: 672-8511 jamie@smyliecrow.com

Research

Tom Pollard ph: 685-2570 tpollard@execulink.com

Historian

Eric Shaw ph: 964-0022 ewshaw@baymarsupply.com

Golf Tournament

Hugh Palser ph: 471-9382 palserent@primus.ca

Program

Applying Variable Volume Pumping (Modern HVAC systems)

Phil Searle., C.E.T.
Manager of Consultant Services
ITT Fluid Products Canada

The presentation will provide an introduction to the "Tools Of The Trade" available to Consulting Engineers in designing medium to large Hydronic distribution systems. Advantages and disadvantages of varying methods are discussed in addition to revisiting some of the basic principles that have been used for many years.

Phil graduated in Mechanical Engineering at the North Staffordshire Polytechnic, U.K., in 1974. He joined the Application Engineering Department of ITT Fluid Products Canada in 1978, specializing in Heat Transfer products and HVAC system design. He graduated from the 13 week ITT "HVAC system design" program in the summer of 1990 and assumed the role of Manager, Consultant Services in 1991.

For many years, Phil has been a representative of the ITT Bell & Gossett technical advisory committee. Recently, this committee produced the newest 3-day course offering entitled "Large Chilled Water System Design Workshop. This course, among others, are presented at the famous "Little Red Schoolhouse", located at Bell & Gossetts facility in Morton Grove, Illinois.

Meeting Location

The Lamplighter Inn 591 Wellington Rd., London

London Chapter Members = \$30.00 or \$160.00 meal plan Students = \$15.00 Guests (all others) = \$35.00

Monday October 25/2004

Resource Promotion Night

5:15-Social 6:00-Dinner

7:15-Program



President's Message

The Program for the year is nearly set. You can check out the topics and dates on our website, at:

http://LondonCanada.AshraeChapters.org

Be sure to mark your calendar with the meeting dates. Several of the topics this year should be of interest to people in the industry who don't normally attend our meetings, so if you know of someone who might be interested, please invite them to attend. If you know anyone who would benefit from joining ASHRAE, you can put them in touch with John Kelly at jkelly2@trane.com.

Our social event this year will take place in March instead of December. On March 3rd, we have a 54 seat box reserved at the John Labatt Centre for a London Knights OHL hockey game. Tickets will go quickly, so speak to Joe Claessens at the meeting if you're interested.

Last month's meeting was also our Student Night. We had twelve students attend, and their meals and ASHRAE student membership were sponsored by a number of our member companies. I'd like to thank those companies for their support and assistance in making the students aware of ASHRAE.

See you at the meeting.

Derek B. Vakaras, P.Eng. London Canada Chapter President

Student Sponsors

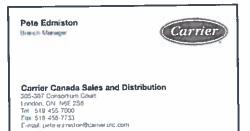
The following corporations have sponsored local students to the September Chapter meeting and their student membership in ASHRAE

Pollard Engineering

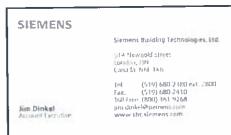
Chorley & Bisset Ltd. Smylie & Crow Associates Trane

HTS Engineering Baymar Supply Somers Environmental **Engineered Air** E.H. Price Drennan Refrigeration

The London Chapter would like to thank the sponsors for their continuing support.









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Previous Meeting Summary

On September 27, 2004 we kicked off our 2004/2005 ASHRAE season with our first chapter meeting of the year. The attendance was down slightly, we believe due to a conflict between our meeting date and Palser Enterprises' 50th Anniversary. On behave the London ASHRAE Chapter we would like to extend our congratulations to Hugh and Dick Palser and their staff. Our first meeting was student night and we had 12 new students from the University of Western Ontario and Fanshawe College.

The topic was on "Large Fan Balancing and Case Histories", it was very well presented with a power point display. The topic informative and interesting and touched on metal fatigue, vibration analogous, bearing selections and support, effect of corrosion both chemical and heat on equipment. We would like to thank our two speakers Frank Frabotta and Dave Hillis of Baymar Supplies in Windsor.

We hope to see more people out at our October Meeting.

CTTC Chair & Vice President, London ASHRAE Chapter Joe Claessens

Resource Promotion Night

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.

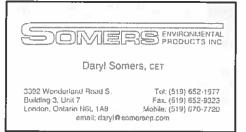
This annual support totals more than \$1.7 million annually and is matched dollar-for-dollar by ASHRAE from the proceeds of the annual winter AHR Exposition. Since ASHRAE pays all the fund raising expenses, 100% of every donor's invested dollar goes into the research program.

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 the left menu, click the Contribute Online link

Payments should be made able to <u>ASHRAE Research Canada</u> and addressed to: Resource Promotion, 1791 Tullie Circle, Atlanta, GA 30329.











TEL (519) 471-9382 TEL: (905) 738-6200 FAX (519) 471-1049 FAX: (905) 738-6111

E-Mail: hpaser@patrerent.com





2003-2004 Resource Promotion Recognition Program

The following donors will be listing in the ASHRAE's October Journal Issue - Honour Roll (recognition starts at \$100.00 for individuals and \$150.00 for companies)

Westminster Mechanical RayTec Radiant Heaters Glover Hill

Drennan Refrigeration Graham Heating & Cooling

HTS Engineering Smylie & Crow Chorley & Bisset

London Canada ASHRAE Chapter

Abram Sheet Metal JMR Electric

EH Price Roberts Brothers Sheet Metal Airwaso - London

Linde Plumbing and Heating

Weit-McCain

VanDerWesten and Rutherford

Somers Environmental
Erie Sheet Metal
Trane-London
Curney Mechanical
Control Systems-Ontario
Durell Control Systems

JA Brownlee Union Gas

Daryl Somers Dennis Dawe Tom Pollard Scott Turner Joseph Claessens Derek Vakaras Craig Morasch Owen Glerd Peter Golem John Bisset Scott Edmunds

Total contributions by London Canada for 2003-2004 was over \$9,907.00

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)

ASHRAE Research 2003-2004 Commemorative Coin William L. Holladay

In his 1968 Presidential address, Holladay, as the incoming ASHRAE President, extolled the three virtues that previous ASHRAE Presidents highlighted in their Presidential speeches, adding an additional one: Lifelong Learning. Holladay said Lifelong Learning referred "to the obligation each of us has to continue educating oneself, keeping abreast of an ever-advancing technology." He believed that such education was achieved four ways: through listening and interacting with fellow engineers, through study and research, through attending or teaching formal and correspondence courses and through membership and active participation in ASHRAE.

It was this commitment to Lifelong Learning that prompted Holladay to join ASRE in 1930 after graduation from California Institute of Technology. Working for 35 years as a consulting engineer and president of Holladay, Egget & Helin, he specialized in litigation, studies and system improvements. He served as an expert witness in a multitude of cases and consultant on system improvements and energy to such organizations as Denny's, J. Paul Getty Museum and the city of Inglewood, CA.

A Presidential Member, Fellow and Life Member of ASHRAE, Holladay served as Chairman for the Honors and Award Committee, Charters and Bylaws Committee, Weather Data Committee and member of the Research and Technical Committee and was the initiator of the Louise and Bill Holladay Distinguished Fellow Award in 1979. He was also President of the Southern California Chapter three times, author of multiple books, papers and articles in the ASHRAE Journal and patent holder on a heat exchanger. Bill Holladay passed away in December of 2000 at the age of 89.



LONDON CANADA CHAPTER #116

LondonCanada.AshraeChapters.org

November 29/2004

Board of Governors & Committee Chairs

President

Derek Vakaras ph: 679-8660 derek.vakaras@chorley.com

Vice President and Program

Joseph Claessens ph: 672-8511 joe@smyliecrow.com

Secretary

Scott Edmunds ph: 667-4108 sedmunds@uniongas.com

Treasurer

Scott Turner ph: 652-1977 scott@somersep.com Student Affairs

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Historian

Eric Shaw ph: 964-0022 ewshaw@baymarsupply.com

Golf Tournament

Hugh Palser ph: 471-9382 palserent@primus.ca

Program

Introduction to VRF (Variable Refrigerant Flow) Air Conditioning Systems

Mr Anton Wolmarans
General Manager, HVAC Division
Mitsubishi Electric Sales Canada Inc.

Topic to be covered

- Background
- What is a VRF System
- Different types of VRF Systems
- Operating Principles
- Benefits of VRF Systems
- VRF System Piping Application and Limitations
- Comparison to conventional systems
- Typical controls
- Energy Savings Potential
- IAQ Integration Issues
- Examples of installed jobs worldwide & in Canada

GO KNIGHTS GO

Erie Otters at the London Knights
Thursday March 3/2005 at the John Labatt Centre
We have a 54 seat box for this game (as we did a couple of years ago), which
adds to the fun. Cost: \$25.00 for a game ticket and snacks
Contact Joe Claessens at the November meeting to set aside a ticket

Meeting Location - Mon November 29/2004

The Lamplighter Inn 591 Wellington Rd., London

London Chapter Members = \$30.00 or \$160.00 meal plan Students = \$15.00Guests (all others) = \$35.00

Membership Promotion Night 5:15-Social 6:00-Dinner 7:15-Program



President's Message

November's meeting will be our first Membership Promotion night of the year. Our regional focus this year is on promoting ASHRAE and signing up new members. The London Chapter is doing its part, with a few new members already this year, but I'm sure there are many owners, contractors and designers out there who could benefit from ASHRAE. If you know of someone who might be interested, please help promote ASHRAE by telling them about it!

This month's meeting topic, packaged variable refrigerant flow systems, is on the leading edge of current technology. These systems have only become commercially available in the last few years, and allow multiple evaporators to be served by a single condenser in a small system. This should make for an interesting and challenging evening.

I'd like to highlight next month's meeting, on LEED in Canada, and also our social event, a London Knights hockey game next March. Last year's session on LEED and sustainable design was one of our best attended meetings. I suspect we'll the same thing this year - sustainable design is the hot topic right now. The meeting date is January 31st. You should also mark your calendar for our social event, the Erie Otters at the London Knights on Thursday March 3rd at the John Labatt Centre. We have a 54 seat box for this game, as we did a couple of years ago, which adds to the fun. Contact Joe Claessens at joe@smyliecrow.com to set aside tickets.

See you at the meeting.

Derek B. Vakaras, P.Eng. President, London Canada Chapter

Speaker's Bio

Mr Anton Wolmarans

General Manager, HVAC Division Mitsubishi Electric Sales Canada Inc., Markham, Ontario

Education:

Mechanical Engineering Diploma HVAC&R as main subject (South Africa) (like CET in Canada)

Final year achieved highest marks in Country for subject HVAC and R. Factory trained at Mitsubishi Electric in Japan and United Kingdom on VRF and other HVAC technologies.

Also Certified Refrigeration and Air-Conditioning mechanic South Africa and Canada.

Work History:

HVAC&R technician for Contracting company's

Technical Advisor Mitsubishi Electric South Africa.

Senior Technical Advisor and Trainer Mitsubishi Electric South Africa

Technical and Training Manager Mitsubishi Electric South Africa

Sales Engineer Dunham Bush South Africa.

Sales Engineer Mitsubishi Electric South Africa

Product Manager Mitsubishi Electric Canada Inc.(Introduction of VRF (City Multi) systems to Canada)

General Manager Mitsubishi Electric Sales Canada Inc.

Pete Edmiston



Carrier Canada Sales and Distribution

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4-122 Earl Thompson Rd, AYR, ON NOB 1E0



Previous Meeting Summary

On October 25, 2004 we had or second meeting for the 2004/2005 ASHRAE season. The meeting was well attended. The meeting was Resource Awards Night and presentations were made to all the Honor Roll awardees in attendance. Once again we thank everyone for their generous contribution.

The topic was on "Applying Variable Volume Pumping (Modern HVAC systems" it was very well presented by our speaker Phil Searle of ITT Fluid Products Canada. Phil made some interesting alternatives to pumping strategies and efficiencies.

Thank-you Phil for your time and effort.

Joe Claessens CTTC Chair & Vice President, London Canada Chapter

Resource/Research Contributions 2003/04

The list publish in October was for contributors who obtained Honor Roll status - the following list is for all contributors:

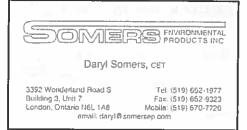
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Baymar Supply
Control Systems-Ontario
Curney Mechanical Ltd
Durell Control Systems Inc
Emcad Consulting Engineers Inc
Glover Hill Incorporated
HTS Engineering - London
JMR Electric Ltd.
London ASHRAE Canada Chapter
Palser Enterprises Ltd.
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Somers Environmental Product Inc
Union Gas Ltd.-Chatham
Weil-McLain Canada

Mr John B Bisset Mr Dennis L Dawe Mr Owen Glenden Mr Ronald E Granger Mr R Thomas Pollard Mr Scott Turner Airwaso Limited - London Ontario Chorley & Bisset Ltd.
Culliton Brothers Limited
Drennan Refrigeration Inc
E.H. Price Sales Ltd. - London
Erie Sheet Metal
Graham Heating & Cooling
J A Brownlee (1995) Limited
Linde Plumbing and Heating Ltd
Melex Engineering Ltd
Ray Tec Radiant Heaters Ltd.
Smylie & Crow Associates Inc
Trane Sales Agency-London
Van DerWesten & Rutherford
Westminster Mechanical

Mr Joseph M Claessens Mr Scott C Edmunds Mr Peter J Golem Mr Craig T Morasch Mr Daryl E Somers Mr Derek B Vakaras

Thank You for your contributions and I hope you will continue your support to ASHRAE Research

Tom Pollard
Past President & Resource Promotion Chair, London Canada Chapter









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LEED CANADA LAUNCH & GOVERNMENT SUMMIT

"Government Leading the Way: Emerging Trends in Green Buildings"

Please join Canada Green Building Council and its members at:

CONSTRUCT CANADA - Metro Toronto Convention Centre

December 1, 2004 10:00am to 5:00pm (Reception to follow 5:00 to 6:30pm)

Session Overview

- Participate in the national launch of the LED Canada building rating system
- Learn about government green building initiatives from coast to coast
- See on the ground examples of green programs & policies in action
- Explore what the future holds for green buildings & sustainable communities
- Learn how your organization can benefit by participating in this growing industry sector

Speakers:

This years roster of speakers includes leading Industry experts and government officials from across the country

- · Peter Busby, Busby Perkins & Will
- · Ian Jarvis. Chair CaGBC
- Ray Cole, UBC School of Architecture
- Anne Auger, Natural Resources Canada
- · Kevin Hydes, Keen Engineering
- Thomas Mueller, Greater Vancouver Region District
- John Gibson, Alberta Infrastructure

- Steve Polin, Society Immobiliere du Quebec
- Ian Smith, City of Vancouver
- Richard Allan, City of Calgary
- John Campbell, Toronto Waterfront Revitalization Corporation
- Bill Semple, Canada Mortgage and Housing Corporation

Registration: \$75.00 for CaGBC members, \$100 for non-members (includes lunch & refreshments)

To register: goto www.constructcanada.com/tor/frame04a.html follow the links to "Seminars and Conferences - Program at a Glance" and visit the CaGBC website at www.cagbc.org for more information

November Membership Promotion Night

A few of the benefits of joining and belonging to ASHRAE...

- * grow technically, personally and professionally
- * delivering tools to practice design excellence
- * networking with experts and colleagues you can trust
- * providing life-long learning
- * developing leadership and management skills

be sure to see

John Kelly Membership Chair, ASHRAE London Canada

Every practitioner of HVAC&R technology relies on ASHRAE: designers, contractors, facility managers and operators, building owners, maintenance personnel, educators, suppliers, researchers. ASHRAE enables its members to provide comfortable and healthy environments and maintain the industry processes and cold chain on which human existence relies. How does ASHRAE benefit you?

Stay current

Invest in your professional development.

Provide expert insights to your company.

Access Technical Tools to Do Your Job Better

You can rely on ASHRAE information. It is the one source that is accepted internationally. As a member you receive:

o ASHRAE Handbooks, FREE

o ASHRAE Journal, FREE

o The HVAC&R Industry eNewsletter, FREE

o ASHRAE Standards, DISCOUNTED

o More than 300 ASHRAE Research Reports, Software, Application Guidelines and Studies, DISCOUNTED

o Educational Products and seminars from

o Winter ASHRAE/AHR Expo and ASHRAE Annual Meetings

the ASHRAE Learning Institute, DISCOUNTED

DISCOUNTED

The value of ASHRAE membership measured only in the free publications provided to members, access to technical information on the ASHRAE website, and discounts on publications and educational products that are essential for HVAC&R practice used by engineers every day, easily exceeds \$300 annually.



LONDON CANADA CHAPTER #116

LondonCanada.AshraeChapters.org

January 31/2005

Board of Governors & Committee Chairs

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Vice President and Program

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Scott Edmunds ph: 667-4108 sedmunds@uniongas.com

Treasurer

Scott Turner ph: 652-1977 scott@somersep.com Student Affairs

Membership

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Student Activites

Jamie Whitty
ph: 672-8511
jamie@smyliecrow.com

Research Promotion

Tom Pollard ph: 685-2570 lpollard@execulink.com

Historian

Eric Shaw ph: 964-0022 ewshaw@baymarsupply.com

Golf Tournament

Hugh Palser ph: 471-9382 palserent@primus.ca

Program

LEED[™] Canada and Canada Green Building Council

Mr Michael Pelton, B.A.Sc., P.Eng LEED Accredited Professional Enermodal Engineering

Recently, there has been a groundswell of interest in green building. Owners, designers, and product manufacturers are beginning to recognize that by integrating sustainable design principles into their projects, they can dramatically improve the performance of the buildings they create and reduce life-cycle costs. Green Building Councils around the world are at the forefront of these efforts - working to help transform the built environment towards a sustainable future. This presentation will provide an introduction to the Canada Green Building Council and its activities. An overview of the benefits of green buildings will be provided as well as an introduction to the Leadership in Energy and Environmental Design (LEED™ Canada-NC v1.0) green building rating system. Examples of several recent projects that Enermodal Engineering Ltd. has been involved with will highlight recent green building successes.

Meeting Location - Monday January 31/05

The Lamplighter Inn 591 Wellington Rd., London

London Chapter Members = \$30.00 Guests (all others) = \$35.00

CASH BAR ALL YOU CAN EAT BUFFET
Student Night

5:15-Social

6:00-Dinner

7:15-Program

If you plan on attending, and are not contacted by the telephone committee, please advise:

Joe Claessens (ph: 672-8511 joe@smyliecrow.com)



President's Message

I hope everyone enjoyed the holiday season and 2005 has been good to you so far. This month's meeting will be our second Student Night of the year, and I urge you to take the opportunity to meet the students that will be attending the meeting. The topic this month is LEED (Leadership in Energy Efficient Design), and should tie in nicely with the UWO Fourth Year student project, which this year is conceptual design of a new Engineering Building on Campus. We hope everyone will come away from the meeting with some new ideas on sustainable design for their projects.

I'd like to thank Joe Claessens for filling in for me at November's meeting while I was in sunny Dominican Republic for a friend's wedding. I hear the meeting was a good one, and well attended.

As I've mentioned before in this spot, our focus this year is on membership renewal. Our membership has declined a bit in the past couple of years, as some people have left the chapter and not quite as many new members have joined up. We do have four or five new members so far this year, but I'm sure there are a number of others in the area who could benefit from joining ASHRAE. If you know someone like that, please help us spread the word. Anyone interested in membership can contact me at derek.vakaras@chorlev.com and I'll be happy to assist them in getting started.

See you at the meeting.

Derek B. Vakaras, P.Eng. President, London Canada Chapter

Speaker's Bio

Michael C. Pelton, B.A.Sc., P.Eng Research and Design Engineer Enermodal Engineering (www.enermodal.com)

Mr. Pelton has over six years experience in sustainable design. His main areas of expertise include energy conservation/efficiency, renewable energy, water conservation/efficiency, low impact development, green materials selection, indoor environmental quality and construction waste management. He works closely with owners, architects and design consultants to improve building energy and environmental performance. He also designs solar and wind energy systems and has conducted detailed computer simulations and field monitoring to assess their performance. Mr. Pelton is a LEED™ Accredited Professional for the Leadership in Energy and Environmental Design building rating system administered by the U.S. Green Building Council.

As a Research and Design Engineer at Enermodal, Mr. Pelton has worked on projects encompassing the various aspects of energy efficiency and sustainability.

Pete Edmiston

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FEBRUARY 28, 2005

Just a reminder that for the next meeting, we have arranged to have ASHRAE Distinguished Lecturer

Christopher McDonald, Esq. Shook Hardy and Bacon LLP Kansas City, Mo

topic: Indoor Air Quality and Mold: Legal Issues and Liability Concerns

for Engineers and Related Industry Professionals

Be sure to mark you calendar for this special evening.

Joe Claessens CTTC Chair & Vice President, London Canada Chapter

<u>TableTop Display</u>

Palser Enterprises will have a display and information on Bradley washbasins that have an option to power a hand washing fixture without electricity or batteries. "The patent-pending ndite technology developed by Bradley using photo-voltaic cells to convert light to energy. The energy is then stored in a proprietary battery-free power system, which then provides energy to the sensors and valves. Whether natural light or normal room level lighting, the cells continue to capture light and store the energy for later use. ndite technology completely eliminates the need for an electrical hook-up or any batteries, plus provides years of maintenance-free operation. This environmentally friendly technology keeps dangerous battery acids out of landfills and caves money on installation and maintenance."

Be sure to stop by and see the new product and pick up some information.

HOCKEY NIGHT

Erie Otters at the London Knights
Thursday March 3/2005 at the John Labatt Centre
Cost: \$25.00 for a game ticket and snacks
Contact Joe Claessens at the January meeting for tickets

January Student Night

It is student night once again and we would like to invite all students to come out to our monthly meeting on Monday January 31st. The cost to students on this night is FREE! Members, please make an extra effort to welcome students by inviting them to your dinner table or introducing yourself sometime throughout the night.

Any company that would like to sponsor a student meal on this night can contact me or Scott Turner.

Jamie Whitty
Student Activities Chair, London Canada Chapter



Daryl Somers, CET

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email: daryl & somersep.com



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LONDON CANADA CHAPTER #116

LondonCanada.AshraeChapters.org

February 28/2005

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Historian

Eric Shaw ph: 964-0022 ewshaw@baymarsupply.com

Golf Tournament

Hugh Palser ph: 471-9382 palserent@primus.ca

Program

Legal Issues and Liability Concerns for Engineers and Related Industry Professionals

Christopher (Chris) M. McDonald Partner - Shook, Hardy & Bacon L.L.P Kansas City, Missouri (www.shb.com)

ASHRAE DISTINGUISHED LECTURER

Mr McDonald will talk will provide an overview of the increase in indoor air and mold concerns over the last several years and will focus on actual cases that have recently made their way through the courts, with a particular emphasis on legal disputes involving indoor mold contamination. Target defendants, legal theories, and verdicts will be discussed to give the ASHRAE member a better understanding of the potential liabilities facing those who participate in HVAC design and construction. Defence strategies will also be outlined. A discussion of practical steps engineers can take to avoid liability will conclude the talk.

Meeting Location - Monday February 28/05

The Lamplighter Inn 591 Wellington Rd., London

London Chapter Members = \$30.00 Students = \$15.00 Others = \$35.00

CASH BAR ALL YOU CAN EAT BUFFET Research Night

5:15-Social 6:00-Dinner 7:15-Program

If you plan on attending, and are not contacted by the telephone committee, please advise: Joe Claessens (ph. 672-8511 joe@smyliecrow.com)



President's Message

This month's meeting will be our second Research Promotion night this year. This will mark the beginning of the "serious" part of the campaign. and many of you will be contacted in the next couple of months and asked to provide a donation. If you haven't made a donation already, please consider it. ASHRAE research provides the tools we use in our everyday working lives, and the money donated from Canada ends up back here. funding research at Canadian universities and companies. The London chapter Board of Governors have set a good example by each donating \$100 or more to ASHRAE research; now its your turn. Please support ASHRAE research!

This month's meeting features an ASHRAE Distinguished Lecturer. Mr. Christopher McDonald is a lawyer from Kansas City, and he'll be speaking on Mould Legal and Liability Issues. This is a hot topic in the industry right now, and the ASHRAE Distinguished Lecturers are always very good. We're hoping for a large turnout at the meeting. This year's ASHRAE Satellite Broadcast will also be about mould, on Wednesday April 13th at 1 pm. This year's broadcast is also being webcast. You can find more information at: http://www.ashrae.org/moldsatellitebroadcast.

As I've mentioned before in this spot, our focus this year is on membership renewal. Our membership has declined a bit in the past couple of years. as some people have left the chapter and not quite as many new members have joined up. We do have four or five new members so far this year, but I'm sure there are a number of others in the area who could benefit from joining ASHRAE. If you know someone like that, please help us spread the word. Anyone interested in membership can contact me at Derek.vakaras@chorley.com and I'll be happy to assist them in getting started.

See you at the meeting.

Derek B. Vakaras, P.Eng. President, London Canada Chapter

Meeting Summary - Jan 31, 2005

Mr Micheal Pelton, Enermodal Engineering, spoke on the new LEED CANADA program and the Canadian Green Building Council. Several example projects were presented with building systems that were designed to comply with the LEED points system. Additional information can be found at www.cagbc.ca

The January was also our second student night. The London Chapter would like to thank the following sponsors:

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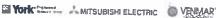


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Speaker's Bio

Christopher (Chris) M. McDonald Partner - Shook, Hardy & Bacon L.L.P

Kansas City, Missouri (www.shb.com)

Chris McDonald is a Partner who has concentrated his practice in the area of environmental, regulatory and toxic tort law and has experience with indoor air quality issues. He has experience in environmental and toxic tort litigation in federal and state courts and has significant experience in counselling clients on a broad range of environmental, regulatory, transactional and standard-setting issues. He has experience with a number of environmental statutes, including CERCLA, RCRA, the Clean Air Act and the Clean Water Act. He also has experience with the OSHA Act. He has participated in trials in both state and federal court and successfully argued one case before the Supreme Court of Kansas.

A significant part of Chris's practice has focussed on advising clients on regulatory and standard-setting initiatives relating to indoor air quality issues. He also focuses on advising clients relating to litigation avoidance and preparedness. Much of his work deals with complex scientific and technical issues.

Chris has spent a significant amount time working with junior lawyers as part of the Firm's Associates Committee which he currently Chairs.

SATELLITE BROADCAST/WEBCAST MOLD IN OUR BUILDING ENVIRONMENT

Wednesday, April 13, 2005 1:00 p.m. – 4:00 p.m. Eastern Standard Time

Concerns about mold in the building environment are no longer limited to just humid environments or North America. Mold is now a global concern for designers, contractors, building owners/operators and building occupants. Information on how to properly control moisture and humidity conditions in order to minimize mold will be presented in this broadcast/webcast sponsored by ASHRAE's Chapter Technology Transfer Committee (CTTC).

RESOURCE PROMOTION NIGHT

The London Chapter has received the <u>FULL CIRCLE AWARD</u> as the President, Vice President, Secretary, Treasure, and Resource Promotion Chair have each contributed \$100.00 to ASHRAE Research. The money collected goes to fund research projects (including information for handbook chapters) and educational materials. It is hoped that you recognized the work that ASHRAE contributes to the hvac industry and that you also consider a contribution. Donors will be recognized in a future newsletter and at a future meeting.



Daryl Somers, cet

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LONDON CANADA CHAPTER #116

LondonCanada.AshraeChapters.org

March 21/2005

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Scott Edmunds ph: 667-4108 sedmunds@uniongas.com

Treasurer

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Student Activites

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Research Promotion

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Historian

Eric Shaw ph: 964-0022 ewshaw@baymarsupply.com

Golf Tournament

Hugh Palser ph: 471-9382 palserent@primus.ca

Program

Technical Tour STRATHROY FOODS

225 Lothian Ave, Strathroy

This year is the 100th Anniversary of ASRE (American Society of Refrigeration Engineers) the starters of ASHRAE. We have been asked by ASHRAE Society to provide a tour of process refrigeration systems to our members as a tribute to this 100th anniversary. Therefore this month's meeting will be a tour of the Strathroy Foods plant at 225 Lothian Ave, Strathroy, Ontario. The tour will include an overview of their refrigeration plant. The building is a vegetable freezing plant with three IQF freezer tunnels and approximately 80,000 square feet of storage freezer. The tour will start at 6:00 PM and should be approximately 45 minutes long.

Dinner after the meeting will be a Bear Creek Golf and County Club at 571 Metcalfe Street East, Strathroy at 7:00 PM. Unfortunately the golf course will not be open.

REFER TO MAP ON PAGE 4

Meeting - Monday March 21/05 **Strathroy Foods**

225 Lothian Ave

Strathroy. Ontario

London Chapter Members = \$30.00 Students = \$15.00 Others = \$35.00

6:00-Tour

7:00-Dinner

If you plan on attending, and are not contacted by the telephone committee, please advise: Joe Claessens (ph. 672-8511 joe@smyliecrow.com)



President's Message

This month we have our annual Tour meeting. We'll be visiting Strathroy Foods (in Strathroy), to see their refrigeration plant. A map to the site is included in this newsletter. After the tour we'll have a dinner meeting at Bear Creek Golf Club, which is nearby. We hope to see you there.

ASHRAE Society will be conducting a Satellite Broadcast/Webcast on Wednesday April 13th at 1 pm. This year's topic is Mold in the Building Environment. You need to register your satellite or webcast site in advance. You can find more information at:

http://www.ashrae.org/moldsatellitebroadcast

We will be having our annual golf tournament on Monday, June 6th, at Forest City National as usual. Special thanks to Mr. Hugh Palser, for organizing this for the nth time. More details to follow next month.

At this time of year we need to start thinking about next year's executive. If you'd like to help with operations of the London Chapter, then we'd like to have you! We're always looking for new blood. If you're interested, please contact Dennis Dawe at dennis.dawe@chorley.com.

See you in Strathroy.

Derek Vakaras P.Eng ASHRAE London Canada Chapter President

Meeting Summary - Feb 28, 2005

On February 28, 2005 we had a Distinguished Lecturer at our meeting. Distinguished lecturers are individuals who are recognized by ASHRAE Society as outstanding speakers in their field. Each Chapter is allowed to have a distinguished lecturer every once every two years. We were privileged to have Mr. Christopher M. McDonald, ESQ. a lawyer with Shook, Hardy & Bacon L.L.P. from Kansas City, Missouri. The topic was on Indoor Air Quality and Mold: Legal Issues and Liability Concerns for Engineers and Related Industry Professionals. Mr. McDonald was very knowledgeable in the topic and addressed some very interesting issues and preventative methods for protecting yourself from litigation with regards to mold and indoor air quality.

Unfortunately there was a very poor turnout for the evening, we believe mainly due to the weather forecast. There were only 24 people present.

Joe Claessens London ASHRAE Chapter CTTC Chair & Vice President

ASHRAE LONDON CHAPTER ELECTIONS

In accordance with the London Chapter bylaws which require yearly elections for officers to be held, nominations for positions for the 2005-2006 year can now be brought forward. If you would like to assist in the chapter operations, or can suggest some names, please contact: Dennis Dawe at dennis.dawe@chorley.com

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SATELLITE BROADCAST/WEBCAST MOLD IN OUR BUILDING ENVIRONMENT

Wednesday, April 13, 2005 1:00 p.m. – 4:00 p.m. Eastern Standard Time

Concerns about mold in the building environment are no longer limited to just humid environments or North America. Mold is now a global concern for designers, contractors, building owners/operators and building occupants. Information on how to properly control moisture and humidity conditions in order to minimize mold will be presented in this broadcast/webcast sponsored by ASHRAE's Chapter Technology Transfer Committee (CTTC).

The Year for the 'R' in ASHRAE History of the Refrigeration Industry

Commercial development of mechanical refrigeration began in the United States in the 1860's; however, it did not amount to much until the late 1870's. By the end of the nineteenth century, mechanical refrigeration was well established and widely used in beer brewing, ice making, and cold storage.

In December of 1904, The American Society of Refrigeration Engineers was chartered, and has evolved over the last 100 years into what we know today as ASHRAE.

Recently, in honor of the 100th Birthday of the founding of ASRE (American Society of Refrigeration Engineers), the ASHRAE Historical Committee has published a commemorative magazine issue reproducing several pages from the 1905 issue of "Ice & Refrigeration" which was a monthly periodical that began circulation in 1891 to communicate developments and news in the mechanical refrigeration field, particularly for the newly expanding ice making industry.

For several decades this magazine followed the many changes and developments in the refrigeration industry, and was not limited to only one area of interest; household refrigeration, air conditioning early 1900's style (a very new idea of providing comfort cooling for commercial buildings...) and frozen food industry were the main subjects of interest highlighted by the monthly magazine issues.

Sounds a little like the ASHRAE Journal, doesn't it? Unfortunately, the magazine ceased publication in 1961.

If anyone would like to review a copy of this "Commemorative Issue", please contact the chapter Historian (Eric Shaw) as this will be available in the London ASHRAE Chapter Library in the near future.

Eric Shaw London ASHRAE Chapter Historian Chair



Daryl Somers, cer

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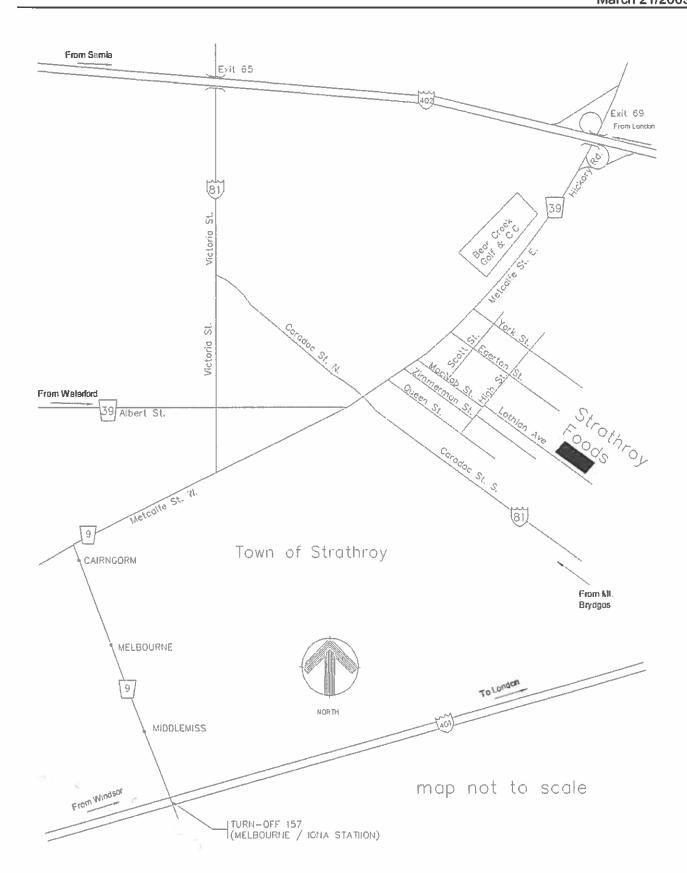
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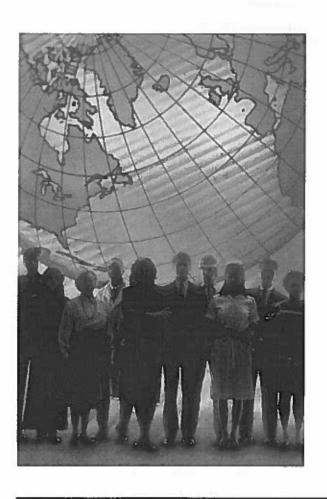
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ASHRAE LONDON CANADA CHAPTER #116 Page 4 March 21/2005





ASHRAE SATELLITE BROADCAST HOMELAND SECURITY FOR BUILDINGS

Sponsored by the
American Society of Heating, Refrigerating
and Air-Conditioning Engineers
Presidential Ad Hoc Committee
on Homeland Security
with support from the
Alfred P. Sloan Foundation

Wednesday, April 14, 2004 Noon – 3 p.m. EST

Terrorist attacks targeting the built environment are a critical and compelling issue to the nation, especially to building designers, owners and managers and first responders.

Multiple hazards and threats intersect within a building, and critical questions concerning the danger of chemical, biological or radiological (CBR) attacks remain. This broadcast will address questions of design, construction and operation of buildings. The primary goal is to address the key issues related to building protection from CBR incidents and draws heavily from ASHRAE's most credible and timely reports and publications.

This free broadcast from the studio of WETA public television in Washington, D.C., is intended to reach a cross-section of professionals, including engineers, architects, building owners and managers, fire, police, medical responders, public safety officers, risk managers and other key personnel.

DVDs will be produced and made available for sale and for use by ASHRAE chapters.

Information on downlink sites is available on ASHRAE.org.

Please check periodically for updated downlink locations.

http://www.ashrae.org/template/AboutLinkLanding/category/1561

Segment One-Noon EST

- Keynote
 D.A. Henderson, M.D., M.P.H.
 Founding Director of the Center for Civilian Biodefense Studies,
 Johns Hopkins Bloomberg School of Public Health Former Director of the World Health Organization Global Smallpox Eradication Campaign
 The Threat to Building Occupants
- Welcome and ASHRAE Views
 Richard H. Rooley, FREng., ASHRAE President
 ASHRAE's role in Homeland Security and the purpose
 of this broadcast
- January 2003 ASHRAE Report Summary and Building Codes and Standards Lawrence G. Spielvogel, P.E. ASHRAE reports and Homeland Security-related codes and standards
- HVAC and Refrigeration Systems
 William J. Coad, P.E.
 Hamaland Security issues related to design

Homeland Security issues related to design and operation of HVAC&R systems in existing and new buildings Segment Two—1:30 P.M. EST Protecting Buildings from CBR and Associated Threats

- Ventilation and Pressurization
 Andrew K. Persily, Ph.D.
 Design and operation of HVAC ventilation and pressurization systems to protect occupants
 - Filtration and Air Cleaning
 II.E. Barney Burroughs

Design, operation and maintenance of filtration systems and application in refuge areas

Personal Protection

Rainh F. Goldman, Ph.D.

Personal CBR protective systems and equipment and their effectiveness

Questions-Ronald P. Vallort, P.E.

Phone, fax or email questions during the broadcast only to: WETA Toll-free telephone: 1-888-493-9382 FAX: 703-998-2706

E-mail: videoconference@weta.com

How To Register Sites

100 PAOE Points are awarded to ASHRAE chapters that host this broadcast.

Phone:	Email:
Room Capacity:	Open to the Public?

WETA's "trouble number" in their transmission control room for satellite viewers on the day of the program will be 703-998-2675. WETA can provide only limited help at that time due to the variety of different models of satellite receivers. Anyone who does not know how to tune their satellite dish at all should contact the person who installed their system prior to April 14 for instructions on how to tune into the correct satellite and channel.

The broadcast will shown on the following satellite channels:

Wednesday, April 14, 2004
Test time: 11:30 a.m.-noon
Live program: Noon-3 p.m.
(3.5 hours total time on each satellite)

Ku-band satellite information:
AMC-9, Transponder K15
85 degrees west
Downlink frequency: 12000 Vertical
Audio: 6.2 and 6.8

C-band satellite information: AMC-3, Transponder C19 87 degrees west Downlink frequency: 4080 Horizontal Audio: 6.2 and 6.8

Fax this form to ASHRAE's Washington Office at 202-833-0118

Email to: patriciaryan@ashrae.org

ASHRAE 1828 L Street, NW, Suite #906 Washington, D.C. 20036 Phone 202-833-1830 Fax 202-833-0118



LONDON CANADA CHAPTER #116

LondonCanada.AshraeChapters.org

April 25/2005

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Student Activites

Jamie Whitty ph: 672-8511 jamie@smyliecrow.com

Research Promotion

Tom Pollard ph: 685-2570 tpollard@execulink.com

Historian

Eric Shaw ph: 964-0022 eshaw@baymarsupply.com

Golf Tournament

Hugh Palser ph: 471-9382 palserent@primus.ca

Program

AIR QUALITY AND ASHRAE STANDARD 62

Gordon Cooke, P.Eng President, Air Solutions Inc

ASHRAE Standard 62 dealing with Ventilation for Acceptable Indoor Air Quality has been receiving a number of concerns by members in regards to its scope - should it provide guidelines in regards to smoking? and ventilation requirements - what is acceptable indoor air quality? You may also have received your ASHRAE Society election package in which the hospitality industry has a petition asking for a new project committee to develop standards and guidelines for their special industry (the ASHRAE Board of Directors recommends voting against the petition as ASHRAE 62.1-2004 already has requirements).

Meeting - Monday April 25/05

The Lamplighter Inn 591 Wellington Rd., London

London Chapter Members = \$30.00 Students = \$15.00 Others = \$35.00

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:

Joe Claessens (ph. 672-8511 joe@smyliecrow.com)



President's Message

This month will mark our last technical meeting of the year. The ASHRAE year is nearly complete, with our annual Golf Tournament on June 6th being our final event before we break for the Summer. The golf tournament usually fills up fast, so if you would like to book a foursome you should contact Hugh Palser (hpalser@palserent.com) right away.

As the year winds down we also need to begin our Resource Promotion fundraising drive in earnest. We are currently at something below 15% of our goal. This is typical for this time of year, but we need you now to make your annual contribution to ASHRAE research. It is a worthwhile cause and we all benefit from ASHRAE research when we use the handbooks, design guides, standards and technical courses. Please contact Tom Pollard at tpollard@execulink.com and make your contribution as soon as you can.

I'd like to thank this year's Board of Governors for their efforts, and particularly Joe Claessens, Scott Turner, Scott Edmunds, Tom Pollard, Jamie Whitty, Eric Shaw and Hugh Palser. ASHRAE is a volunteer organization, and the few that help out with running the chapter do guite a lot of work. Without them, the monthly technical meetings, golf tournament, etc. wouldn't be possible. We need new members each year to join the Board of Governors and would welcome your participation. If you are interested in helping out, please contact Dennis Dawe at dennis.dawe@chorley.com.

Though the chapter doesn't meet over the summer, this summer will be busier than most, London is hosting the Chapters Regional Conference (CRC) in August, at the Oakwood Inn in Grand Bend. ASHRAE members from all over our Region (Windsor to Halifax), and ASHRAE Society members from Atlanta will attend the conference. Peter Golem and Daryl Somers are co-chairing the committee organizing the CRC, and they will need lots of help. Contact Peter at peter.golem@chorley.com to sign up.

See you at the meeting.

Derek Vakaras P.Eng ASHRAE London Canada Chapter President

ASHRAE LONDON CHAPTER ELECTIONS

Board of Director and Committee Chair positions for the upcoming 2005-2006 year will coming up for election. If you can suggest some names or would like to assist in the chapter operations please contact:

> Dennis Dawe at dennis.dawe@chorley.com or phone: 679-8660

ASHRAE Hamilton Golf Tournament

The ASHRAE Hamilton Chapter's Annual Golf Tournament will be held on Wednesday June 8th at Legends on the Niagara. This is a class course and Hamilton's first ever Shot-gun start at 1 pm. We have extended the invite to members of the London and Toronto Chapters. The cost is \$150/ person and includes Golf, cart and Dinner. Anyone interested in obtaining an entry form, please either call, fax, or email your intent to:

David Rasmussen, Social Chairman-Hamilton Chapter Phone/ Fax: (905) 575-5542 Email: drasmussen@delhi-industries.com

note - see page 4 of this newsletter for: 2005 LONDON AND AREA ASHRAE GOLF TOURNAMENT Pete Edmiston

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Speaker's Bio

Gordon Cooke, P.Eng President, Air Solutions Inc

Gordon Cooke, president of Air Solutions Inc., is a professional engineer who has been working in the indoor air quality and building science industry for over 20 years. His company represents the technical interests of a number of manufacturers within the housing industry in Ontario. Gord also develops and delivers training course in the fields of building science, energy efficiency, sales and marketing, and indoor air quality. He has particular expertise in energy efficiency building and has been actively involved in the R-2000 and EnerGuide program as a designer, trainer and performance evaluator.

Gord has been a speaker at various conferences including ASHRAE, HRAC, Affordable Comfort, EEBA Home Builders Associations, and the Ontario Builder Forum.

Gord lives and works in Cambridge, Ontario.

Meeting Summary - Mar 21, 2005

On March 21st, 2005 we had our annual site tour. This year's tour was of the Strathroy Foods plant in Strathroy. Ontario. The tour was well attended with approximately 40 people, which is one of the larger tour we have had in the pass few years. We where given a guided tour by Mr. Bob Freer. Bob is in charge of the plant's maintenance and operations. Unfortunately because of the time of the year the quick freeze equipment was not operational; however, it was a great opportunity to view the internal components of the equipment. We were able to tour the refrigeration plant and the packaging line. We would like to thank Bob Freer for his time and also Tom Drennan for his help in setting up the contact.

After the tour the group went back for a quick Dinner Meeting at the Bear Creek Golf and County Club, in Strathroy.

Joe Claessens
London ASHRAE Chapter CTTC Chair & Vice President

<u>Steam Seminar - ASPE Eastern Michigan Chapter</u> <u>April 28, 2005</u>

The Detroit Chapter of ASHRAE is co-sponsoring a seminar by Dan Holohan on "Troubleshooting Steam & Heating Hot Water Systems". Dan is World famous as a Writer, Speaker, and publisher of many Steam and Hydronic books. Dan also has a website called www.heatinghelp.com

It has been over 11 years since Mr. Holohan has given a seminar in this area. For more information contact Ron George (rongeorge@charter.net)



Daryl Somers, CET

3392 Wonderland Road S Building 3, Unit 7 London, Ontario N6L 1A8 Tel. (519) 652-1977 Fax. (510) 652-9323 Mobile: (519) 670-7720

amail: dary @somercep.com



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2005 LONDON & AREA ASHRAE GOLF TOURNAMENT

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Monday June 6, 2005

Place:

Forest City National 16540 Robin Hill Road

London, Ontario

Tee Off:

Shot Gun Start @ 1:00pm

Scramble Format

4 SOMES ONLY/SOFT SPIKE ONLY

Cost:

Golf & Dinner \$145.00

Dinner Only \$45.00

- * Light Lunch Included
- * 4-star course
- * golf carts included
- * buffet dinner
- * limited spaces available

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2005 LONDON & AREA ASHRAE GOLF TOURNAMENT

Date: N	Monday June	6.	2005
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16540 Robin Hill Road

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LONDON CANADA CHAPTER #116

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SEPT 26/2005

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Treasurer

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Committee Chairs

Membership

Jason Vanderberghe ph: 670-8066 jasonv@aquatech.ws

Research

Derek Vakaras ph: 679-8660 derek.vakaras@chorley.com

Student Activities

Jamie Whitty ph: 672-8511 jamie@smyliecrow.com

Golf Tournament

Hugh Palser ph: 471-9382 hpalser@palser.com

Newsletter

Tom Pollard ph: 685-2570 tpollard@execulink.com

Program

ECONOMICAL AND ENVIRONMENTAL EFFECTS OF ENERGY CONSUMPTION

Mark Read

Energy Stewardship Specialist London Health Sciences Centre

An overview of the concerns surrounding the economical and environmental effects of energy consumption, the London Health Sciences Centre & St. Joseph's Health Care, London overall approach to energy management and the economical and environmental benefits that have been achieved as a result.

FUTURE MEETINGS

Mon Oct 24/2005

Mon Nov 28/2005

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

Meeting - Monday Sept 26/2005

The Lamplighter Inn 591 Wellington Rd., London

>>> NEW LOWER RATES FOR MEMBERS <<<
London Chapter Members = \$25.00 Member's Meal Plan = \$125.00

STUDENT NIGHT
Students = FREE FOR SEPTEMBER (regularly \$10.00)

Others = \$35.00

CASH BAR 5:15-Social ALL YOU CAN EAT BUFFET 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@somersep.com)

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President's Message

I would like to welcome everyone to the 2005-2006 ASHRAE year. The London Chapter just had a very successful Chapter's Regional Conference in Grand Bend and I would like to extend a thank-you to all our members that helped make it happen, with honorable mention to Peter Golem, Daryl Somers and Tom Pollard for their efforts.

Our Board of Governors have been working hard to get the year's activities arranged. We have a few new Committee Chairs this year and I'm looking forward to working with them. Our program is slowing coming together and the topics will be of interest to everyone in the industry. If anyone has a topic that they would like to have addressed or gain more knowledge of, contact myself (joe@smyliecrow.com) or Scott Turner (scott@somersep.com) we would like our program to meet the needs of our members.

Please mark all the meeting dates on your calendar. We have reduced the cost of our chapter meetings for our local chapter members making it more affordable for everyone to attend.

We have arranged our social night for December this year. On Sunday December 11 we have a 54 seat box reserved at the John Labatt Centre for a London Knights Game. The tickets will be on sale at one of the up coming meetings.

This month's meeting will be Student's night. Jamie Whitty, our Student Committee Chair, will be visiting the University of Western and Fanshawe College to talk to the students to let them know the benefits of ASHRAE. Jamie will also be contacting our members and companies looking for student sponsors to help the students attend the meetings and become a student ASHRAE Member. Your support will be greatly appreciated.

I look forward to seeing you at the meeting to welcome the student, our future in the industry.

Joe Claessens ASHRAE London Canada Chapter President

Speakers Bio

Mark Read **Energy Stewardship Specialist London Health Sciences Centre**

Current Employment - The London hospitals (London Health Sciences Centre & St. Joseph's Health Care, London) for the last 3 years.

Work - To champion an Energy Stewardship program that addresses the hospital's energy use through retrofitting programs and staff education and awareness.

Activities - To educated other facilities on energy management practices via presentations at Canadian Healthcare Engineering Society (CHES), Ontario Hospital Association (OHA), Canadian Centre for Pollution Prevention (C2P2), Community Schools etc.

ASHRAE Newsletter business card ads are available for just \$100 / year (January to December). Please contact Tom Pollard (tpollard@execulink.com) for more information.



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Interactive CD Provides Greater Access to ASHRAE Handbook

ATLANTA n An enhanced CD-ROM provides greater access to the technical guidance in the ASHRAE Handbook. The ASHRAE HandbookCD+ 2002-2005 is the Society's first four-volume HandbookCD with electronic enhancements. "The CD provides users with the most complete and useful HVAC&R reference available," Mark Owen, ASHRAE Handbook editor, said. "The CD+ contains all Handbook chapters with the latest updates in a searchable electronic format, featuring interactive and supplemental tools."

These tools include:

- Spreadsheets demonstrating the radiant time series (RTS) method of load calculation;
- Greatly expanded climatic design data tables from the 2005 Handbook, Fundamentals;
- NAIMA 3E Plus software for calculating insulation thickness;
- A desiccant wheel performance estimator;
- Video clips of kitchen hood airflows;
- Equipment animations;
- Interactive charts and spreadsheets;
- Supplemental examples and text;
- More links to organizations and data;
- Color graphics for improved understanding, surpassing the presentation possible in the black-and-white print volumes;
- Links to commercial resources that allow users to source products and services related to the topic of each chapter.

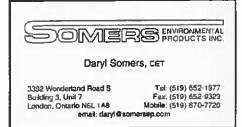
The CD+ contains PDF files of chapters in all four current volumes: 2005 Fundamentals; 2004 HVAC Systems and Equipment; 2003 HVAC Applications; and 2002 Refrigeration. The 3,100+ pages of PDFs are searchable across all the volumes, in both the I-P and SI unit editions.

The cost of the Handbook CD+ is \$499 (\$249, ASHRAE members). Prices are for a single user. A multi-user network license and a network Handbook CD+ also are available.

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.

SEPTEMBER 26 IS STUDENT NIGHT

This month is our first student night of the year; the chapter would like to invite all students who are interested to come out to our monthly meeting on Monday September 26th, 6:00pm to The Lamplighter Inn, 591 Wellington Road South. We would ask that all chapter members in attendance make an extra effort to welcome the students by inviting them to your dinner table or introducing yourself sometime throughout the night. ASHRAE Student Membership is only \$16.00 USD per year and enables the student to purchase various ASHRAE publications at a discounted rate, receive the monthly published ASHRAE Journal, and have access to the member's only areas on the ASHRAE website.









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New Faces of Engineering

ASHRAE Members:

Are you interested in promoting an outstanding young employee, your company and ASHRAE?

Then I encourage you to enter the New Faces of Engineering.

Part of National Engineers Week, Feb. 19-25, the New Faces program highlights the contributions of the industry's newest engineers. Each year, the program culminates with a full-page ad in USA Today of the top 16 New Faces. The ad features a photo of the selected young engineers, the name of the company for which they work and a brief description of their contributions.

Within ASHRAE, this same information is used to promote the Society's nominees in ASHRAE Insights, in the ASHRAE electronic newsletter, E-Connections, and on ASHRAE.org.

To make this program successful, ASHRAE needs the help of its members. We are seeking nominees. Nominees must be under the age of 30, hold an engineering degree, be employed as an engineer for between two and five years, have been involved in projects that significantly impact public welfare or further professional development and growth and be an ASHRAE member.

To nominate young engineers, submit the completed nomination form on ASHRAE.org at www.ashrae.org/newfaces. We ask that you submit nominations to ASHRAE by November 1, 2005.

The New Faces of Engineering strives to promote the accomplishments of young engineers by highlighting their engineering contributions and the resulting impact on society. It is a recognition program, not a competition. Nominees should be able to tie at least one achievement to something the non-engineering community can appreciate.

Thank you,

Lee Burnett ASHRAE President

ASHRAE.org Earns Award of Excellence

ATLANTA - ASHRAE.org, the Web site of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, has earned an award of excellence from the Web Marketing Association. The association's Standard of Excellence WebAward recognizes the best Web sites in a variety of industry categories. Past Standard of Excellence sites include The American Water Works Association, ABC News, and Abercrombie and Fitch. Judges noted that ASHRAE.org is "easy to navigate and easy to find your contact information." Entries are judged on design, innovation, content, technology, interactivity, copywriting and ease of use.

The site exceeds 6,000 unique visits per day and hosts 8,000 documents. ASHRAE.org was launched in 1995 to deliver information to the HVAC&R industry, including authoritative, in-depth technical information, information on Society activities, updates on emerging trends in new technologies, and information on HVAC&R products, companies and organizations. "ASHRAE.org is designed to make it easy for visitors to find the information they need in order to help fulfill their obligation to their clients and customers as well as to the Society," David McAlister, ASHRAE's manager of electronic communications, said. "For Internet professionals to judge our site a Standard of Excellence in Web design is encouraging. But the usability and friendliness of a site depends on member feedback and constant study of industry best practices. We see this award as confirmation that we're on the right path."

Services of the site include:

- Discussion boards to enable practitioners to share expertise and opinions in a variety of technical areas.
- Online meetings for committees.
- An interactive membership application form.
- * A career services center where members can post resumes and search for jobs.
- * Enewsletters, The HVAC&R Industry, which provides weekly industry update to subscribers, and Society Connections, which provides discussion forums on technical issues and Society news.

The Web Marketing Association was founded in 1997 to help set a high standard for Internet marketing and corporate Web development on the World Wide Web.

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.

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

LONDON CANADA CHAPTER #116

LondonCanada.AshraeChapters.org

OCT 24/2005

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Scott Edmunds ph: 667-4108 sedmunds@uniongas.com

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Membership

Jason Vanderberghe ph: 670-8066 jasonv@aquatech.ws

Research

Derek Vakaras ph: 679-8660 derek.vakaras@chorley.com

Student Activities

Jamie Whitty ph: 672-8511 jamie@smyliecrow.com

Golf Tournament

Hugh Palser ph: 471-9382 hpalser@palser.com

Newsletter

Tom Pollard ph: 685-2570 tpollard@execulink.com

Program

NFPA 96 AND THE USE OF VARIABLE VOLUME KITCHEN VENTILATION DESIGN

Thomas E. Mills P.Eng Spring Air Systems

A recent ASHRAE sponsored a research project at the University of Minnesota that resulted in NFPA 96-2004 Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations reducing the minimum exhaust velocity in a Type 1 grease duct from 1,500 fpm to 500 fpm. This change has opened the door for systems that reduce airflow.

FUTURE MEETINGS

Mon Nov 28/2005

Mon Jan 30/2006

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

Meeting - Monday Oct 24/2005

The Lamplighter Inn 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

MEMBERSHIP NIGHT

CASH BAR 5:15-Social ALL YOU CAN EAT BUFFET 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@somersep.com)



President's Message

Our program for the year is almost finalized; we have a list of the upcoming topics. Looked over the dates and topics and mark them on the calendar. All of these topics should be of some interest to many people in our industry; some who are not members of ASHRAE (Architects, Building Owners, and Contractors etc.) so please let them know as well.

Last months meeting was Student night and we had 8 students from University of Western and Fanshawe. It was a successful evening and we would like to thank the students and hope to see them again at some future meetings. We will be contacting some of our members for help in sponsoring the students.

This month's meeting will be Membership night. Our goal for the year is to get 10 new members to our London Chapter. If you know anyone who has expressed an interest in ASHRAE or who is new in the industry please contact myself (joe@smyliecrow.com) or our Membership Chair, Jason Vanderberghe (jasonv@aquatech.ws)

The tickets for the December social night will be on sell this meeting. On Sunday December 11 we have a 54 seat box reserved at the John Labatt Centre for a London Knights vs. the Guelph Storm. Seats will be sold on a first come bases.

I look forward to seeing you at the meeting.

Joe Claessens **ASHRAE London Canada Chapter President**

Speakers Bio

Thomas E. Mills P.Eng **Spring Air**

Graduated with Bachelors of Mechanical Engineering from the University of Waterloo in 1979. He has been involved in the Canadian heating and ventilating industry for 25 years and in the commercial kitchen ventilation industry for 21 years. He has personally listed "Commercial Kitchen Ventilating" equipment with both Canadian and American listing authorities. Mr. Mills is presently a partner in Spring Air Systems Inc. Spring Air Systems is a Canadian manufacturer of commercial kitchen ventilation equipment. Their products are certified and/or listed by Underwriters Laboratories of Canada Ltd., Underwriters Laboratories Inc., the Canadian Standard Association, and the National Sanitation Foundation

September Meeting Summary

Mr Mark Read, London Health Scions Centre spoke on energy savings that have been undertaken to the hospital building and departments. Several items dealt with reducing electrical power and scheduling of systems. LHSC has undertaken a long term program of measuring all forms of energy use (electrical, steam, water) and making comparisons to other facilities. Mark presented several initiatives that have already been undertaken with energy savings and payback periods.

Pete Edmiston



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Student Activities

Our chapter is once again working with the 4th year HVAC course at UWO to better expose new students to the HVAC industry by having professionals help teach portions of the class. This was a great success last year! If you would be interested in offering some of your time and expertise, or would like to know more, please contact me at 690-3013, or by e-mail: jamie@smyliecrow.com.

Jamie Whitty Student Activities Chair, London Canada Chapter

SEPTEMBER 26 WAS STUDENT NIGHT

Special thanks go out to the following companies that sponsored a meal and ASHRAE membership for the students who attended our September meeting from UWO and Fanshawe College:

- -HTS Engineering Ltd.
- -Somers Environmental Products Inc.
- -Aqua Tech Sales & Marketing Inc.
- -Baymar Supply Ltd.
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- -Pollard Engineering Ltd.

ASHRAE WINTER MEETING and AJHR EXPO

McCormick Place, Chicago

January 21-25, 2006

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

SUN DEC 11 2:00pm

SPECIAL EVENT

London Knights vs. the Guelph Storm

Game tickets available for purchase at the Oct 24 meeting. Just \$30.00 (includes game ticket and snacks withing the ASHARE London group booth during the game)



Daryl Somers, CET

3392 Wonderland Road S London, Ontario N6L 1A8

Tel: (519) 652-1977 Fax: (519) 652-9323 Mobile: (519) 670-7720

smail: daryl@somersep.com



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Addenda Availability Changes - ASHRAE implements New Process to Update Code-Intended Standards

As part of ongoing efforts to increase use of its standards, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) has announced a major change to availability of addenda to code-intended standards. The move puts ASHRAE in line with issuance of model building codes.

In the past, addenda for code-intended standards on continuous maintenance were posted individually on ASHRAE.org after being approved by the Board of Directors for publication. Now, Board-approved addenda to code-intended standards will be published in a supplement. The supplements for each standard will be published on a regular schedule halfway between the three year publication of each standard. The addenda also will be incorporated into each standard when it is reissued after its last publication.

Richard Hermans, P.E., chair of ASHRAE's Standards Committee, acknowledges the change is significant. "Our whole approach to how we relate to the building code industry is changing," Hermans said. "We are seeking more involvement with the model code development community to assist us in our code proposals. We are responding to member concerns over the cost of keeping up with our code-intended standards. By cost, I am not referring to the dollars spent for obtaining the updated documents but rather the cost in time to train employees about the new requirements contained in addenda. And we are aligning our release of certain standards to coincide with the model code schedules for code change proposals."

All of these actions point to a policy of releasing addenda on a predictable schedule spaced out over years, he said. "In this way, we will develop our code-intended standards in the same way that groups such as the International Code Council and the National Fire Protection Association, both of which incorporate ASHRAE standards, maintain their model codes," he said.

The change applies only to code-intended standards that are on continuous maintenance. These are:

- Standard 15, Safety Standard for Refrigeration Systems;
- Standard 34, Designation and Safety Classification of Refrigerants;
- Standard 52.2, Method of Testing General Ventilation Air Cleaning Devices for Removal Efficiency by Particle Size:
- Standard 62.1, Ventilation and Acceptable Indoor Air Quality in Commercial, Institutional, Industrial and High-Rise Residential Buildings;
- Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings;
- Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings;
- Standard 90.2, Energy Efficient Design of Low-Rise Residential Buildings;
- Standard 140, Standard Method of Test for the Evaluation of Building Energy Analysis Computer Programs.

The first supplements for standards published will be available in March 2006.

For more information on ASHRAE's work in standards, visit www.ashrae.org/standards.

Sustainability Topic of ASHRAE Satellite Broadcast/Webcast - April 19, 2006

A satellite broadcast is being offered by ASHRAE to fulfill its goal of promoting building sustainability as a means to provide a safe, healthy, comfortable environment while simultaneously limiting the impact on the Earth's natural resources.

Information about building sustainability principles, practices and emerging concepts will be presented in the free April 19, 2006, satellite broadcast and Webcast, Sustainability and the Building Environment. The program is sponsored by ASHRAE's Chapter Technology Transfer Committee (CTTC).

"This broadcast will benefit all of the team members involved in the design, construction, start-up, and operation phases of a facility," said Jon Christopher Larry, chair of CTTC. "Viewers will be given information and sources to assist them when they are faced with the situation where a green design must be done. The green building industry will also benefit from the engineering input from ASHRAE."

The speakers for the broadcast will provide guidance on how to practice green building design. They are: Joe Van Belleghem, president, BuildGreen Developments, Victoria, Canada; Hal Levin, Fellow ASHRAE, research architect, Building Ecology Research Group, Santa Cruz, Calif.; Jean Lupinacci, director, ENERGY STAR commercial and industrial branch, Climate Protection Partnerships Division, U.S. Environmental Protection Agency; Kevin Hydes, P.E., P.Eng., president and CEO, Keen Engineering, Montreal, Canada; and Malcolm Lewis, Ph.D., P.E., president, CTG Energetics, Irvine, Calif.

The broadcast will be similar to the April 2005 Mold in the Building Environment Broadcast/Webcast viewed by some 16,000 viewers at 1,700 locations. Visit www.ashrae.org/greenbuildingsbroadcast for the latest information regarding the broadcast/Webcast and ASHRAE's work on sustain ability.

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Comment on Proposed ASHRAE Standard - Proper Ventilation Integral Part of Patient Care

Just as the right dose of medication can improve their health, proper ventilation is an integral part of patients' well-being in health care facilities. Requirements to ensure high quality ventilation can be found in ASHRAE's proposed standard 170P, Ventilation of Health Care Facilities. The proposed standard is open for public comment from Sept. 23-Nov. 7, 2005. The standard is being developed by ASHRAE and the American Society for Health Care Engineering.

"Without high quality ventilation, patients, health care workers and visitors can become infected through normal respiration of particles in the air," Richard Hermans, P.E., chair of the committee writing the standard, said. "Poorly ventilated health care facilities are places where the likelihood of pathogenic particles occurring in the air is quite high. Because such pathogens can be found everywhere in health care facilities and because patients are susceptible to them, additional care should be taken in the design of ventilation systems."

The proposed standard will define requirements for ventilation system design intended to provide environmental control for comfort, as well as infection and odor control.

It addresses systems and equipment, space ventilation for a variety of areas in health care facilities, including airborne infection isolation rooms, critical care units, burn units, surgery rooms, and Class B and C operating rooms, and planning, construction and system startup.

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 170P during the comment periods, visit ASHRAE.org at www.ashrae.org/standards.

106 ASHRAE Winter Meeting - Using Integrated Design to Achieve Sustainability

In designing buildings, professionals should work together to determine points of integration between various building systems, architecture and the environment. Only when this integrated design is achieved will buildings become truly sustainable, according to Kirk Mescher, chair of ASHRAE's Program Committee. Several sessions relating to integrated or sustainable design will be presented at the American Society of Heating, Refrigerating and Air-Conditioning Engineers' 2006 Winter Meeting, Jan. 21-25, Chicago, at the Palmer House Hilton. One-hundred and four sessions will be presented as part of the technical program. The complete technical program can be found at www.ashrae.org/chicago.

Integrated design is an all-encompassing design strategy that should integrate architecture, engineering, building use, location and utilities into a building form that meets or exceeds the requirements of the integrated components, according to Mescher.

"Green building design has grabbed headlines," he said. "As a subcomponent of integrated building design, green building design has become the marketing measure of forward thinking for engineering professionals. As a minimum, design teams should be asking: 'Why can a building not recognize when the occupants arrive and turn on the necessary building functions to support occupants? Can the heating and cooling system be integrated with the building architecture to minimize the need for mechanical support? Can the building control system be integrated with communication, alarm, security and other electronic systems?"

Among the sessions is a symposium on creating low-energy buildings through integrated design. It includes case studies of low-energy, sustainability and integrated design in residential and commercial buildings. A seminar focuses on HVAC&R buildings systems and how they interact with the local environment, including discussion on cooling tower water, district energy and acoustic concerns. While many non-profits have incorporated green building design, for-profit entities are just beginning to examine green in operating strategies and projects. A seminar examines how green is good for business as well as the environment. A forum seeks input on the barriers to using air-to-air energy recovery for sustainable HVAC systems. Energy recovery ventilation is a key equipment solution to providing efficient and sustainable HVAC&R systems.

The technical program is comprised of 62 seminars (presentations on a central or related topic with no published papers), 14 symposia (presentations with papers on a central subject), 26 open-discussion forums, a poster session and a public session. A total of 73 papers will be presented. Held with the ASHRAE Winter Meeting is the ASHRAE co-sponsored International Air-Conditioning, Heating, Refrigerating Exposition, Jan. 23-25, at McCormick Place. For more information, contact International Exposition Company at 203-221-9232, info@ahrexpo.com, www.ahrexpo.com.

Registration for the 2006 ASHRAE Winter Meeting is \$635 (\$375, ASHRAE member) prior to Dec. 2. After Dec. 2, the registration fee will be \$750 (\$490, ASHRAE member). For more information or to register, visit www.ashrae.org/chicago.

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ASHRAE Research Plan Provides Guide for a Sustainable Future

Providing navigation for a sustainable future is the goal of a new research strategic plan developed by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). The plan outlines ASHRAE's research goals for the next five years. It centers on sustainability, which is defined as "the concept of maximizing the effectiveness of resource use while minimizing the impact of that use on the environment."

"Research and technology are the foundation of ASHRAE on which everything else is built," said John Mitchell, Ph.D., P.E., chair of the Research Advisory Panel that developed the plan. "With issues related to energy conservation, refrigeration and indoor air quality facing our industry, our foundation must remain strong."

The plan contains goals in five targeted areas. These include:

Energy and Resources

- Provide guidance on techniques to working toward achieving net zero-energy use by 2015, meaning buildings that consume equal or less energy than they produce on an annual basis.
- Produce by 2015 new residential and light commercial buildings that have 70 percent less energy use than buildings built at the turn of the millennium according to ASHRAE Standard 90.2, Energy-Efficient Design of Low-Rise Residential Buildings.
- Optimize and make consistent ASHRAE Standards 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings, 62.1, Ventilation for Acceptable Indoor Air Quality, and 55, Thermal Environmental Conditions for Human Occupancy, to achieve measured and verified high system energy efficiency with high indoor environmental quality (IEQ) for indoor built environments.

Indoor Environmental Quality

- Make improvements in occupant health and comfort that can yield a 20 percent increase in productivity by 2015
- Provide an optimal indoor environment for buildings, vehicles and facilities with respect to comfort, productivity, health and safety.
- Provide better understanding of how contagious viruses are transmitted in an indoor environment and develop remediation techniques and equipment to minimize exposure.

Tools and Applications

- Develop more effective tools that will improve the productivity of the design process by 25 percent by 2015.
- Develop dual path standards where paths are prescriptive based and performance based.
- Develop a measurement-based rating system to establish the environmental performance of a building and its system.
- Provide design guidance for buildings and systems to address the past and expected change in climatic conditions.

Equipment, Components and Materials

- Establish techniques to improve the energy efficiency and reliability of heating, ventilating, cooling and refrigeration system components.
- Improve performance and reliability and minimize the environmental impacts of working fluids and materials.
- Advance ASHRAE's role in the safety and security of food distribution.
- Develop techniques that reduce the installed energy use of HVAC&R system auxiliary equipment by 50 percent by 2015.

Education and Outreach

- Make the results of ASHRAE sponsored and cooperative research available to the technical community.
- Ensure that ASHRAE research has an international impact.

To view the plan or for more information on ASHRAE's research program, visit www.ashrae.org/research.



ASHRAE LONDON 2005 - 2006 PROGRAM

DATE	SPEAKER	TOPIC OF DISCUSSION
Sept. 26, 2005 Student Nihgt	Mark Read LHSC	London Hospitals & Energy Conservation
Oct. 26, 2005 Membership Night	Tom Mills, P.Eng. Spring Air Systems	NFPA 96 and the Use of Variable Volume Kitchen Ventilation Design
Nov. 28, 2005 Research Night	Craig Fischbach Florida Heat Pump	Heat Pump Technology
Dec. 11, 2005	Social Event	Knights Game 2:00PM
Jan. 30, 2006	John Paleczny	Linkagless Controls
Feb. 27, 2006	Union Gas	Updates To Ontario Gas Code
Mar. 27, 2006	Tour	ТВА
Apr 19, 2006	Satellite Broadcast/Webcast	Guidance on How To Practice Green Building Design
Apr. 24, 2006	William J. Coad, P.E. Coad Engineering Enterprises ASHRAE Distinguished Lecture	The Ethics & The Economics of Energy Conservation
May 2006	Golf Tournament	Forest City National

If you have a particular topic or speaker that you would like to see/hear, please contact: Scott Turner (ph: 652-1977 email: scott@somersep.com)

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

LONDON CANADA CHAPTER #116

LondonCanada.AshraeChapters.org

NOV 28/2005

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<u>Program</u>

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@somersep.com)

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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 confession 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 ASHARE 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@somersep.com or phone: 519-652-1977).

Just \$30,00 (includes game ticket and snacks within the ASHARE London group booth during the game)

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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.



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Norm Clarks, P. Eng.

(Astrict Manager)



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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 <u>ASHRAE Research Canada</u> 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
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Ray Tec Radiant Heaters
Roberts Brothers Sheet Metal
Smylie and Crow
Somers Environmental Products
Trane Sales Agency London
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Westminster Mechanical

ASHRAE Individual Investors

Terry Arcese John Bisset Joseph Claessens 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.

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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.



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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 ASRHAE 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



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ASHRAE London – Social Event

London Knight's vs Guelph Storm

John Labatt Centre

SUNDAY DECEMBER 11/2005

7:00 PM Start Time

(Revised From 2:00PM Due to it becoming a Televised Event)

We have ordered some food items available while supplies last, a cash bar will be held within the box.

Ticket Price \$30.00

For Tickets Please Contact Scott Turner @ 519-652-1977 or scott@somersep.com

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

LONDON CANADA CHAPTER #116

LondonCanada.AshraeChapters.org

JAN 30/2006

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LEAKAGE LESS CONTROLS Microprocessor based fuel:air control system on commercial power burners.

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Retrofit conventional cams and jackshaft "mechanical linkage systems" with a "linkage-less" direct mount servo system and microprocessor based controller for greater accuracy and efficiency on the burners, with less environmental impact. The system includes configuration software, main controller, and independent servo motors for combustion air, main gas, secondary fuel, and flue gas recirculation if required. Typical fuel savings range from 5 to 15% with this system.

Meeting - Monday Jan 30/2006

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

>>> NEW LOWER RATES FOR MEMBERS <<<

London Chapter Members = \$25.00 Students = FREE Others = \$35.00 (for January Meeting)

STUDENT NIGHT

CASH BAR 5:15-Social ALL YOU CAN EAT BUFFET 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@somersep.com)

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President's Message

Although it has been almost a month since the break, I hope everyone had a great Holiday Season, and I would like to welcome everyone back. We hope that one of your New Year resolutions is to try and be more active in this year's ASHRAE activities.

The first half of the ASHRAE year is now behind us, and we are hitting full stride for the second half. Our second half promises to be an exciting program, with a tour in March, our Distinguished Lecturer in April and the Golf Tournament in early June. Your Board of Governors has been working hard to make the year a success. We are always looking for your opinion, suggestions and feedback to improve our chapter and ensure that our members are getting what they except from ASHRAE

The January Chapter meeting will be our second Student Activities night for the season. The speaker's topic is "Linkageless Controls". We encourage all students to attend.

By the time we have our January meeting the ASHRAE winter meeting and AHR Expo in Chicago will have ended. I know there are many members of the London ASHRAE Chapter attending. Hopefully we will have a few volunteers to speak briefly at the meeting on their experience in Chicago.

I look forward to seeing you at the meeting.

Joe Claessens London Canada Chapter President

Speakers Bio

John Paleczny Yorkland Controls Ltd. (www.yorkland.net)

Since 1991, Mr Paleczny has worked for Johnson Controls System Products, and Emerson Climate Technologies - Division of Emerson Electric - both sales SW Ontario and Niagara peninsula. Joined Yorkland Controls in 2004.

January Student Night

It is student night once again and we would like to invite all students to come out to our monthly meeting on Monday January 30th. The cost to students on this night is FREE! Members, please make an extra effort to welcome students by inviting them to your dinner table or introducing yourself sometime throughout the night; this may also be a good opportunity to scout out your next future employee!

Student Activities Chair, London Canada Chapter







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November Meeting Summary

In November Craig Fishbach of Florida Heat Pump came to see us with an overview of Geothermal Heat Pump Technology and Applications. Green Building Design and LEED Certification has renewed interest in heat pumps as their efficiencies exceed the requirements of ASHRAE 90.1 as well as their ability to use environmentally friendly refrigerants.

Be sure to join us in January as John Paleczny from Yorkland Controls talks to us about linkage-less controls and the use of direct mount servo systems and microprocessor based controllers to greater improve accuracy and efficiencies of mechanical equipment.

<u>LEED Credits Now Available for Energy Design</u> Guide <u>Use</u>

Designers can now earn credit under Leadership in Energy and Environmental Design (LEED) certification for use of the Advanced Energy Design Guide for Small Office Buildings. The inclusion of the design guide will help designers achieve LEED certification, offered by the U.S. Green Building Council.

"The small office design guide clearly meets the overall goal of LEED in that it accelerates the development and implementation of green building practices," Lee Burgett, P.E., ASHRAE president, said. "The design guide series is intended to provide prescriptive guidance to bring us 30 percent closer to a net zero-energy building, meaning those that use equal or less energy than they produce on an annual basis. Our goal is to provide the technical resources needed to assist the HVAC&R industry in creating the most sustainable buildings possible."

Specifically, the design guide has been added in LEED-NC 2.1 and the upcoming LEED-NC 2.2 as a prescriptive compliance path to achieve LEED-NC Energy and Atmosphere Credit 1, Optimize Energy Performance (EAc1), credit.

LEED-NC EAc1 is intended to reduce environmental impacts associated with excessive energy use by awarding LEED credit to buildings that achieve increasing levels of energy performance above ANSI/ASHRAE/IESNA Standard 90.1-1999.

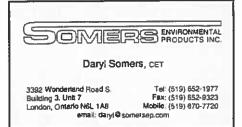
The guide establishes a previously unavailable prescriptive compliance path and enables small office design teams to earn LEED-NC EAc1 points without incurring the costs associated with whole building energy simulation. Small office buildings that successfully demonstrate compliance with the guide will be awarded 4 LEED EAc1 points.

The guide was developed by a committee representing a diverse group of energy professionals drawn from ASHRAE, the American Institute of Architects (AIA), the New Buildings Institute (NBI), the Illuminating Engineering Society of North America (IESNA) and the Department of Energy (DOE).

The cost of the Advanced Energy Design Guide for Small Office Buildings is \$59 (\$47, ASHRAE member).

To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or at 1791 Tullie Circle NE, Atlanta, GA 30329, or visit the ASHRAE.org Bookstore at www.ashrae.org.











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ASHRAE Energy Design Guide Earns Award from Green Building Council

A guide written to make sustainable design easier has earned a leadership award from the U.S. Green Building Council (USGBC).

The Advanced Energy Design Guide for Small Office Buildings is a recipient of a USGBC 2005 Leadership Award, which recognizes outstanding individuals and organizations that signify vision, leadership and commitment to the evolution of green

building design and construction.

The guide received the Research Award for being "a significant contribution helping to advance green building." The guide was developed by a committee representing a diverse group of energy professionals drawn from the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), the American Institute of Architects (AIA), the New Buildings Institute (NBI), the Illuminating Engineering Society of North America (IESNA) and the Department of Energy (DOE).

"The Advanced Energy Design Guide developed by ASHRAE and its partner organizations is another tool in the 'green' toolkit, which users need to build a sustainable future," ASHRAE president Lee Burgett, P.E., said. "We thank the USGBC for recognizing

our efforts."

"The U.S. Green Building Council's Leadership Awards are presented for leadership in promoting green building design and construction," Rick Fedrizzi, president, CEO and founding chair, USGBC, said. "The Advanced Energy Design Guide for Small Office Buildings is a seminal resource for the green building industry, and is highly deserving of this prestigious award."

The award is the second for the book, which earlier this year was recognized by the Alliance to Save Energy as part of its annual Stars of Energy Efficiency Awards program. The Alliance recognized ASHRAE for its "exemplary illustration of and

commitment to energy-efficient policy and practice."

The guide provides a sensible, hands-on approach to design through use of products that are practical and commercially available as "off-the-shelf" technology from major manufacturers.

ASHRAE, AIA, IESNA and the U.S. Green Building Council are currently developing the second guide in the series, which will focus on small retail/mercantile spaces.

The cost of the Advanced Energy Design Guide for Small Office Buildings is \$59 (\$47, ASHRAE member).

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

ASHRAE Energy Design Guide, ASHRAE Journal Earn Awards from SBIC

The Advanced Energy Design Guide for Small Office Buildings published by ASHRAE has been recognized with its third award related to sustainability.

Also recognized with an award from the Sustainable Buildings Industry Council is a sustainability supplement to ASHRAE ournal.

The ASHRAE Journal supplement, Building for the Future, and the design guide both received honorable mention from the Sustainability Buildings Industry Council as part of its Best Sustainable Practice Awards. The publications were recognized in the educational initiatives category.

"These two publications are part of ASHRAE's technical resources that provide the engineering basis for sustainable buildings," Lee Burgett, P.E., ASHRAE president, said. "ASHRAE is pleased to be recognized for its efforts in engineering for sustainability."

Building for the Future is an annual supplement to ASHRAE Journal addressing several sustainable design issues for greater energy efficiency and responsible use of the earth's resources. It was published in the September 2005 issue.

The design guide was developed by a committee representing a diverse group of energy professionals drawn from ASHRAE, the American Institute of Architects (AIA), the New Buildings Institute (NBI), the Illuminating Engineering Society of North America (IESNA) and the Department of Energy (DOE).

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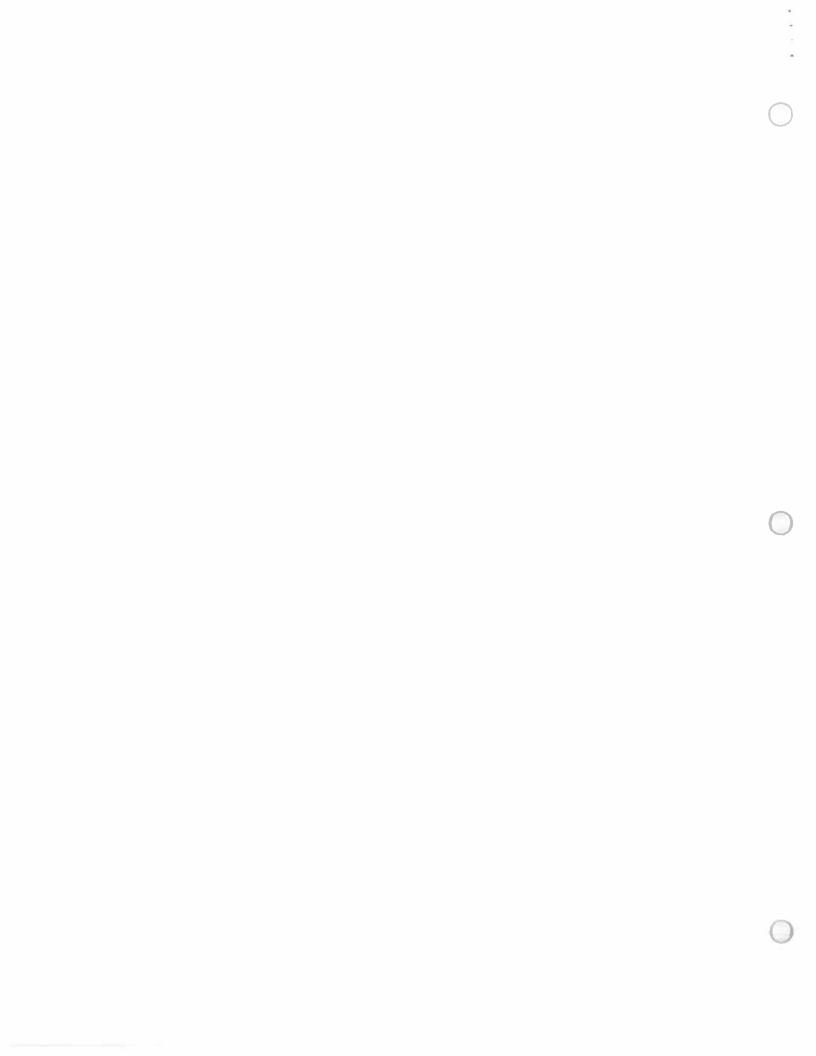
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CLIMA 2007 to be held in Helsinki, Finland

Creating wellbeing in indoor environments in an environmentally sustainable manner is the theme of CLIMA 2007.

The conference, organized by the Federation of European Heating and Air-Conditioning Associations (REHVA) and endorsed by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), will be held June 10-14, 2007, in Helsinki, Finland. A call for papers will be announced in February with abstracts due in October.

Main themes will be energy performance of buildings, energy efficient heating and cooling systems, ventilation, indoor environment, health and productivity, ecological domestic water and waste systems, building energy management systems, and intelligent buildings.

ASHRAE has been a cosponsor of CLIMA since 1985.

For more information, visit www.ashrae.org/clima2007, or contact info@clima2007.org.

Design Needs of Datacom Facilities Addressed by ASHRAE

An overview of the design needs for data centers and telecommunication facilities is available in a new publication from the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

"The datacom industry is faced with tough technical challenges such as high density cooling and the lack of vendor neutral material," said Don Beaty, chair of ASHRAE's technical committee on mission control facilities, technology spaces and electronic equipment, which wrote the book.

Design Considerations for Datacom Equipment Centers provides an overview of the design needs, such as heat loads, of datacom facilities. The book is divided into two parts. Datacom Facility Basics includes chapters on datacom design criteria, HVAC load, computer room cooling, including both air and liquid cooling, and air distribution. Other Considerations includes chapters on ancillary spaces, contamination, acoustical noise emissions, structural and seismic design and testing, fire detection and suppression, commissioning, availability and redundancy, and energy efficiency.

The book is part of the ASHRAE Datacom Series, developed to provide a more comprehensive treatment of datacom cooling and related subjects. Other books in the series are ASHRAE's Thermal Guidelines for Data Processing Environments and Datacom Equipment Power Trends and Cooling Applications.

The cost of Design Considerations for Datacom Equipment Centers is \$54 (ASHRAE members, \$43).

To order this or any of the books in the series, 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.



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TECHNOLOGY COUNCIL

MEMBERS FIRST!

2005-06, Volume 2

TECH COUNCIL NEWS ASHRAE Technology is for ASHRAE Members. Members come first.

This is the second of Tech Council's quarterly briefings. You will find information from all the committees that report to ASHRAE's Technology Council. Our goal is to make the work of the technical side of ASHRAE open to all ASHRAE members. Page 2 of this newsletter lists the questions we received from our first newsletter and our responses. We ask that you look this over and give us feedback. Please direct any questions on any topic or feedback on this newsletter to Hugh McMillan, Vice-Chair, Tech Council at hugh_mc@mail.ashrae.org.

STANDARDS NEWS

How can you tell what is the latest version of any of Code-Intended continuous maintenance standards? Under the new policy of the Standards Committee, you will always know when these documents are updated. Since July 1, the code-intended standards under continuous maintenance have been on a three year republication schedule. The next fully published version of Standards 15, 34, 52.2, 62.1, 62.2, 90.1, 90.2 and 140 will occur in 2007. Next March, a supplement of all addenda approved since the 2004 versions were released will be published. These addenda will become effective with the supplement date of approval by the ASHRAE BOD and ANSI. This means you can expect something to be coming out on these standards every 18 months. We are striving to make the business of keeping up with code-intended standards more predictable and less costly for our Members and the public.

TECHNICAL ACTIVITIES NEWS

TAC is considering a proposal to form a new Task Group (TG) that is concerned with all exergetic aspects of energy and power consumption of building comfort and service systems and equipment, assessment of their impact on the environment, and development of analysis techniques, methodologies and solutions for environmentally safer low-exergy buildings. Exergy is defined by ASHRAE as an expression for the loss of available energy due to the creation of entropy in irreversible systems or processes. The energy loss in a system or component is determined by multiplying the absolute temperature of the surroundings by the entropy increase. This TG will help pave a road for a more comprehensive set of scientific and technical actions in order to further develop a more environmentally safe building technology and new HVAC systems while the commitment of ASHRAE towards sustainability is facilitated.

RESEARCH ADMINISTRATION NEWS

A color brochure summarizing ASHRAE's 2005-2010 Research Strategic Plan is now posted on the "Research" page of ashrae.org. The brochure details all five Opportunity themes, 28 goals associated with the five themes and a partial listing of potential project topics that may help address these goals. The strategic plan is primarily intended to help guide the 98 TCs within ASHRAE towards achieving broad and ambitious goals set by the Society as a whole for research. How well a particular topic supports the strategic plan will count towards forty-five percent of the review criteria used to evaluate all research topics proposed by the TCs. Find the Research Strategic Plan at:http://www.ashrae.org/content/ASHRAE/ASHRAE/ArticleAltFormat/2005928112649_347.pdf

ENVIRONMENTAL HEALTH NEWS

Planning for the Ventilation Workshop to review research that has been or is being conducted on the effect of ventilation rates on health in multiple types of indoor environments, including offices, schools, residences and day care is well underway. The purpose of the project will be to determine the current state of knowledge to develop priorities for additional research that may be needed.

REFRIGERATION NEWS

REF has posted two documents to our website: "Tips on Hosting a Successful Refrigeration Focused ASHRAE Chapter Meeting" and "Training in Refrigeration". The first was written to provide chapter level people help on setting up a refrigeration focused chapter meeting that would draw more than 3 people by giving contacts at other organizations and a list of timely topics. The latter document is a continuously updated list of all North American based training programs on industrial (ammonia) refrigeration. REF intends to keep both up-to-date and promote their use at regional and local levels.

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MEMBERS FIRST! FEEDBACK

QUESTION 1

CTTC has liaison assigned to each TC Section. Liaisons attend section breakfasts but are not respected. The purpose of CTTC is to strengthen the ties between the grassroots and technology side of ASHRAE.

RESPONSE

The Technical Activities Committee (TAC) will work with TCs to insure that liaison relationship is respected. While time is limited at the section breakfasts, the TCs understand the importance of this liaison. In the interest of time, it would be helpful if the CTTC liaison could bring any information they wish to share in written form to distribute to the TC chairs.

QUESTION 2

A significant proportion of ASHRAE members do not know how to join a TC.

RESPONSE

There is a good discussion on how to join a technical committee on ashrae.org. It can be accessed at:

http://www.ashrae.org/template/AssetDetail/assetid/23231

QUESTION 3

Research Promotion RVCs do not understand the process by which a research proposal becomes and project and how the results of the research are implemented. The result of this lack of knowledge is lack of focus in the Research Promotion campaign.

RESPONSE

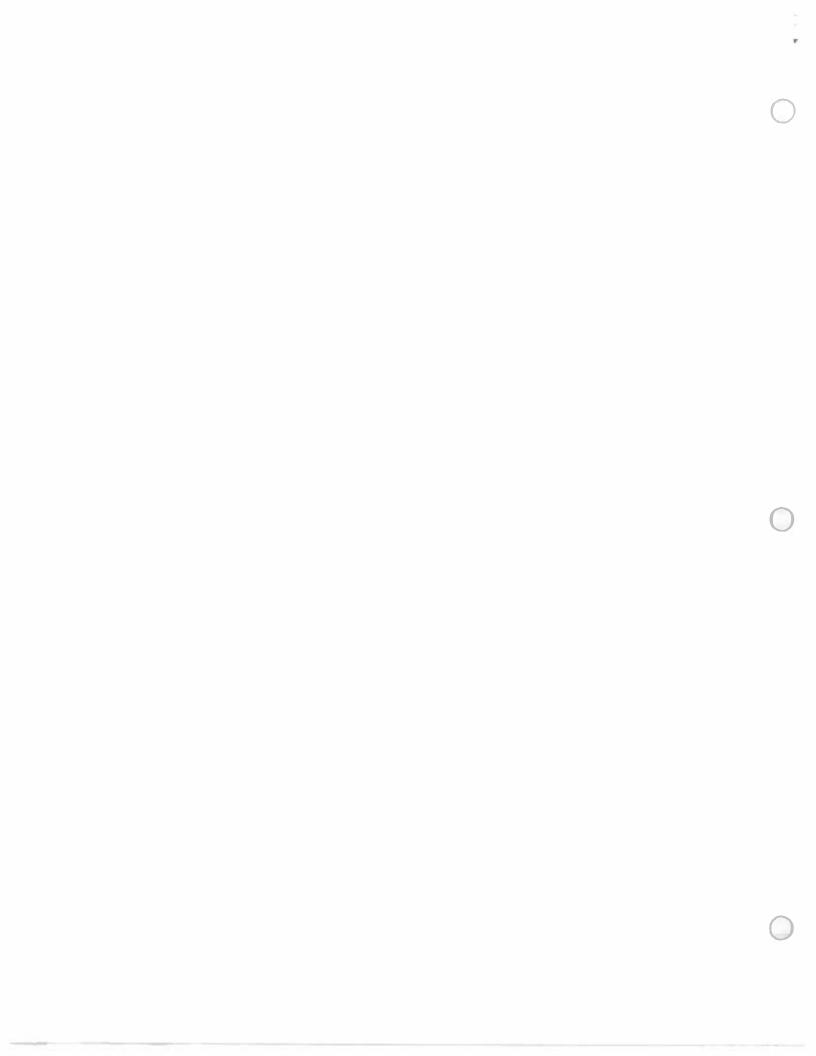
Certainly we want all members to understand how the ASHRAE research process works. An overview is reported here, but we strongly recommend that RVCs and other interested parties visit the www.ashrae.org website. Choose the "Standards and Technology" link on the home page and scroll to "Research." Within the research section, you will find the "Research Digest" along with several interesting references to all the research activities - past, present, and future. The Digest contains a complete flow chart that will elaborate on what we are reporting with this note.

ASHRAE Technical Committees (TC) play the lead role in all research projects, whether generated within the TC, an Unsolicited Research Project (URP), or requested from an individual through his local Chapter and Region. If the research request comes from outside TC membership, and it falls within the Strategic Research Plan (also on the website), one or more TCs are asked to champion the work. There are 98 TCs organized into 10 Sections.

Key documents requiring RAC, Tech Council, and, in some cases, ASHRAE Board of Director approval are (1) the Research Topic Acceptance Request (RTAR); (2) the Work Statement prepared as a result of the approved RTAR in the Implementation Plan; (3) the Tentative Research Proposal (TRP) which leads to obtaining bids from contractors; and (4) the recommendation of contractor from a Project Evaluation Subcommittee (PES) appointed by the TC. Once the project is initiated with an entity, the TC has a Project Monitoring Subcommittee (PMS) that ensures the work remains on course toward the objectives, timely, and within the contracted costs. Technology Transfer is achieved through publication in ASHRAE Handbooks, ASHRAE Standards, special publications, ASHRAE transactions and/or Research Bulletins.

Very recently, our society has prepared and published a Strategic Research Plan that was prepared with input from the broad membership. This plan will be updated every five (5) years. A big factor in evaluating the merits of proposed research will be its fit in the Strategic Research Plan. The plan is organized into five (5) research opportunity themes: (1) Energy and Resources, (2) Indoor Environmental Quality, (3) Tools and Applications, (4) Equipment, Components and Materials, and (5) Education and Outreach. To understand some of the specific goals within these themes, we urge you to visit the research link at the www.ashrae.org.

You will find much more detailed information on how research projects are chosen and how they are implemented and used in the vastly improved research website. We urge all interested parties to take a look.





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

LONDON CANADA CHAPTER #116 LondonCanada.AshraeChapters.org

FEB 27/2006

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Jamie Whitty ph: 672-8511 jwhitty@smyliecrow.ca

Golf Tournament

Hugh Palser ph: 471-9382 hpalser@palser.com

Newsletter

Tom Pollard ph: 685-2570 tpollard@execulink.com

<u>Program</u>

UPDATES TO THE NATURAL GAS AND PROPANE INSTALLATION CODE

Ontario recently required the adoption of CAN/CSA-B149.1-05 Natural Gas and Propane Installation Code for all new work on gas appliances and piping. The presentation will review the code changes (effective January 1, 2006) and the Ontario Amendments issued by the Technical Standards & Safety Authority (TSSA).

Meeting - Monday Feb 27/2006

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

>>> NEW LOWER RATES FOR MEMBERS <<<

London Chapter Members = \$25.00 Students = \$10.00 Others = \$35.00

RESEARCH 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 sott@somersep.com)

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President's Message

Our February meeting will be our second Research Promotion night of the year. "ASHRAE was founded in 1894; it is an international organization of over 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." The importance of Research is what ASHRAE is about, so we ask that you seriously consider making a donation. There are many ASHRAE research projects in Canada which are founded by the Canadian research dollar, all the money raised through ASHRAE Research in Canada stays in Canada.

This months meeting is dealing with the revisions to the new Gas Code which came into effect on January 1, 2006. We will have some input from a few of our own members as well as our guest speaker. It is a topic that will be helpful to almost everyone in the industry.

On April 19, 2006 there is a ASHRAE Sustainability and the Building Environment Satellite Broadcast and Webcast about the principles, practices, and emerging concepts for building sustainability design. Trane has generously donated their boardroom for anyone who is interested. The broadcast will be from 1:00 PM to approximately 4:00 PM. The London Chapter will provide some snacks and soft drinks. Don't forget to bring a friend! All broadcast/webcast attendees who are not currently ASHRAE members are invited to join ASHRAE at a special introductory rate for the first year of membership. A special membership application will be available at the satellite broadcast sites or by request by emailing membership@ashrae.org after March 1, 2006.

I look forward to seeing you at the meeting.

Joe Claessens **London Canada Chapter President**

January Meeting Summary

In January, John Paleczy from Yorkland Controls presented possible energy efficiency improvements that are possible by converting boiler air and fuel mixing controls to a microprocessor based system. John showed before and after photos and control set points at a typical project. Retrofitting boiler control systems allowed better energy efficiency while reducing discharges to the atmosphere.

Also in attendance at the January meeting was Grant Miles with Natural Resources Canada. Grant spoke about possible grants available to assist Owners and Designers in performing energy studies and project upgrades. More information can be found on the web site of The Office of Energy Efficiency (http://oee.nrcan.gc.ca)

Pete Edmiston



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February Research Promotion Night

Last year, almost 7,000 individuals and companies worldwide supported ASHRAE Research. Close to \$1.5 million was raised in last year's campaign. Your investment is needed today for this year's campaign.

Investment in ASHRAE Research benefits the HVAC&R industry in many ways. For example, results from the research program are used to shape and revise the ASHRAE Handbook, which is used by professionals around the world. The results of our research initiatives are incorporated into ASHRAE standards to benefit the public and the HVAC&R industry. The results are also being published in many formats so ASHRAE members and the HVAC&R industry can readily find and use the valuable information.

Your investment in ASHRAE Research Canada is doubly important because ASHRAE has a policy of matching contributions dollar for dollar with the revenues generated from the Winter AHR Expo. The research program is currently funding over 71 projects around the globe valued at over \$7 million. While this is impressive, ASHRAE has an additional eight projects in negotiation that will need another \$1 million of investments!

Investment in ASHRAE Research Canada results in Canadian Research. For every dollar contributed in Canada, approximately four U.S. dollars are invested in Canadian HVAC&R research projects.

I hope that we can count on your support. Individual contributors over \$99 and corporate contributors over \$150 are designated as Honour Roll investors and are acknowledged in the ASHRAE Journal. Your cheque should be made payable to "ASHRAE Research Canada". Please send your cheque to me, so that I can pass it along to ASHRAE with the appropriate paperwork to ensure you get credit. If you have any questions, please call me at 679-8660.

Thank you in advance for your support of ASHRAE Research.

Derek Vakaras Resource Promotion Chair London Chapter

Other Events

CMX.CIPHEX • www.cmxciphexshow.com Metro Toronto Convention Centre, North Building March 23,24,25/2006

ASHRAE Sustainability and the Building Environment Satellite Broadcast and Webcast • www.ashrae.org
April 19, 2006

ASHRAE 2006 Annual Meeting • www.ashrae.org/quebeccity Quebec City • June 24-28, 2006





Daryl Somers, CET

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ASHRAE Recognizes Outstanding HVAC&R Industry Achievements

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) recognized 38 people for their contributions to ASHRAE and the HVAC&R industry at the Society's 2006 Winter Meeting held here Jan. 21-25.

The ASHRAE Hall of Fame honors deceased members of the Society who have made milestone contributions to the growth of HVAC&R technology. The Society inducts Jasper Guy Woodroof, Ph.D., Fellow ASHRAE, into the ASHRAE Hall of Fame. Woodroof died in 1998 at the age of 98. His contributions included development of freezing and canning processes for the preservation of fruits and vegetables as well as techniques for the long-term storage of military rations. Much of the technology of fruit, vegetable and nut handling and processing used today was developed by Woodroof.

The ASHRAE/ALCO Medal for Distinguished Public Service recognizes distinguished public service by an ASHRAE member.

The recipient is Alfred Greenberg, ASHRAE Fellow, Life Member, who resides in Marlboro, N.J.

Fellow ASHRAE is a membership grade that recognizes distinction in the arts and sciences of environmental technology. The honor is earned through achievement as a researcher, designer, educator or engineering executive. The Society elevated 18 members to the grade of Fellow ASHRAE:

- James E. Braun, Ph.D., P.E., professor, School of Mechanical Engineering, Purdue University, West Lafayette, Ind.
- Qingyan Chen, Ph.D., professor, Purdue University, West Lafayette, Ind.

Piya Chongvatana, president, Patkol Public Co. Ltd., Bangkok, Thailand.

 S.K. Chou, Ph.D., professor and vice president, External and Industry Relations, Faculty of Engineering, National University of Singapore.

Kenneth W. Cooper, Ph.D., P.E., director of engineering, Poolpak International, York, Pa.

- Charles H. Culp, Ph.D., P.E., associate professor, Department of Architecture, and associate director, Energy Systems Laboratory, Texas A&M University, College Station, Texas.
- William Fisk, P.E., senior staff scientist and department head, Indoor Environment Department, Lawrence Berkeley National Laboratory, Berkeley, Calif.

Arthur P. Garbarino, president and CEO, Air Service Inc., West Palm Beach, Fla.

 David T. Grimsrud, Ph.D., principal, Grimsrud and Associates, Minneapolis, Minn., and professor emeritus, Department of Bio-Based Products, University of Minnesota.

Carl C. Hiller, Ph.D., P.E., president, Applied Energy Technology Co., Davis, Calif.

 Vojislav Novakovic, Ph.D., a professor, Norwegian University of Science and Technology (NTNU), Department for Energy and Process Engineering, Trondheim, Norway.

Deepak Pahwa, managing director, Bry-Air (Asia), Delhi, India.

Srinivasan Sankaran, vice president, business development, Blue Star Ltd., Chennai, India.

 Avraham Shitzer, Ph.D., James H. Belfer professor of mechanical engineering, Technion, Israel Institute of Technology, Haifa, Israel.

David R. Tree, professor, mechanical engineering, Purdue University, West Lafayette, Ind.

George N. Walton, Building Physics Division, National Institute of Standards and Technology, Gaithersburg, Md.

 Chi-Chuan Wang, Ph.D., senior researcher, manager, Energy and Resources Lab, Industrial Technology Research Institute, Hsinchu, Taiwan.

Gary L Wingfield, P.E., mechanical project principal, The Haskell Co., Jacksonville, Fla.

The ASHRAE Technology Awards recognize outstanding achievements by members who have successfully applied innovative building designs, which incorporate ASHRAE standards for effective energy management and indoor air quality. Three projects received first-place ASHRAE Technology Awards:

- Lev H. Zvenyach, P.E., for Chicago Center for Green Technology, Chicago, in the existing commercial buildings category. He
 is vice president of IBC Engineering Services, Waukesha, Wis.
- Martin Roy for TOHU's Capiteua Des Arts, Montreal, in the public assembly category. Roy is president, Martin Roy and Associates, Deux-Montagnes, Quebec.
- Laurier Nichols for the Ecole Du Tournant, Saint-Constant, Quebec, in the alternative and/or renewable energy use category.
 Nichols is team leader, energy efficiency, Dessua-Soprin, Longueuil, Quebec.

Projects receiving ASHRAE Technology Awards honorable mentions are:

- Dennis Sczmok and Thom Barry for Compuware World Headquarters, Detroit, in the new commercial buildings category.
 Sczmok is vice president, Peter Basso Associates, Troy, Mich. Barry is vice president, Mechanical Professional Services,
 Plymouth, Mich.
- Wing Hong Chan for Swire Properties Management, Hong Kong, in the existing commercial buildings category. Chan is head
 of technical services, Swire Properties Management.
- James Megerson, P.E., for Blue Valley North High School, Overland Park, Kans., in the existing institutional buildings category. Megerson is vice president Larson Binkley, Leawood, Kans.
- Peter Johnson for the Brunswick (Ohio) School Performing Arts Center in the new institutional buildings category. Johnson is service manager, Pier Associates, Akron, Ohio.
- Siang Hwa Lek for the National Institute of Education, Nanyang Technological University, Singapore. Lek is vice president,
 CPG Consultants, Singapore.
- Mehdi Jalayerian for the Exelon Elevator and Stair Pavilions North, Millennium Park, Chicago in the alternative and/or renewal energy use category. He is senior vice president, Environmental Systems Design, Chicago.

The ASHRAE Student Design Project Competition challenged teams of undergraduate students to focus on The Brewery Blocks, a mixed use retail, residential and office grouping of five buildings in Portland's Pearl District.

First place in the HVAC system design category was awarded to Jesse Fisher and Amy Pastor of The Pennsylvania State University, University Park, Pa.

First place in the architectural design category was awarded to Scott Poloney and Dan Guith of Lawrence Technological University in Southfield, Mich.

First place in the refrigeration system design category was awarded to Thammarat Wittayakerkkrai, Chaiwat Puttanuntadech and Kittipong Sookochai of Chulalongkorn University in Bangkok, Thailand.

The E.K. Campbell Award honors outstanding achievements by engineering educators. The recipient is Arthur Hurlbut, Ph.D., dean, School of Engineering Technology, State University of New York College of Technology, Canton, N.Y.

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ASHRAE Technology Awards

Sustainable Design Recognized in ASHRAE Technology Awards

A circus big top, a school using 80 percent less energy than typical, and a Chicago sustainability education center are being recognized for innovative design by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

Three projects received first-place ASHRAE Technology Awards during ASHRAE's 2006 Winter Meeting, Jan. 21-25,

Chicago.

The awards recognize outstanding achievements by members who have successfully applied innovative building design in the areas of occupant comfort, indoor air quality (IAQ) and energy conservation. Their designs incorporate ASHRAE standards for effective energy management and IAQ.

Receiving first place in the alternatives and/or renewable energy use category is Laurier Nichols for Ecole Du Tournant,

Saint-Constant, Quebec. Nichols is team leader, energy efficiency, Dessau-Soprin, Longueuil, Quebec.

The alternative school has no greenhouse gas emissions and is the most energy efficient school in Quebec. It is 80 percent more efficient than a similar school built according to the energy code used in Canada. ASHRAE's energy conservation standard, 90.1, was the model used to develop the code.

Innovative design methods used include a high quality building envelope, a highly efficient lighting system, and a low energy HVAC&R system with intelligent control system.

Energy bills from the past two years show that the school saves \$34,4000 in energy per year, resulting in a payback period of 3.9 years.

Also receiving first place is Lev Zvenyach, P.E., vice president of IBC Engineering Services, Waukesha, Wis., for a City of Chicago building designed to serve as a national model of environmentally sensitive design. He is receiving the award in the existing commercial buildings category.

The Chicago Center for Green Technology functions as an office building, educational facility, a high-tech factory, interpretive center and a "garden in the city." The building houses tenants with a sustainable mission, such as a solar panel manufacturer, and its campus is open to visitors to help educate the public on how green buildings function and how they benefit

the public and the environment.

The center incorporates a number of demand (lighting, cooling and heating) and energy consumption reduction measures. As a result, the building has a significant reduction in energy consumption: some 75 percent over typical office buildings in Chicago, 45 percent over ASHRAE Standard 90.1 compliant buildings without photovoltaic credit and 60 percent over buildings with the credit.

Receiving first place in the public assembly category is Martin Roy for TOHU's Capiteau Des Arts, Montreal, which is the first concert hall dedicated to the circus arts in North America. Martin is president, Martin Roy and Associates, Deux-Montagnes, Quebec.

The building features natural ventilation, passive solar heating, water conservation, use of wasted heat and energy efficiency. Most the concepts and technologies used are new in local industries. District heating using waste heat, underground cuts, solar walls and natural/hybrid ventilation will help demonstrate the feasibility of such innovative designs.

Projects receiving ASHRAE Technology Awards honorable mentions are:

- Dennis Sczmok and Thorn Barry for Compuware World Headquarters, Detroit, in the new commercial buildings category.
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- Mehdi Jalayerian for the Exelon Elevator and Stair Pavilions North, Millennium Park, Chicago in the alternative and/or renewal energy use category. He is senior vice president, Environmental Systems Design, Chicago.

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ASHRAE and Elsevier Launch New eLearning System

A new eLearning system is being launched by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and Elsevier.

The system provides complete learning experiences that focus on learning-by-doing that can be taken at any time and at the learner's own pace. It offers online instruction with interactive exercises and problem-solving demonstrations supplemented by authoritative course readers in eBook and printed formats.

The launch was announced at ASHRAE's 2006 Winter Meeting held in Chicago from Jan. 21-25.

The system also offers integrated assessment, skills tracking for earning CEU/PDH credits and online registration and retrieval of certificates of course completion.

The first course Fundamentals of HVAC Systems will be available April 3. The course will be supported by Learning Bursts, in-depth scenario-based training and simulation

exercises with a heavy focus on applicability. Learning Bursts allow learners to apply the information presented and practice extensively without making costly mistakes in the real world.

"ASHRAE eLearning Systems from the ASHRAE Learning Institute offer a flexible, skills-focused, approach that meet today's learning needs," said Gordon V.R. Holness, PE, chairman emeritus, Albert Kahn Associates, Inc. Architects and Engineers. "These learning on-demand programs are backed up with authoritative references from the ASHRAE Learning Institute, providing the 'real-world' training experience that employers are seeking."

"We believe the ASHRAE eLearning System will revolutionize HVAC&R professional development by allowing engineers to earn their CEU/PDH in an interactive online environment from their office or home without being burdened by the additional expense of accommodation and travel," said Jim DeWolf, vice-president publishing with Elsevier.

For more information about ASHRAE eLearning Systems, visit www.ashrae-elearning.org.

ASHRAE e-Learning Systems are the latest offering of the ASHRAE Learning Institute, www.ashrae.org/ali, the arm of the Society that produces seminars, courses and other professional development tools to assist the HVAC&R industry in staying current with rapidly changing technology.

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Elsevier is a world-leading publisher of scientific, technical and medical information products and services. Elsevier's 7,000 employees in 77 offices worldwide publish more than 2,000 journals and 1,900 new books per year, in addition to offering a suite of innovative electronic products, bibliographic databases, and online reference works.

ASHRAE Sets Sustainability Course with New Roadmap

A new roadmap adopted by ASHRAE will help members lead the march toward a sustainable built environment through use of advanced technologies.

ASHRAE's Sustainability Roadmap was adopted at the Society's 2006 Winter Meeting held Jan. 21-25 in Chicago. The roadmap can be viewed at www.engineeeringforsustainability.org or www.ashrae.org.

"By implementing the goals in this roadmap, buildings employing sustainable technologies will flourish, the critical need for contributions by ASHRAE members will be better understood and the quality of life will be enhanced in the present and long into the future," Lee Burgett, P.E., ASHRAE president, said.

Ron Jamagin, who chaired the committee that wrote the roadmap, agreed.

"Implementation of the roadmap will help propel ASHRAE into a leadership position in sustainability, energize our members, raise our spirits, attract and retain young members, and contribute substantially to the well being of our world," he said.

Jarnagin noted that sustainability has become a strong focus for ASHRAE and the industry with the growing realization of the impact on future generations.

"Efficient energy use is of prime importance but so are the materials used, what is emitted and disposed of, and how we impact existing ecosystems," he said. "We cannot do these things at the expense of human health and well-being. As an organization of professionals responsible for the total life cycle cost of the building, ASHRAE has expertise that impacts elements related to sustainability."

These elements include energy use, atmospheric emissions, building materials, indoor environmental quality, engineering design and architecture, land use, water use, and waste management and disposal.

As part of the roadmap, ASHRAE will explore making ASHRAE's meetings greener, developing a standard for recycling used equipment and funding more sustainability- related research projects.

Recommendations in the roadmap include:

- Develop and maintain productive relationships with other organizations in the sustainability field;
- Raise public awareness of ASHRAE's contributions to sustainability;
- Aggressively market ASHRAE's sustainability profile in the industry;
- "Walk the talk" by practicing what we preach;
- Develop educational products that assist in sustainable building design, building operation and evaluation;
- Implement the sustainability-oriented objectives in the Society's Research Strategic plan;
- Accelerate development of the Advanced Energy Design Guide series;
- Consider sustainability certification programs.

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ASHRAE, ASHE Partner to Ensure Healthy Health Care Facilities

As part of a continuing partnership, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and the American Society for Healthcare Engineering (ASHE) will work together to advance and promote the mutual interests of engineers and health care facility professionals.

A memorandum of understanding (MOU) between the two groups was signed at ASHRAE's 2006 Winter Meeting held in Chicago, Jan. 21-25.

"With ASHRAE having the primary expertise in HVAC and ASHE having the primary expertise in health care engineering, our joint efforts will ensure that the design and operation of our health care facilities meet the patients' needs for health and safety," Lee Burgett, P.E., ASHRAE president, said.

"Our signatures on this MOU signify an important day in the history of our two organizations," said William Morgan, SASHE, CHFM, 2006 ASHE president. "By formalizing the already strong relationship shared by ASHE and ASHRAE we have committed our organization to continuously improve engineering design and construction for the creation of optimal health care environments."

ASHRAE and ASHE are working together in a number of areas, including jointly developing proposed standard 170P, Ventilation for Healthcare Facilities. The proposed standard will define requirements for ventilation system design intended to provide environmental control for comfort, as well as infection and odor control.

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ASHE is an association of diverse professionals dedicated to continued improvement in the health care environment through advocacy, education, information and collaboration.

ASHRAE and CIBSE Issue Joint Statement on Climate Change

Continued reductions in emissions, guidelines leading to reduced energy consumption and responsible refrigerant use are encouraged in a new joint statement on climate change issued by ASHRAE and CIBSE.

The statement was signed by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and the Chartered Institution of Building Services Engineers (CIBSE) at ASHRAE's 2006 Winter Meeting held Jan. 21-25 in Chicago. To read the statement, visit www.ashrae.org/positiondocuments.

"The use of HVAC&R technologies is an essential element of contemporary life," Lee Burgett, ASHRAE president, said. "Yet, HVAC&R systems contribute to greenhouse gas releases through energy-related effects and through the effect of refrigerant losses. Together, ASHRAE and CIBSE are emphasizing improved energy efficiency in HVAC&R technology, low or zero emission energy technologies and responsible refrigerant use."

"This joint statement makes very clear how our two bodies are determined to use the expertise of our members internationally to address the challenges of climate change and sustainability," Donald Leeper, CIBSE president, said.

CIBSE and ASHRAE provide building design, operation, and energy efficiency standards used globally. Since energy production often contributes greenhouse gas emissions to the atmosphere, these standards potentially reduce emissions. Energy-related impacts are addressed by reducing the equipment system and building energy consumption, and by modifying user behavior, thereby reducing emissions including CO2.

ASHRAE and CIBSE are implementing the following:

- · Coordinated approaches to environmental issues at all stages of building and component life cycles;
- Adoption and development of designs, materials, components, systems and processes that minimize environmental impacts, including climate change;
- Promotion of practices that encourage energy efficiency by building users;
- Encouragement of renewable energy supply into buildings and building engineering systems when economically feasible;
- · Education of building owners, operators and engineers on the importance of energy efficiency and climate change; and
- Providing of advice, information and assistance related to energy efficiency and climate change to governments and other influential bodies.

"ASHRAE and CIBSE reaffirm their joint commitment to developing and adopting energy efficient practices and resources, and call upon their members, governments, and colleagues in the buildings and related industries to likewise respond," Burgett said.

ASHRAE/CIBSE joint statement.

Worldwide concern for the global climate has emerged with the recognition of increasing concentrations of atmospheric greenhouse gases (GHGs) and increased average global temperatures. The Intergovernmental Panel on Climate Change (Third Assessment Report, 2001) noted that a signal of human-induced change is emerging from the noise of climate variability.

CIBSE and ASHRAE provide building design, operation, and energy efficiency standards used globally. Since energy production often contributes GHGs to the atmosphere, these standards potentially reduce emissions. Energy-related impacts are addressed by reducing the equipment, system and building energy consumption, and by modifying user behavior, thereby reducing GHG emissions including CO2.

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The public has indicated its concern about global warming and climate change. This must be supported by sound business practices, and government incentives where appropriate.

CIBSE and ASHRAE specifically support:

- The goals of the United Nations Framework Convention on Climate Change.
- Government and industry leadership in technology and atmospheric research.

Development of low-or zero-emission energy technologies.

Long-term reductions in emissions based on life cycle environmental design, economics and operation.

Design and operating guidelines leading to reduced energy consumption.

- Responsible refrigerant use, including emissions reduction technologies and practices.
- Building and systems design, and their operation and maintenance, to minimize total GHG emissions.
- Membership education and actions based on environmental responsibility and ASHRAE/CIBSE standards and publications.
- Maintaining economic growth without compromising the needs of future generations.

CIBSE and ASHRAE are implementing the following:

- Coordinated approaches to environmental issues at all stages of building and component life cycles from conception, design, construction, and through operation, maintenance and refurbishment.
- Adoption and development of designs, materials, components, systems and processes that minimize environmental impacts, including climate change.

Promotion of practices that encourage energy efficiency by building users.

- Encouragement of renewable energy supply into buildings and building engineering systems when economically feasible.
- Education of building owners, operators and engineers on the importance of energy efficiency and climate change.
- Providing of advice, information and assistance related to energy efficiency and climate change to governments and other influential bodies.

CIBSE and ASHRAE reaffirm their joint commitment to developing and adopting energy efficient practices and resources, and call upon their members, governments, and colleagues in the buildings and related industries to likewise respond.

ASHRAE Headquarters Renovation to Showcase Sustainability

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) is studying renovation of its headquarters to showcase sustainability.

"The proposed renovation of our current headquarters would incorporate ASHRAE technology and demonstrate our strong commitment to sustainability," Lee Burgett, P.E., ASHRAE president, said. "ASHRAE launched an engineering for sustainability movement this past year. The headquarters renovation is another example of ASHRAE's role as an engineering engine that drives sustainability."

ASHRAE moved to its current headquarters in Atlanta from New York in 1981. The 31,000-square-foot building houses some 100 employees. Recent inspections indicated that the building, constructed in 1965 and last renovated in 1991, needs substantial repairs. ASHRAE explored several options, including purchasing a new building or leasing.

"The potential beneficial environmental impact gained by refurbishing existing buildings to sustainability standards is far greater than new sustainable buildings," Burgett said. "Through this project ASHRAE proposes demonstrating that potential."

The Society's Board of Directors agreed at its 2006 Winter Meeting to study renovating headquarters into a sustainable

ASHRAE would work toward the U.S. Green Building Council's Leadership in Energy and Environment Design certification for existing buildings (LEED-EB), with a goal of a gold rating.

The Society also plans to demonstrate specific compliance with ASHRAE standards with respect to energy conservation and indoor air quality. Selected ASHRAE technical committees will be brought into the study to determine how the ASHRAE headquarters renovation can become a "living lab" regarding both energy conservation and indoor air quality.

The study is expected to begin by March 2006 with a final decision on renovation due by September 2006.

ASHRAE Research Program Hits \$50 Million Milestone

With approval of projects at the Society's 2006 Winter Meeting, ASHRAE has funded \$50 million in research since the merger of its two predecessor societies in 1959.

"ASHRAE research furthers technology to help keep indoor environments comfortable and productive, deliver healthy food to consumers and preserve the natural environment," Lee Burgett, P.E., ASHRAE president, said. "Only an organization such as ASHRAE has the continuity, the ability to generate research funding, and the expertise to attract researchers from disparate backgrounds and institutions. Only ASHRAE provides a forum to integrate their knowledge and transfer that knowledge to the industry to advance the science of engineering and the art of human comfort."

The first project contracted by ASHRAE was a study of condensing refrigerants in horizontal and inclined tubes at Kansas State University for \$7,600. Since that time, ASHRAE has funded some 700 projects. A complete listing of the projects funded since 1960 can be viewed at www.ashrae.org/research.

ASHRAE recently approved funding totaling \$1.4 million for 12 research projects. These are:

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- Revised Heat Gain and Capture and Containment Exhaust Rates from Typical Commercial Cooking Appliances, 1362-RP, researcher Donald Fisher, Fisher-Nickel Inc., San Ramon, Calif., 2 years, \$261,000, sponsored by ASHRAE technical committee (TC) 5.10, Kitchen Ventilation.
- Develop a Standard for Testing and Stating the Efficiency of Industrial Pulse Cleaned Dust Collectors, 1284-RP, Robert Burkhead and Charles Rose, Blue Heaven Technologies Inc., Louisville, Ky., 18 months, \$114,617, TC 5.4, Industrial Process Air Cleaning.
- Incident-Response Monitoring Technologies for Aircraft Cabin Air Quality, 1306-RP, J.B.G.A. Havermans, TNO, Delft, the Netherlands, 10 months, \$98,000, TC 9.3, Transportation Air Conditioning.
- Identification and Evaluation of Working Fluids for High Temperature Heating Applications (including Replacements for R-114), 1308-RP, J. Steven Brown, Catholic University of America, Washington, D.C., 1 year, \$68,497, TC 3.1, Refrigerants and Secondary Coolants.
- Algorithm for Smoke Modeling in Large, Multi-Compartmented Buildings, 1328-RP, A. Kashef, National Research Council Canada, Ottawa, 18 months, \$80,000, TC 5.6, Fire and Smoke Control.
- Intelligent Control of Combined Heat and Power Systems, 1340-RP, Itzhak Maor, PWI Energy, Philadelphia, Pa., 18 months, \$100,563, TC 7.4, Building Operation Dynamics.
- Common Data Definitions for HVAC&R Industry Applications, Jason Glazer, GARD Analytics Inc., Park Ridge, Ill., 18 months, \$127,500, TC 1.5, Computer Applications.
- Generation of Hourly Design-Day Weather Data, 1363-RP, Roger Hedrick, GARD Analytics Inc., Park Ridge, III., 18 months, \$78,400, TC 4.2, Climatic Information.
- Characterization of Effluents from Additional Cooking Appliances, 1375-RP, Thomas Kuehn, University of Minnesota, Minneapolis, Minn., 18 months, \$124,779, TC 5.10, Kitchen Ventilation.
- Development of Design Guidelines for Hybrid Ground Source Heat Pump Systems, 1384-RP, Greg Nellis, Sandy Klein and Jeff Thornton, University of Wisconsin, Madison, Wis., 18 months, \$98,135, TC 6.8, Geothermal Energy Utilization.
- Heat Gains from Electrical and Control Equipment in Industrial Plants, Part 2, 1395-RP, Warren White, Kansas State University, Manhattan, Kans., 2 years, \$192,101, TC 9.2, Industrial Air Conditioning.
- Scientific Review of Existing Information Related to the Impact of Ventilation Related to Health, 1443-RP, Hal Levin and Jan Sundell, Indoor Air Institute, Santa Cruz, Calif., 18 months, \$50,000, Environmental Health Committee.

Compliance with Standard 90.1, 62.1 Tops ASHRAE's Online Courses

Six online professional development seminars will be offered this spring by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

ASHRAE Learning Institute's professional development seminars provide in-depth information that is timely, practical and advanced beyond a fundamental level. Seminar participants will earn professional development hours, continuing education units, or American Institute of Architects learning units for each seminar completed.

- Seminars are:
- Complying with ASHRAE Standard 90.1-2004, Energy Standard for Buildings Except for Low-Rise Residential Buildings, HVAC/Mechanical Code, 1-4 p.m. EST, March 15.
- Complying with Requirements of ASHRAE Standard 62.1-2004, Ventilation for Acceptable Indoor Air Quality, 1-4 p.m. EST, March 22.
- Humidity Control I, Basic Principles, Loads and Equipment, 1-4 p.m. EST, March 29.
- Humidity Control II, Applications, Control Levels and Mold Avoidance, 1-4 p.m. EDT, April 5.
- An Introduction to BACnet, 1-4 p.m. EDT, April 12.
- Life-Cycle Cost Analysis, 1-4 p.m. EDT, April 26.

The cost of the seminars is \$225 (\$150, ASHRAE members).

To register for any of the seminars, visit www.ashrae.org/onlinepds or call ASHRAE's Customer Service Department at 1-800-527-4723 or 404-636-8400 (worldwide), fax 404-321-5478, or mail at 1791 Tullie Circle NE, Atlanta, GA 30329.

Five BACnet Addenda Recommended for Public Review

Five addenda to ASHRAE's BACnet standard were recommended for public review at the Society's 2006 Winter Meeting held Jan. 21-25, Chicago.

ANSI/ASHRAE Standard 135-2004, BACnet® – A Data Communication Protocol for Building Automation and Control Networks, allows building equipment and systems manufactuared by different companies to work together.

The proposed addenda, c, d, e, f and g, are expected to be released for public comment in March.

In other news, BACnet committee chair Bill Swan announced the formation of the wireless BACnet working group.

"There is considerable interest in wireless applications for building automation," he said, "This group will work out the details of BACnet wireless communications."

A new means for securing network communications would be provided through proposed addendum g. Over four years in development, the proposed addendum draws on advances in encryption and authentication technologies.

"This system can be scaled way up for high security or way down for simplicity," said Dave Robin, network security working group leader. "It provides two levels of access, with a general key for reading and writing basis system data, and application-specific keys plus authentication for connecting to critical systems including access control (security) and fire safety."

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Proposed addendum f includes the first of a series of new BACnet access control objects in development in the life safety and security working group. The access door object represents the physical characteristics of an access-controlled door and its associated physical hardware and devices, including door contacts, door locks and card readers.

The BACnet Web services proposed in addendum c has been revised by the XML working group and recommended for second public review following the resolution of 53 comments received from first public review. BACnet Web services provide access to data in BACnet systems using standard PC desktop software vs. specialized

drivers. They also are proposed for the communications between energy utilities and BACnet systems for demand limiting and real-time pricing.

The load control object proposed in addendum e has been recommended for second public review. It provides a standardized means for external control over load shedding and is the first of several proposals from the utilities integration working group, working to connect the energy utilities with building automation systems.

The BACnet committee continues its broad range of work on items such as defining a standard mechanism for presenting application devices such as VFDs and VAV controllers; accommodating and adopting new IP technologies; advanced lighting control support; and extending conformance testing as new capabilities are added to BACnet.

ASHRAE Publishes Principles of HVAC&R

ATLANTA in A new textbook designed to also be used as a reference manual that allows engineers to build on their knowledge of HVAC&R design procedures and methods has been published by ASHRAE.

"Principles of Heating, Ventilating and Air-Conditioning builds on much of the basic information in the ASHRAE 2005 Handbook, Fundamentals, which includes many significant changes," said co-author Ron Howell, Ph.D., P.E. "It serves as a good source for many of the procedures or methods used in HVAC&R design."

The book can be used as an undergraduate or graduate level textbook or for self instruction and as a reference for those who would like reinforcement of their understanding of HVAC&R.

Principles of HVAC elaborates on the use of technical guidance in the Fundamentals Handbook, such as the new radiant time series (RTS) methodology, which includes enhanced treatment

of RTS procedures for non-residential cooling and heating loads; a new chapter on residential cooling and heating loads; inclusion of the new ventilation air procedure from ASHRAE 62.1-2004; and changes in the format and quantity of design weather conditions around the world.

The book includes a CD that contains a spreadsheet for the RTS method and the expanded weather data.

Also available is Principles of HVAC Solutions Manual, which contains solutions to most of the problems in the principles book. Co-authors are Harry Sauer Jr., Ph.D., P.E., and William Coad.

The cost of Principles of HVAC is \$84 (\$67, ASHRAE members), while the cost of the solutions manual is \$57 (\$46, ASHRAE members).

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

HVAC Simplified in New Book from ASHRAE

Step-by-step engineering design methods and tools are emphasized in a new design manual from ASHRAE.

"HVAC Simplified provides an understanding of fundamental HVAC concepts and explains simple design tools used to create building systems that are efficient and provide comfortable and healthy environments," said author Stephen Kavanaugh, Ph.D., a professor of mechanical engineering at the University of Alabama.

Topics include equipment selection and specification, comfort and indoor air quality, ventilation air, ASHRAE standards, building assemblies, heating and cooling loads, electrical and control systems, and design of air and water distribution systems.

"This publication provides the instruction and tools required to specify HVAC systems for many small to medium-sized buildings," he said.

The book includes a CD with spreadsheet programs that incorporate design and computation procedures.

The cost of HVAC Simplified is \$79 (\$59, 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, USGBC, IESNA Partner on Baseline Standard for Green Building New standard to drive high performance building practices to the mainstream

The U.S. Green Building Council (USGBC); the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE); and the Illuminating Engineering Society of North America (IESNA) announced today that the three organizations have agreed to co-sponsor the development of a new ASHRAE/USGBC/IESNA minimum standard for high performance green building.

Proposed Standard 189, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings, will provide minimum requirements for the design of sustainable buildings to balance environmental responsibility, resource efficiency, occupant comfort and well-being, and

community sensitivity. Using USGBC's LEED Green Building Rating System, which addresses the top 25% of building practice, as

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a key resource, Standard 189P will provide a baseline that will drive green building into mainstream building practices.

Scheduled for completion in 2007, the proposed standard will apply to new commercial buildings and major renovation projects, addressing sustainable sites, water use efficiency, energy efficiency, a building's impact on the atmosphere, materials and resources, and indoor environmental quality.

Standard 189P will be an ANSI-accredited standard that can be incorporated into building code. It is intended that the

standard will eventually become a prerequisite under LEED.

"This standard will establish a baseline for a high-performance, green building," ASHRAE president Lee Burgett, P.E., said. "It will allow us to provide for the needs of the present without detracting from the ability to fulfill the needs of the future. Our partnership with USGBC to develop the proposed standard draws on their extensive experience in the green building market and assures that the needs of those who create sustainable buildings are met. We also are pleased to partner again with IESNA, building on the earlier efforts of our two societies in creating design guidance for more energy efficient

"We are proud to work with ASHRAE and IESNA to bring high performance green building practices to the mainstream," said Rick Fedrizzi, President, CEO and Founding Chair, USGBC. "USGBC's mission is market transformation, and we've long recognized the need to reach beyond the market leaders served by LEED to accomplish it. Given ASHRAE's integrity and long history of leadership in energy efficiency and indoor environment, and IESNA's technical strength in lighting, they're the ideal partners in the effort. We're confident that the baseline standard we'll develop together will raise the entirety of the commercial building marketplace to a new level of resource efficiency."

Fedrizzi noted that concurrent with this initiative, USGBC will begin work on LEED v3.0, which will encompass major advancements

in building science and technology, such as LifeCycle Assessment and bioregional weighting.

"Sustainability is the next natural progression in the evolution of standards for building design, allowing us to weigh system solutions against the impact on the environment, while ensuring that buildings meet the needs of those who must work or live in them" said Dr. Alan Lewis, president, IESNA. "Sustainable design is a collaborative approach to architecture and construction and IESNA is pleased to be in partnership with ASHRAE and USGBC."

ASHRAE's technical resources provide the engineering basis for sustainable buildings. Through the Society's Roadmap for Sustainability, ASHRAE advocates a sustainable built environment via the use of advanced technologies and develops and maintains productive relationships with other organizations in the sustainability field.

About ASHRAE

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Founded in 1894, ASHRAE 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 HVAC&R to serve the evolving needs of the public. About USGBC

USGBC is the nation's leading nonprofit organization working to promote buildings that are environmentally responsible, profitable and healthy places to live and work. USGBC's membership includes 6,000 corporations, federal agencies, state and local governments, and nonprofits; and encompasses 65 local chapters and affiliates nationwide.

About IESNA

IESNA is the recognized technical authority on illumination. For over 100 years, its objective has been to communicate information on all aspects of good lighting practice to its members, to the lighting community, and to consumers, through a variety of programs, publications, and services.

SAVE THE DATE! ASHRAE 2006 Annual Meeting Quebec City • June 24-28, 2006

Registration for ASHRAE's 2006 Annual Meeting opens March 1, 2006. Attending the meeting provides you with opportunities to influence the future of HVAC&R technology, outstanding networking and career advancement. We look forward to seeing you here.

Meeting highlights include:

A varied technical program.

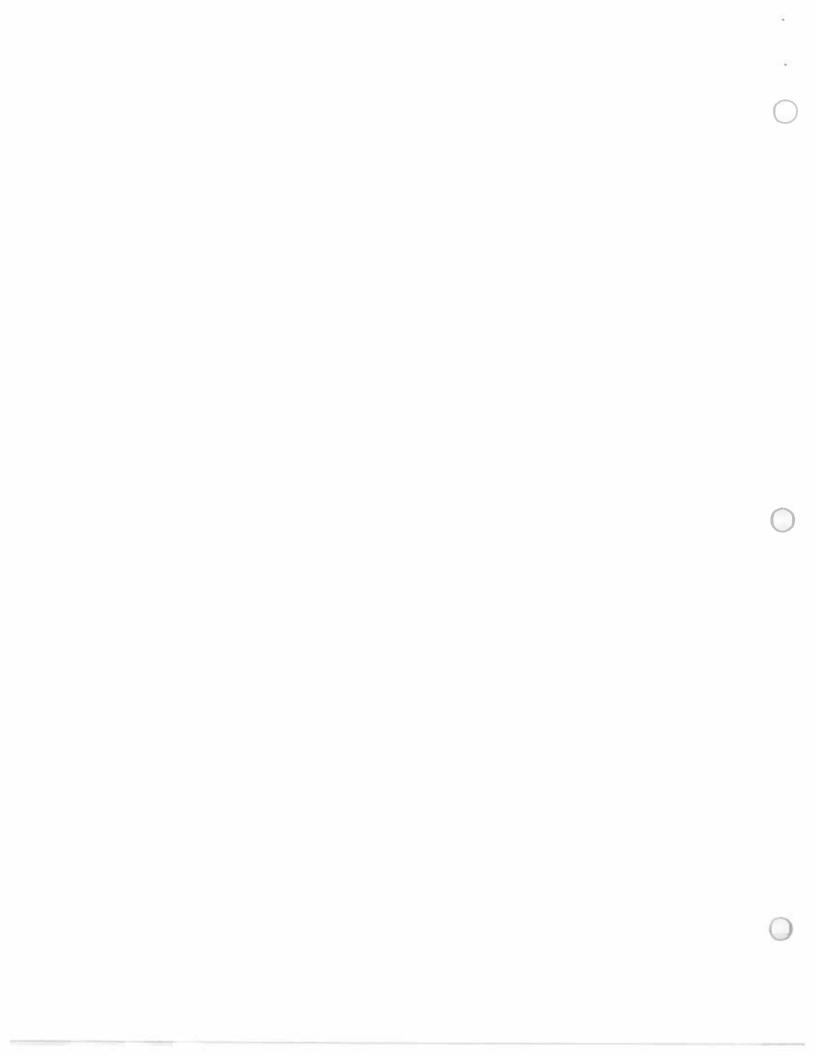
Sightseeing opportunities - Located on the St. Lawrence River, Quebec City, with its walled Old City and narrow cobblestone lanes, is by far the most European of destinations in North America. The City of Quebec, founded in 1608 by Samuel de Champlain, is known as the cradle of French civilization in North America. It is the capital of the province of Quebec and seat of the National Assembly. The greater Quebec area offers a variety of activities.

Celebration of a national holiday – Saint-Jean-Baptiste Day will take place June 23-24. The celebration will begin on Friday, June 23 with a musical show and bonfire on the Plains of Abraham. This is a huge celebration in Quebec City so plan to arrive in time to enjoy the festivities.

Revamped social activities, including a members' night out, to provide better networking opportunities.

A chance to further your education by taking ASHRAE Learning Institute courses – including a new short course on terrorism threat assessment.

For complete information, including housing information, visit www.ashrae.org/quebeccity



ASHRAE Sustainability and the Building Environment Satellite Broadcast and Webcast

Learn more about the principles, practices, and emerging concepts for building sustainability design by attending the ASHRAE Sustainability and the Building Environment Satellite Broadcast and Webcast on April 19, 2006.

For more information on how to sign up, go to http://www.ashrae.org/greenbuildingsbroadcast. On-line registration will begin on March 15, 2006.

Don't forget to bring a friend! All broadcast/webcast attendees who are not currently ASHRAE members are invited to join ASHRAE at a special introductory rate for the first year of membership. A special membership application will be available at the satellite broadcast sites or by request by emailing membership@ashrae.org after March 1, 2006.

ASHRAE's Most Used Standards Available on One CD

ASHRAE's "greatest hits" n its 12 top selling standards and guidelines - are now available on one CD.

Design Essentials: ASHRAE's Most Referenced Standards and Guidelines contains a library of documents that can be easily searched and printed with copy and paste features for text and graphics. The standards and guidelines address design or system operations, and most are code-intended standards.

"Because ASHRAE standards/guidelines often refer to requirements in other standards, our documents need to be used together in order to understand the means for compliance with any one of them," Rick Hermans, chair of ASHRAE's Standards Committee, said. "The Design Essentials CD is intended to make that process simpler for the user."

Hermans noted that the standards and guidelines included in the CD serve as the basis for HVAC&R design and some of them are referenced in building codes.

Included are:

- ANSI/ASHRAE Standard 15-2004, Safety Standard for Refrigeration Systems;
- ANSI/ASHRAE Standard 34-2004, Designation and Safety Classification of Refrigerants;
- ANSI/ASHRAE Standard 52.2-1999, Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size:
- ANSI/ASHRAE Standard 55-2004, Thermal Environmental Conditions for Human Occupancy;
- ANSI/ASHRAE Standard 62.1-2004, Ventilation for Acceptable Indoor Air Quality;
- ANSI/ASHRAE Standard 62.2-2004, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings;
- ANSI/ASHRAE/IESNA Standard 90.1-2004, Energy Standard for Buildings Except Low-Rise Residential Buildings (I-P edition);
- ANSI/ASHRAE Standard 90.2-2004, Energy-Efficient Design of Low-Rise Residential Buildings;
- ANSI/ASHRAE Standard 135-2004, BACnet®: A Data Communication Protocol for Building Automation and Control Networks:
- ASHRAE Guideline 0-2005, The Commissioning Process;
- ASHRAE Guideline 1-1996, The HVAC Commissioning Process;
- ASHRAE Guideline 13-2000, Specifying Direct Digital Control System.

The cost of the single-user version of Design Essentials: ASHRAE's Most Referenced Standards and Guidelines is \$499 (\$429, ASHRAE members). Annual renewal fee for access to updates after the first year is \$290 (\$220, ASHRAE members).

A network version also is available for organizations so multiple users can have simultaneous access.

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/bookstore.



CMX.CIPHEX

Metro Toronto Convention Centre, North Building

CMX.CIPHEX is the combination of HRAI's CMX and CIPH's CIPHEX Ontario tradeshow all under one roof to create Canada's largest trade show for the air conditioning, heating (forced air and hydronic), hearth, plumbing, piping, refrigeration and ventilation industries.

This sold-out three-day event will host over 400 of Canada's leading companies, showing fabulous new products & design ideas, and is expected to attract over 12,000 visitors to this ultimate training and information centre. CMX.CIPHEX will prove to be one of your most effective sales and education tools available in Canada in 2006.

The CMX.CIPHEX 2006 learning forum's scheduled line-up of speakers includes North American renowned presenters such as Richard Trethewey, John Siegenthaler, and Robert Bean along with well known industry personnel such as Garth Dennison (Sportan Valve), and Rick Proulx (Cash Acme). The seminars, technical workshops, and critical updates will help position you to profit from the building and renovation explosion. The Learning Forum will provide you, your contractors, customers and your employees with an excellent opportunity to learn what is new and innovative in the industry.

Bonus:

- 1. Skills Canada Ontario will showcase the 17th Annual Technological Skills Competition. The Competition promotes careers in the skilled trades and technologies through provincial and national competitions.
- 2. Canadian Hydronics Pump Challenge is designed to test who can remove and replace a working circulating pump in record time without springing a leak.

For more information visit www.cmxciphexshow.com website for more details.



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ASHRAE LEARN ON-LINE

This fall, The ASHRAE Learning Institute will be presenting six seminars on topics including Introduction to Green Buildings and Sustainable Construction, Leadership Skills for Engineering Leaders-Situational Leadership®, Complying with Requirements of ASHRAE Standard 62.1-2004 and more.

Visit www.ashrae.org/onlinepds

ASHRAE Joins PERSI to Promote Infrastructure Sustainability

ATLANTA – The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) has joined an alliance to help promote sustainable infrastructure such as buildings, water resources, transportation, energy generation and waste treatment.

The alliance, Practice, Education and Research for Sustainable Infrastructure (PERSI), is an initiative of the American Society of Civil Engineers (ASCE) that works to promote and translate sustainable practices into action within its member organizations.

ASHRAE is the first organization to formally join PERSI by signing the memorandum of understanding. By joining the alliance, which will not itself produce standards or guidelines, ASHRAE will work with other PERSI member organizations to assist with educational programs, conduct research, and contribute knowledge about sustainable infrastructure, among other activities.

ASHRAE President Terry Townsend noted that joining PERSI helps further ASHRAE's mission of sustainability.

"By partnering with other organizations worldwide, ASHRAE can enhance its own current efforts and supplement the activities and resources of other groups," he said. "This sharing of ideas and resources can only help us reach our energy and

sustainability goals faster and more efficiently."

"Sustainable infrastructure is vital to a sustainable human society," Richard N. Wright, Ph.D., an honorary member of ASCE who is spearheading the effort to establish PERSI, said. "ASHRAE has illustrated its leadership in the infrastructure community by contributing strongly to the development of the PERSI initiative. PERSI now will begin its important efforts to advance and incorporate concepts and knowledge of sustainability into the standards and practices used throughout the life cycle of infrastructure systems."

ASHRAE also will assist PERSI in developing a common language for the definition and achievement of sustainable infrastructure. The alliance currently defines sustainability as the challenge of meeting human needs for natural resources, industrial products, energy, food, transportation, shelter and waste management while conserving and protecting external and

internal environmental quality and the natural, economic and social resources essential for human needs.

The alliance has attracted more than 15 groups that have participated in its development, including the American Institute of Architects, the American Planning Association, the American Water Works Association, and the National Institute of Standards and Technology.

ASHRAE Hires Staff in Support of Strategic Plan

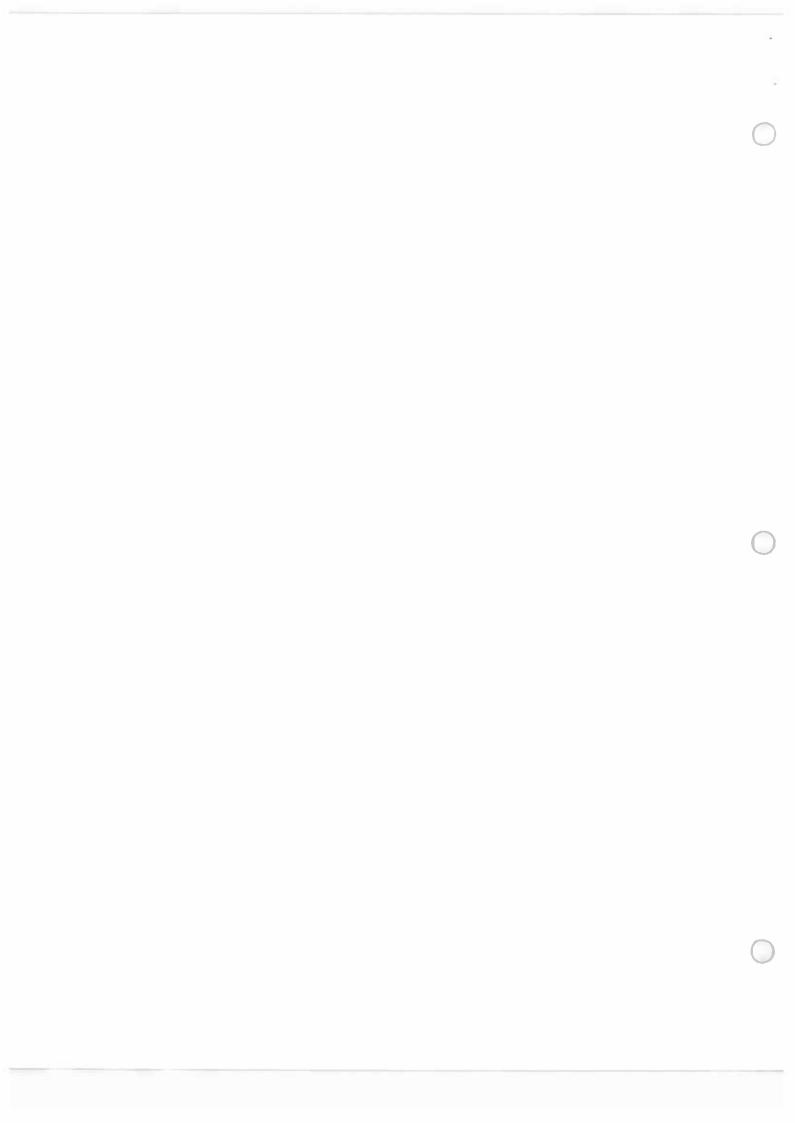
ATLANTA – In support of its strategic plan adopted earlier this year, ASHRAE has hired staff to oversee its marketing, certification and advocacy efforts. The plan will help ASHRAE focus its efforts to ensure that its products and services are timely, relevant and appropriately positioned to serve the changing marketplace. The plan can be found at www.ashrae.org/strategicplan.

To support the strategic plan goal of making ASHRAE a premier provider of HVAC&R expertise, Jeff Dimond has been named marketing director of ASHRAE. Dimond has some 24 years of communications management experience. At ASHRAE, he will oversee implementation of activities that will enable the Society to make the greatest amount of its products and services available to the largest number of consumers. Before joining ASHRAE, Dimond served as director of marketing and communications for Conway Data Inc., Norcross, Ga., where he developed marketing and public relations activities for non-profit and business association clients of the association management firm.

A resident of Roswell, Ga., Dimond has a master's of business administration degree in athletic administration/marketing from the University of Arizona and a bachelor's of arts degree in political science/journalism from the University of Alabama. ASHRAE also has hired Joyce Abrams as manager of certification. She will develop and implement a credentialing program for HVAC&R engineers to help promote ASHRAE as a leader in industry education and professional development. Before joining ASHRAE, she was an assistant vice president in the education and training division of LOMA where she oversaw the design and development of credentialing programs, courses and course materials and managed the development and/or production of up to 35 college-level textbooks or online courses a year. A resident of Atlanta, Abrams has a master's of science degree in mass communications from Indiana University, and a juris doctorate and a bachelor's of arts degree in journalism from the University of Georgia.

The Society also has hired Doug Read as program director of government affairs. He will oversee management of the Society's governmental affairs efforts, including government outreach and issues management. Read served as manager of government relations, compliance and regulatory affairs for the National Electric Manufacturers Association (NEMA), where he developed strategies for interface with government bodies to ensure support of electrical industry safety, environmental and trade policy. A resident of Washington, D.C., Read has a master's of science degree in human resource and organization development from the University of Maryland and a bachelor's of science degree in industrial engineering from State University of New York.







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ASHRAE Joins Former President Clinton in Climate Initiative

ATLANTA - The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) will join with former President Bill Clinton in an initiative to reduce carbon emissions and increase efficiency in the world's largest cities.

The Clinton Climate Initiative (CCI) is a Clinton Foundation program dedicated to making a difference in the fight against

climate change in practical and measurable ways.

The initiative was launched Tuesday at a news conference in Los Angeles, where Clinton was joined by London Mayor Ken Livingstone, Los Angeles Mayor Antonio Villaraigosa and San Francisco Mayor Gavin Newsom. British Prime Minister Tony Blair also attended to show support for the initiative. ASHRAE President Terry Townsend, P.E., also was present.

*ASHRAE has a long history of engineering for sustainability by applying its diverse technology to reduce the consumption of

energy in the built environment," Townsend said.

"We are pleased to partner with the Clinton Foundation and others to accelerate the adoption of energy-saving technologies by city

For more than 30 years, ASHRAE energy standards have set the standard of care for the efficient use of energy resources in buildings. In particular, since being developed in response to the energy crisis in the 1970s, ASHRAE's Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings, has influenced building designs worldwide. It has become the basis for building codes and a standard for building design and construction recognized throughout the world.

"Recognizing the impact of buildings on global energy use and greenhouse gas emissions, ASHRAE will work with city planners to support development of codes, standards, energy use metrics, and other programs that lower environmental impacts," according to an agreement signed by ASHRAE and the Foundation. "ASHRAE's assistance will facilitate the transfer of existing tools and technology, and support solutions to common energy and greenhouse gas emission challenges facing large city group

Urban areas are responsible for more than 75 percent of all greenhouse gas emissions in the world. Therefore, reducing

energy use and greenhouse gas emissions in cities is fundamental to any effort to slow the pace of global warming.

"It no longer makes sense for us to debate whether or not the earth is warming at an alarming rate, and it doesn't make sense for us to sit back and wait for others to act," said President Clinton at the announcement event. "The fate of the planet that our children and grandchildren will inherit is in our hands, and it is our responsibility to do something about this crisis. The partnership between my Foundation and the Large Cities Climate Leadership Group will take practical and, most importantly, measurable steps toward helping to slow down global warming, and by taking this approach I think we can make a big difference.

The Clinton Climate Initiative will assist the large cities in the group in reducing greenhouse gas emissions and increasing

energy efficiency. To enable partner cities to do so, CCI will:

Create a purchasing consortium that will pool the purchasing power of the cities to lower the prices of energy-saving products and accelerate the development and deployment of new energy-saving and greenhouse-gas-reducing technologies and products.

Mobilize the best experts in the world, including ASHRAE, to provide technical assistance to cities to develop and implement plans that will result in greater energy efficiency and lower greenhouse gas emissions.

Create and deploy common measurement tools and internet-based communications systems that will allow cities to establish a baseline on their greenhouse gas emissions, measure the effectiveness of the program in reducing these emissions and to share what works and does not work with each other.

There are a number of practical steps cities can take to increase efficiency and reduce emissions, including:

Building codes and practices that make use of more effective insulation and more energy efficient windows, heating and ventilation systems, and lighting

Localized, cleaner electric generation systems

More intelligent design of electric grids both across the city and within office and municipal buildings

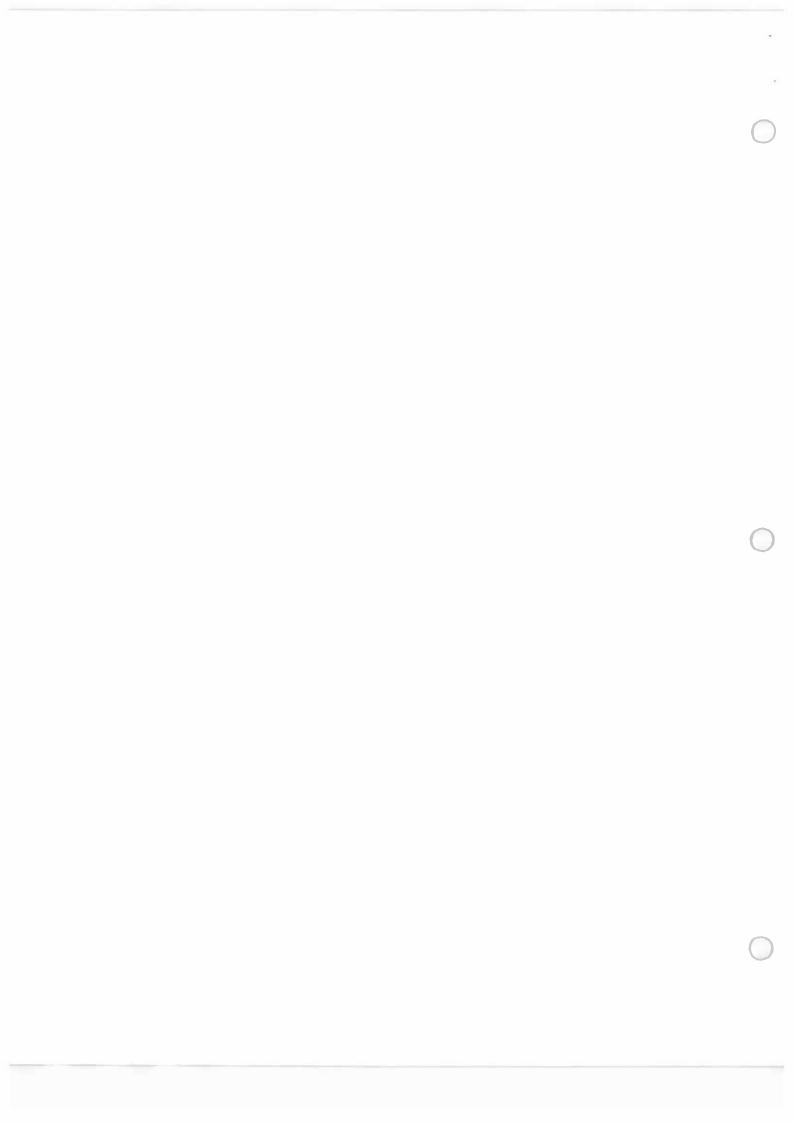
The CCI-Large Cities partnership is initially targeting 22 of the largest cities in the world - Berlin, Buenos Aires, Cairo, Caracas, Chicago, Delhi, Dhaka, Istanbul, Johannesburg, London, Los Angeles, Madrid, Melbourne, Mexico City, New York, Paris, Philadelphia, Rome, Sao Paulo, Seoul, Toronto, and Warsaw.

Many of these cities will be visited by ASHRAE leaders as part of initiative later this calendar year. The partnership anticipates

that many more cities will join over the next four to six months.

Other partners in the Clinton Climate Initiative include the U.S. Green Building Council, the Alliance to Save Energy, and the International Council for Local Environmental Initiatives. ASHRAE is also partnering with the U.S. Green Building Council and the Illuminating Engineering Society of North America to develop the standard 189P, Design of High-Performance Green Buildings Except Low-Rise Residential Buildings.







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ASHRAE Awards Scholarship in Memory of Frank Coda

ATLANTA – A scholarship created in memory of Frank Coda, ASHRAE's former executive vice president who died in 2004, has been awarded for the first time. The undergraduate engineering scholarship was awarded to Jeremy Dreiling, an architectural engineering student at Kansas State University. It provides \$5,000 for one year. "Frank saw the need for ASHRAE's involvement with education and always advocated assistance for students and supported cooperation between ASHRAE and universities," Jeffrey Spitter, Ph.D., P.E., chair of ASHRAE's Scholarship Trustees, said. "This scholarship is a very appropriate way to recognize his contributions and honor his memory. The endowed scholarship will provide significant help to a deserving student each year." Coda became ASHRAE executive director in 1981, was named chief staff officer in 1984, and became executive vice president emeritus in January 2004. He continued to work for ASHRAE in a consulting capacity until his death in June 2004. ASHRAE's scholarship program was launched in 1989 under Coda's leadership. Since that time, ASHRAE has awarded 136 scholarships. The ASHRAE Scholarship program encourages and assists HVAC&R education through scholarships and fellowships.

Other scholarships awarded by ASHRAE this year, totaling some \$60,000, are:

- Reuben Trane Scholarships, \$10,000 for two years, Adrian Akerson, space physics and aeronautics, Embry-Riddle
 Aeronautical University, Daytona Beach, Fla.; Kevin Moore, mechanical engineering, Saginaw Valley State University, University
 Center, Mich.; and Peter McKeon, mechanical engineering, University of Pittsburgh;
 - ASHRAE Region VIII Scholarship, \$3,000 for one year, Brad Crumpton, mechanical engineering, University of Texas at Tyler;

ASHRAE Memorial Scholarship, \$3,000, Blake Erb, mechanical engineering, University of Saskatchewan;

- Associate Engineering Technology, \$3,000, David Fox, commercial/industrial refrigeration and HVAC technology, Bellingham (Wash.) Technical College; and David Pirozzoli, HVAC technology, Harrisburg (Pa.) Area Community College;
- General Scholarship, \$3,000, Kai Hartman, mechanical engineering, Tri-State University, Angola, Ind.; and Nashley Mascarenhas, mechanical engineering, Purdue University;

Henry Adams Scholarship, \$3,000, Kevin Kaufman, architectural engineering, Pennsylvania State University;

- Bachelor Engineering Technology, \$3,000, Andrew Mengwasser, mechanical engineering technology, Southern Polytechnic State University, Marietta, Ga.;
- Alwin B. Newton Scholarship, \$3,000, Martin Nolan, mechanical engineering, City College City University of New York;

J. Richard Mehalick Scholarship, \$3,000, Igor Tatarintsev, mechanical engineering, University of Pittsburgh;

Duane Hanson Scholarship, \$3,000, Cassie Waddell, architectural engineering/architecture, University of Kansas.

Changes Related to ETS and Ventilation Proposed for ASHRAE 62.1

ATLANTA – Ventilation for smoking areas returns to center stage through a proposed addendum to ASHRAE's Standard 62.1.

Proposed addendum i will be open for public comment until Nov. 6. To read the proposed addendum and comment, visit www.ashrae.org/publicreviews. ANSI/ASHRAE Standard 62.1-2004, Ventilation for Acceptable Indoor Air Quality, specifies minimum ventilation rates and indoor air quality requirements for commercial and institutional buildings.

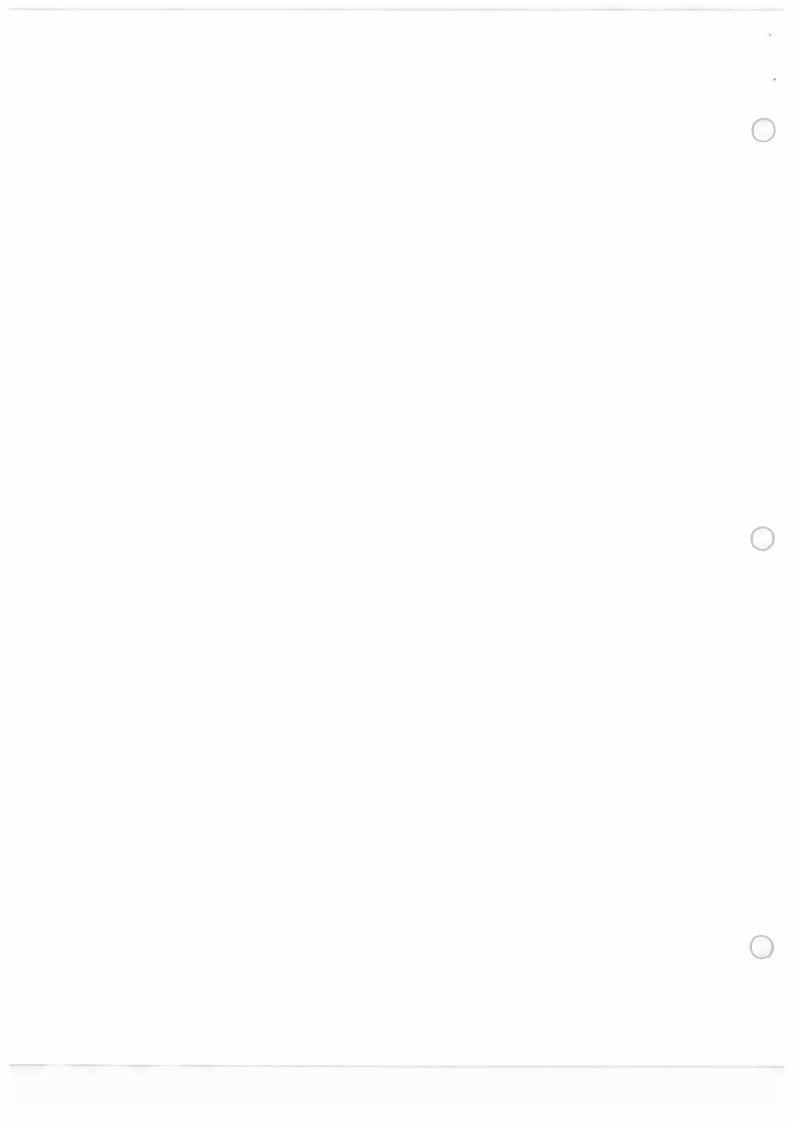
The proposed addendum removes the existing requirement for an increase to the ventilation rates prescribed in Table 6-1 (and/or an increase in air cleaning) for smoking areas. It also strikes informative language explaining why specific rates for smoking areas cannot be prescribed, adds a reference to Section 5.18 smoking-related separation requirements, and strikes a requirement in Table 6-1, Note 2, to determine smoking-permitted area rates using means other than the table.

"The proposed changes, based in part on recent position statements issued by World Health Organization and the U.S. Surgeon General, reflect the opinion of cognizant authorities that no safe level of environmental tobacco smoke exists," Dennis Stanke, chair of the 62.1 committee, said. "Whether the proposed changes also reflect the opinions of Standard 62.1 stakeholders will be determined during the public review process. The eventual content of the standard depends on the valuable participation of all interested parties."

ASHRAE Looks to Develop Water Conservation Standard

ASHRAE – Requirements regarding the amount of water used to operate HVAC, plumbing and irrigation systems would be established under a proposed standard from the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). "Water is the most important renewable resource on this planet," Terry Townsend, P.E., ASHRAE president, said. "To protect this source of life, we must reduce the demand and consumption that the built environment is placing on available water sources. It is our intention to develop a standard that can be used globally to conserve this valuable resource." The proposed standard, Conservation of Water Use in Building, Site and Mechanical Systems, would provide baseline requirements for the design of buildings, landscapes, and mechanical systems that minimize the volume of water required to operate HVAC systems, plumbing systems, and irrigation systems. The standard would address water use efficiency through water conservation measures implemented during design and construction of residential, commercial, institutional and industrial projects. It would not apply to storm water management. The proposed title, purpose and scope of the standard are open for public comment until Nov. 20. Also, members are being sought to serve on a committee to write the standard. To join the committee or comment on the draft title, purpose and scope, visit the standards actions for Oct. 6 at www.ashrae.org/publicreviews.







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ASHRAE Student Design Competition

Winning Projects Focus On Mixed-Use Buildings

ATLANTA – Night pre-cooling, naturally daylit areas and low-emission HVAC systems are some of the sustainable measures selected by students as part of ASHRAE's 2006 Student Design Competition. This year's competition focused on the mixed-use renovation of the Dallas Power & Light building in a historic area of Dallas. The renovation includes converting the majority of the former office building into residential apartments, with retail space occupying the first floor of the building. Awards were announced in three categories: HVAC system selection, HVAC system design and architectural design.

The winning entries in the HVAC system selection and HVAC system design categories are awarded to the same team from The Pennsylvania State University: Justin Bem, Kevin Kaufman, David Melfi, Jon Gridley, Jessica Lucas and Yulien Wong. Their

faculty advisor is William P. Bahnfleth, Ph.D, P.E.

For the HVAC system selection category, the students selected water source heat pumps, giving the system a life cycle cost of \$7,464,000. The system selected calls for water-source heat pumps to parallel the one rooftop unit serving floors two through 20 and an additional rooftop unit for the first-level retail area. This system allows for easily converting first-level retail space to a new function, limits maintenance disruption to individual apartments and the roof, and allows for separate metering of retail space. The ventilation systems were evaluated using Standard 62.1 and on their ability to fit into available mechanical room and shaft space. The option chosen was a rooftop unit paralleled by WSHP for residential units, and a rooftop unit serving the retail areas. The students said, "The separation of the two types of spaces allows for better flexibility in the system and allows for future growth." The system also allowed for lower cost and emissions as well while allowing the building meet Standard 90.1 without compromising historic integrity of building.

For the HVAC system design category, the students designed a decoupled outdoor air system with a parallel sensible system with an energy cost of \$4.72/square foot per year. Because the mechanical penthouse on the second-floor roof of the annex was so close to the ground, dealing with architectural, environmental and acoustical impacts were serious considerations. Some of the solutions the students used were: night time pre-cooling with unconditioned night air, and using only fan energy for the

retail spaces to reduce cooling load during the day. The students also used a dedicated outdoor air system.

First place in the architectural design category is awarded to Alissa Ogen and Sonia Carias of Savannah College of Art and Design. Their faculty advisor is Emad M. Afifi, Ph.D.. The students, who were required to design a mixed-use collegiate space, designed a student activities center complete with student dormitories, a theater, recycling centers, an amphitheater, retail, landscaping and dining space. The entry's sustainable design features included pervious sidewalk materials, photovoltaic glass panels inside the cafeteria, translucent, diffuse light-transmitting walls and reflective roofing materials. The students' design also includes a naturally ventilated atrium near the lobby and a naturally daylit cafeteria that is also shaded to save on energy costs.

Awards will be presented at ASHRAE's 2007 Winter Meeting Jan. 27-31 in Dallas. Winning student groups will each have a poster presentation to display their projects at the meeting. The competition recognizes outstanding student design projects, encourages undergraduate students to become involved in the profession, promotes teamwork and allows students to apply their

knowledge of practical design.

ASHRAE Research Provides Comparison Data for Unitary Equipment

ATLANTA - New research from ASHRAE will lead to better understanding of humidity control and energy cost when comparing unitary equipment.

ASHRAE Research Project-1254, Evaluating the Ability of Unitary Equipment to Maintain Adequate Space Humidity Levels,

Phase II was funded in part by the Air-Conditioning and Refrigeration Technology Institute.

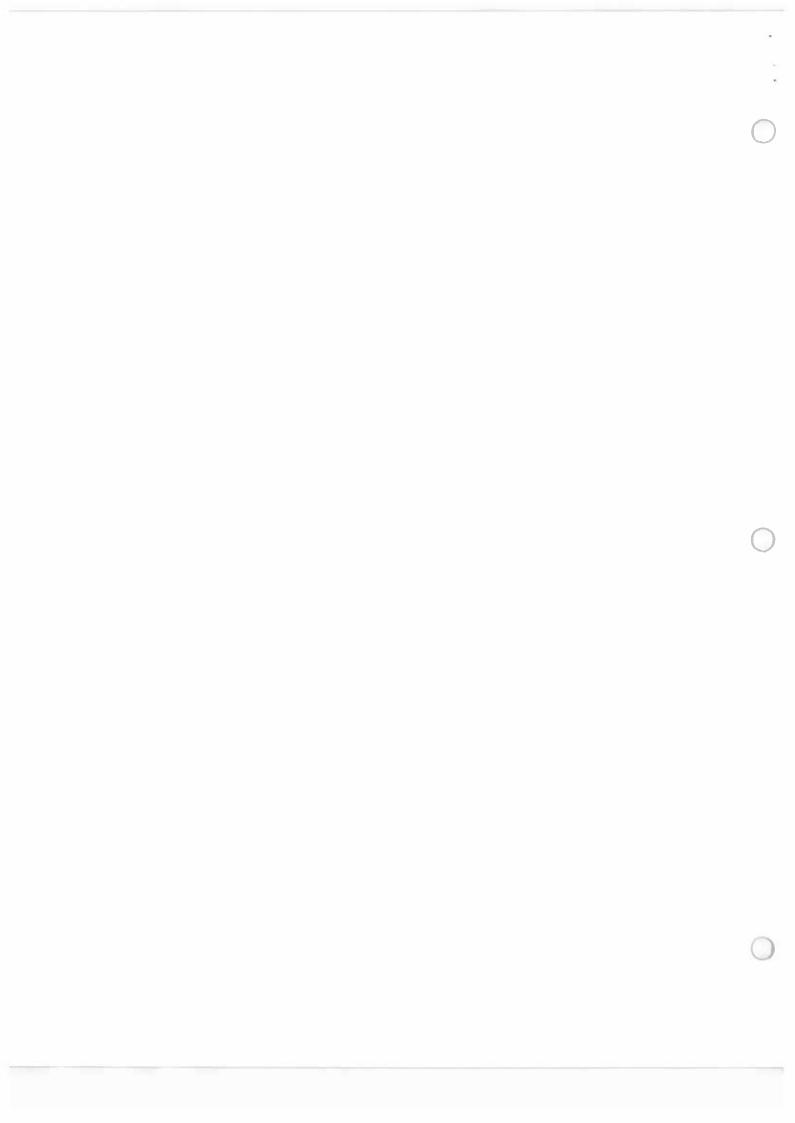
"The results will help designers better understand the humidity control and energy cost impacts of the unitary equipment options compared in this project," said lead researcher Michael J. Witte, Ph.D., GARD Analytics. "Many of these options are in limited use so actual performance experience is not available for a broad range of building types or climates. What performs well on a restaurant in Orlando may not be effective on a retail store in Atlanta. This comparison of 18 system types across seven building types in 10 climates provides additional equipment selection information."

The project provides designers with:

- Comprehensive analysis of humidity control performance of a wide range of DX system configurations, including sub-cool
 reheat, wrap-around heat pipes, dual-path systems, enthalpy heat recovery and desiccant dehumidifiers.
- Significant advancement in whole building energy simulation capabilities for modeling DX equipment by adding new
 capabilities to EnergyPlus. This provides designers and analysts with access to study specific applications and extend the results of
 this analysis, according to Witte.
- Identification of key issues for further exploration to better understand some of the key drivers and possibly develop some simple new system configurations that can efficiently control humidity.

The final report can be purchased from "research results" at www.ashrae.org/research. The cost is \$30 (\$24 ASHRAE members).







ASHRAE HAMILTON

Distinguished Lecturer Program – November 2006

Operation & Maintenance of HVAC Systems for Improved Comfort and Air Quality to be Addressed by Distinguished Lecturer

EVENT:

Operation & Maintenance of HVAC Systems for Improved Comfort and Air Quality a presentation sponsored by the Hamilton Chapter of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

DATE:

November 7th, 2006 @ 5:00 pm

LOCATION: Hamilton Yacht Club, Foot of McNab St., Hamilton, ON

ISSUE:

The heating, ventilating, air-conditioning and refrigerating industry affects the public's quality of life in many ways, from indoor air quality, to conserving energy in buildings, to the development of refrigerants that do not harm the environment. As part of its outreach to the community, the Hamilton Chapter is sponsoring a presentation on Operation & Maintenance of HVAC Systems for Improved Comfort and Air Quality featuring an internationally recognized expert in the HVAC&R field.

Indoor air quality is of increasing concern as society redefines the needs of the indoor environment. This talk presents a new perspective on the topic, starting with the proper preventative program and how to reduce the opportunity of bad indoor air quality relating from a proper maintenance program. We will look at the location of outside air intakes, air- handling systems, cooling towers and other areas.

SPEAKER: Carl N. Lawson, PWI Commissioning Services, Durham, NC

COST:

ASHRAE Hamilton Chapter Member - \$30.00

Non-member - **\$40.00**

Students - \$15.00

Note: Taxes included.

CONTACT: Nathan Martin, O'Dell Associates, Burlington, ON

e-mail: nathan@odellassoc.com

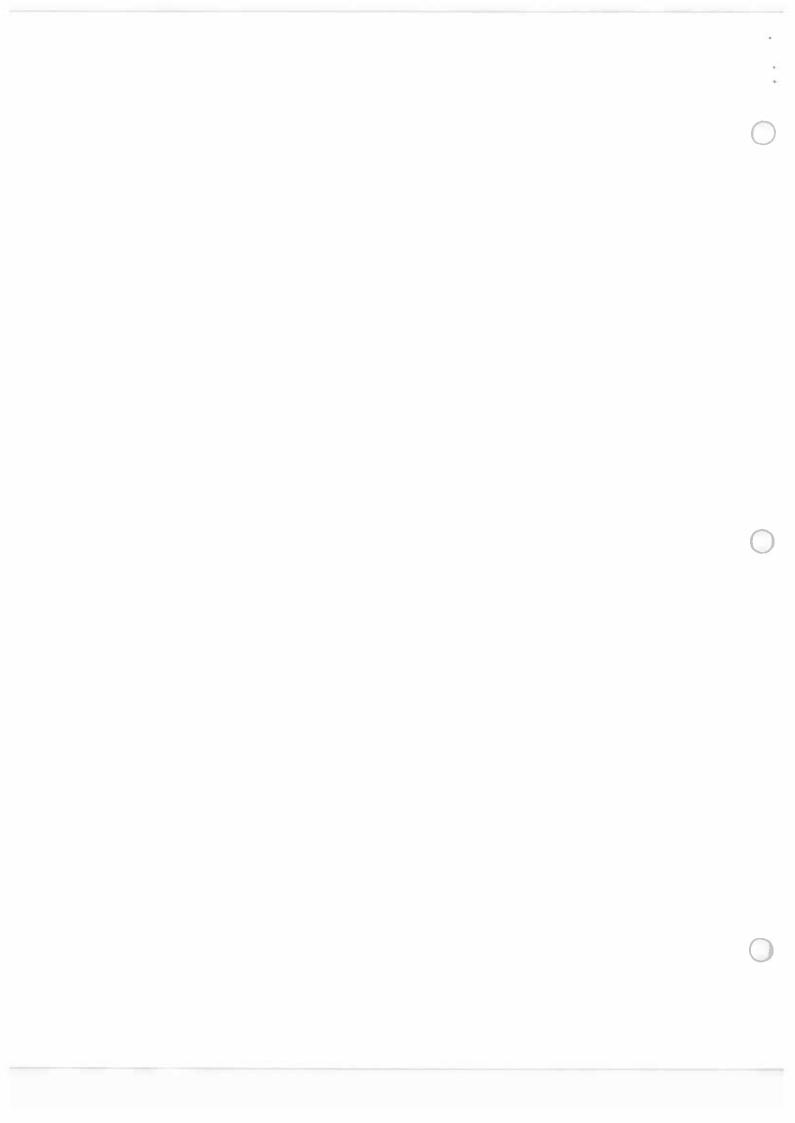
Payment may be made in CASH or CHEQUE at time of meeting. If paying in advance, please make cheque payable to "ASHRAE Hamilton Chapter"

Please return form to Wilf Laman no later than October 27th, 2006.

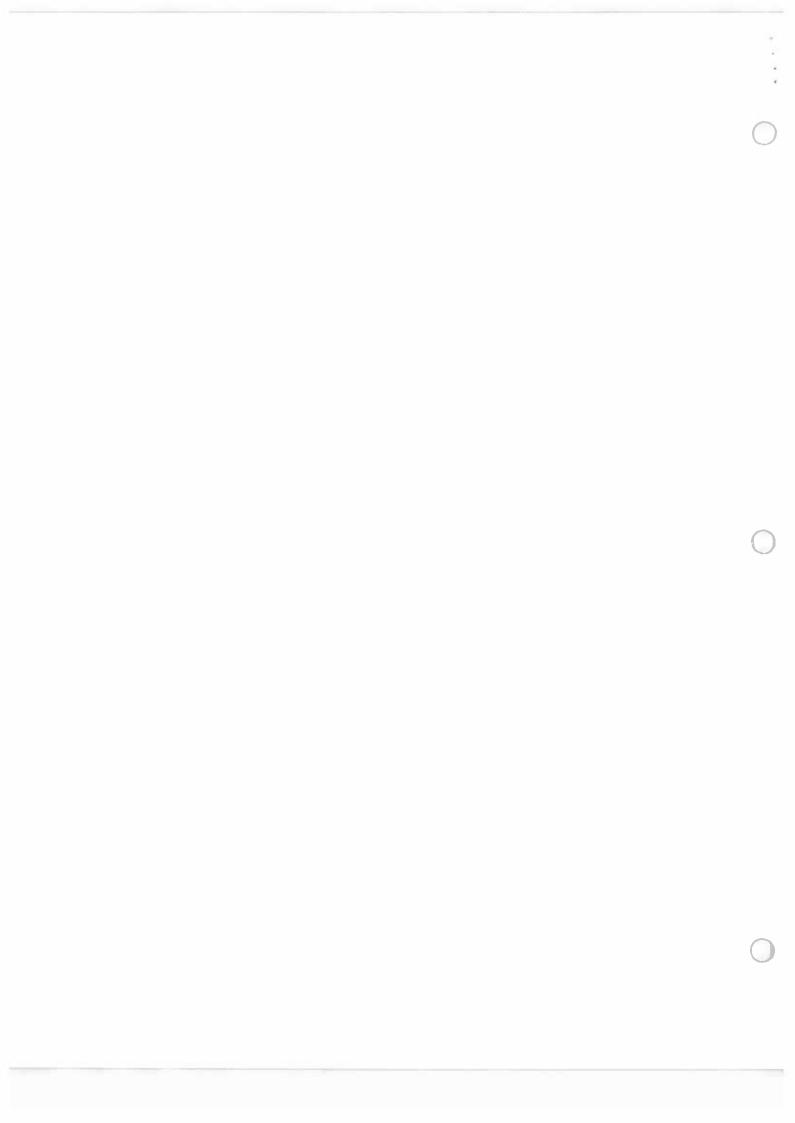
Note:

Attendance is limited to 50 people. Reserve your spot early on a first

come first served basis.



Date	Speaker	Topic	Promotion Night
Sept 25/2006	Mr. James (Jim) Hooke, James Hooke & Assoc. Ltd.	"Energy Management Information Systems (EMIS)"	Student
Oct 30/2006	Mr. Bernard Ratledge, SEF Air Services Ltd.	"Systems Effect Factor - How it Effects Operating Cost"	
Nov 27/2006	Mr. Julian Rimmer, EH Price Ltd.	"Air Distribution Options in Green Buildings"	Membership, Research
Jan 29/2007	Prof. John Wright, P.Eng., University of Waterloo	"Improving Load Calculations for Fenestration with Shading Devices"	
Feb 26/2007		Technical Tour	
Mar 26/2007		HVACR Trade Show	Student, Membership
April 30/2007		Distinguished Lecturer	Research
June/2007		Golf Tournament	





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

LONDON CANADA CHAPTER #116

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NOV 27/2006

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Hugh Palser ph: 519-471-9382 hpalser@palserent.com

Newsletter

Tom Pollard ph: 519-685-2570 tpollard@execulink.com **TOPIC:**

Air Distribution Options in Green Buildings

Julian Rimmer

EH Price

Underfloor Air Distribution (UFAD), Displacement Ventilation (DV), and Overhead Air Distribution (OHAD) systems in green buildings and their relevance to the LEED program.

Meeting - Monday Nov 27/2006

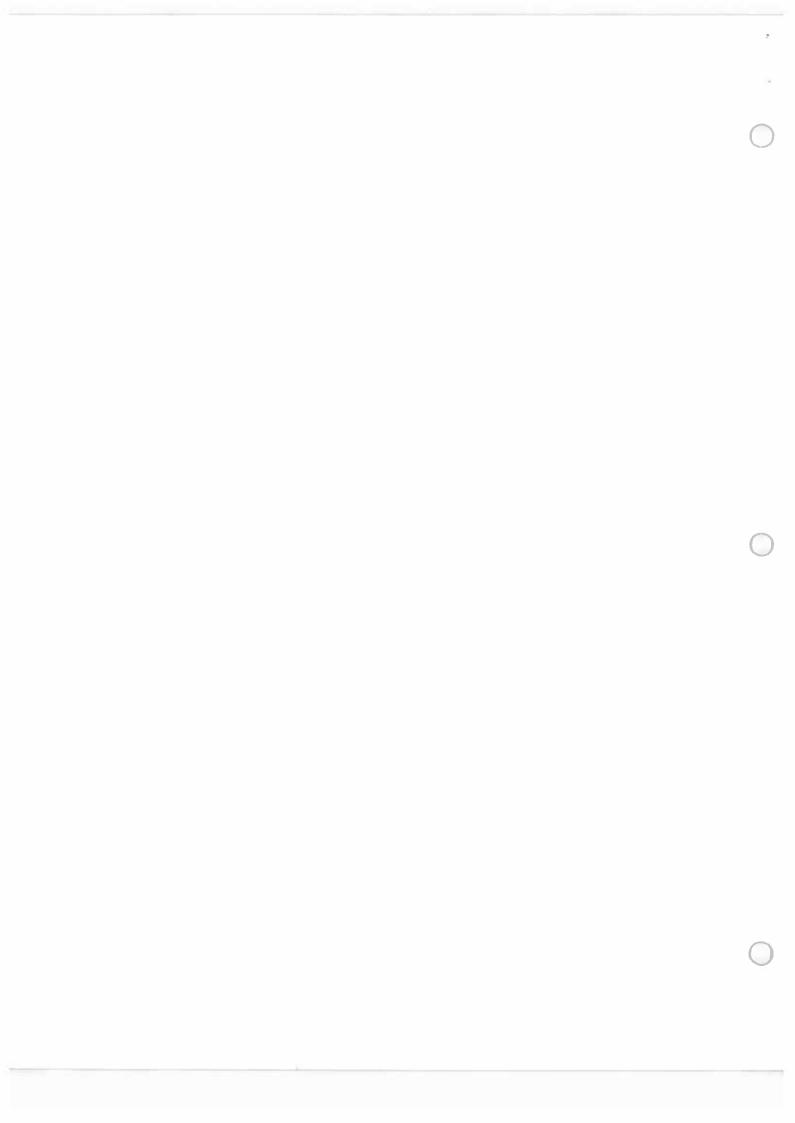
THE LAMPLIGHTER INN, 591 Wellington Rd., London

RESEARCH & MEMBERSHIP NIGHT

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

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







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President's Message

Last month Mr. Bernard Ratledge discussed system effect in fan systems and how it effects operating costs, a very enlightening presentation showing that proper installation must go hand in hand with appropriate fan selection. Please join us this month as Mr. Julian Rimmer of E.H. Price discusses air distribution options in green buildings.

November is also our Membership and Research Promotion night in which we encourage new members to join ASHRAE and our local chapter, if you know of someone who may be interested in joining, invite them out. ASHRAE Research invests many dollars in Canada in the form of funding studies and projects. In actual fact, more money is actually invested back into Canada than that which is contributed by Canadians, so please give generously.

Looking ahead, the London ASHRAE Chapter in conjunction with the Windsor Chapter have successfully attained Evans J. Lizardos, a Distinguished Lecturer who will be talking to us March 19 on "Innovative Applications to Conform to ASHRAE 90.1". Although March 19 is a Monday, it is not our normal last Monday of the month, so be sure to mark this date in your calendar and invite a friend or business associate. Having a DL in March has pushed the still "potential" mini-trade show back into April. As a committee, we are intending to proceed with a feasibility study for this event.

Hope to see you at the November 27 meeting,

Scott Turner – President scott@somersep.com London Canada Chapter President 2006-2007

4th Year HVAC Student Award

Congratulations to Corinna Bellomo, this year's 2006 recipient of the London Chapter ASHRAE award. This award is given to a 4th Year HVAC student at the University of Western Ontario symbolizes the characteristics of ASHRAE in both professional excellence and community involvement.

On top of her Mechanical Engineering studies, Corinna has been involved with local high school groups, mentoring young women to pursue a career in Engineering, and other applied sciences. Corinna, though the help of the Hellenic club, set up free tutoring for high school students.

Please join me in congratulating Corinna at an upcoming ASHRAE meeting.

Jack Maynard Student Activities Chair, London Canada Chapter 2006-2007

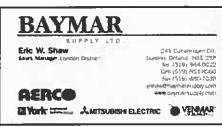
October Meeting Summary

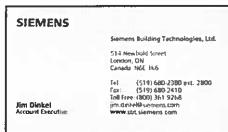
Bernard Ratledge reviewed the problems associated with System Effect Factor (SAF), why it occurs, how to identify SAF, the cost of SAF and how to avoid it in the future. Mr Ratledge explained that SAF can be a ongoing cost to building operations that be able to be reduced during design and installation.





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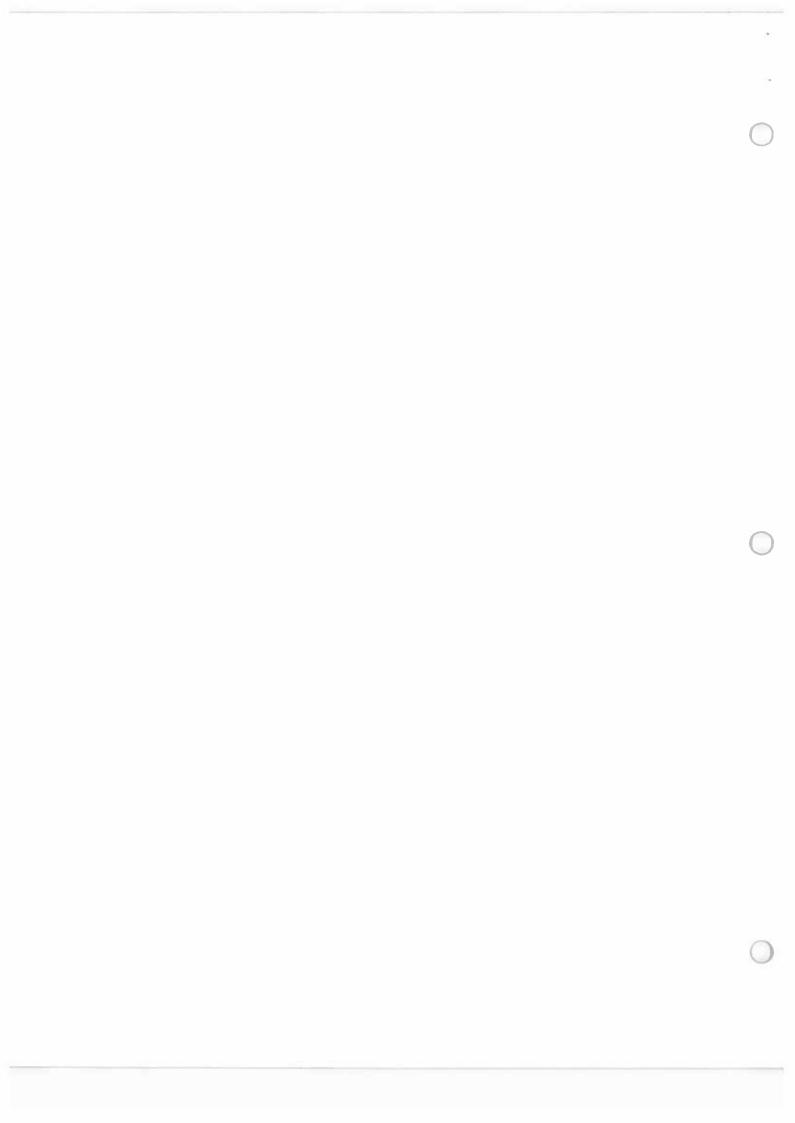


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<u>SPEAKER BIO</u>

Julian Rimmer, EH Price

As Product Manager for the Underfloor Air Distribution, Displacement Ventilation and Radiant Systems product lines at EH Price, Julian Rimmer has extensive daily experience with the product requirements, system requirements, and characteristics of Heating, Ventilation, and Air Conditioning (HVAC) systems. Julian is charged with the development of new product, and business development of these product lines. Formerly the Design Engineering Manager for these products, Julian has an intimate knowledge of the technology as well as the performance and operational characteristics behind these products.

Over the past three years, Julian has lead Price Industries sustainable product and systems development, training internally and externally on the use of Underfloor Air Distribution (UFAD), Displacement Ventilation (DV) and Overhead Air Distribution (OHAD) systems in green buildings and their relevance to the LEED program. He has travelled to all areas in the United States and Canada to present, training and consulting on UFAD and DV projects. As a regular participant in the Center for the Built environment, and the Price representative on the US Green Building Counsel (USGBC) and the Coalition for High Performance Schools (CHPS) organizations, Julian has had extensive experience in consulting on the design of sustainable HVAC systems in many areas throughout North America.

Resource Promotion Night - Mon Nov 27, 2006

The ASHRAE Research Program is one of the most important programs in the operation of ASHRAE. ASHRAE Research Canada is a registered non-profit organization that relies on the generous contributions of its members to function.

ASHRAE Research is benefiting the HVAC&R industry in many ways. The research program helps shape and revise the ASHRAE Handbook, which is used by professionals around the world. They are incorporated into ASHRAE standards to benefit the public and the HVAC&R industry. The results are being published in many formats so ASHRAE members and the HVAC&R industry can readily find and use the data and results.

Your investment in ASHRAE Research is doubly important because ASHRAE has a policy of matching contributions dollar for dollar from the revenues generated in its Winter AHR Expo. These funds are currently funding over 71 projects around the globe valued at over \$7 million. Many of the research projects are in Canada, we also want to point out that for every dollar being contributed in Canada, about four (4) U.S. dollars are being reinvested back into Canadian HVAC&R research projects.

Members have several options to submit individual or company contributions:

- a. with their dues payment
- b. mailing directly to ASHRAE in Atlanta
- c. by forwarding their contribution to their Chapter's Research Promotion Chair
- d. or on the www.ashrae.org web site by clicking on the Contribute Online link in the left menu. (charge to a credit card in USA dollars.)

Cheques should be made to <u>ASHRAE Research Canada</u> and addressed to: ASHRAE Research Promotion, 1791 Tullie Circle, Atlanta, GA 30329

Joe Claessens

Research Chair, London Canada Chapter 2006-2007





Daryl Somers, CET

3392 Wonderland Road S. Building 3, Unit 7 London, Onlario N6L 1A8 Tel: (519) 652-1977 Fax: (519) 652-9323 Mobile: (519) 670-7720

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2005 - 2006 Research Promotion Recognition

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

ASHARE Research Associate Union Gas

ASHRAE Corporate Investors

Abram Refrigeration
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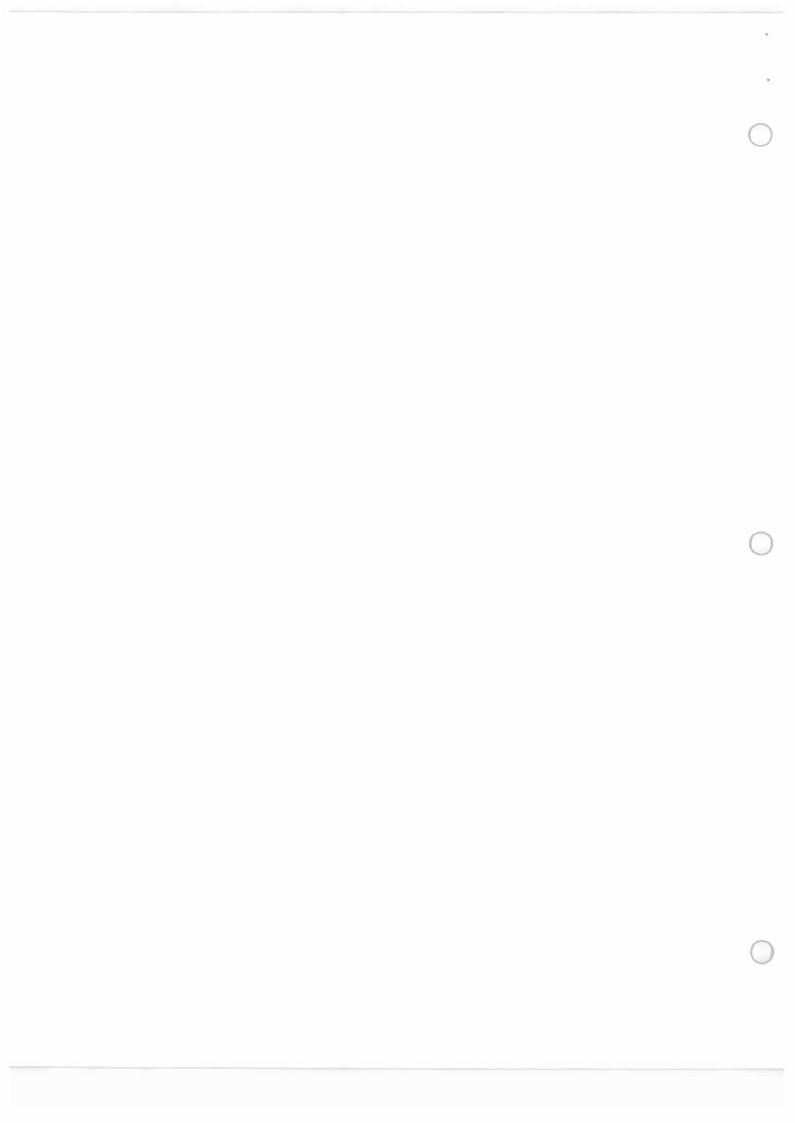
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ASHRAE Individual Investors

Terry Arcesse John Bisset Joe Claessens Dennis Dawe Scott Edmunds Owen Glenden Peter Golem Ron Granger Scott Kuni Andrew Piatek Tom Pollard Eric Shaw Daryl Somers Scott Tumer Derek Vakaras

The total investment made by London Chapter members and associates was \$11,900.00





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NRCan Building Energy Labelling Forum Dec 1st 2006

Natural Resources Canada's Office of Energy Efficiency is hosting a one-day forum on December 1st, 2006, in Toronto, to discuss issues related to energy labelling of buildings. I am very pleased to welcome your attendance at this important meeting. Given your acknowledged expertise in building and energy matters, I hope you will take advantage of this opportunity to learn more about building labelling and to share your views with us.

This meeting follows on the successful Experts Meeting on Energy Labelling for Buildings that we hosted on March 27-28, 2006. Discussions at that previous meeting suggested a strong mutual interest in energy label for buildings. There was considerable debate over exactly what sort of label would be most effective in the Canadian marketplace. Many questions were raised over how best to proceed. Therefore, the purpose of this forum is threefold:

to outline the progress on building energy labelling made since the first meeting; to continue discussion on issues on which opinions diverged; and present specific building energy labelling concepts for consideration and discussion.

In summary, the overall objective of the Building Energy Labelling Forum is to gain a clearer sense of how the building market feels about the introduction of voluntary energy-specific label and how such a label could satisfy the needs and expectations of all stakeholders.

Please note that you will be responsible for making and paying for your own travel expenses. However, we have arranged this meeting in coordination with a major building event, PM Expo, which occurs the preceding two days (November 29-30), in the expectation that you may be already planning to attend this other event.

Please respond and confirm your attendance, addressing your response directly to: D. R. Dunlop & Associates T: (613) 235-8879 dunlopdr@rogers.com

Please note that registration will be on a first-come-first-served basis.

ASHRAE, Canada Green Building Council Partner to Advance Sustainability

ATLANTA - The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and the Canada Green Building Council (CaGBC) will work together to advance buildings that are healthy, productive, environmentally responsible and economically viable.

The two organizations, both of whom are committed to green building and sustainable community development, have signed a memorandum of understanding.

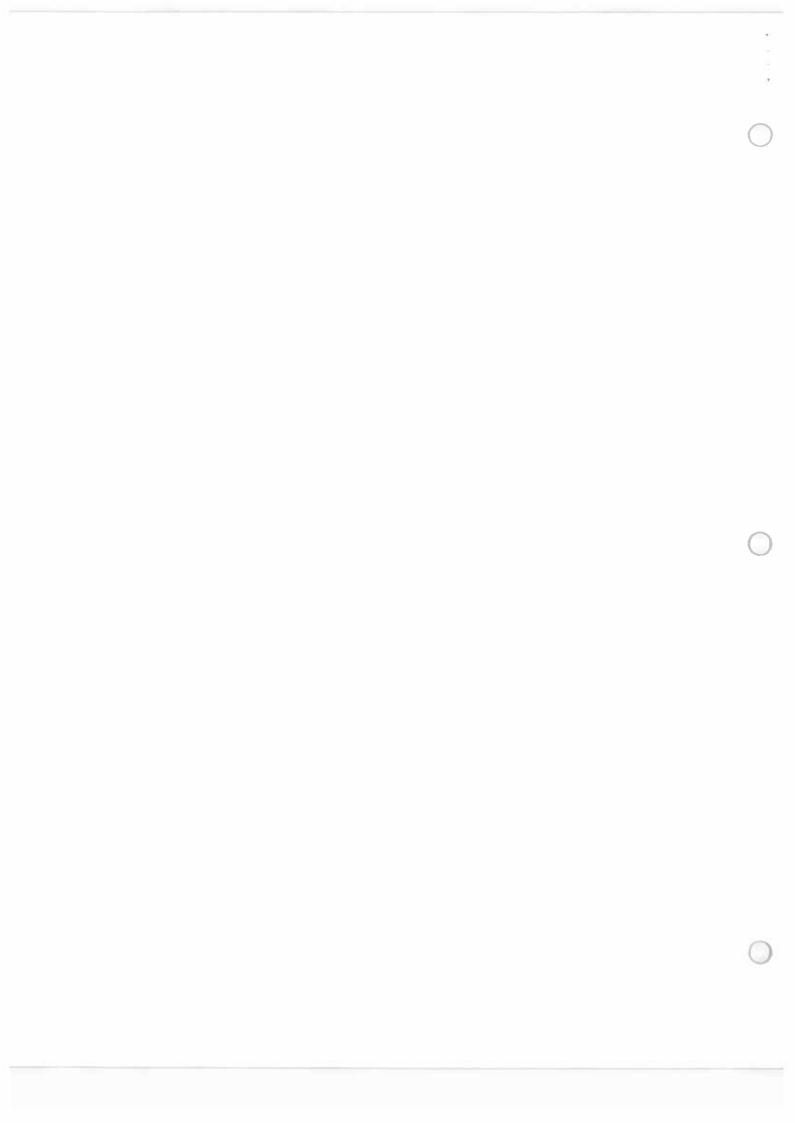
The memorandum calls for ASHRAE and the Council to join efforts in development and maintenance of technical standards and guidelines, communications and marketing, and research and education of members and the building industry.

"This year, ASHRAE has renewed focus in working with other organizations to share and further our technical guidance," Terry Townsend, P.E., ASHRAE president, said. "Working with the CaGBC will allow us to improve on our efforts in achieving energy savings without sacrificing comfort, air quality or productivity."

Thomas Mueller, president of the CaGBC, also is enthusiastic about the new collaboration.

"The CaGBC shares ASHRAE's interest in the opportunities to evolve the technical aspects of buildings," he said. "The work we can do together in Canada will benefit not only our respective memberships but anyone interested in engaging in better building practices."

The CaGBC was established in December 2002 to promote and accelerate the design and construction of high performance buildings for livable communities. The Council advances market transformation through advocacy, education, application and development of tools, and celebration of demonstrably superior performance. The CaGBC membership represents a reach of more than 500,000 public and private sector professionals across Canada.





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Educational Programs at ASHRAE '07

Health Care Design Guidance Provided in New ASHRAE Courses

ATLANTA — Guidance to help designers create safe indoor environments in health care facilities is provided in new educational courses at the AHR Exposition held in conjunction with ASHRAE's Winter Meeting.

In all, ASHRAE will conduct three professional development seminars and 14 short courses at the ASHRAE meeting, January 27-31 in Dallas. Among them are two new short courses related to health care facility design.

Health Care Facilities - Best Practice HVAC Design Considerations and Criteria introduces design considerations. A major emphasis is on the necessary considerations for various diagnostic and treatment and support areas. The course also offers guidance on how to deal with existing facilities, smoke and life safety design issues.

Health Care Facilities-Best Practice Applications of HVAC Systems introduces best practice designs, with a focus on air distribution designs for surgical and patient rooms. Various control and energy efficiency techniques for cooling and heating plants are presented along with O&M and other commissioning topics. Smoke control and life safety best practices and application issues also are covered.

Both courses are based on ASHRAE's HVAC Design Manual for Hospitals and Clinics.

"HVAC systems for hospitals and health care facilities have special requirements because of their functions and the unique susceptibility of patients," Anand Seth, P.E., design considerations course instructor, said. "Designers must create ventilation systems that minimize exposure hazards for health care providers, patients and visitors while providing a comfortable working environment."

The Professional Development Seminars organized by ASHRAE are:

- The Commissioning Process in New and Existing Buildings
- Facility/HVAC Terrorism Threat and Vulnerability Reduction
- Mechanical Insulation Training Program

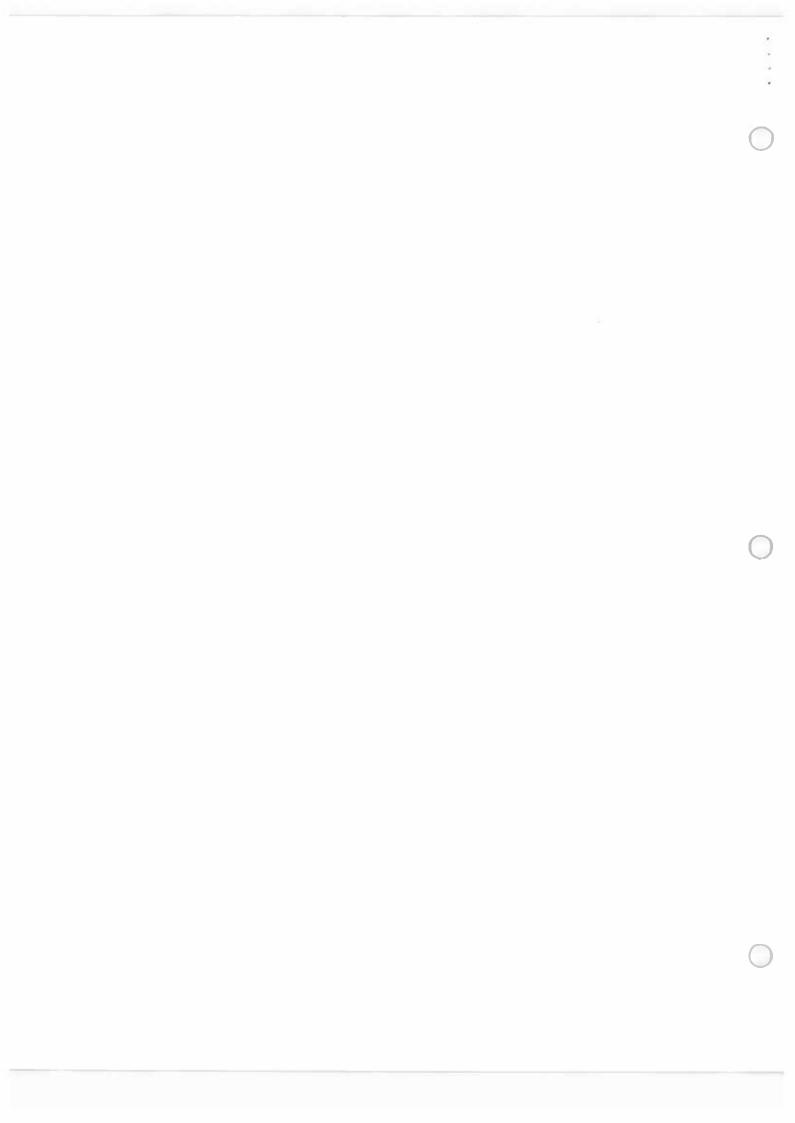
Each seminar is a full day long and includes handouts.

The 3-hour ASHRAE short courses being held at the AHR Expo are offered on the following topics:

- Successful Solar Applications
- Introduction to Ground Source Heat Pumps
- Introduction to Commercial Desiccant Dehumidification Systems
- Leadership Skills for Engineering Leaders Situational Leadership®
- Introduction to Thermal Energy Storage Systems for Air Conditioning
- Introduction to Green Buildings and Sustainable Construction
- Complying with Requirements of ASHRAE Standard 62.1-2004
- People Skills for Engineering Leaders— Myers-Briggs Type -Indicator® (MBTI®)
- MasterFormat 2004 and HVAC Specifications
- Compliance with ASHRAE Standard 90.1—2004 HVAC Mechanical
- Designing Residential Ventilation Systems to Meet ASHRAE Standard 62.2
- Emerging Dehumidification Enhancements for DX Cooling Systems
- Health Care Facilities Best Practice HVAC Design Considerations and Criteria
- Health Care Facilities-Best Practice Applications of HVAC Systems

Professional Development Seminars award attendees 6 PDHs and .6 CEUs and earn AlA and New York and Florida recognition. Short courses award attendees 3 PDHs, .3 CEUs, 3 AlA LUs and New York and Florida recognition.

For complete course information and to register, visit www.ashrae.org/dallas.





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ASHRAE Receives EPA Grant to Provide Advanced IAQ Guidance

ASHRAE – ASHRAE has received a \$510,000 grant from the U.S. Environmental Protection Agency (EPA) to provide guidance for designing and building healthier buildings with effective operation and maintenance programs that reduce exposure to toxics and asthma/allergy triggers.

The three-year grant will be used to write the Advanced Indoor Air Quality (IAQ) Design Guide for Non-Residential Buildings, which will help professionals implement high performance designs, improve indoor air quality performance, increase energy efficiency and decrease the environmental impact of exposure to air toxics in a broad range of non-residential buildings.

The grant is part of some \$4 million awarded by EPA to improve indoor air quality. ASHRAE will collaborate with the U.S. Green Building Council, the American Institute of Architects and other organizations that address indoor air

quality.

"Through the guide and an associated education effort, ASHRAE will improve the long-term environmental health for building occupants by reducing their exposure to air toxics and increased productivity due to greater comfort and health of building occupants," Terry Townsend, P.E., ASHRAE president, said. "The project addresses the EPA's priority areas of indoor air pollutants, which include asthma triggers such as dust mites, pests, mold and air toxics."

"We are thrilled to be working with ASHRAE on the Advanced IAQ Design Guide," Eric Werling, EPA project officer, said. "This guide will fill a critical information need for the building industry, and ASHRAE has the experience

and reputation to deliver a top-notch project."

The guide will facilitate the design process so that advanced practice can be accomplished within the constraints

of typical construction and design fees.

It is expected to be published in late 2008, with an ASHRAE Professional Development Seminar based on the guide available in late 2009.

Focus on Small Retail

ASHRAE Releases Next Advanced Energy Design Guide

ATLANTA - Buildings designers are one step closer to a net-zero energy building.

Published by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), the Advanced Energy Design Guide for Small Retail Buildings is the second in a series of publications that cover various types of building construction. Intended for use by builders, contractors and architects, the guide covers energy-efficient design for retail buildings up to 20,000 square feet.

"The purpose of the design guide is to provide a simple, prescriptive menu of options that will result in a building using 30% less energy than those constructed in accordance with the 1999 version of ASHRAE Standard 90.1, the foundation for energy efficiency in building codes throughout the United States," said Merle McBride, chairman of the committee overseeing the book's creation. "Those looking to achieve a LEED certification from the U.S. Green Building Council (USGBC) will find this guide particularly useful."

The guide offers energy efficiency guidance in many areas, including lighting, HVAC efficiencies, windows, skylights and envelope measures. A major difference from Standard 90.1 is that the guide provides equipment efficiencies by climate zone to take into account varying environmental factors, instead of having one number for the

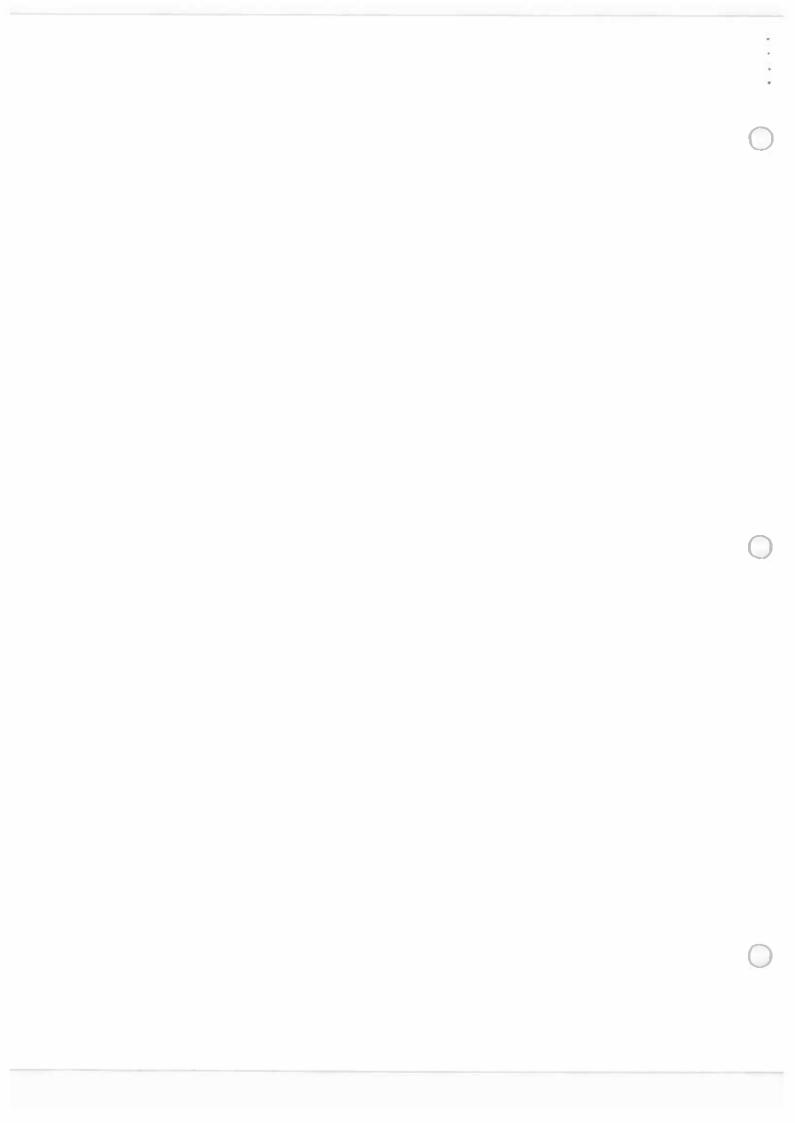
entire United States.

The guide resulted from collaboration among ASHRAE, the Department of Energy, USGBC, Illuminating Engineering Society of North America (IESNA) and the American Institute of Architects (AIA). The retail industry provided guidance to the guide's development team to ensure building owner perspectives were considered when forming design recommendations. To help in future editions, users of the guide will be able to provide feedback via an Internet link.

The guide is part of a series of ASHRAE publications that will progress toward providing net-zero energy designs for buildings of various types. The first publication in the series focused on small office buildings, and the next energy design guide will address K-12 schools.

"This is a long-term endeavor by ASHRAE," said McBride. "ASHRAE is focusing on improving the energy efficiency of the nation's building stock, targeting where the greatest energy—saving impact can be achieved."

The cost of the Advanced Energy Design Guide for Small Retail Buildings is \$59 (\$49, 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.





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

LONDON CANADA CHAPTER #116

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JAN 29/2008

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Meeting - Monday Jan 29/2007

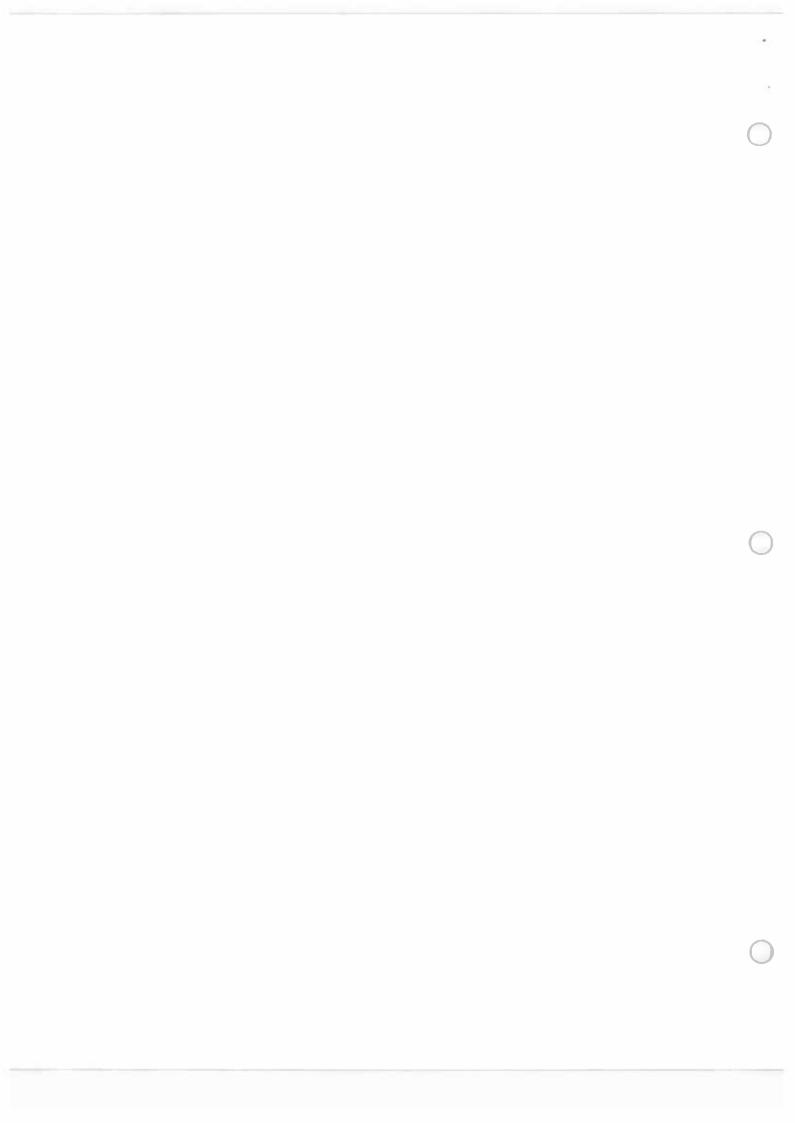
THE LAMPLIGHTER INN, 591 Wellington Rd., London

STUDENT NIGHT

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

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







http://LondonCanada.AshraeChapters.org Page 2

Mon Jan 29/2007

President's Message

Welcome back to all of you, I hope you had a great holiday season and happy new year. I see we are finally going to experiencing "Old Man Winter", you didn't think those gas low bills were going to last now did you? Here we are at the end of another month, and I would like to extend the invitation to all of you to join us Jan. 29th for a talk on Energy Recovery systems.

Due to a last minute cancellation a change in speakers and topics was in order. Mr. James Moore was able to accommodate us and will be speaking on Timeless Engineering Design. Our original topic of "Improving Load Calculations for Fenestration with Shading Devices" may be something we can revisit at a future ASHRAE meeting.

The ASHRAE Society Winter Meeting is being held during the AHR Expo Show in Dallas, TX January 29 ~ 31st.. I'm sure that some of you will attending the show and maybe the Society Meeting. Daryl Somers, the Nominating Member for Region II, will be one of those attending the winter meeting. Unfortunately Daryl will not be available for our February meeting, however I will hold him to giving us a short summary of some of the activities at the Society level at our March meeting.

Hope to see you at the January 29 meeting,

Scott Turner - President scott@somersep.com London Canada Chapter President 2006-2007



ASHRAE is committed to advancing its programs and services for young members. With this in mind, ASHRAE has created a subcommittee called Young Engineers in ASHRAE (YEA), for members age 30 and younger!

Be sure to visit www.ASHRAE.org -> Members --> YEA

<u>November Meeting Summary</u>

Novembers meeting saw a fantastic turnout as Mr. Julian Rimmer of EH Price spoke to us on Displacement Ventilation Systems, and Overhead Air Distribution in green buildings and their relevance to the LEED program. Julian used great visual aids and scenarios in explaining how displacement ventilation differs itself from conventional systems. Thanks again to Julian for taking time from his busy schedule to come out and talk to us.

Pete Edmiston

ranch Manager



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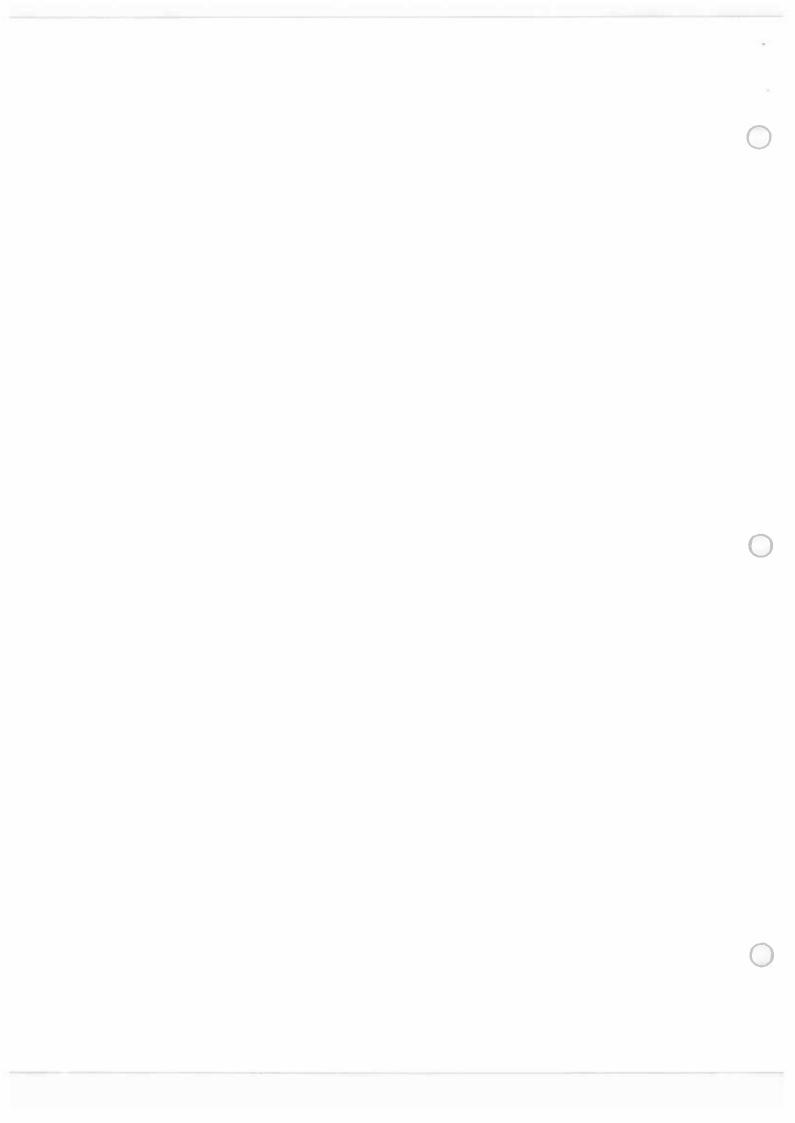
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http://LondonCanada.AshraeChapters.org Mon Jan 29/2007

Fundamentals of Standard 90.1 ANSI/ASHRAE/IESNA Standard 90.1

Learn How to Comply Online, with ASHRAE eLearning Is compliance with Standard 90.1 a key part of your work?

You can now take an online course, at your PC, that will show you how to:

- * Apply the detailed requirements of ANSI/ASHRAE/IESNA Standard 90.1
- Understand and make best use of the information in the Standard, the User's Manual and EnvStd software
- * Fill out the paperwork to gain compliance first time
- * Translate the principles of the Standard to local and state adaptations

Fundamentals of Standard 90.1 provide 35 PDH or 3.5 CEU credits. It is a US Green Building Council Approved Education Provider Program.

Visit the web site to take the first 2 modules of the course for Free. There is a \$200 Discount for ASHRAE Members.

Direct web link:

http://www.cyweb.co.uk/clients/ashrae/fundamentals_901.htm

ASHRAE WEB SITE UPDATE

Member Login Changes

ASHRAE has launched the first phase of its new integrated membership database. As part of this change, you will need to login using your e-mail address and personal identification number (PIN).

Manage Your Membership

You can manage various aspects of your membership online, including paying dues and updating your bio.

ASHRAE SATELLITE BROADCAST & WEBCAST

April 18, 2007

Indoor Environmental Design: Practical Solutions to Everyday Problems

This free broadcast will present specific solutions to the everyday challenges of achieving indoor environmental quality within real-world budget constraints. Speakers will describe how you can provide ventilation air that helps protect the building from mold risk, how to avoid the three most common mistakes in ventilation system design and operation, how to achieve all three goals of IAQ, thermal comfort and noise control at lower cost through better air distribution decisions, and how to provide comprehensive filtration without breaking your budget. This program is sponsored by ASHRAE's Chapter Technology Transfer Committee

Online registration for site coordinators and webcast viewers begins March 1. Registration for satellite viewers begins March 15. Information about the speakers and program is available at: www.ashrae.org/iedbroadcast

A \$50 discount off a one-year membership will be extended to anyone who joins ASHRAE as a new member in conjunction with the broadcast. See website for details.



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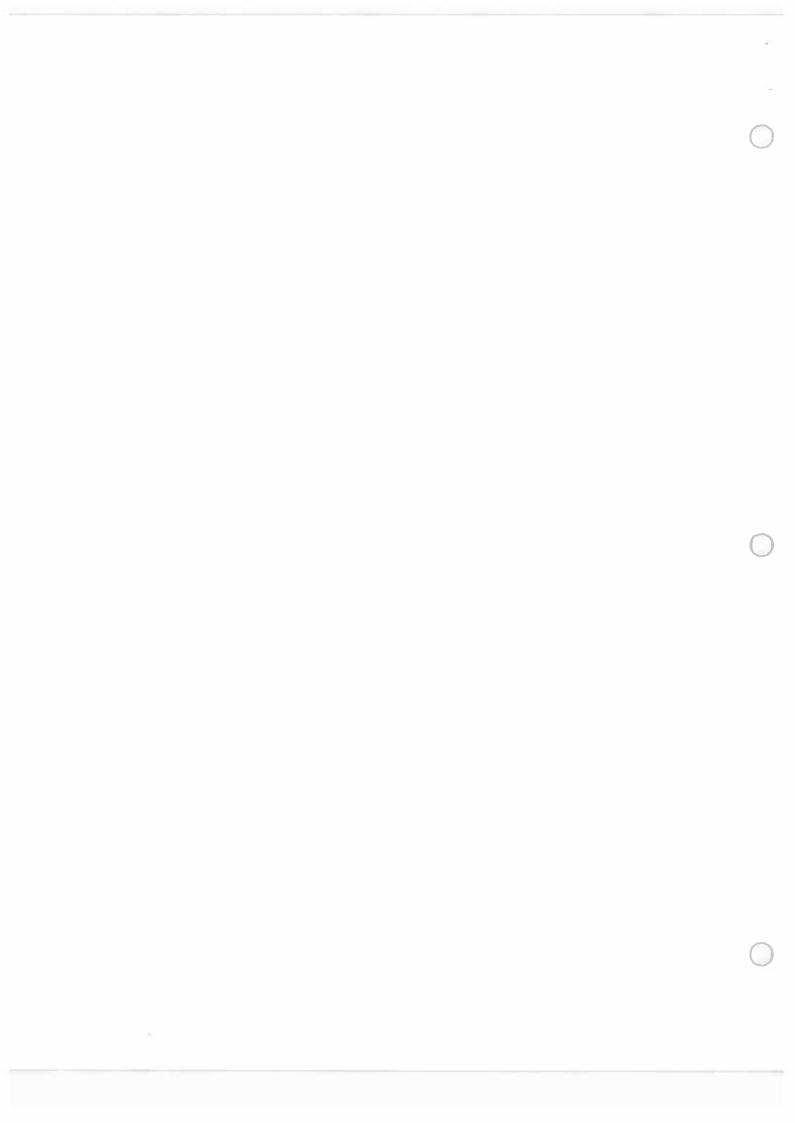
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http://LondonCanada.AshraeChapters.org Mon Jan 29/2009

Learn to Meet, Beat 90.1 Requirements with new eLearning Course

ATLANTA - Guidance to help users design buildings that are in compliance with ASHRAE's energy efficient standard is available through a new online learning course.

The Fundamentals of Standard 90.1 is the newest offering in ASHRAE's eLearning system, which provides on-demand, interactive online courses that include hardbound and online course reference books, online self-assessment and continuing

ANSI/ASHRAE/IESNA 90.1-2004, Energy Standard for Buildings Except Low-Rise Residential Buildings, has become the basis for building codes, and the standard for building design and construction throughout the United States.

The new eLearning course is designed to help you go through the standard and learn about each of the requirements," said Carol Marriott, P.Eng., a former member of the Standard 90.1 committee who helped develop the new module. "In school, you had assignments to enforce retention of the concepts you learned. The eLearning course is designed exactly the same way, in that it reinforces learning by providing questions to practice the concepts learned, and applying the 90.1 requirements to sample questions. Most users will hardly even realize they are learning as it is designed for users to have fun while doing the work."

The course explains:

- The detailed requirements of the standard so that they can be applied in designing buildings that are in compliance with 90.1;
- How to use available resource material, such as the standard and the User's Manual, to design and construct building in compliance with the standard;
- How to complete compliance documentation in a satisfactory manner the first time; and

How to translate the key principles of the standard to local and state adaptations.

Marriott said the course is one of three key elements in learning about the requirements, along with the actual standard and the Standard 90.1 User's Manual.

The course is the second in ASHRAE's eLearning system. The first, Fundamentals of HVAC Systems, provides a thorough and comprehensive introduction to how HVAC systems function in controlling temperature, air quality, and air circulation in a conditioned space.

For more information about ASHRAE eLearning Systems, visit www.ashrae-elearning.org.

Become Part of the Green Team: New Guidance from ASHRAE

ATLANTA - Looking to become a more effective player on the green team?

ASHRAE GreenGuide: The Design, Construction and Operation of Sustainable Buildings will help teach designers how to participate effectively on design teams charged with producing green buildings.

This is a design guide for mechanical engineers who are interested in advancing integrated, high performance/green concepts and applications on building design projects," said Malcolm Lewis, Ph.D., a member of ASHRAE's technical committee on building environmental impacts and sustainability, which wrote the book. "The guidance will help building professionals analyze system design options and point them in the right direction for deeper analysis."

The book, an update to the 2003 version of ASHRAE GreenGuide, contains a new chapter outlining guidance on the Leadership in Energy and Environmental Design (LEED™) Rating System developed by the U.S. Green Building Council. The chapter discusses ways in which LEED credits affect engineers and how they can best respond to the opportunities presented by the use of LEED on projects.

The GreenGuide will assist the design and development team in striving for a level of accountability as to the effectiveness of their efforts to produce a building that is truly green," Lewis said.

The book also contains a new chapter on how HVAC&R systems interact with the local environment and methods for mitigating or reducing that impact.

"There are some areas that are either not intuitively obvious as being potential impacts of HVAC systems or are items that some may not consider to be truly sustainable issues," Lewis notes.

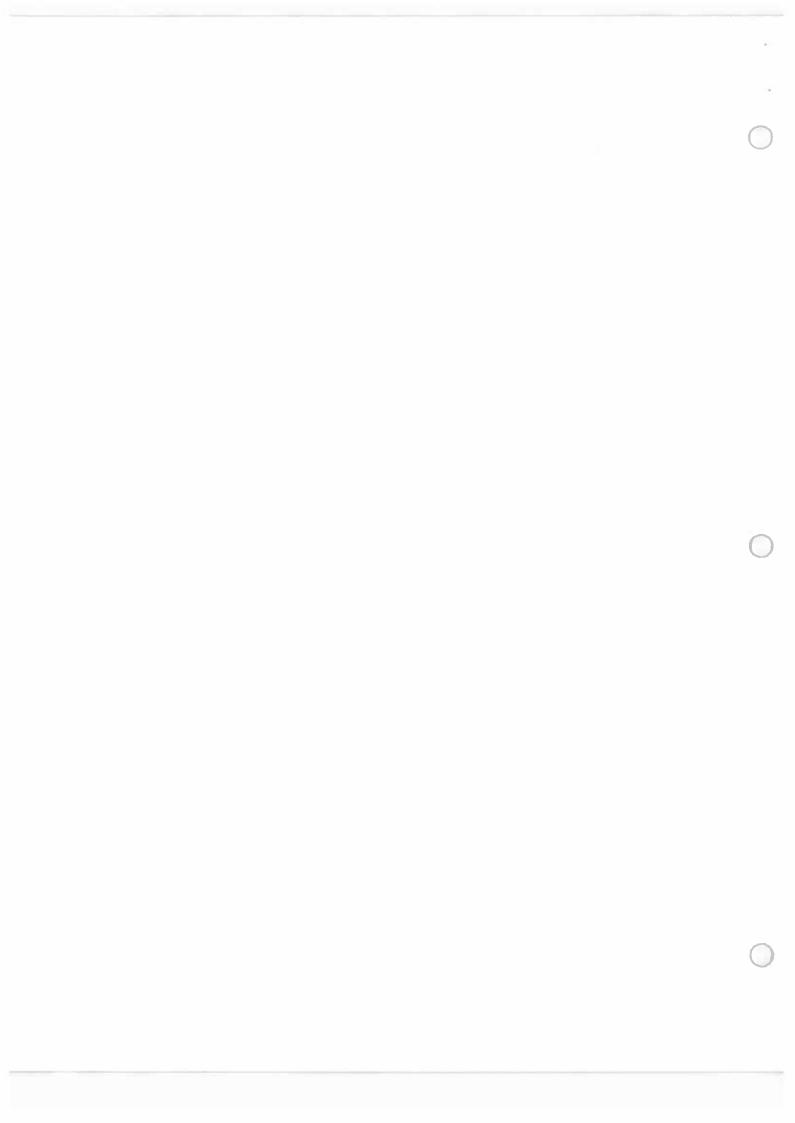
The ASHRAE GreenGuide also contains more than 40 GreenTips, which are sidebars containing information on techniques, processes, measures or systems. The tips contain a list of other sources for reference. To read the GreenTips, visit www.engineeringforsustainability.org.

This is the first in a new series of books, known as The ASHRAE Professional Series, published in cooperation with Butterworth-Heinemann/Elsevier. The series is intended to provide high-quality professional information for a global audience of HVAC&R engineers as well as professionals in related fields.

The cost of the ASHRAE GreenGuide is \$79.95 (\$62.95, 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. 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.





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ASHRAE Publishes User's Manual for Standard 62.2

ATLANTA – A new book from ASHRAE will aid users in designing and constructing homes and apartments that comply with its residential ventilation and indoor air quality standard.

The User's Manual is the first for ASHRAE Standard 62.2-2004, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings, which provides the minimum requirements necessary to achieve acceptable indoor air quality for dwellings.

The manual was co-developed by the Indoor Air Quality Association.

"The 62.2 User's Manual will provide HVAC engineers and IAQ consultants with practical information to ensure that ventilation positively affects the indoor environment," Robert G. Baker, IAQA president and ASHRAE Member, said. "IAQA was pleased to be a co-sponsor of this dynamic publication."

The manual explains how to comply with all the requirements of the standard, provides examples illustrating specific methods

of

complying with sections of the standard, and includes background material explaining why many of the requirements of the standard exist, according to Roger Hedrick, who co-authored the book.

The manual is targeted toward builders and subcontractors, but will also be useful for code officials, researchers, and interested homeowners.

"The manual has been developed as a document that will accompany Standard 62.2 and provide guidance for applying its requirements to the design and construction of residential buildings," David Grimsrud, chair of the Standard 62.2 committee, said. "It serves as a guide to clarifying issues for users."

The cost of the 62.2 User's Manual is \$45 (\$36, 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.

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and promote a sustainable world through research, standards writing, publishing and continuing education.

IAQA, founded in 1998, is an international organization of 5,200 members. IAQA is a non-profit, multi-disciplinary organization, dedicated to promoting the exchange of indoor environmental information, through education and research, for the safety and well being of the general public. For more information, visit www.iaqa.org.

IAQ 2007 Conference to Discuss Sustainable Buildings

ATLANTA - Healthy and sustainable buildings are the talk of the building industry, but what exactly defines what a healthy building is?

ASHRAE will discuss this and other topics at its IAQ 2007: Healthy and Sustainable Buildings conference in Baltimore Oct. 15-17.

IAQ 2007 addresses what tools and metrics can be used to quantify buildings' health and sustainability and how indoor air quality can be certified as sustainable. Plenary session speakers will compare the functionality of rating systems, how they can be improved and what information other than the ratings can developers, designers and public entities use to distinguish high-performing buildings.

Kevin Hydes, P.Eng., P.E., chair of the Board of Directors of the U.S. Green Building Council, will address the Council's Leadership in Energy and Environmental Design building rating system and case studies. Nils Larsson, executive director of the International Initiative for a Sustainable Built Environment, will cover the same questions for other rating systems, labels and green

building/IAQ metric tools.

"Buildings' health and efficiency impact everyone," said Larry Schoen, chair of the committee organizing the conference. "It's important to discuss how our designs as building professionals will affect the occupants' lives and the global community for many years to come. This conference helps attendees learn how we can work together to maximize sustainability."

The conference is open to anyone with a stake in the built environment or with an interest in indoor air quality, including researchers, policy makers, owners, designers, builders, building operators and remediation experts.

To submit an abstract to be a speaker at the conference, visit www.laq2007.org. The submission deadline has been extended to Jan. 15, 2007.

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07' ASHRAE

Measures to Attain Major Energy Savings Shared at ASHRAE Seminar

ATLANTA - Guidance for building design engineers and owners that will result in buildings cutting their energy usage in half by 2010 currently is being developed by leading organizations in the building environment industry.

Achieving that goal will require more than simply substituting or adopting new technologies and systems. It will acquire changes in design practice in which the design team converts energy strategies into building plans, sections, details and construction.

An update on some of the measures that have been demonstrated to yield significant energy reductions will be presented at ASHRAE's 2007 Winter Meeting in a seminar, Achieving 50% and Beyond Approach to Net Zero Energy Use in Buildings Part 1. It takes place from 7:45-9:15 a.m. Monday, Jan. 29, and is followed by Part 2 from 10:45 a.m.-12:15 p.m.

The guidance is being developed by ASHRAE in cooperation with the American Institute of Architects, the Illuminating Engineering Society of North America and the U.S. Green Building Council, through a series of Advanced Energy Design Guides for the commercial building sector.

John Mitchell, P.E., is chairing a scoping committee studying ways to achieve building designs as close as is feasible to net zero energy use, defined as "a building which, on an annual basis, uses no more energy than is provided by the building's on-site renewable energy sources." This study will provide the basis for the development of Advanced Energy Design Guides to go 50 percent and beyond minimum standards for energy use.

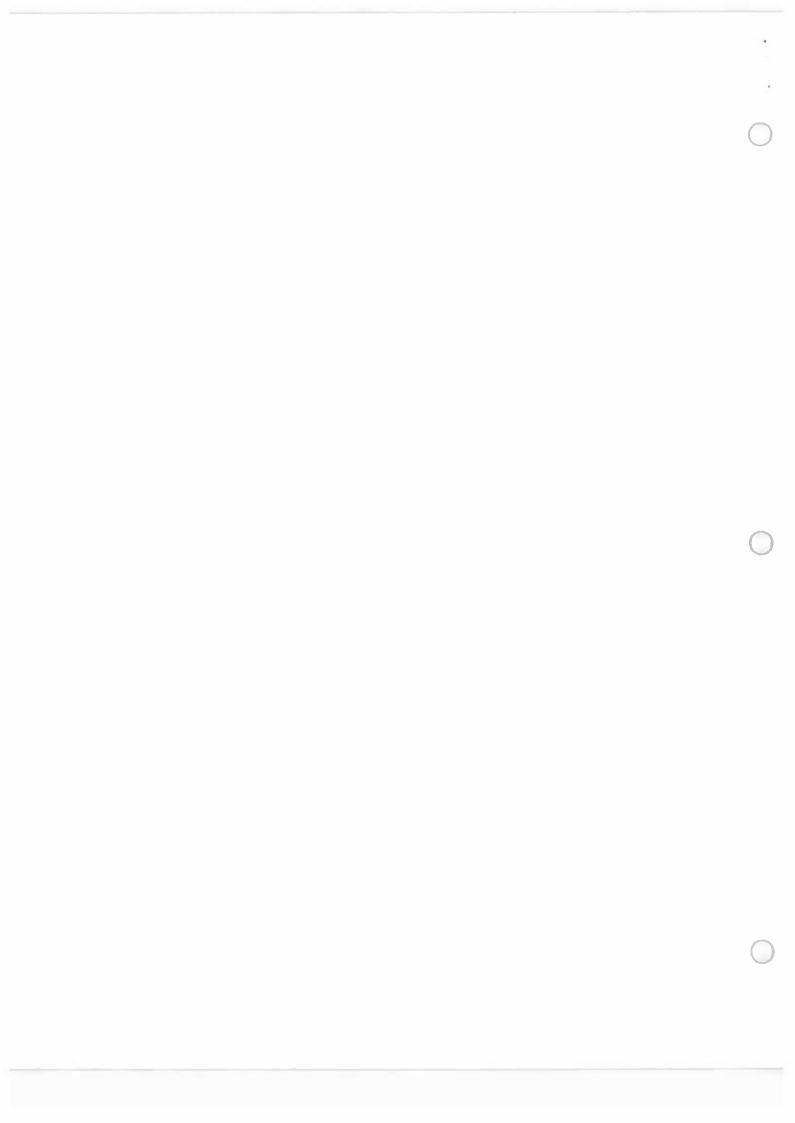
The goal of a 50 percent approach to net zero energy use, on either a site or source basis, is feasible," he said. "There are no apparent technological barriers to achieve the desired energy reductions but aggressive energy conservation strategies and energy generation are needed."

The scoping study recently was completed and identified measures that achieve significant energy savings. Some of the measures identified are:

- Improved daylighting and electrical illumination systems
- Reduction of parasitic power requirements in air and water distribution systems
- Separate treatment of ventilation and internal thermal loads
- Improved delivery of conditioning to where it is needed
- Improved part load performance of HVAC components
- Water loop heat pump systems.
 - Information related to the Advanced Energy Design Guide series can be found at www.ashrae.org/aedg. Speakers in the seminars are:
- Net Zero Energy Building Ideas The Path Toward Net Zero Energy Use, John W. Mitchell, Ph.D., P.E., University of
- Architectural Perspective as a Bridge to Engineering, Jeff Levine, American Institute of Architects, New York, N.Y.
- What Has Been Done? Case Study Review, David Hewitt, New Buildings Institute, White Salmon, Wash.
- Integrated Design Process Making it Possible, Jeff Levine, American Institute of Architects, New York, N.Y.
- Daylighting Advanced Lighting, Daylighting and Controls, Stephen Selkowitz, Lawrence Berkeley National Laboratory, Berkeley, Calif.
- Distribution Systems Air, Wayne Reedy, Carrier Corp., Indianapolis, Ind.
 Distribution Systems Water, Stephen Kavanaugh, Ph.D., University of Alabama, Tuscaloosa, and Harvey Sachs, Ph.D., American Council for an Energy-Efficient Economy, Washington, D.C.
- HVAC/Ventilation, Michael Brandemuehl, Ph.D., University of Colorado, Boulder, Colo.

For more information about the ASHRAE meeting, visit www.ashrae.org/dallas.

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ASHRAE Receives Recognition for Sustainability Efforts

ATLANTA – ASHRAE has been recognized by the Sustainable Buildings Industry Council for the Society's educational efforts related to sustainability.

Last week, ASHRAE received a Best Sustainable Practice Award in the Educational Initiatives category, which recognizes the

best products, processes, educational tools and outreach initiatives.

The award centered on the presidential challenge made by Terry Townsend of ASHRAE's promise for a sustainable future. To fulfill that challenge, ASHRAE is using its expertise and tools to provide cost-effective solutions in designing, operating and maintaining energy efficiency and sustainable buildings.

"The sustainability initiative is stimulating conversation inside ASHRAE about what it means to be sustainable and the importance of protecting today's natural resources for future generations," Townsend said. "We are pleased to be recognized by the Sustainable Buildings Industry Council (SBIC) for our

efforts."

The Awards program was established in 2001.

"The Best Sustainable Practice category recognizes the excellent innovations and unique contributions SBIC members are making toward building a sustainable future in America," Douglas K. Schroeder, associate director of SBIC, said. "This year's competition was exceptionally competitive, but for the second consecutive year, the SBIC jury recognized the valuable contributions ASHRAE is making to the buildings industry."

Realizing that sustainability cannot be accomplished without measurable goals, ASHRAE has put in place some 35 specific challenges, ranging from a proposed water conservation standard, development of building performance metrics, research and

design guidance resulting in net zero energy use buildings and greening of ASHRAE meetings.

To generate excitement and increase member awareness, ASHRAE created a three-part DVD, featuring a video of Townsend fishing with his grandchildren illustrating the importance of sustainability, Townsend's recorded presidential speech, and a short video highlighting why ASHRAE is taking on this challenge.

The DVD is part of a total communications package from ASHRAE to inspire members and the industry about the challenges

and opportunities related to sustainability.

Other aspects include a promotional slide chart explaining the benefits of sustainable design measures, a Website, www.engineeringforsustainability.org, featuring sustainability guidance from ASHRAE; creation of a page on ASHRAE.org, www.ashrae.org/building, focusing on ASHRAE's planned renovation of its Headquarters building as sustainable; and use of ASHRAE publications and other outreach vehicles to spread the word about the Society's work.

The award is the second for ASHRAE from SBIC. Last year, the Advanced Energy Design Guide for Small Office Buildings published by ASHRAE and the ASHRAE Journal supplement, "Building for the Future," were recognized with honorable mention in

the educational initiatives category.

<u>Liquid Cooling Guidelines Available</u> IT Heat Load Solution Discussed in New ASHRAE <u>Publication</u>

ATLANTA — Heat loads generated by IT equipment can present significant problems for data centers by introducing effects such as decreased equipment availability, wasted floor space and inefficient cooling system operation. One solution, liquid cooling, is described in detail in ASHRAE's new publication, Liquid Cooling Guidelines for Datacom Equipment Centers.

Liquid Cooling Guidelines for Datacom Equipment Centers covers a broad range of liquid cooling topics such as facility cooling systems, facility piping design, liquid cooling implementation for datacom equipment, liquid cooling infrastructure requirements for chilled water systems, and liquid cooling infrastructure requirements for technology cooling systems.

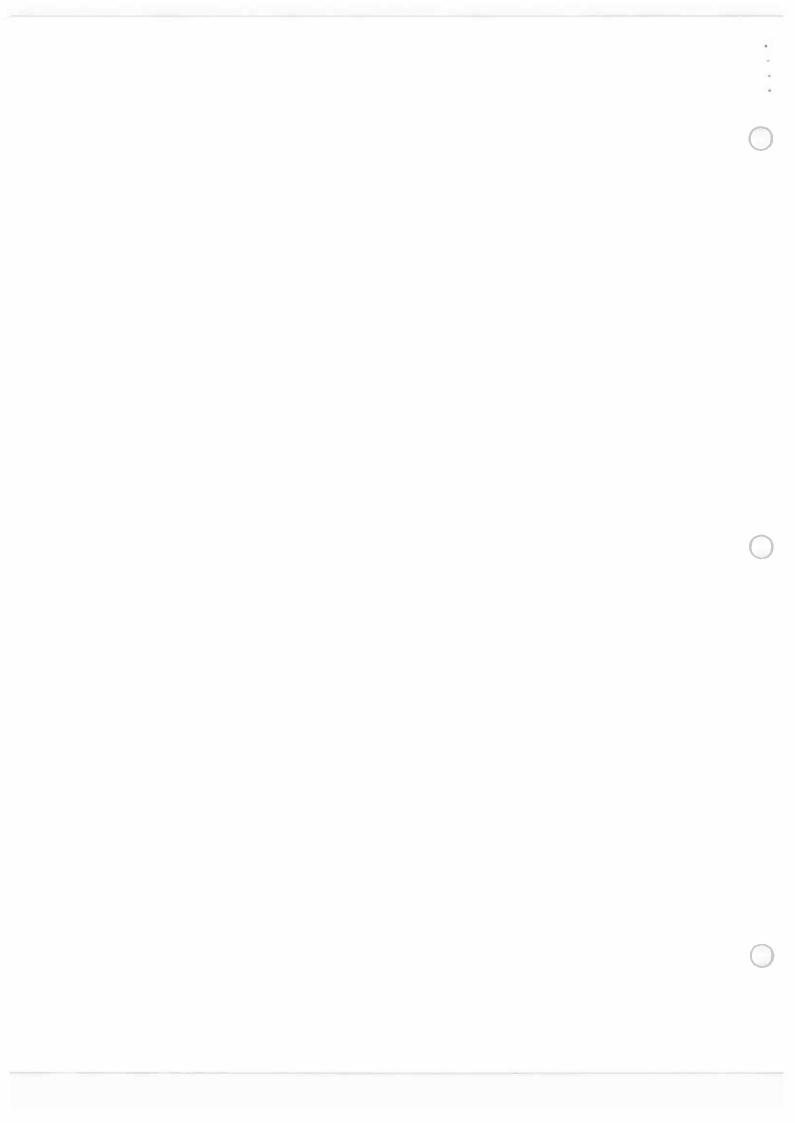
The book is the fourth in a series written by ASHRAE Technical Committee 9.9, Mission Control Facilities, Technology Spaces

and Electronic Equipment.

"The book incorporates the experience of liquid cooling from the mainframe days," says Roger Schmidt of IBM and chair of TC 9.9. "Liquid cooling is a proven technology, and the book provides a good central source of liquid cooling information from the datacom equipment to the facility level."

The cost of Liquid Cooling Guidelines for Datacom Equipment Centers is \$49(ASHRAE members, \$39) and is available in print and download versions. 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 Bookstore at www.ashrae.org.

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





http://LondonCanada.AshraeChapters.org Mon Jan 29/2009 Page 8

Major Study of Aircraft Cabin Air Quality Launched by ASHRAE

ATLANTA — Good afternoon and thank you for flying with us. We want to make sure you are as comfortable as possible during the flight, so please let us know — how's the air quality? Is the temperature ok? Do we need to adjust the lighting? Thanks again for flying Indoor Comfort Airlines.

This is the message millions of U.S. and international airline passengers could be hearing in the near future thanks to a study funded by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and conducted by Battelle, a Columbus, Ohio-based global services and technology enterprise.

The research project will examine the link between aircraft cabin air and health symptoms and discomfort experienced by passengers and crew members.

"The aircraft cabin is a challenging microenvironment for maintaining the health, comfort and well-being of passengers and crew," said Jeff Myers, principal investigator for Battelle. "Space is limited, conditions can feel cramped, the outside environment is extreme, and travelers may experience anxiety over loss of control over their situation and environment. Through this study, we will determine the causes of passenger and crew discomfort and use that information to make flights more comfortable."

More than 600 million passengers fly U.S. carriers each year, with thousands of crew members spending much of their working time in densely packed airliner cabins.

During flights, passengers and crew can experience noise, reduced atmospheric pressure, poor lighting, vibration, low relative humidity, variable temperature and potential air quality degradation.

The study, set to begin early this year, will be carried out on several international and domestic commercial airlines. It also has the support of the Federal Aviation Administration's Air Transportation Center of Excellence for Airliner Cabin Environment Research.

Results from the research could be used by manufacturers to modify aircraft to improve air quality or by airline companies to make more low-impact changes, such as adjustment of lighting.

As part of the research, passengers on 160 flights will be surveyed about their perceptions of air quality on the flight. The flights will vary in distance, lengths and time zones.

Following the surveys, the top causes for statistical variation (such as the most complaints by time zone) will be ranked. Scientists then will travel on those flights, using on-board monitoring instruments to measure carbon monoxide and dioxide, respirable particles and volatile organic compounds among others.

The research is the second phase of a \$1.8 million research project. In the first phase in 2004, passengers and crew surveyed on four flights out of Cincinnati, Salt Lake City, Chicago and Seattle indicated that the overall cabin air quality was adequate.

Indoor Environmental Design Focus of ASHRAE Satellite Broadcast

ATLANTA - Specific solutions to the everyday challenges of achieving indoor environmental quality within real-world budget constraints will be presented by ASHRAE in an upcoming satellite broadcast/Webcast.

Indoor Environmental Design: Practical Solutions to Everyday Problems, sponsored by ASHRAE's Chapter Technology Transfer Committee, will take place from 1-4 p.m. EDT, April 18.

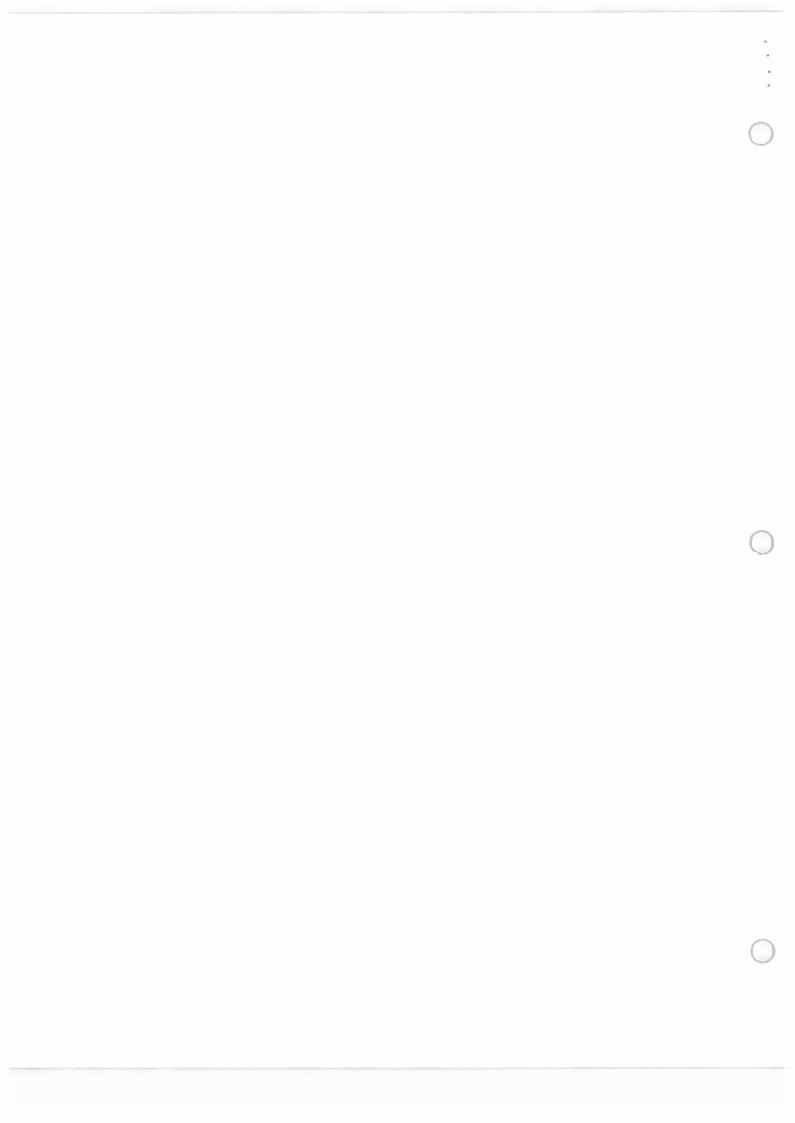
"This program will benefit designers, building owners, architects, contractors and facility managers who are faced with the daily engineering challenge of specifying systems that maximize IAQ, thermal comfort and noise control," said Bill Williams, chair of the broadcast committee. "Viewers will be given guidance on how to provide ventilation air that helps protect buildings instead of increasing mold risk, how to avoid the three most common mistakes in ventilation system design and operation, and how to provide comprehensive filtration without breaking their budget."

Bill Coad, P.E., president of Coad Engineering Enterprises, St. Louis, Mo., and past ASHRAE president, will present an overview perspective on indoor environmental quality and introduce the following panel of experts:

- Hoy Bohanon Jr., P.E., owner and consultant, Bohanon Engineering Winston-Salem, N.C., "Ventilation System Design: Avoiding Three Common Mistakes."
- Lew Harriman, director of research, Mason-Grant, Portsmouth, N.H., "Ventilation Air: First, Do No Harm."
- Dan Int-Hout, chief engineer, Krueger-HVAC, Richardson, Texas, "Noise, IAQ and Thermal Comfort Can You Have It All?"
- Chris Muller, technical director, Purafil, Doraville, Ga., "Behind the Access Door Advances in Affordable Filtration for IAQ."
 Online registration opens March 1 for satellite broadcast site coordinators and Webcast participants at

www.ashrae.org/IEDbroadcast. Registration for satellite downlink viewers begins March 15. There is no fee for registration. For more information, email ashrae-satellitebroadcast@ashrae.org or call 678-539-1139.

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





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

LONDON CANADA CHAPTER #116

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WED FEB 21/2007

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Golf Tournament

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Newsletter

Tom Pollard ph: 519-685-2570 tpollard@execulink.com TOPIC:

TECHNICAL TOUR

BIOTRON FACILITY and

West Valley Bldg (Animal Care)

University of Western Ontario

The Biotron facility is a brand new state of the art facility for studying complex interactions in ecosystems. HVAC&R systems will play a pivotal role in maintaining the biosphere and laboratory conditions for the researchers.

Please <u>bring safety shoes and hard hats</u> (if you have extra safety equipment, some UWO students may also need to borrow for the tour).

Meeting - Wed Feb 21/2007

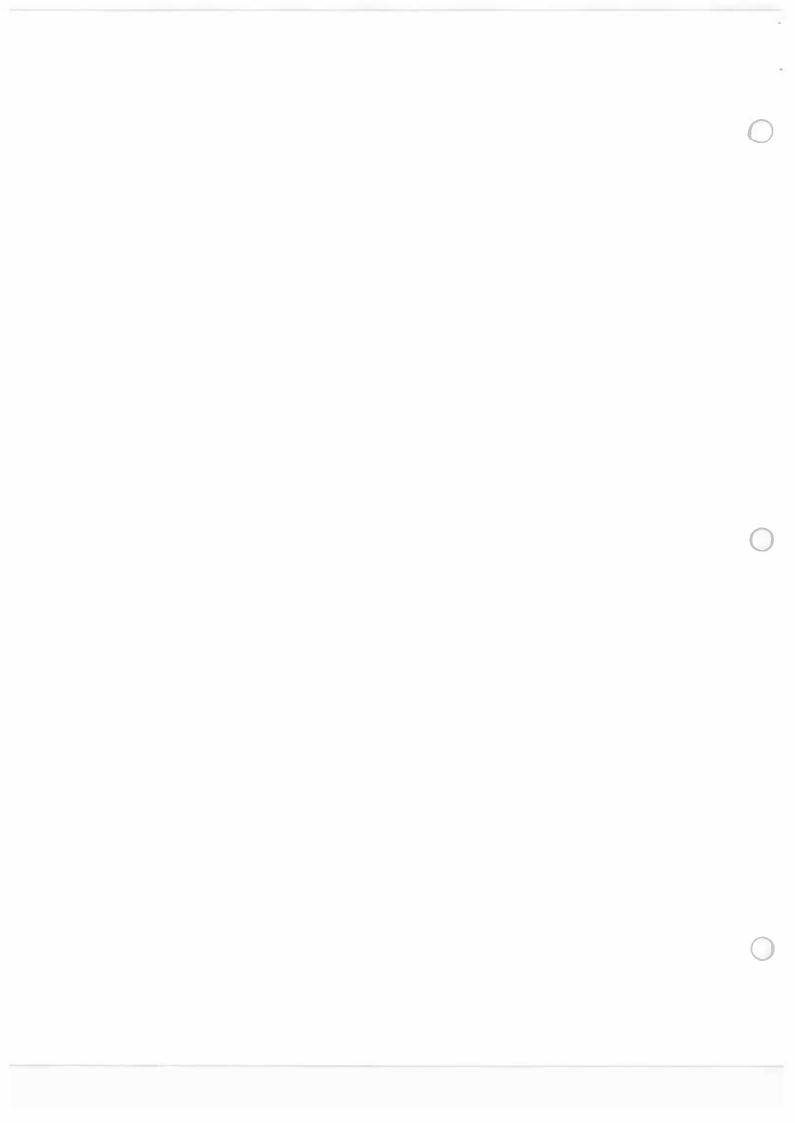
BIOTRON BUILDING University of Western

STUDENT NIGHT

London Chapter Members = \$25.00 Others = \$35.00

Meeting Location:
Biotron Building Lobby at 5:00pm
with dinner to follow the tour

UWO MAP IS ATTACHED





http://LondonCanada.AshraeChapters.org Wed Feb 21/2007

President's Message

I would like to start by apologizing for the change in dates for this months meeting. In an effort to make this a student activities night that did not conflict with exams, we overlooked the fact that the week of the 26th would be "Slack Week", and therefore decided to change the tour date to the 21st in hopes this would help provide a good turn out of students.

The University of Western Ontario has certainly seen quite a few construction projects big and small over the last several years and I look forward to being able to tour a couple of these such projects. Should you have any additional safety equipment (ie hard hat) we may need some extras. A special thanks to George Qubty of UWO for arranging the tour.

Mark your calendars for March 19 as we will be hosting a Distinguished Lecturer at the Lamplighter. Mr. Evans J. Lizardos, P.E. will be talking to us about Innovative Airside Systems Designed to Conform to ASHRAE 90.1 and Improve IAQ and Avoid the Use of Reheat.

Hope to see you on both of these occasions.

Scott Turner London Canada Chapter President 2006-2007

<u>February Tech Tour</u>

We would like everyone to meet in front of the Biotron entrance by 5PM. We will tour the new building for 45-30 minutes, then walk over (or drive over if people prefer) to the West Valley Bldg (also known as the Animal Care Facility) and tour the mechanical room along with a short demo of the HVAC control system by Durell Controls for another 45-30 minutes. We expect to be done the tour around 6:30 and then head to East Side Mario's for dinner.

The ASHRAE London Chapter has invited some UWO students to the tour and we would ask those that have room to provide a ride to the restaurant & back.

Please bring safety shoes and hard hats as the West Valley Bldg (Animal Care Facility) is still under construction.

Parking should be available in the lot across the street (just north of the Labatt Visual Arts Building).

Scott Edmunds London Canada Chapter Vice President 2006-2007

UWO MAP IS ATTACHED TO THIS NEWSLETTER







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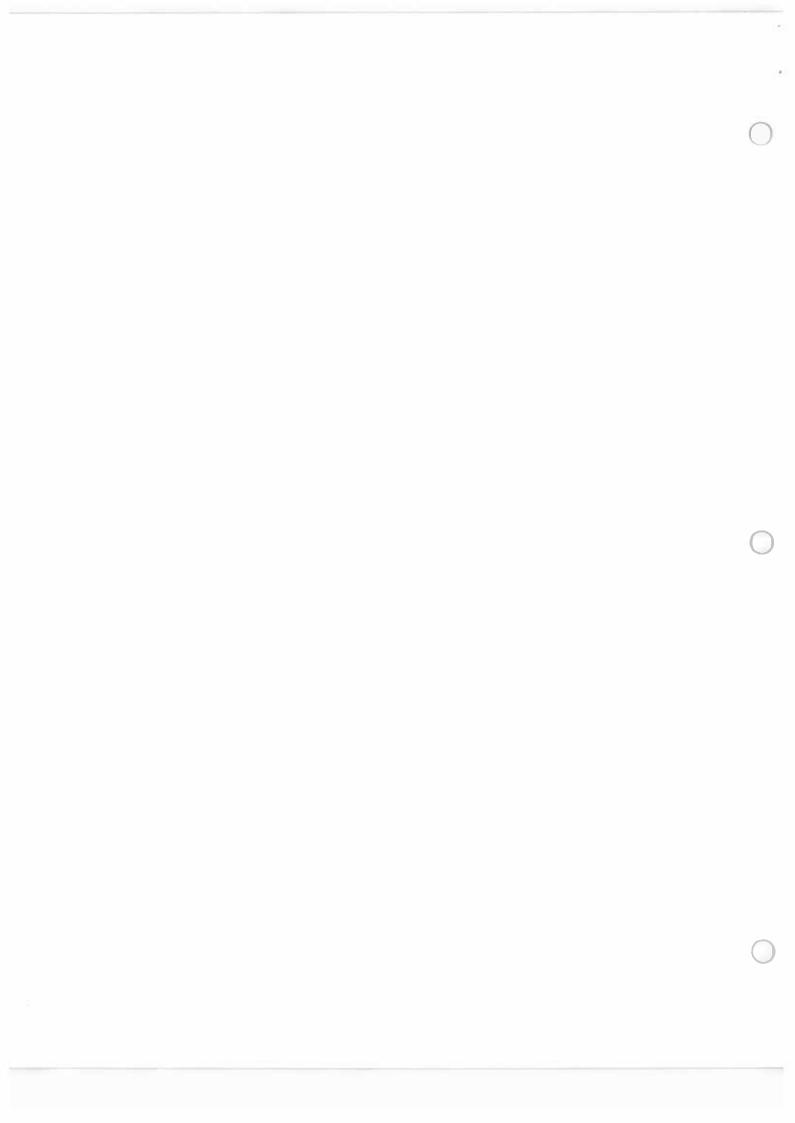
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http://LondonCanada.AshraeChapters.org Page 3 Wed Feb 21/2007

January Meeting Summary

The January 29th meeting had a substitute speaker James Moore from Lahren James Incorporated. Mr Moore spoke briefly on some history of hvac equipment and has some old reference textbooks at the meeting. In addition, James discussed the operation of a industrial style of heat recover unit and presented several photos showing the installation of equipment at different projects.



Committee



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Jim Bender, P.Eng.

Online registration for site coordinators and webcast viewers begins March 1. Registration for satellite viewers begins March 15. Information about the speakers and program is available at: www.ashrae.org/iedbroadcast

ASHRAE SATELLITE BROADCAST & WEBCAST

April 18, 2007

Indoor Environmental Design:

Practical Solutions to Everyday Problems

This free broadcast will present specific solutions to the everyday challenges of achieving indoor environmental quality within real-world budget constraints. Speakers will describe how you can provide ventilation air that helps protect the building from mold risk, how to avoid the three most common mistakes in

ventilation system design and operation, how to achieve all three goals of IAQ, thermal comfort and noise control at lower cost through better air distribution

decisions, and how to provide comprehensive filtration without breaking your

budget. This program is sponsored by ASHRAE's Chapter Technology Transfer

A \$50 discount off a one-year membership will be extended to anyone who joins ASHRAE as a new member in conjunction with the broadcast. See website for details.

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BUILDING AUTOMATION

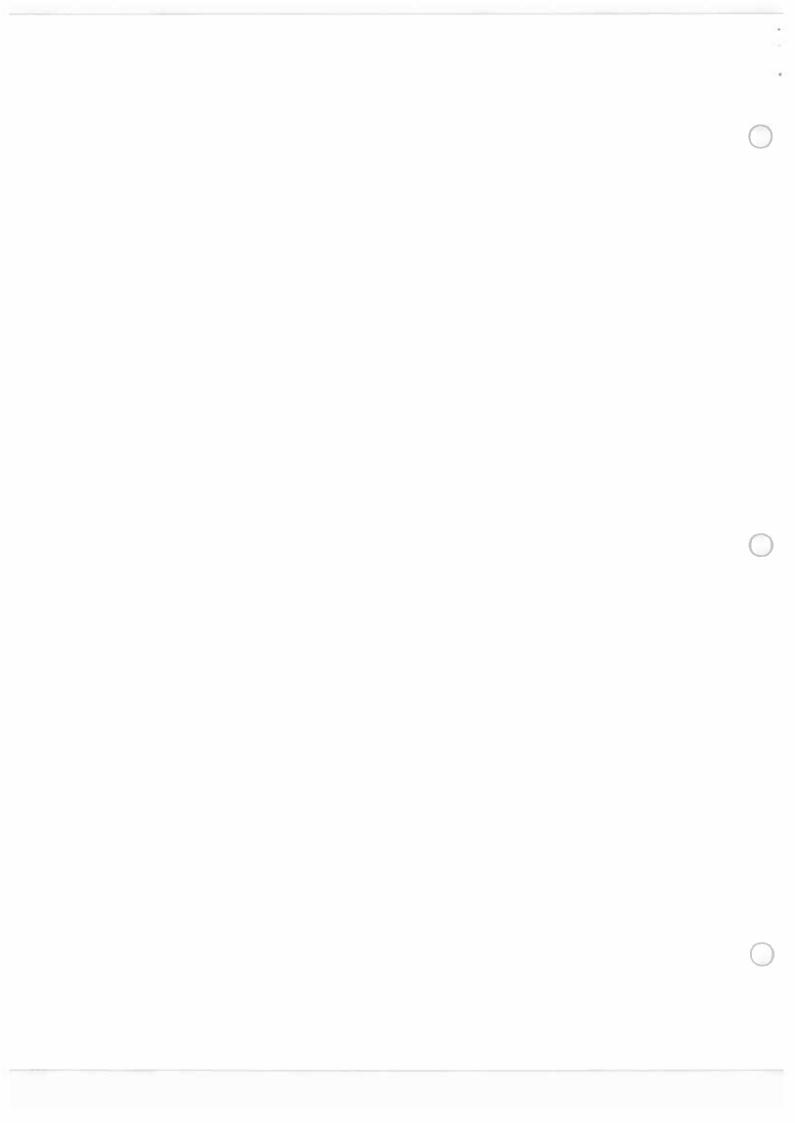
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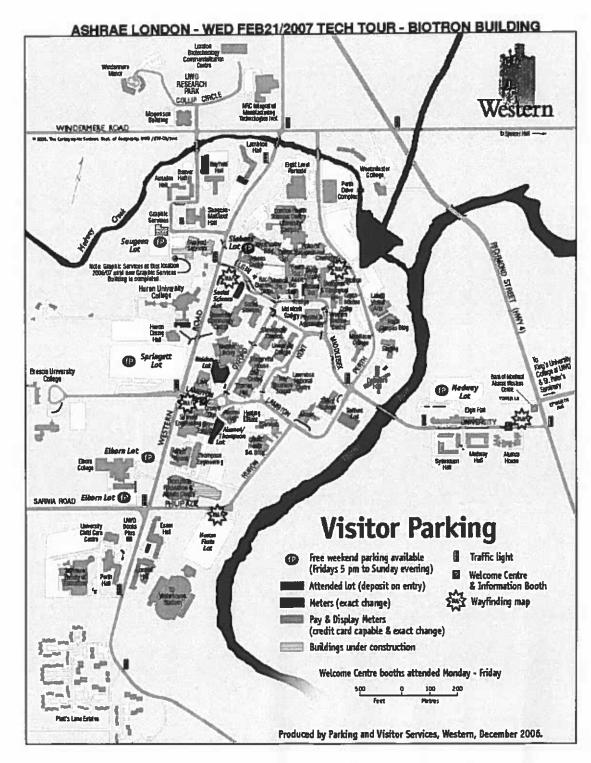


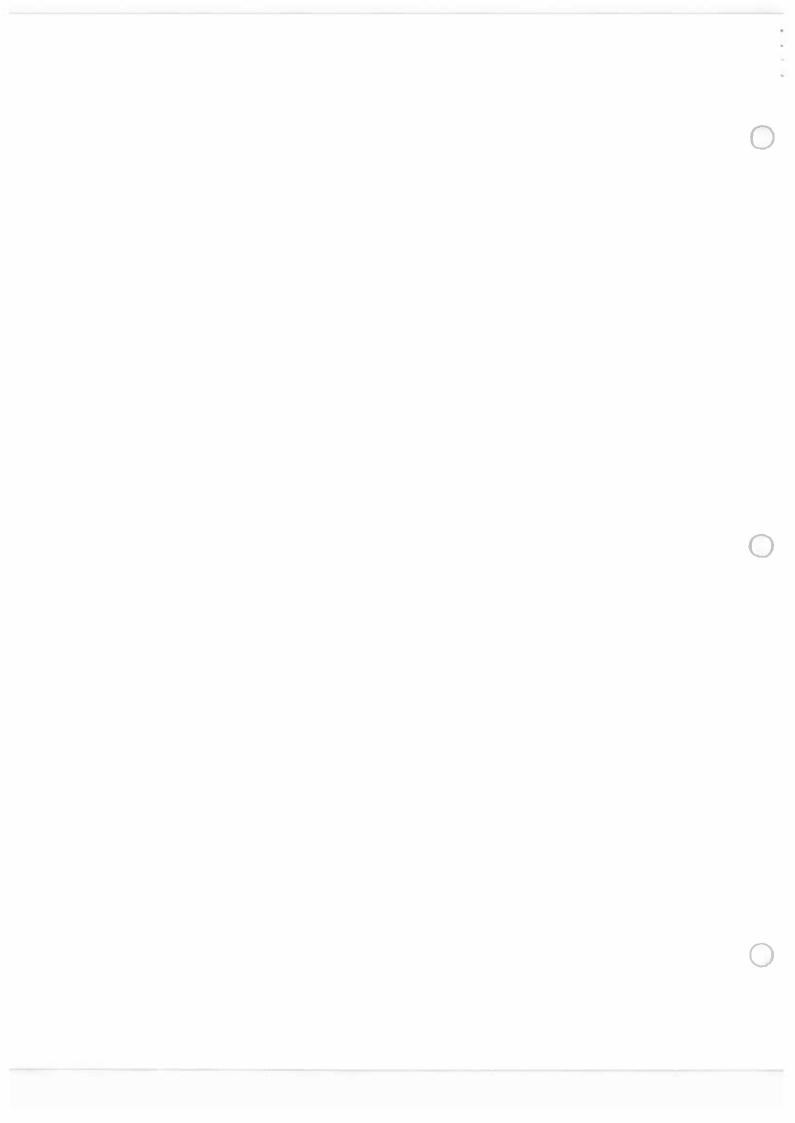
http://LondonCanada.AshraeChapters.org Wed Feb 21/2007 Page 4

We would like everyone to meet in front of the Biotron entrance by 5PM. We will tour the new building for 45-30 minutes, then walk over (or drive over if people prefer) to the West Valley Bldg (also known as the Animal Care Facility) and tour the mechanical room along with a short demo of the HVAC control system by Durell Controls for another 45-30 minutes. We expect to be done the tour around 6:30 and then head to East Side Mario's for dinner.

Please bring safety shoes and hard hats as the West Valley Bldg (Animal Care Facility) is still under construction.

Parking should be available in the lot across the street (just north of the Labatt Visual Arts Building).







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

LONDON CANADA CHAPTER #116

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MON MARCH 19/2007

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Golf Tournament

Hugh Palser ph: 519-471-9382 hpalser@palserent.com

Newsletter

Tom Pollard ph: 519-685-2570 tpollard@execulink.com

TOPIC:

COMBAT MOLD WITHOUT REHEAT "The Control of Temperature and Humidity without Conventional HVAC Systems"



Evans J. Lizardos, P.E.ASHRAE Fellow and Distinguished Lecturer Lizardos Engineering Associates, P.C. Mineola, NY

Meeting - Mon March 19/2007

THE LAMPLIGHTER INN, 591 Wellington Rd., London

RESEARCH NIGHT

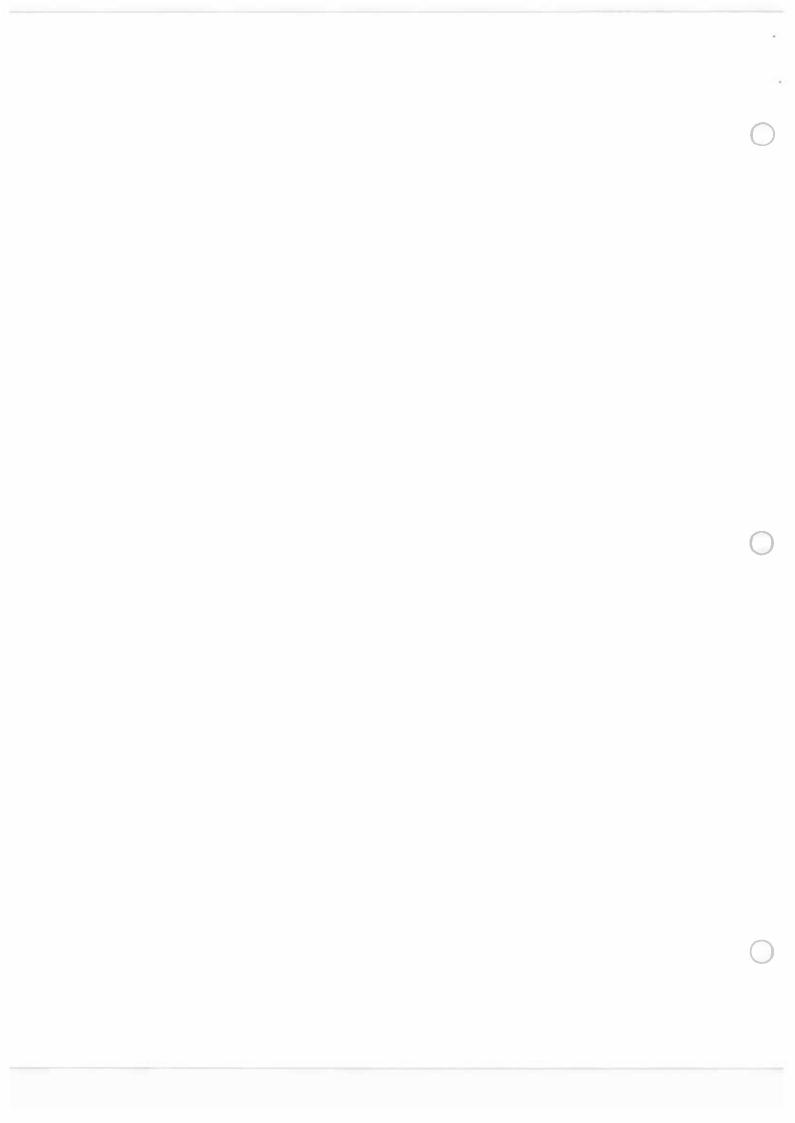
London Chapter Members = \$25.00 Students = \$10.00 Others = \$35.00

CASH BAR

ALL YOU CAN EAT BUFFET -Dinner 7:15-Program

5:15-Social 6:00-Dinner







http://LondonCanada.AshraeChapters.org Mon March 19/2007 Page 2

President's Message

Thank you to all of those that could join us last month for the tour of the UWO Biotron Building as well as the West Valley (Animal Care) Building, and a special thanks to George Qubty from the UWO for helping us arrange the tour. We hope to enjoy a large turn out for this month's speaker as we feature an ASHRAE Distinguished Lecturer Mr. Evans Lizardos, P.E., be sure to invite a friend, colleague, or business associate along for a great talk and a great dinner. Be sure to mark Wed. April 25th in your calendars for the ASHRAE London Tradeshow, tickets will be available at the door at this months meeting or from any of the Board of Governors (see flyer at end of newsletter for more information). And finally Monday June 4th has been set for the ASHRAE London Chapter Golf Tournament to be held again this year at Forest City National, sign up forms will be available soon.

Scott Turner London Canada Chapter President 2006-2007

<u>Speakers Bio</u>

Evans J. Lizardos, P.E. is Founder and President of Lizardos Engineering Associates, P.C., a 75-person mechanical and electrical consulting engineering firm located on Long Island, a suburb of New York City. The company turns 40 in April 2005 and is engaged in the design and analysis of all aspects of building systems. Evans serves as Chief Mechanical Engineer for the firm and holds regular technical sessions for the engineering staff. As a LEED 2.1 Accredited Professional, Evans has held several in-house LEED workshops, which encouraged 16 members of the LEA staff to also obtain their LEED certification.

Evans served as President of the Long Island Chapter of ASHRAE, and was elevated to the grade of ASHRAE Fellow in 1988. He was Vice Chairman of the of 1998 ASHRAE Refrigeration Handbook, and is past Chairman for 11 chapters of the ASHRAE Handbook Committee. Currently, he is Chairman for 18 chapters of the ASHRAE Refrigeration Handbook and a contributing author for the 1996 edition of the Complete Building Equipment Maintenance Desk Book.

In addition, ASHRAE has awarded Evans for his professional accomplishments and service to the community with the ASHRAE ALCO Award for Distinguished Public Service, the ASHRAE Past Presidents Award for continued service to the Long Island Chapter, the ASHRAE New York City Chapter Award for his service and devotion to the organization, and the ASHRAE Distinguished Service Award.

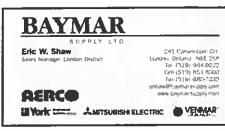
He has received certification by the Association of Energy Engineers as an Energy Manager, Demand-Side Management, Indoor Air Quality, and Cogeneration Professional. He was a lecturer for ASHRAE, IEEE, AEE and ASME sponsored courses and was an instructor for a Hofstra University curriculum in Process, HVAC and Industrial Controls.

ASHRAE London March presentation will be on "Innovative Airside Systems Designed to Conform to ASHRAE 90.1 and Improve IAQ and Avoid the Use of Reheat". This lecture covers Existing or new HVAC system to precondition outside air that is being used for ventilation to prevent mold growth in buildings.

Next Meeting - Wed April 25/2007

ASHRAE LONDON TRADE SHOW 3:00pm to 9:00pm
THE LAMPLIGHTER INN, 591 Wellington Rd., London
Tickets = \$10.00 in advanced or \$15.00 at the Door







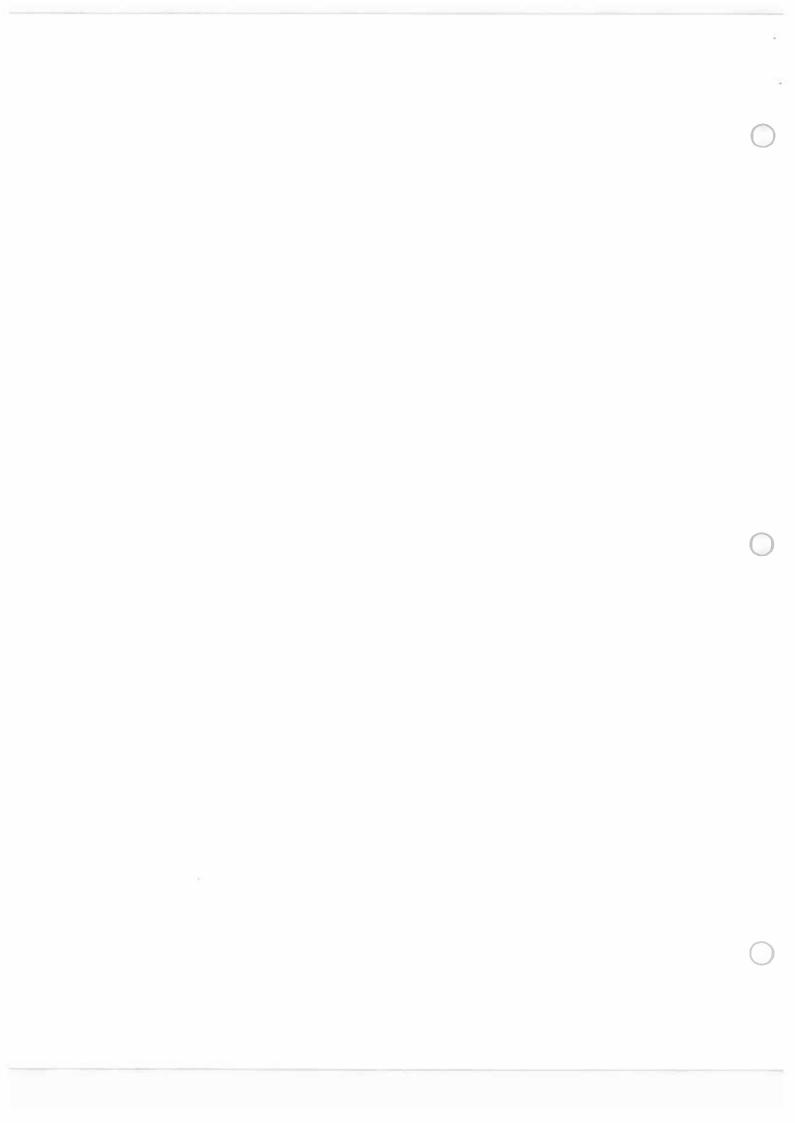


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http://LondonCanada.AshraeChapters.org Monday March 19/2007 Page 3

February Meeting Summary



The Feb tour night was held that the UWO Biotron building currently under construction. Researchers were on site to explain the operation of various rooms and specialized equipment. George Qubty from UWO also arranged for a tour of the mechanical service room at the newly completed West Valley Bldg (also known as the Animal Care Facility).

ASHRAE SATELLITE BROADCAST & WEBCAST

April 18, 2007
Indoor Environmental Design:
Practical Solutions to Everyday Problems

This free broadcast will present specific solutions to the everyday challenges of achieving indoor environmental quality within real-world budget constraints. Speakers will describe how you can provide ventilation air that helps protect the building from mold risk, how to avoid the three most common mistakes in ventilation system design and operation, how to achieve all three goals of IAQ, thermal comfort and noise control at lower cost through better air distribution decisions, and how to provide comprehensive filtration without breaking your budget. This program is sponsored by ASHRAE's Chapter Technology Transfer Committee

Online registration for site coordinators and webcast viewers begins March 1.

Registration for satellite viewers begins March 15. Information about the speakers and program is available at: www.ashrae.org/iedbroadcast

A \$50 discount off a one-year membership will be extended to anyone who joins ASHRAE as a new member in conjunction with the broadcast. See website for details.

Society's Memorial Scholarship for 2007-2008

The ASHRAE London Chapter is pleased to advise that Brian Coulter, a student from the University of Western Ontario, was selected by ASHRAE's Scholarship Trustees at the 2007 Winter Meeting in Dallas, TX to receive the Society's Memorial Scholarship for 2007-2008. This is a one-year \$3,000 scholarship awarded to a deserving undergraduate student who meets the criteria of the Society's Scholarship Program.

The ASHRAE Scholarship Program is designed to encourage and assist in the education of men and women pursuing a career in the field of heating, ventilating, air conditioning and refrigeration (HVAC&R) through its granting of scholarships and fellowships. The program also serves the public interest by aiding in the education of men and women to become qualified to practice as engineers in the HVAC&R field.

Congratulations to Brian.





Daryl Somers, CET

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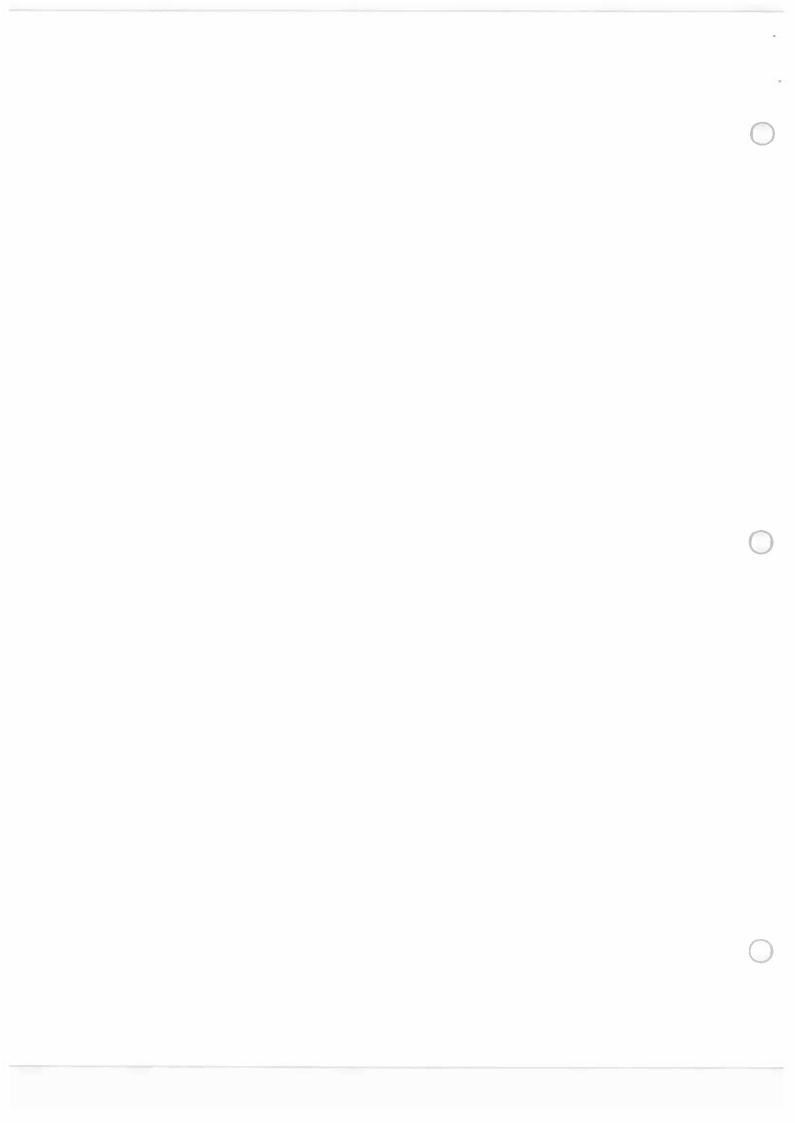
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http://LondonCanada.AshraeChapters.org Monday March 19/2007 Page 4

ASHRAE Recognizes Outstanding HVAC&R Industry Achievements

DALLAS - The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) recognized 42 people for their contributions to ASHRAE and the HVAC&R industry at the Society's 2007 Winter Meeting held in Dallas Jan. 27-31.

The ASHRAE Hall of Fame honors deceased members of the Society who have made milestone contributions to the growth of HVAC&R technology. The Society inducts Mary Engle Pennington, Ph.D., whose pioneering work improved the safety of perishable foods, into the ASHRAE Hall of Fame. Pennington was the first female member of and a Fellow of The American Society of Refrigerating Engineers (ASRE), an ASHRAE predecessor Society. She was known for her outstanding contributions to the refrigerated preservation of foods in storage.

The ASHRAE/ALCO Medal for Distinguished Public Service recognizes distinguished public service by an ASHRAE member. The recipient is David McKenney, P.E., Life Member, chairman and executive officer, McKenney's Inc.: Mechanical Contractors and

Engineers, Atlanta.

Fellow ASHRAE is a membership grade that recognizes distinction in the arts and sciences of environmental technology. The honor is earned through achievement as a researcher, designer, educator or engineering executive. The Society elevated 19 members to the grade of Fellow ASHRAE.

The ASHRAE Technology Awards recognize outstanding achievements by members who have successfully applied innovative building designs, which incorporate ASHRAE standards for effective energy management and indoor air quality. Three projects received first-place ASHRAE Technology Awards:

Matt Younger, P.E., principal of Stantec Consulting, Seattle, Wash., received first place in the new health care facilities category
for his design for the Washington Department of Veterans Affairs, Retsil, Wash.

Receiving first place in the new industrial facilities or processes category are Pierre Roussel, P.E., vice president of the
mechanical division, and Jacques Lagace, P.E., vice president of innovation and major projects, at Bouthillette Parizeau &
Associates for their design of the thermal plant at the Pierre-Elliot Trudeau Airport in Montreal, Quebec, Canada.

 Daniel Pare, project manager for IBM in Bromont, Quebec, Canada, received first place in the existing industrial facilities or processes category for his design for an IBM semiconductor packaging facility in his hometown.

Projects receiving ASHRAE Technology Awards honorable mentions are:

 Ronald Gagnon, president, Concept-R Inc., Sorel-Tracy, Quebec, Canada, new commercial buildings category, Comptoir Richelieu Botanix, Sorel-Tracy, Quebec, Canada.

 George Karidis, P.E., vice president and director of mechanical engineering, SmithGroup Inc., Detroit, new commercial buildings category, Visteon Village's corporate headquarters in Van Buren Township, Michigan.

category, Visteon Village's corporate neadquarters in Van Buren Township, Michigan.

Ronald Henning, P.E., principal, SmithGroup Inc., Detroit, new institutional buildings category, University of Michigan's Life

Sciences Institute, Ann Arbor, Michigan.

Norman J. Brown, P.E., principal, CDi Engineers, Lynwood, Wash., public assembly category, Seattle Center Marion Oliver McCaw Hall Renovation, Seattle, Wash.

The ASHRAE Student Design Project Competition challenged teams of undergraduate students to focus on the mixed-use renovation of the Dallas Power & Light building in a historic area of Dallas. First place winners in the HVAC system selection and HVAC system design categories are awarded to the same team from The Pennsylvania State University: Justin Bern, Kevin Kaufman, David Melfi, Jon Gridley, Jessica Lucas and Yulien Wong. Their faculty advisor is William P. Bahnfleth, Ph.D, P.E. First place in the architectural design category was awarded to Alissa Ogen and Sonia Carias of Savannah College of Art and Design. Their faculty advisor is Emad M. Afifi, Ph.D.

The E.K. Campbell Award honors outstanding achievements by engineering educators. The recipient is Ronald H. Howell, Ph.D., P.E., Fellow ASHRAE, Life Member, who serves as an adjunct lecturer at Boise State University in Boise, Idaho.

The John F. James International Award is given to an ASHRAE member who has done the most to enhance the Society's international presence. The recipients are Constantinos Balaras, Ph.D., P.E., is research director, Institute for Environmental Research and Sustainable Development, National Observatory of Athens, Greece, and Ross Montgomery, P.E., president, QST

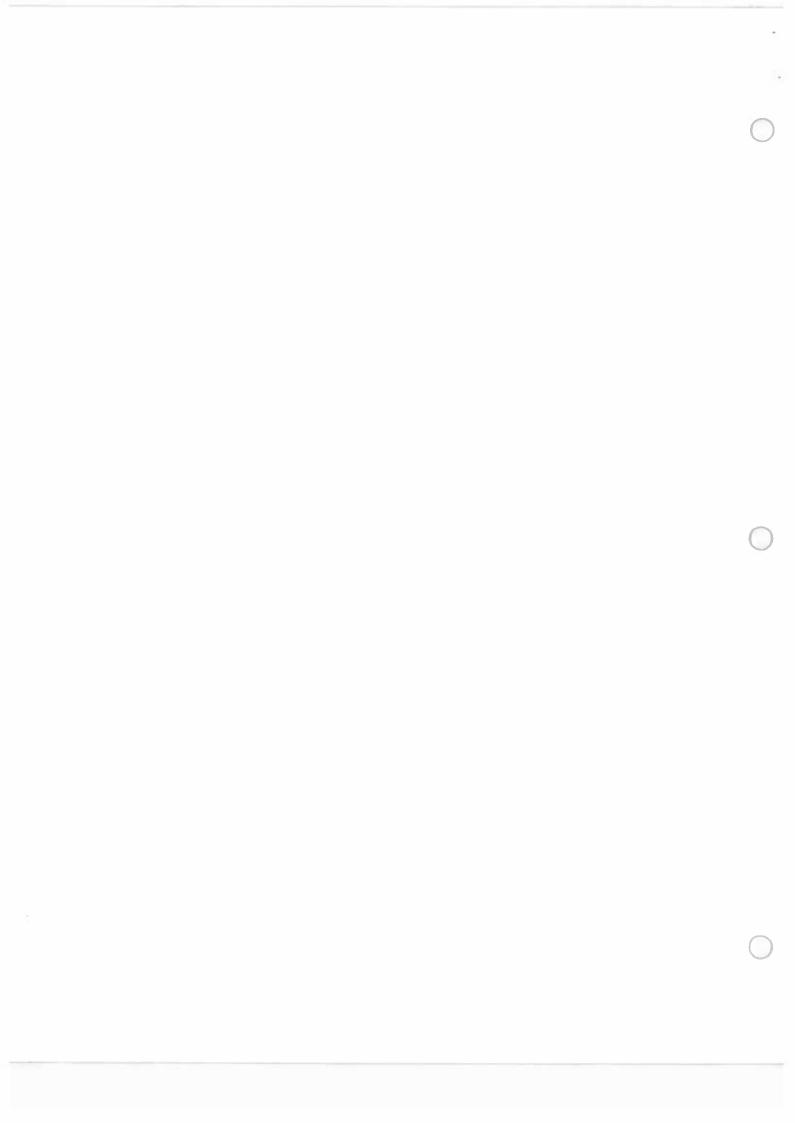
ASHRAE, founded in 1894, is an international organization of 55,000 persons. Its sole objective is to advance through research, standards writing, publishing and continuing education the arts and sciences of heating, ventilation, air conditioning and refrigeration to serve the evolving needs of the public.

Registration Open for ASHRAE IED Satellite Broadcast/Webcast

Honeywell Controls, Palmetto, Fla.

Registration is open for the free April 18 satellite broadcast and webcast, Indoor Environmental Design: Practical Solutions to Everyday Problems. The program will take place from 1–4 p.m. EDT. A panel of speakers will present specific solutions to the challenges of achieving indoor environmental quality within budget constraints.

To read more about the broadcast/webcast and to register, see: www.ashrae.org/iedbroadcast





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LONDON CANADA CHAPTER #116

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Special Presentation and Meeting

The ASHRAE London Canada Chapter has the privilege of having Mr Lizards visit from New York to present

Combat Mold Without Reheat "The Control of Temperature and Humidity with Conventional HVAC Systems"

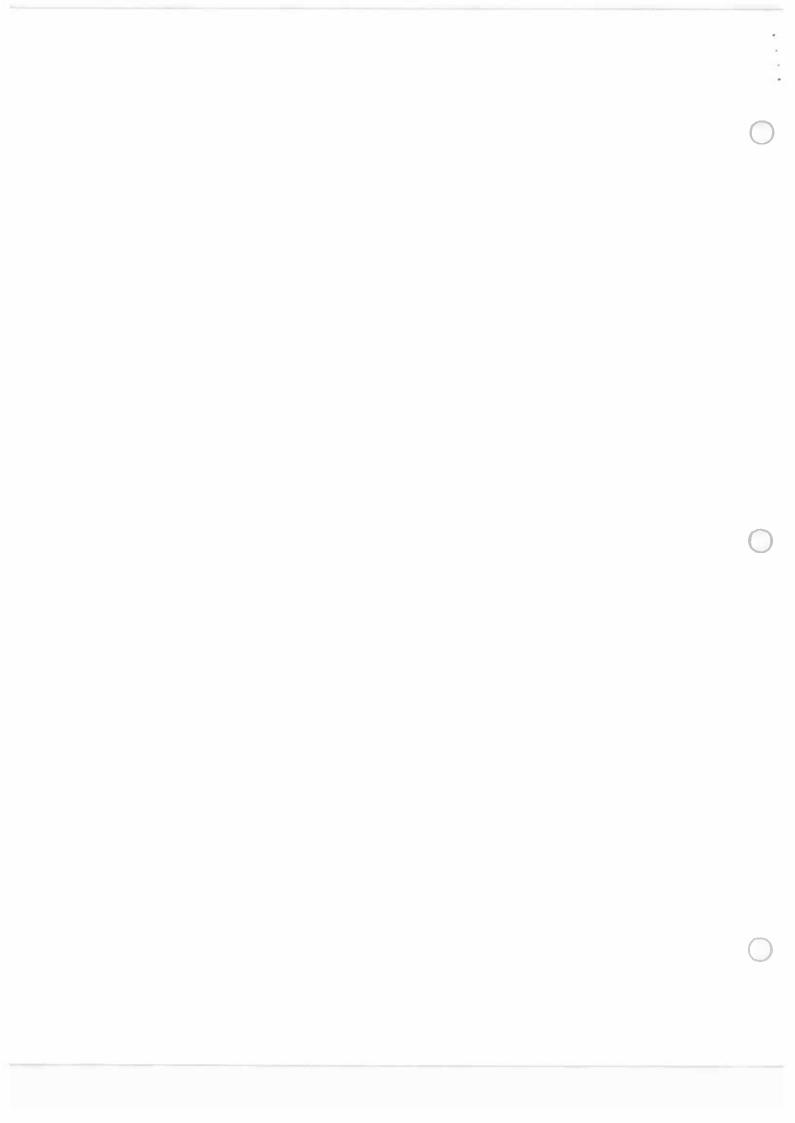


Evans J. Lizardos, P.E.
ASHRAE Fellow and Distinguished Lecturer
Lizardos Engineering Associates, P.C.
Mineola, NY

Monday March 19/2007 LAMPLIGHTER INN 591 Wellington Rd., London

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Introduction to Green Buildings and Sustainable Construction

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Understanding & Designing Dedicated Outdoor Air Systems

Wednesday, Apr 18 — 1:00 p.m. to 4:00 p.m.

Complying with ANSI/ASHRAE/IESNA Standard 90.1-2004 HVAC/Mechanical*

Wednesday, May 2 — 1:00 p.m. to 4:00 p.m. Wednesday, May 9 — 1:00 p.m. to 4:00 p.m.

* Same course offered on two convenient dates

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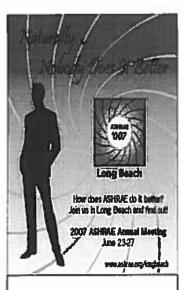
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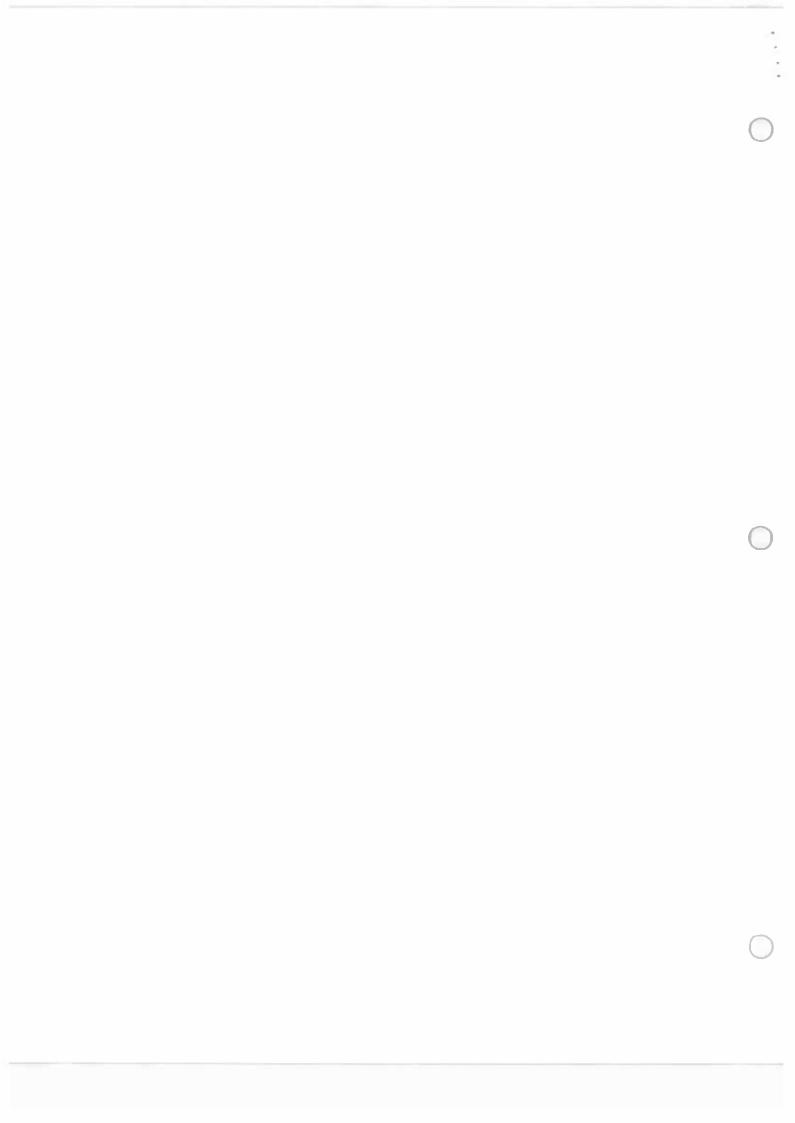




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LONDON CANADA CHAPTER #116

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TUE APRIL 17/2007

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Newsletter

Tom Pollard ph: 519-685-2570 tpollard@execulink.com **TOPIC:**

COMBAT MOLD WITHOUT REHEAT "The Control of Temperature and Humidity without Conventional HVAC Systems"



Evans J. Lizardos, P.E.

ASHRAE Fellow and Distinguished Lecturer Lizardos Engineering Associates, P.C. Mineola, NY

Meeting - Tues April 17/2007

THE LAMPLIGHTER INN, 591 Wellington Rd., London

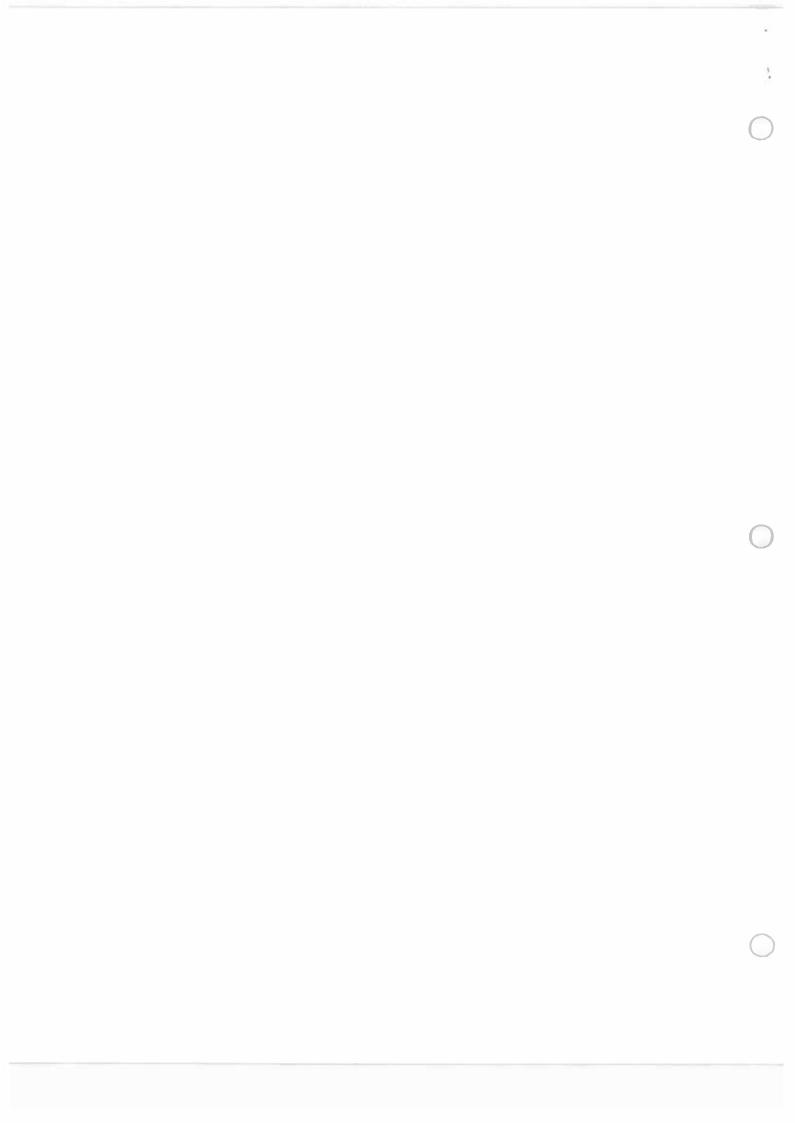
MEMBERSHIP NIGHT

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

6:00-Dinner







http://LondonCanada.AshraeChapters.org Tues April 17/2007 Page 2

President's Message

I would first off like to extend on behalf of the ASHRAE London Chapter our condolences to Mr. Lizardos on the passing of his brother. We truly appreciate his ability to re-schedule his presentation for Tuesday, April 17th, please join us for this event.

Hugh Palser has faxed out the Golf Tournament sign up sheets confirming Monday June 4th at Forest City National anyone wishing further information or if you did not receive a sign up sheet, you may want to contact Hugh via email at hpalser@palsemet.com

The ASHRAE year is quickly coming to a close, which brings a time for nominations. Last month Dennis Dawe opened the floor for nominations for next years ASHRAE London Chapter Board of Governors, anyone wishing to run for a position should contact Dennis at dennis.dawe@chorley.com . The floor will remain open till the Golf Tournament in June.

Hope to see you on the 17th !!

Scott Tumer London Canada Chapter President 2006-2007

Speakers Bio

Evans J. Lizardos, P.E. is Founder and President of Lizardos Engineering Associates, P.C., a 75-person mechanical and electrical consulting engineering firm located on Long Island, a suburb of New York City. The company turns 40 in April 2005 and is engaged in the design and analysis of all aspects of building systems. Evans serves as Chief Mechanical Engineer for the firm and holds regular technical sessions for the engineering staff. As a LEED 2.1 Accredited Professional, Evans has held several in-house LEED workshops, which encouraged 16 members of the LEA staff to also obtain their LEED certification.

Evans served as President of the Long Island Chapter of ASHRAE, and was elevated to the grade of ASHRAE Fellow in 1988. He was Vice Chairman of the of 1998 ASHRAE Refrigeration Handbook, and is past Chairman for 11 chapters of the ASHRAE Handbook Committee. Currently, he is Chairman for 18 chapters of the ASHRAE Refrigeration Handbook and a contributing author for the 1996 edition of the Complete Building Equipment Maintenance Desk Book.

In addition, ASHRAE has awarded Evans for his professional accomplishments and service to the community with the ASHRAE ALCO Award for Distinguished Public Service, the ASHRAE Past Presidents Award for continued service to the Long Island Chapter, the ASHRAE New York City Chapter Award for his service and devotion to the organization, and the ASHRAE Distinguished Service Award.

He has received certification by the Association of Energy Engineers as an Energy Manager, Demand-Side Management, Indoor Air Quality, and Cogeneration Professional. He was a lecturer for ASHRAE, IEEE, AEE and ASME sponsored courses and was an instructor for a Hofstra University curriculum in Process, HVAC and Industrial Controls.

ASHRAE London March presentation will be on "Innovative Airside Systems Designed to Conform to ASHRAE 90.1 and Improve IAQ and Avoid the Use of Reheat". This lecture covers Existing or new HVAC system to precondition outside air that is being used for ventilation to prevent mold growth in buildings. Pete Edmiston



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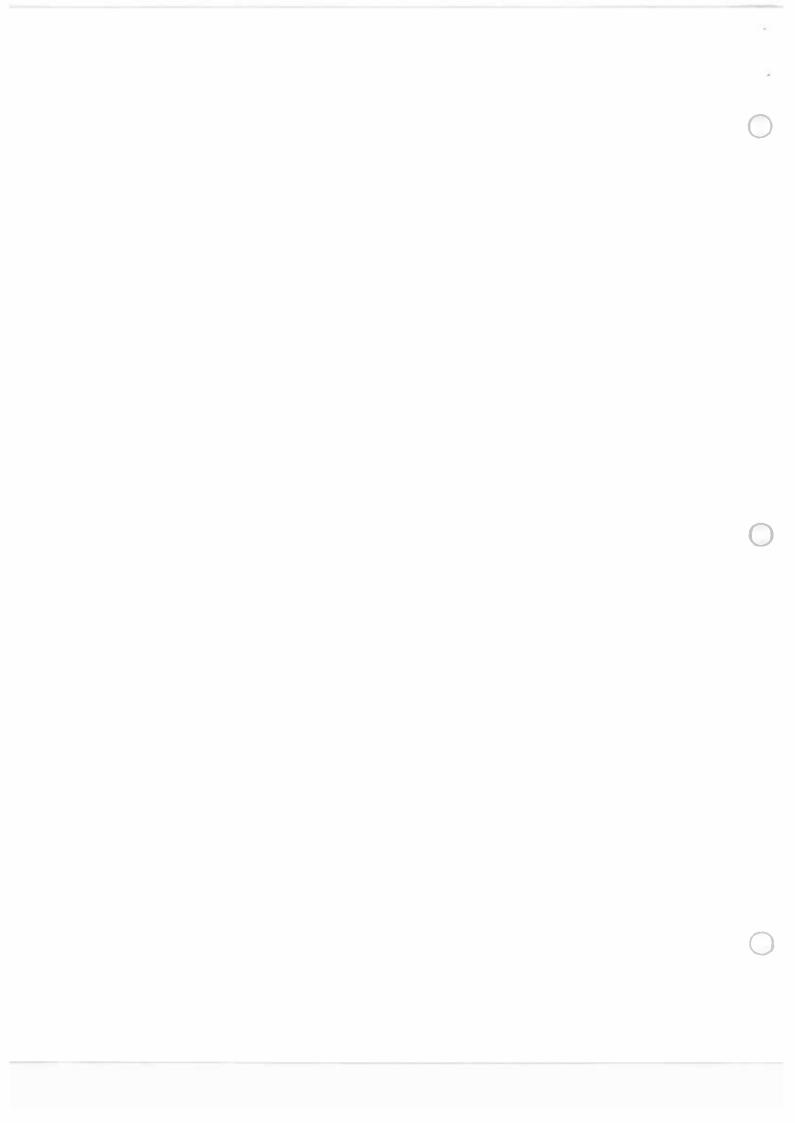
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March Meeting Summary

The March meeting required a last minute change to the program due to Mr Lizardos not being able to travel to London for his presentation. We were able to obtain from Derek Vakaras and Charley & Bisset a previous technical presentation by ASHRAE on Sustainability and the Building Environment.



Daryl Somers, CET

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Building 3, Unit 7 London. Ontario N6L 1A8

Fax: (519) 652-9323 Mobile: (519) 670-7720

email: daryi@somersep.com



ASHRAE SATELLITE BROADCAST & WEBCAST Wed April 18, 2007

Indoor Environmental Design: Practical Solutions to Everyday Problems

This free broadcast will present specific solutions to the everyday challenges of achieving indoor environmental quality within real-world budget constraints. Speakers will describe how you can provide ventilation air that helps protect the building from mold risk, how to avoid the three most common mistakes in ventilation system design and operation, how to achieve all three goals of IAQ, thermal comfort and noise control at lower cost through better air distribution decisions, and how to provide comprehensive filtration without breaking your budget. This program is sponsored by ASHRAE's Chapter Technology Transfer Committee

Online registration for site coordinators and webcast viewers begins March 1. Registration for satellite viewers begins March 15. Information about the speakers and program is available at:

www.ashrae.org/iedbroadcast

A \$50 discount off a one-year membership will be extended to anyone who joins ASHRAE as a new member in conjunction with the broadcast. See website for details.

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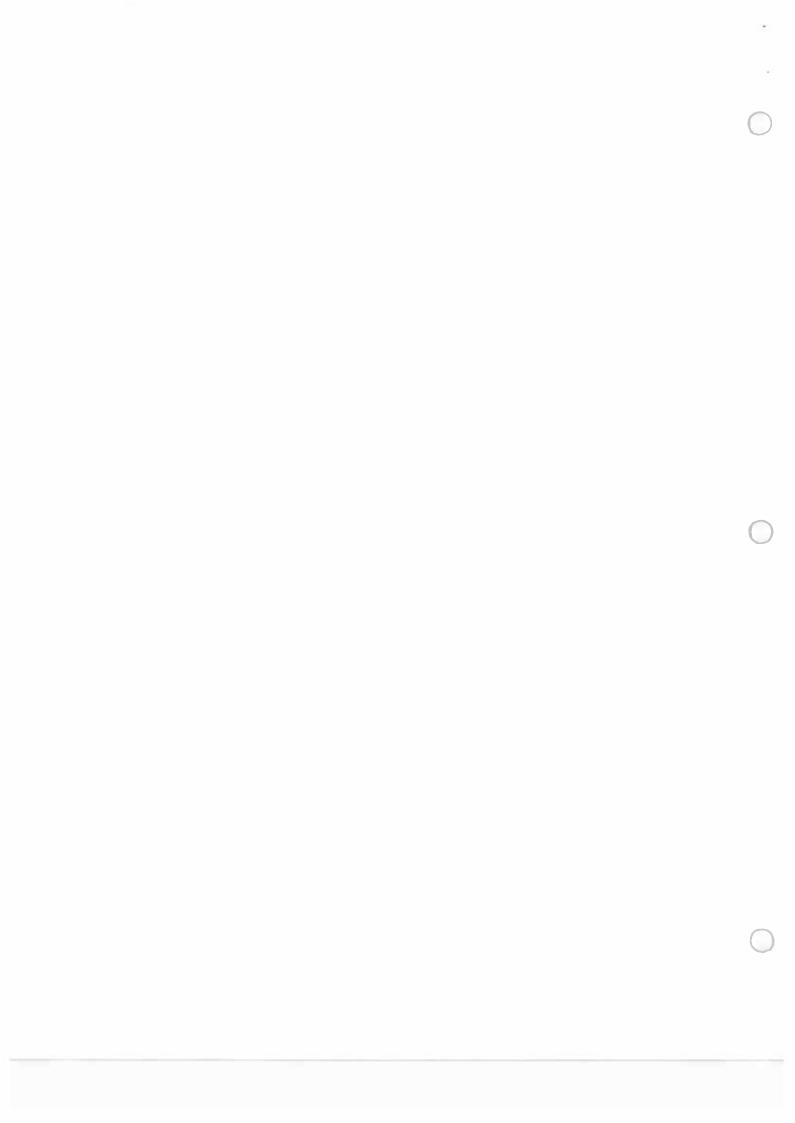
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ASHRAE Technology Awards Highlight Outstanding Building Projects

ATLANTA - A range of innovative technologies, including natural ventilation, use of grey water and incorporation of phase change

materials, are highlighted in the winning ASHRAE Technology Award projects.

The awards recognize members' exceptional achievements that incorporate elements of innovative building design in the areas of occupant comfort, indoor air quality (IAQ) and energy conservation. Winners have applied ASHRAE standards for effective energy management and IAQ. The awards were presented at ASHRAE's 2007 Winter Meeting being held this week in Dallas.

Matt Younger, P.E., principal of Stantec Consulting, Seattle, Wash., received first place in the new health care facilities category for his design for the Washington Department of Veterans Affairs, Retsil, Wash.

The fully naturally ventilated building features large, independently operated windows that aid with a passive cooling system. The system's design is predicted to save 45 percent over Standard 90.1 requirements, even without taking into account the deletion of comfort cooling requirements because the building is naturally ventilated.

Younger used intensive thermal modeling as a critical design tool on this project. Through testing of different design

parameters, a whole-building integrated design solution was developed.

Receiving first place in the new industrial facilities or processes category are Pierre Roussel, P.E., vice president of the mechanical division, and Jacques Lagace, P.E., vice president of innovation and major projects, at Bouthillette Parizeau & Associates for their design of the thermal plant at the Pierre-Elliot Trudeau Airport in Montreal, Quebec, Canada.

One of the challenges they faced was the proximity of the air traffic control tower and the possibility of the smoke plume from

boiler combustion gases interfering with traffic control activities.

The team designed a system to avoid this scenario, incorporating measures such as running the boilers' flue gases through a direct contact economizer to cool them using grey water. This also allows the system to reclaim the heat and creates efficiency of up to 99 percent.

Daniel Pare, project manager for IBM in Bromont, Quebec, Canada, received first place in the existing industrial facilities or

processes category for his design for an IBM semiconductor packaging facility in his hometown.

His use of a thermal energy system with phase change materials combined with free cooling, a variable frequency drive chiller and predictive algorithm control is a first in North America. Phase change materials are substances that can accumulate and release energy during phase change. In this case, a change from liquid to solid.

His design will produce energy savings of six percent annually in part by using artificial phase change materials in the chiller with different melting points between 28°F and 40°F. The system also uses a natural cooling exchanger, which runs from

September to May to take advantage of Mother Nature's natural cooling season.

Honorable mention winners are as follows:

· Ronald Gagnon, president, Concept-R Inc., Sorel-Tracy, Quebec, Canada, new commercial buildings category, Comptoir Richelieu Botanix, Sorel-Tracy, Quebec, Canada.

· George Karidis, P.E., vice president and director of mechanical engineering, SmithGroup Inc., Detroit, new commercial buildings category, Visteon Village's corporate headquarters in Van Buren Township, Michigan.

· Ronald Henning, P.E., principal, SmithGroup Inc., Detroit, new institutional buildings category, University of Michigan's Life Sciences Institute, Ann Arbor, Michigan.

· Norman J. Brown, P.E., principal, CDi Engineers, Lynwood, Wash., public assembly category, Seattle Center Marion Oliver McCaw Hall Renovation, Seattle, Wash.

ASHRAE, REHVA Partner to Encourage Sustainability

ATLANTA - ASHRAE and the Federation of European Heating and Air-Conditioning Associations (REHVA) have formalized a longtime relationship through signing of a new memorandum of understanding. The memorandum, signed today at ASHRAE's 2007 Winter Meeting, calls for increased cooperation between the two associations.

"The challenges of the insecure energy situation and the public's request for better and more secure buildings are huge," Olli Seppänen, president of REHVA, said. "ASHRAE and REHVA must work together to find the best sustainable technology for superior indoor environment for buildings. Coordination and cooperation is needed so that duplication of efforts is avoided and that

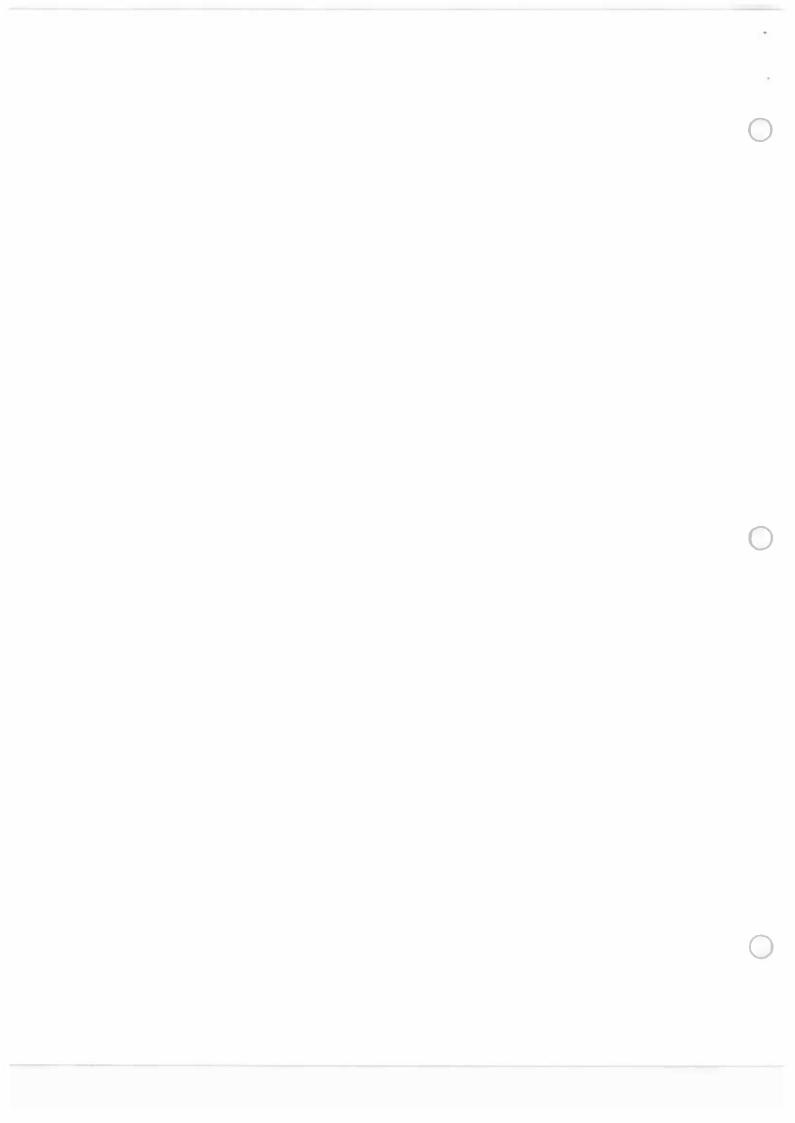
the limited resources are used most efficiently."

Europe is committed to a strong energy policy, Seppanen noted. The goal for energy saving is set at 20 percent by the year 2020 in Europe. Steps toward this goal include an energy efficiency and energy services directive from April 2006 that sets the goal for energy savings in the member states at 1 percent per year during the next nine years, and requests national energy efficiency plans in June 2007. The European commission also prepares a directive for minimum energy performance standards for 14 priority energy products in 2007.

ASHRAE is pursuing a similar goal, with hopes of achieving net-zero energy use by the year 2020.

"This agreement strengthens the long-time relationship between ASHRAE and REHVA," Terry Townsend, president of ASHRAE, said. "We must continue to work together to gain technical knowledge and to share it. The engineers who belong to ASHRAE and REHVA are searching for new technology and guidance to develop safe, comfortable, healthy energy-efficient buildings. This agreement encourages our organizations to work together to ensure more sustainable environments all around the

REHVA represents 30 national engineering associations in Europe representing more than 100,000 experts in the area of heating, air-conditioning, ventilation and refrigeration. It is based in Brussels, Belgium.





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ASHRAE Members Get Energized in Dallas

ATLANTA – The adage that everything is bigger in Texas proved true for the 2007 ASHRAE Winter Meeting held last week in Dallas.

ASHRAE can boast of a large turnout for overall meeting attendance, record attendance at social events, and high attendance at the International Air Conditioning, Heating, Refrigerating (AHR) Exposition cosponsored by ASHRAE and the Air-Conditioning

and Refrigeration Institute (ARI).

"Obviously our members took the meeting theme of 'get energized in Dallas' to heart," Terry Townsend, P.E., ASHRAE president, said. "Our meetings are an integral part of our Society, providing attendees with a first-hand look at the latest technology and allowing them to advance their education, network with fellow members from all over the world and influence technology."

The ASHRAE meeting had a total attendance of 2,634, an increase of nearly 200 over the 2006 Winter Meeting in Chicago. Registration for social events, also up over previous years, was more than 800 for the Welcome Party; more than 600 for the president's luncheon; and 557 for the Members' Night Out.

Two big events were motivational speaker Diana Nyad, who received a standing ovation for her inspiring story about setting the world record for completing the longest swim in history — 102.5 miles from the coast of Bimini to the Florida shore, and Dennis Dimick, executive editor at National Geographic Magazine, who discussed three 2004 National Geographic magazine articles, "Signs from Earth" that document emergent effects of climate change observed worldwide.

Top-selling publications at the meeting were the new ASHRAE GreenGuide: The Design, Construction and Operation of Sustainable Buildings; HVAC Simplified, the Advanced Energy Design Guide for Small Retail Buildings and the ASHRAE Handbook CD+.

The ASHRAE Learning Institute courses also were well-attended by nearly 1,000 people. The top-drawing courses dealt with green buildings, Standard 90.1, health care facilities design and commissioning.

The AHR Expo, sponsored by ASHRAE and ARI also proved to be "Texas-sized" with 1,789 total exhibiting companies and 354,057 square feet of net exhibit space. Total Expo attendance topped 47,000, including 28,130 visitors and 19,065 registered exhibitor personnel.

Comparatively, the first co-sponsored show in the Southwest held in Dallas in 1976 drew 284 exhibiting companies and 90,197 square feet of net exhibit space.

ASHRAE will hold its 2007 Annual Meeting in Long Beach, June 23-27, followed by its 2008 Winter Meeting, Jan. 19-23 in New York, accompanied by the AHR Expo, Jan. 22-24.

BACnet Access Control, Lighting, Network Addenda Approved for Review

ATLANTA - Six proposed addenda to ASHRAE's BACnet standards have been recommended for public review.

The addenda are expected to be released for public review March 16, 2007. If approved, they would become part of Standard 135, BACnet® - a Data Communication Protocol for Building Automation and Control Networks, and Standard 135.1, Method of Test Conformance to BACnet®.

"This was a barnstormer session," said BACnet chairman Bill Swan. "The committee has been working hard to expand BACnet's coverage of building systems, and several items came out together."

Proposed addendum j to BACnet-2004, will add physical access control to BACnet's support for building automation.

"Our committee has worked on these proposals for four years to ensure that we address the state-of-the-art practices of the security industry while building on the proven BACnet platform, "said David Ritter, convener of the BACnet Life-Safety and Security Working Group, which is comprised of representatives from both the HVAC and physical security industries from around the globe.

Addendum j rounds out the working group access control extensions to BACnet, which began with the Access Door object presented in addendum f. The committee is actively soliciting comments on these extensions from the access control industry.

Proposed addendum g to 135-2004, a new means for securing BACnet network communications, provides part of the base on which proposed addendum j is built. Developed by the Network Security Working Group, addendum g draws on significant advances in encryption and authentication technologies since BACnet became a standard.

"This system is very flexible," said Dave Robin, BACnet Network Security Working Group convener. "You can scale it up for high security or way down for simplicity. It provides multiple levels of access, with a general key for read/write access to basic system data, and application-specific keys plus authentication for critical systems including access control and fire."

Robin also notes that "with addendum g going out for its second public review, with little changed from first public review, trial implementations are underway."

Proposed addendum 135-2004 i presents several extensions to the BACnet standard to support lighting control systems. Said Steve Karg, Lighting Application Working Group convener, "These extensions are aimed at supporting both sophisticated and simple lighting systems." The working group, comprised of representatives from lighting controls manufacturers and BACnet experts, has been working for several years on developing lighting extensions to BACnet.

The BACnet committee continues its work on a broad range of items including developing profiles for VAV controllers and VFDs, incorporating wireless capabilities, accommodating and adopting new IP technologies; and extending conformance testing to cover new BACnet capabilities.

Also recommended for review are 135h, which would include miscellaneous changes to the standard; 135.1b, involving new and revised tests, and 135.1c, updating references in 135.1 from 135-2001 to 135-2004.



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Please visit www.ashrae.org/certification for eligibility requirements and other related information. Membership in ASHRAE is not required for participation in the program. However, ASHRAE members will receive a discounts on the price of the certification examinations.

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**these Standards are expected to be released in June!

Continuous Maintenance Standards to Include:

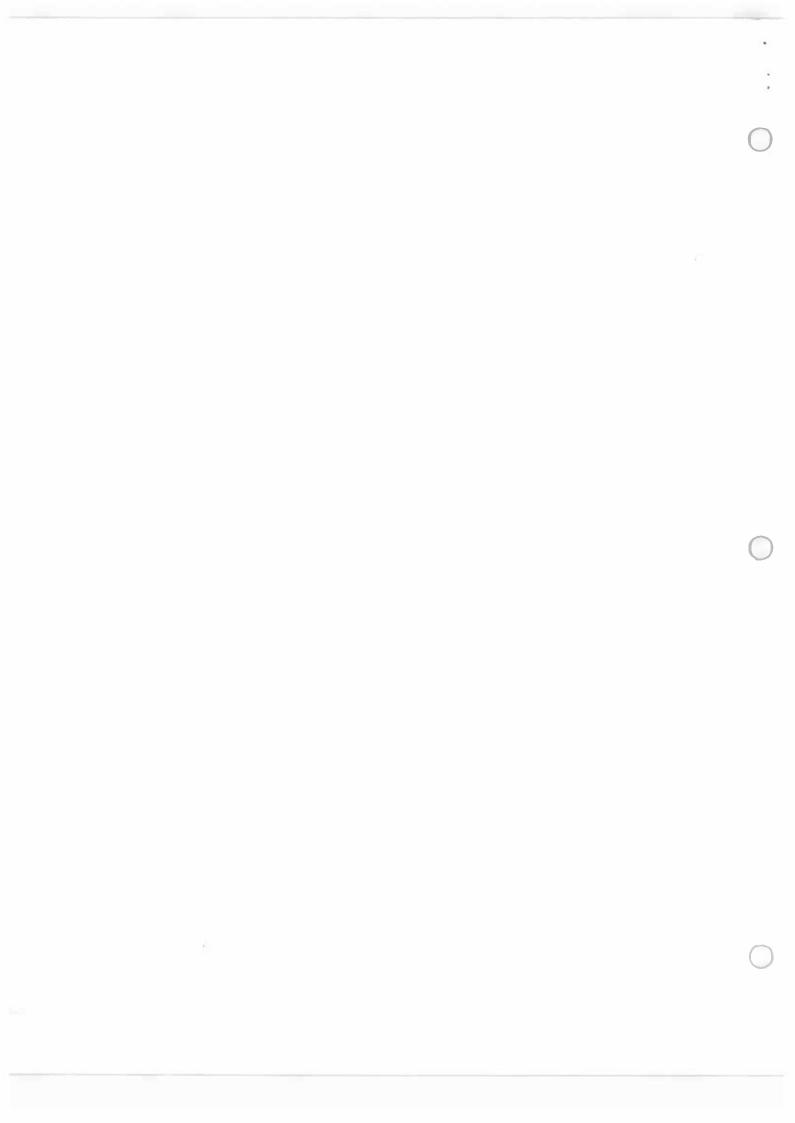
- Standard 90.1-2007, Energy Standard for Buildings Except Low-Rise Residential Buildings (1-P and SI)
- ☐ Standard 90.1-User's Manual
- Standard 90.2-2007, Energy Efficiency Design of Low-Rise Residential Buildings
- Standard 62.1-2007, Ventilation for Acceptable Indoor Air Quality
- ☐ Standard 62.1 User's Manual
- Standard 62.2-2007, Ventilation for Acceptable Indoor Air Quality
- Standard 52.2-2007, Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size
- Standard 140-2007, Method of Testing for the Evaluation of Building Energy Analysis Computer Programs
- ☐ Standard 15-2007, Safety Standard for Refrigeration Systems
- Standard 34-2007, Designation and Safety Classification of Refrigerants

New Standards to Include:

- ☐ Standard 124-2007, Method of Testing for Rating Combination Space-Heating and Water-Heating Appliances
- Standard 183-2007, Peak Cooling and Heating Load Calculations in Buildings Except Low-Rise Residential Buildings

Reaffirmations to Include:

Standard 32.3-2003 (RA 2007), Methods of Testing for Rating Pre-Mix and Post-Mix Beverage Dispensing Equipment



2007 LONDON & AREA ASHRAE GOLF TOURNAMENT

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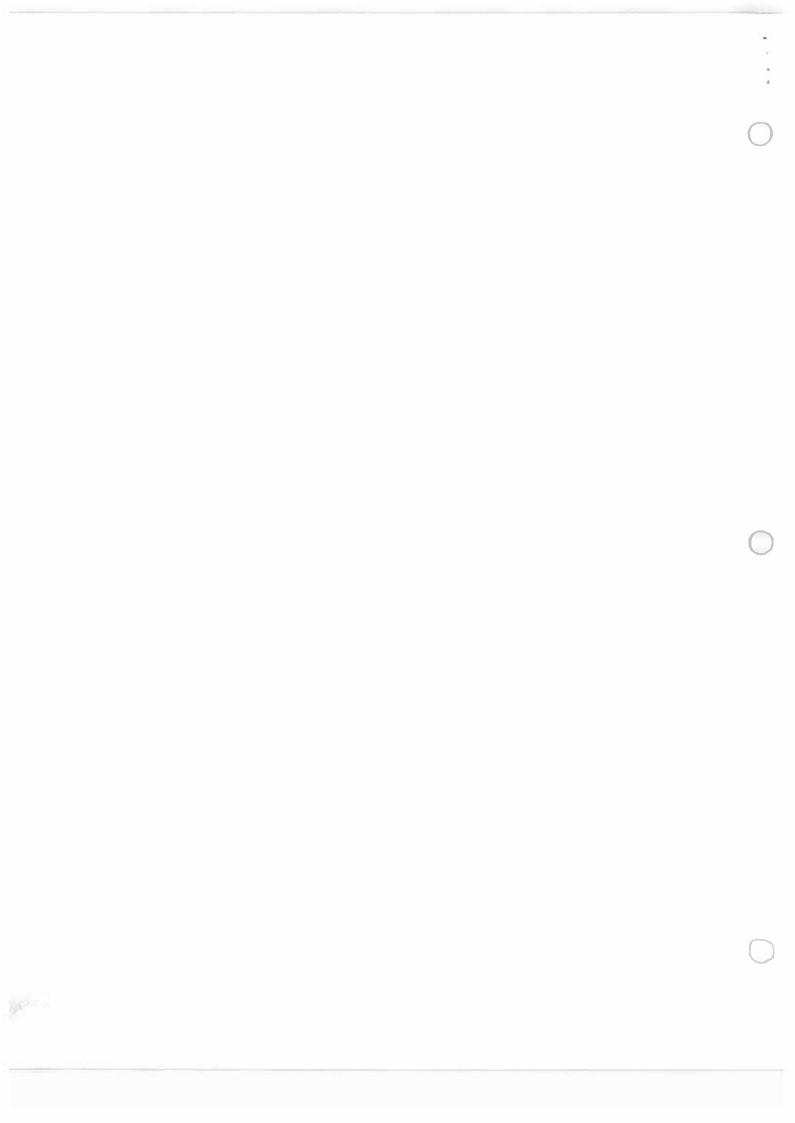
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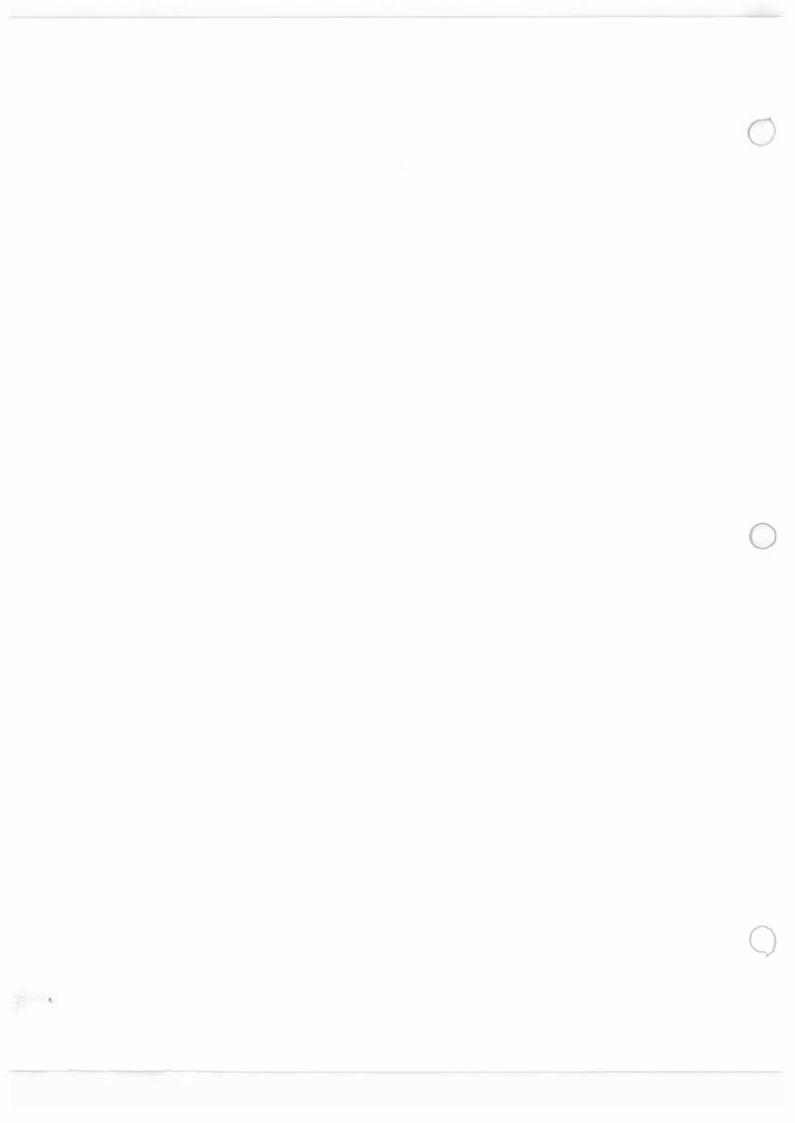
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LONDON CANADA CHAPTER #116

http://LondonCanada.AshraeChapters.org

Mon Sept 24/2007

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Newsletter

Tom Pollard ph: 519-685-2570 tpollard@execulink.com

TOPIC:

How boiler plant efficiencies will be estimated on a seasonal basis with reference to the upcoming SPC 155A ASHARE standard.

Condensing boiler technology development

Selecting accumulator and stratified storage tank hot water system components (i.e. tank, pump, heater, pipe sizes) for laundry or process applications.

Mr FRED CAMPAGNA

AERCO INTERNATIONAL

Meeting - Mon Sept 24/2007

THE LAMPLIGHTER INN, 591 Wellington Rd., London

MEMBERSHIP NIGHT

London Chapter Members = \$25.00 Students = FREE Others = \$35.00

STUDENT NIGHT

CASH BAR 5:15-Social ALL YOU CAN EAT BUFFET

6:00-Dinner 7:15-Program



President's Message

With summer drawing to a close, I would like to welcome everyone back to the 2007-2008 ASHRAE year. First, I would like to introduce you to your new Board of Governors for this year. The chapter executive consists of Eric Shaw as Vice President, Jason Vandenberghe as Treasurer, Jack Maynard as Secretary & myself as President. We have a few new Committee Chairs this year and I'm looking forward to working with everyone to ensure another successful year.

Eric has been working hard to get this year's speakers and activities arranged. He has selected monthly meeting speakers to cover a broad range of topics, including HVAC design, refrigeration and sustainability. One of the highlight of this year will be having an ASHRAE designated lecturer, Mr. Victor Goldshmidt, visit our chapter and speak on Global Warming - Differing Perspectives in March. More information on upcoming meeting topics and dates can be found at the chapter website: http://londoncanada.ashraechapters.org. Please mark all the meeting dates on your calendar

Our September meeting will feature Mr. Fred Campagna of Aerco International, who will be speaking to us on Boiler Advancements. This will also be our first student promotion night and I would encourage those of you who have been active in the ASHRAE environment to take the time to welcome them, let them know the benefits of ASHRAE and what exciting career opportunities lie within the HVAC&R industry. We will also be contacting chapter members and companies shortly to sponsor a student so they can attend meetings on a regular basis. Your support will be greatly appreciated.

As in past year, our focus will continue to be promoting membership. In order to emphasize the value of chapter membership, we have held the price of monthly meeting for chapter members to \$25 per meeting (or \$125 for the entire year), and our guest rate will remain at \$35. Please consider inviting guests to attend a meeting and help grow the chapter.

Over the summer, 6 members of the ASHRAE Board of Governors attended the Chapter II Regional Conference (CRC) in Moncton, New Brunswick, One important aspect of the CRC is to recognition the achievements of each chapter's performance in day-to-day operations. Our chapter received a number of awards for last year's performance including a Special Citation for our Past President, Scott Turner. Congratulations must also goes out to Joe Claessens, who received a Resource Promotion award in recognition of exceeded his goal of raising \$10,000.00 for ASHRAE Research by over 20% (\$12,308), a new chapter record.

In closing, I look forward to another successful year for ASHRAE London and I hope to see you on September 24th.

Scott Edmunds **ASHRAE London President**

Student Night

September is student night and we would like to invite all students to come out to our monthly meeting on Monday September 24th. The cost to students on this night is FREE! Members, please make an extra effort to welcome students by inviting them to your dinner table or introducing yourself sometime throughout the

Any company that would like to sponsor a student meal on this night can contact a member of the executive.





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Speakers Bio

Fred F. Campagna
VP, International Sales & Marketing
AERCO INTERNATIONAL

Fred has been working in the HVAC industry in distribution, engineering, and manufacturing since 1971. In 1979, following several years with Burns & Roe A&E Consultants, a nuclear and fossil fuel power plant design firm, he joined Aerco International. Initially with engineering developing new products and eventually moving on to sales and marketing as Product Manager, Marketing Manager, General Sales Manager and currently, as the VP of International Sales & Marketing. He was a member of the ASHRAE charter committee for the SPC 155 boiler part load efficiency standard. He was also a charter member of the American Marketing Association Business to Business Marketing Council.

Over the past several years, Aerco has expanded its distribution to 29 International representatives. In addition, Aerco has expanded its operations into Asia where Fred has been instrumental in the formation and current management of Aerco's Chinese and S. Korean joint venture manufacturing companies.

<u>ASHRAE LONDON</u> 2006/07 Financial Summary

Starting Balance (Aug 1/2006)

\$ 22,383.43

Income

 Memberships
 \$ 2,160.00

 Meal Plans & Door Fees
 \$ 4,185.00

 Special Events
 \$18,515.00

 Misc
 \$ 585.00

 \$ 27,625.00

Expenses

 Meetings
 \$ 8,525.13

 CRC
 \$ 5,942.94

 Special Events
 \$ 15,985.87

 Misc
 \$ 3,427.32

\$ 33,881.26 -\$ 6,256.26

Ending Balance (June 31/2007)

\$ 16,127.17

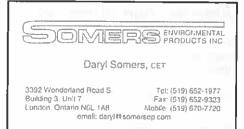
ASHRAE LONDON 2006/07 Awards

At the Regional Chapters Conference (CRC) held in Moncton this summer, the Regional awards were handled out. The London Chapter received awards for:

Research Award - for the Chapter exceeding it research goal

 <u>Full Circle Award</u> - for the Chapter Executive and Research Chair each contributing to ASHRAE Research

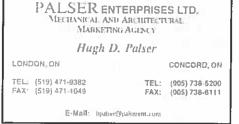
 Presidential Award of Excellence - Star + Honour Roll - for obtaining par in point for chapter activities and for at least four consecutive years.















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June Meeting Summary

The annual golf tournament was held last spring and was another sold out event. ASHRAE Research London Chair Joe Claessens would like to thank everyone who made a "donation" to ASHREA Research (by purchasing a mulligan) in which \$585.00 was raised.

Thank you to Hugh Palser and Palser Enterprises who organized the event.

UPCOMING Meetings & Events

Mon Oct 22/2007

>>> NOTE - MEETING ONE WEEK EARLIER THEN NORMAL <><< Cooling Tower Design, Application and Problems Mr Gary Sweeney - CTM

Mon Nov 26/2007

Green Globes - Environmental Assessments for Building Mr Daryl Boyce - Carleton University, Ottawa

Mon March 31/2007

Global Warming - Differing Perspectives Mr Victor Goldschmidt - Northport MI ASHRAE DISTINGUISHED LECTURER

Wed April 16, 2008

Chapter Technology Transfer Committee Satellite Broadcast/Webcast
The broadcast will focus on "Integrated Building Design."
Watch for additional information regarding the Broadcast/Webcast via ASHRAE Insights and www.ashrae.org.

ASHRAE Installs New Officers, Directors

LONG BEACH - The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) installed new officers and directors at its 2007 Annual Meeting held here June 23-27.

The new president is Kent W. Peterson, P.E., Fellow ASHRAE, vice president and chief engineer, P2S Engineering Inc., Long Beach, Calif. Through his theme, Greater Efficiency Today, Blue Skies Tomorrow, Peterson emphasizes innovation in the quest for sustainability in the built environment. He notes that "energy efficiency should always be the elegant alternative to fuel consumption." As such, he encourages ASHRAE members to become more radical in their ideas, more daring in their creativity, and dedicated to delivering innovative systems, methods and technology.

Other officers installed for a one-year term are:

- President-Elect: William A. Harrison, president, Trane Arkansas, Little Rock, Ark.
- Treasurer: Gordon V. R. Holness, P.E., Fellow ASHRAE, Life Member, chairman emeritus, Albert Kahn Associates Inc., Detroit, Michigan.
 - · Vice President; Lynn G. Bellenger, P.E., Fellow ASHRAE, partner, Pathfinder Engineers, Rochester, N.Y.
 - Vice President: Maureen Grasso, Ph.D., dean, Graduate School, University of Georgia, Athens, Ga.
- Vice President; Andrew Persity, Ph.D., Fellow ASHRAE, group leader, National Institute of Standards and Technology, Gaithersburg, Md.
 - Vice President: Vincent Tse, Fellow ASHRAE, managing director, Parsons Brinckerhoff (Asia), Hong Kong.
 ASHRAE installed the following directors to serve a three-year term from 2007-2010;
- Region IV Director and Regional Chair: Ira Poston, northern region business relations manager, Duke Energy Carolinas, Burlington, N.C.
- Director-at-Large: Constantinos A. Balaras, Ph.D., P.E., research director, Institute for Environmental Research and Sustainable Development, National Observatory of Athens, Greece.
- Director-at-Large: Richard Kelso, Ph.D., P.E., Fellow ASHRAE, retired president, Kelso-Regen Associates, Knoxville, Tenn., and professor, the College of Architecture and Design, the University of Tennessee.
 - · Director-at-Large: David Knebel, P.E., Fellow ASHRAE, vice president, sales and technology, AAON Inc., Tulsa, Okla.



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ASHRAE Announces Scholarship Recipients

ATLANTA – The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) has announced the recipients of 21 scholarships totaling \$86,000 for the 2007-08 academic year. The students, all pursuing courses leading to a career within the HVAC&R industry

Memorial Scholarship: Brian Coulter, University of Western Ontario, mechanical engineering,

ASHRAE has awarded 148 scholarships during the past 16 years. The ASHRAE scholarship program encourages and assists HVAC&R education through scholarships and fellowships.

In addition, ASHRAE has launched a new Webpage for its scholarship program – www.ashrae.org/scholarships. The page provides a summary of all ASHRAE scholarship opportunities for students seeking scholarship information, along with testimonials from former scholarship recipients.

For more information, visit the scholarships page or contact Lois Benedict, scholarship administrator, at benedict@ashrae.org or 678-539-1120.

River Serves as Inspiration for Energy Source

ATLANTA – Student designers turned to the Hudson River as an energy source in transforming a New York City distribution center into a biotech research laboratory as part of ASHRAE's 2007 Student Design Competition.

This year's competition featured architectural design as well as selection and design of HVAC&R systems. The goal was to turn an existing building in a biotech research facility complete with labs, office space, equipment, mechanical penthouse space, and a vivarium (an enclosure for keeping plants and animals alive in their natural habitat for observation purposes).

First place in the HVAC system selection category is awarded to Kevin Chow, Brandon Damas, Jeremy Fowler, Brandon Frey, Brendan Gleason and Ben Willey from Kansas State University, Manhattan, Kansas. Their advisors are Julia Keen, P.E., and Fred Hasler, P.E.

The students selected open-loop geothermal heat pumps, extracting water from the Hudson River as a heat source, with heat pipe heat exchange units recovering sensible heat only to avoid cross contamination between the outside air and lab exhaust airstreams. The students note that this system eliminates the need for a boiler, cooling tower, and chiller.

"Overall, the greatest benefit realized by the owner will be due to the efficient nature of the geothermal heat pumps and the heat pipe heat recovery unit," the students said. "Geothermal heat pumps utilize natural heating and cooling energy from the river, reducing the amount of natural resources consumed for operation. This minimizes the impact on the environment when compared to other systems by reducing the carbon dioxide gas associated with burning fossil fuels."

First place in the HVAC system design category goes to Gary Schrader, Jeremy Saddison, Ryan Larson and Chad Gydesen of Ferris State University, Big Rapids, Mich. Their faculty advisor is Douglas Zentz.

Their design features a geothermal heat pump plant, using the Hudson River as the heat sink, considered a water-to-water heat pump system. Both the lab and office systems will use total enthalpy wheels to recover sensible and latent heat from the exhaust air streams to pre-condition the outside air needed for ventilation.

"Using a water source heat pump plant along with variable air volume air handlers with total energy recovery wheels proves to be the most energy efficient when looking at total energy consumption," the students noted. "The system also was the best in terms of sustainability and green design."

First place in the architectural design category is awarded to Stuart Johnson and Grant Helmkamp of Lawrence Technological University, Southfield, Mich. Their advisor is Daniel Faoro.

The students selected a cellular approach to their design, due to the nano-technology and biology research uses. The design allows mechanical systems to be grouped together to minimize unused space between walls and provide efficient systems, according to the students.

"The opportunity to express the mechanical systems on the exterior is evident in the tall mechanical chases," the students noted. "The mechanical chases contain the exhaust system and wind turbines to provide alternative energy. The exterior is intended to complement the existing building. The laboratories are designed to express their function from the exterior; the use of translucent cladding, which illuminates the labs and renders them visible to the street."

Awards will be presented at ASHRAE's 2008 Winter Meeting Jan. 19-23 in New York City. Winning student groups will each have a poster presentation to display their projects at the meeting.

The competition recognizes outstanding student design projects, encourages undergraduate students to become involved in the profession, promotes teamwork and allows students to apply their knowledge of practical design.



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GreenBits Blog Provides Insight Into Building Industry Trends and ASHRAE

ATLANTA - Kent Peterson juggles many roles these days: president of ASHRAE, husband and father, business owner and engineer. Now, he is adding one more item to that tidy list-blogger.

In a new blog from the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Peterson shares information about ASHRAE happenings and industry trends from his perspective as president of the Society. Titled GreenBits, the

blog can be found at www.ashrae.org/blog.

"The construction industry is rapidly evolving with new technologies adapted to a varied array of building services," Peterson says. "As I travel to various events as ASHRAE president globally, I hope to share my perspective on how our industry is meeting sustainability challenges in the built environment and how ASHRAE members worldwide are contributing. It also provides ASHRAE members with an opportunity to comment on our progress."

Updated weekly, GreenBits also has its own RSS feed for easy access to the latest posts and reader comments. To subscribe to the feed, visit the blog and click on the RSS link on the left column.

ASHRAE Publishes Energy Performance Comparison Standard

ATLANTA - A common basis for reporting building energy use and comparison of energy performance is available in a new standard from ASHRAE.

ANSI/ASHRAE Standard 105-2007, Standard Methods of Measuring, Expressing and Comparing Building Energy Performance, provides a method of energy performance comparison that can be used for any building, proposed or existing, and that allows different methods of energy analysis to be compared.

This will help facilitate comparison, design and operation improvements and development of building energy performance standards, according to J. Michael MacDonald, chair of the committee that wrote the standard.

"ASHRAE is working to advance the development and understanding of these advanced building performance comparison methods," he said. "This standard provides a framework for assuring access by all interested parties to performance comparison or rating methods that are developed."

The biggest change to the standard, last published in 1999, is inclusion of building energy performance comparison, which is vital for energy efficiency efforts worldwide, he said. Past versions of the standard provided a basis for reporting energy use but had limited ability to express or compare performance.

MacDonald notes that existing standards and building rating systems include requirements related to energy performance comparison.

MacDonald said the guidance in the standard progresses from energy use index (total annual energy use per square foot) to other indexes, such as energy use per hospital bed, and then to performance comparison frameworks.

The standard also identifies key characteristics that users should consider reporting when performance comparisons are of interest, such as the number of workers, weekly hours of operation, and annual cooling and heating degree days.

The cost of ANSI/ASHRAE Standard 105-2007, Standard Methods of Measuring, Expressing and Comparing Building Energy Performance, is \$36 (\$30 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, or visit at www.ashrae.org/bookstore

Varied HVAC Systems Featured in ASHRAE Headquarters Renovation

ATLANTA - Once completed, ASHRAE's renovated headquarters building in Atlanta will feature two separate HVAC systems as part of its role as living lab.

ASHRAE's Board of Directors has given the project its final stamp of approval, ASHRAE staff will move into temporary offices in September. The renovation is expected to be completed in June 2008 at an estimated cost of \$5.4 million. The renovated building will feature a new learning center and will serve as a living lab.

The living lab will support the ASHRAE research program with a rich resource of data on building, system and equipment performance, a demonstration of performance monitoring, and space for 'real world' investigations in an operating building," said Bill Harrison, ASHRAE president-elect who serves as chair of the committee overseeing the project.

Level one of the building will feature air-cooled multi-split variable refrigerant flow fan coil units with zoned inverter-driven outdoor heat pumps. Level two will feature ground source direct expansion heat pumps for cooling and heating.

Both systems will use a common dedicated outside air system (DOAS), served by a 100 percent outside air unit with energy recovery wheel, series desiccant dehumidification wheel, electrostatic enhanced filters and DX air-cooled R410 multi-stage compressor/condensers.

ASHRAE plans to apply for a LEED Gold certification under the U.S. Green Building Council's Leadership in Energy and Environmental Design rating system.

Complete information on the renovation can be found at www.ashrae.org/building



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Humidity Control I - Basic Principles, Loads and Equipment

Mon, October 15, 2007 - 1:00 p.m. to 4:00 p.m.

Instructor: Lew Harriman, P.E.

Complying with Requirements of Standard 62.1-2004

Wed, October 24, 2007 – 1:00 p.m. to 4:00 p.m. Mon, November 19, 2007 – 1:00 p.m. to 4:00 p.m.

Instructor: Hoy Bohanon, P.E.

An Introduction to BACNet®

Wed, November 7, 2007 - 1:00 p.m. to 4:00 p.m.

Instructor: David Fisher, P.E.



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Thurs, October 4, 2007 – 1:00 p.m. to 4:00 p.m.

Instructor: Frank Mills, P.E.

<u>Humidity Control II – Applications, Control Levels</u> <u>and Mold Avoidance</u>

Wed, October 17, 2007 – 1:00 p.m. to 4:00 p.m.

Instructor: Lew Harriman, P.E.

<u>Understanding & Designing Dedicated Outdoor</u>
<u>Air Systems</u>

Wed, October 31, 2007 – 1:00 p.m. to 4:00 p.m. Instructor: Stanley Mumma, Ph.D., P.E.

Introduction to Green Buildings and Sustainable

Construction
Wed, November 14, 2007 – 1:00 p.m. to 4:00 p.m.

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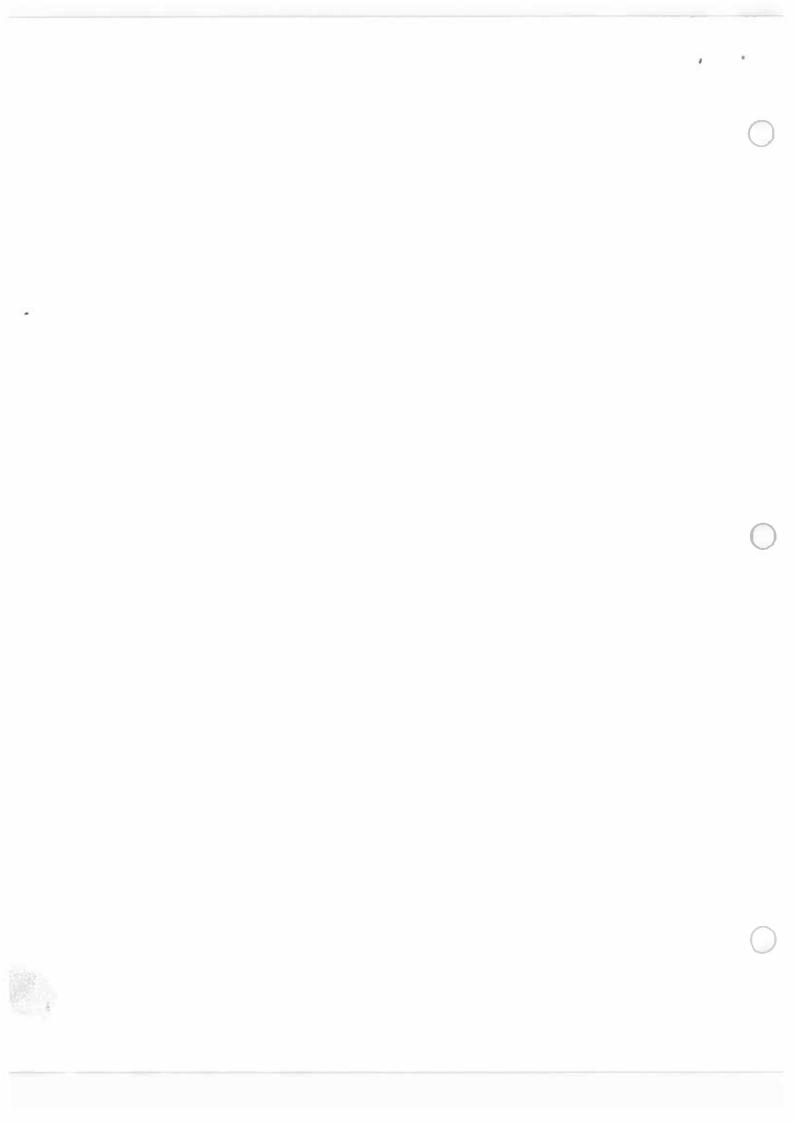
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LONDON CANADA CHAPTER #116

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Mon Oct 22/2007

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Newsletter

Tom Pollard ph: 519-685-2570 tpollard@execulink.com **TOPIC:**

COOLING TOWER DESIGN

APPLICATION AND PROBLEMS

MR GARY SWEENEY

CTM INC

(Cooling Tower Maintenance)

Meeting - Mon Oct 22/2007

THE LAMPLIGHTER INN, 591 Wellington Rd., London

MEMBERSHIP NIGHT

London Chapter Members = \$25.00 Students = \$10.00 Others = \$35.00

MEMBERSHIP NIGHT

CASH BAR 5:15-Social

ALL YOU CAN EAT BUFFET 6:00-Dinner

7:15-Program





http://LondonCanada.AshraeChapters.org Mon Oct 22/2007 Page 2

President's Message

I hope those of you who made it out to our September meeting enjoyed Mr Fred Campagna of AERCO International presentation on boiler plant efficiencies, ASHRAE SPC 155A and stratified hot water storage tank design. Fred provided a wealth of information on how to better understand boiler efficiency ratings. The remainder of this year's program & monthly meetings is very close to being finalized. You can check out the speakers, topics and dates on our website, at http://LondonCanada.AshraeChapters.org.

Last month's meeting was our first Student Promotion Night this year as well. I had the privilege of awarding the ASHRAE Memorial Scholarship to Mr. Brian Coulter, a 4th year engineering student at the University of Western Ontario, and the first recipient of an ASHRAE Society Scholarship in our chapter history. Congratulations, Brian! I would also like to thank the five other students who made it out to their 1st ASHRAE meeting. We continue to extend an invitation to all students to attend & hope to see more new young faces at our future meetings. Lastly, I would also like to thank the five companies that sponsored the students to attend the September meeting. Your support and assistance is truly appreciated.

This month's meeting is Membership Promotion night. Our goal for the year is to raise local membership with new members. If you know of anyone who would benefit from being an ASHRAE member, please let myself (sedmunds@uniongas.com) or our Membership Chair, Karl Gilroy (kgilroy@prive-hvac.com) know. Better yet, if you know someone who would enjoy attending one of our monthly meetings to hear a speaker, such as Mr. Gary Sweeney from CTM, who will be speaking on Cooling Tower Design at this month's meeting, please invite them to come along with you. If nothing else, I certainly hope you can make it out to the meeting on October 22nd.

Scott Edmunds **ASHRAE London President**

Membership Night

If you know someone who would benefit from our meetings invite them out. Being a chapter member provides a reason to get out once a month and meet with your peers. By attending the monthly Chapter meeting you have access to the expertise of many in our industry. Of course, meetings are open to all so if you don't know if you want to join the chapter, come on out for a month or two and see what it's all about

Karl Gilroy **ASHRAE London Member Chair**

<u>HVAC Heritage Centre Canada</u>

Preserving and promoting the HVACR Industry's - and your heritage and legacy - is what the HVACR Heritage Centre Canada is all about. It is the only group in North America striving to not only preserve the significant technological achievements of the early 20th Century but also the pioneers, the innovators, the leaders who made all that you benefit from today.

Check out our website at www.hhc-canada.net and view the major educational presentation: 'Chilling Out' the evolution of refrigeration and its impact on lifestyles, culture, society and the economy during the 20th Century, just one example of what this new group is striving to achieve.





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Speakers Bio

Gary Sweeney is the Director of Business Development for CTM Inc (Cooling Tower Maintenance) which deals with cooling towers, mobile hvac sales and rentals and ultra sonic humidification.

He spent 28 years with the Trane Company working in office administration, the parts department, achieved third year standing as a refrigeration apprentice, dispatcher and job coordinator, service salesman, service sales manager, Vice President and General Manager Service and finally, General Sales Manager for all equipment, temperature controls and aftermarket sales.

After leaving the Trane Company in 1999, Gary worked as an independent consultant to Enwave District Energy and the ECE Group before joining CTM Inc. Gary has a Honours BA from the University of Western Ontario. He is also a member of ASHRAE, BOMA, the Association of Condominium Managers of Ontario and Canadian Hospital Engineers Society.

Sept Meeting Summary

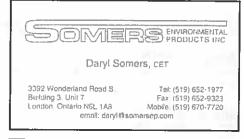
The startup fall meeting for ASHRAE London Canada was on September 24th, and our speaker was Fred Campagna of AERCO International from Northvale, New Jersey. He spoke on the topic of "How boiler plant efficiencies will be estimated on a seasonal basis with reference to the upcoming SPC 155A ASHARE standard". He also spoke about condensing boiler technology development, and the process of selecting accumulator and stratified storage tank hot water system components (i.e. tank, pump, heater, pipe sizes) for laundry or process applications.

We also presented the ASHRAE Memorial Scholarship Award to University of Western Ontario Student Brian Coulter.



ASHRAE Memorial Scholarship Award

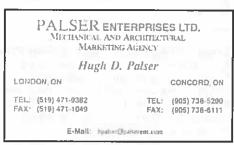
ASHRAE London
Canada 2007-2008
President Scott
Edmunds (on left)
presenting to 4th Year
University of Western
Ontario Student Brian
Coulter (on right)















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UPCOMING Meetings & Events

Mon Nov 26/2007

Green Globes - Environmental Assessments for Building Mr Daryl Boyce - Carleton University, Ottawa

Mon March 31/2008

Global Warming - Differing Perspectives Mr Victor Goldschmidt - Northport MI ASHRAE DISTINGUISHED LECTURER

Wed April 16, 2008

Chapter Technology Transfer Committee Satellite Broadcast/Webcast
The broadcast will focus on "Integrated Building Design."
Watch for additional information regarding the Broadcast/Webcast via ASHRAE Insights and www.ashrae.org.

ASHRAE Notes HVAC&R Industry's Role in Montreal Protocol Successes

ATLANTA - The creation of the Montreal Protocol, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) celebrates the efforts of the heating, ventilating, air conditioning and refrigeration (HVAC&R) industries that have played a role in reducing ozone depletion.

The Montreal Protocol on Substances that Deplete the Ozone Layer is an international treaty designed to protect the ozone layer by phasing out the production of a number of substances believed to be responsible for ozone depletion.

"ASHRAE has played a substantial role in stopping further ozone depletion by helping the industry to transition away from ozone-depleting refrigerants," Kent Peterson, ASHRAE president, said. "The Montreal Protocol has shown that when we do what is right for mankind, our initial burden can turn to benefit. Not only has the Montreal Protocol improved the ozone layer, but it also initiated vast technological improvements in air conditioning equipment."

ASHRAE has continuously developed ANSI/ASHRAE Standard 15-2004, Safety Standard for Refrigeration Systems, and ANSI/ASHRAE Standard 34-2007, Designation and Safety Classification of Refrigerants as new refrigerants that are better for the ozone have been developed. In particular, ASHRAE has traced the development of HCFCs to replace CFCs, and then HFCs to replace HCFCs as technology improved. Now, there is a movement to use "natural" refrigerants such as carbon dioxide, ammonia, and hydrocarbons such as propane and butane.

ASHRAE-funded research projects have also contributed to the successes of the Montreal Protocol. Research has included projects concerning ozone destruction, properties of refrigerants, and evaluation of CFC-alternative refrigerants.

Since the Montreal Protocol, ASHRAE has written and updated its Position Document on Ozone-Depleting Substances, and the Society is currently writing a position document on natural refrigerants.

Since the energy crisis of the 1970s in particular, ASHRAE has been a leader in energy efficiency. Work has included collaborations with the Clinton Climate Initiative, publications such as the Advanced Energy Design Guide series and the ASHRAE GreenGuide, and making ASHRAE's flagship energy standard that is adopted into building codes, ANSI/ASHRAE/IESNA Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings, increasingly more energy efficient.

Occupant Reactions to IEQ in Offices Presented at ASHRAE Conference

ATLANTA – Glare, noise level and cold drafts during winter months were top concerns of building occupants surveyed in an Australian study regarding indoor environmental quality (IEQ) in office buildings.

Results of the survey will be shared at ASHRAE's IAQ 2007: Healthy and Sustainable Buildings conference, Baltimore Oct. 14-17. For more information, visit www.iaq2007.org.

Occupants of two new buildings in Melbourne were asked about their satisfaction with design features and IEQ including temperature, airflow, air contaminants, sound pressure level, view, lighting and workspace configuration.

Researchers at the University of Melbourne found that the occupants' complaints dealt with areas related to building operation processes, lack of personal control and noise level.

"The study confirms that it is useful for understanding how design and environmental quality design features impact occupants," Maxwell Ashibuogu Chiazor, a doctoral student at the University of Melbourne, said. "The study shows that well-being and physiological discomfort are the two factors that account for occupants' reactions to design and environmental quality. This information is useful for decisions about workplace configuration and building energy efficient design features."



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ASHRAE Seeks to Reach New Heights in New York City

ATLANTA – ASHRAE will reach new heights in sustainability, professional development and HVAC&R technology at its 2008 Winter Meeting.

Centered on the theme Reaching New Heights, a nod to the skyscraper skyline of New York City, the meeting takes place Jan. 19-23 at the New York Hilton. Held in conjunction with the meeting is the ASHRAE co-sponsored AHR Expo, Jan. 22-24, Javits Convention Center.

For complete meeting information and to register, visit www.ashrae.org/newyork.

Meeting highlights include the technical program, with its theme of Reaching New Heights in Net-Zero Energy Design, featuring more than 130 sessions with presentation of 59 papers.

Sessions of special interest in the technical program include a roundtable featuring two of New York's best-known owner/developer firms along with the engineering designers who bring their projects to reality. The session takes place at 11 a.m. Jan. 22. New York Hilton.

A look at New York City's Sustainability Plan, plaNYC 2030, is presented at 9:45 a.m. Jan. 20, New York Hilton. One goal of the plan is to reduce greenhouse gas emissions by more than 30 percent by 2030. Learn about the city's efforts and ASHRAE's role in meeting these goals.

ASHRAE's free public session focuses on HVAC System Design for Security and Sustainability. It is held at 3 p.m. Jan. 22 at Javits Convention Center.

Steve Rizzo, author of Becoming a Humor Being, is keynote speaker at the plenary session held at 3:15 p.m. Jan. 19, New York Hilton. He shows people how to choose a healthy attitude both professionally and personally, learning how to succeed and enjoy their lives in the midst of challenging and changing times.

"Concerns about climate change and the need to reduce energy consumption has created numerous challenges, or make that wonderful opportunities, for the built environment engineering community," Kent Peterson, ASHRAE president, said. "Rising to the challenge will require equal parts of perseverance and innovation. Steve Rizzo illustrates how to embrace change as ASHRAE turns its technology engine against the daunting challenge of creating market viable net-zero energy buildings."

Sustainability is highlighted in the technical tours of facilities recognized around the world for their leadership in sustainable design. Buildings on the tour include Four Times Square, One Bryant Park, the Time and Life Building chiller plant, the Helena Apartment building, 7 World Trade Center and Time Warner Center.

The ASHRAE Learning Institute offers seven Professional Development Seminars and 14 short courses at the New York Hilton and Javits Convention Center. New sessions include Compliance with ANSI/ASHRAE/IESNA Standard 90.1-2007 and Energy Management in Existing Buildings.

Sustainability also is highlighted at the ASHRAE Headquarters Hotel, the New York Hilton. Sustainability measures at the hotel include 90 percent fluorescent lighting; environmentally friendly refrigerants used in the chillers; preheating of hot water with steam condensate; and occupancy sensors installed in the meeting rooms. The hotel recently installed a 200KW fuel cell to generate electricity in a clean, environmental friendly way.

In addition, ASHRAE is debuting a program that allows attendees to connect online to carpool or share hotel rooms. Through ShareSpace, attendees can find others in their neighborhood who are attending the meeting, making it easier to find someone to share a cab to the airport and hotel or catch up with someone upon arrival in New York to share ground transportation. Sharing rides or rooms cuts down on energy and vehicle usage, as well as provides networking opportunities. To learn more, visit www.ashrae.org/newyork or www.spaceshare.com/ashrae.

ASHRAE Provides Guidance on Achieving Good IAQ

ATLANTA – Providing design guidance on how to achieve good indoor air quality is the aim of a proposed guideline from ASHRAE now open for public comment.

Guideline 24P, Ventilation and Indoor Air Quality in Low-Rise Residential Buildings, is the companion guideline to ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings. The guideline currently is open for public comment until Oct. 29, 2007.

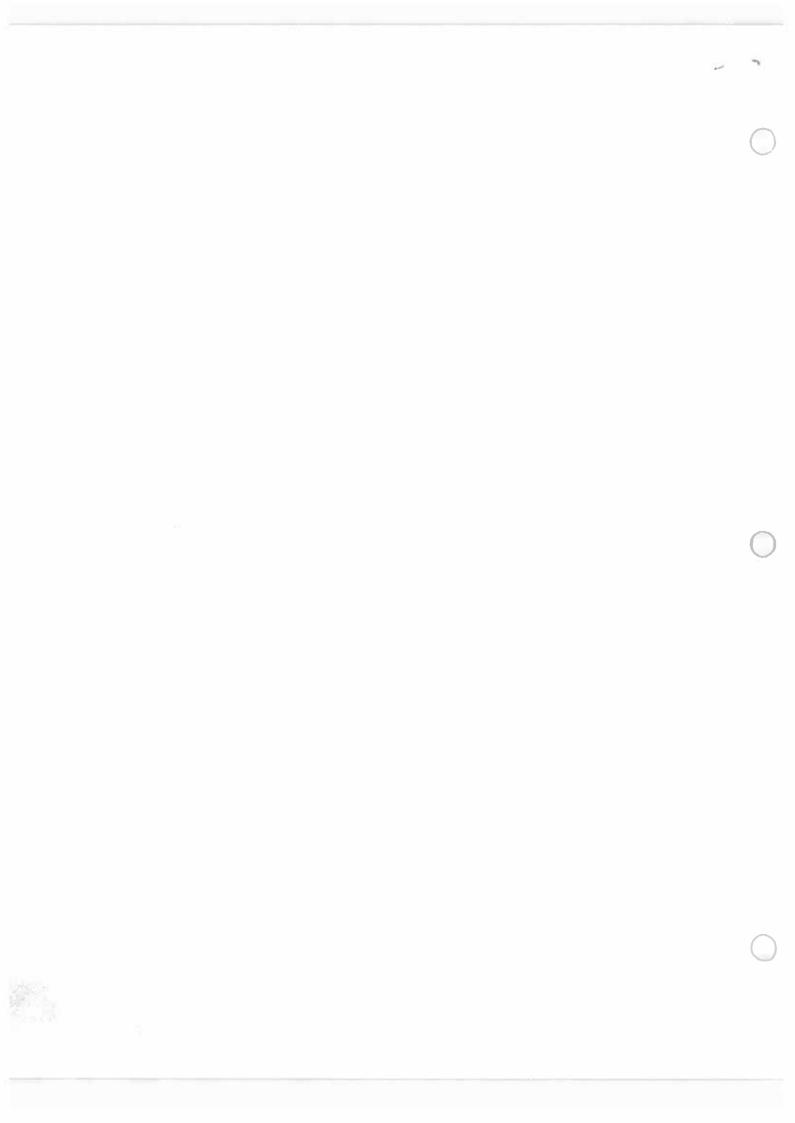
The proposed guideline would provide information on envelope and system design, material selection, commissioning and installation, and operation and maintenance.

The guideline goes beyond the requirements contained in Standard 62.2 by providing explanatory and educational material that would be inappropriate in the code-intended standard.

Topics addressed in the guideline but not covered in the standard include carbon monoxide alarms, air distribution, better air filtration and unvented combustion appliances.

"While both Standard 62.2 and Guideline 24P seek to provide acceptable indoor air quality, the guideline goes beyond by providing additional information for achieving good indoor air quality," Steve Emmerich, chair of the committee writing the guideline, said. "The guideline also provides information on topics such as verification of ventilation equipment performance and operations and maintenance, which, though important, are not easily addressed in a code-intended standard."

A draft of proposed Guideline 24P is available during the public review period. To read the guideline or to comment, visit www.ashrae.org/publicreviews.





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

LONDON CANADA CHAPTER #116

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MR DARRYL BOYCE, P.Eng

CARLETON UNIVERSITY

Assistant Vice-President (Facilities and Planning)

Meeting - Mon Nov 26/2007

THE LAMPLIGHTER INN, 591 Wellington Rd., London

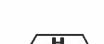
MEMBERSHIP NIGHT

SPECIAL RATE = \$25.00

Students = \$10.00

RESEARCH NIGHT

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







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President's Message

I hope those of you who made it out to our October meeting enjoyed the presentation of Mr. Gary Sweeney of Cooling Tower Maintenance (CTM) Inc., who spoke on cooling tower design and common problems encountered with each design in the field. Gary provided an extremely candid review on the pros and cons of each cooling tower design.

Please join us this month as Mr. Daryl Boyce of Carlton University discusses Green Globes Environmental Assessments for Building. Many of you will remember Daryl as an active member of London ASHRAE Chapter before he moved to Ottawa. He will present how to measure the environmental performance of buildings against current best practices in areas such as energy, water, hazardous materials, waste management and indoor environment. It is very similar to other green design assessment methods such as LEED. ASHRAE recently announced efforts to achieve 30% energy savings in ASHRAE Standard 90.1 by 2010. Building assessment systems provide a roadmap for existing buildings to keep pace with their younger cousins. For other upcoming speakers, topics and dates, please check out the London ASHRAE website, at http://LondonCanada.AshraeChapters.org.

This month's meeting is also Research Promotion night. Research is the foundation of ASHRAE and is the source of developing the ASHARE Standards and the ASHRAE Handbooks. ASHRAE Research invests significant dollars in Canada to funding HVACR studies and projects at Canadian universities and companies. In actual fact, more money is actually invested back into Canada than is contributed by Canadians, so please give generously.

I hope to see you on November 26th.

Scott Edmunds **ASHRAE London President**

Research Night

November 26th will be our Research Promotion night and I would like to start by thanking all of you who have in the past and continue to contribute towards ASHRAE Research Canada. Last year the London Chapter received \$12,308 in contributions and has set a budget for the 2007/2008 campaign of \$12,000. The ASHRAE Society Goal for the 2007/2008 campaign is \$2,037,900 and is currently sitting YTD at \$284,460. I will soon be calling on those of you who have contributed in the past, to continue your support, and would like to ask for those who have who have not contributed to consider doings so. ASHRAE Research plays a key role in sponsoring research projects that help set the standards and design criteria we all see and use today. ASHRAE Research's mission is to "Improve the quality of life and to answer tomorrow's questions through research today."

Scott Turner Research Promotion Chair - ASHRAE London

Oct Meeting Summary

Gary Sweeney from CTM Inc spoke about cooling towers and the problems that can happed when maintenance on these typically forgotten pieces of mechanical equipment is forgotten. Mr Sweeney had several photo from cooling towers that had failed. Recommendations of cooling tower styles and operations were also discussed.

Pete Edmiston ch Monager



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Speakers Bio

Darryl Boyce P.Eng CARLETON UNIVERSITY

Assistant Vice-President (Facilities Management and Planning)

Darryl Boyce joined Carleton University as Director of the Department of Physical Plant in 1998 and was promoted to the position of Assistant Vice-President (Facilities Management and Planning) in 2007. He came to Carleton having spent the previous twelve years with the University of Western Ontario where he served as Associate Director, Facilities Engineering and Construction directing activities related to alterations, new construction, energy management, and utilities operations. Darryl has been a member of ASHRAE since 1983 and has served on numerous Society Committees over the years. Additionally, Darryl has served on the ASHRAE Board of Directors as a Director, Regional Chairman (Region II), a Director-at-large, and a Vice-President. Mr. Boyce is the Past President of the Ontario Association of Physical Plant Administrators (OAPPA), Chair of the Canadian Association of University Business Officers (CAUBO) National Facilities Management Committee, and a member of the Association of Higher Education Facilities Officers (APPA) Information and Research Committee. He completed the Mechanical Engineering Technology Program at the British Columbia Institute of Technology and received a Bachelor of Science Degree in Mechanical Engineering from the University of Alberta.

GREEN GLOBES

www.greenglobes.com

Green Globes is an online building and management environmental audit, Green Globes for Existing Buildings helps property owners and managers measure the environmental performance of their buildings against best practices in areas such as energy, water, hazardous materials, waste management and indoor environment. Using a confidential questionnaire, it generates an online report. Green Globes Design is both a guide for integrating green design principles and an assessment protocol. Using confidential questionnaires for each stage of project delivery, the program generates comprehensive on-line assessment and guidance reports. Using Green Globes helps to design a building that will be energy and resource efficient, will achieve operational savings and be healthier to work or live in.

Green Globes Canada was developed in Canada with support of federal and provincial ministries and public utilities and in the UK, by the RICS foundation and Faber Maunsell. Green Globes is the newest addition to the BREEAM/Green Leaf suite of environmental assessment tools. The program's core premise is that environmental leadership and responsibility make business sense.

HVACR Heritage Centre Canada

visit www.hhc-canada.net

HVACR Heritage Centre Canada is to preserve and record the history of the heating, ventilating, air conditioning and refrigeration technologies and their essential contributions to Canada's rich heritage and way of life.









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Upcoming Meetings & Events

Jan 19-23/2008

ASHRAE 2008 Winter Meeting - New York City (refer to www.ashrae.org)

Mon Jan 28/2008 ASHRAE London Chapter Meeting

Mon Feb 25/2008 ASHRAE London Chapter Meeting CFD Analysis in HVACR Applications Mr. Paul J. MacDonald - ANSYS Canada Ltd.

Mon March 31/2008 ASHRAE London Chapter Meeting
Global Warming - Differing Perspectives
Mr Victor Goldschmidt - Northport MI ASHRAE DISTINGUISHED LECTURER

Wed April 16, 2008 Chapter Technology Transfer Committee Satellite Broadcast/Webcast The broadcast will focus on "Integrated Building Design."

Watch for additional information regarding the Broadcast/Webcast via ASHRAE Insights and www.ashrae.org.

2006/2007 ASHRAE Research Donors

I would like to take this opportunity to recognize the individual and corporate donors for the 2006/2007 campaign

Scott Turner Research Promotion Chair - ASHRAE London

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Guidance for Net-Zero Energy Design Highlighted in Technical Program

ATLANTA - How low can you go when it comes to energy reduction in buildings?

Try net zero.

Guidance on how to get there is featured in the technical program at ASHRAE's 2008 Winter Meeting, Jan. 19-23, New York Hilton, New York City. For complete meeting information, including abstracts on all technical program sessions, visit www.ashrae.org/newyork.

"This technical program is ASHRAE's most ambitious ever," promises Mo Hosni, chair of the ASHRAE Program Committee. "First, the technical program is filled with sessions that focus on the hottest issues facing the industry – sustainability and net-zero energy buildings. Second, the program is structured to offer the greatest options for attendees with an extended day of sessions on Wednesday, Jan. 23, as well as the scheduling of 16 seminars at the AHR Expo. Third, for the first time, New York professional development hours will be awarded for several sessions in the technical program, providing excellent value for meeting attendees."

The technical program covers a full range of presentations from basic to advanced, offering more than 130 sessions and 60 papers covering some 100 different technical areas. Programs are separated by tracks: applications, business management, commissioning, data center cooling, dehumidification, exergy, fundamentals, operational topics, refrigeration, sustainability, systems and equipment and underfloor air distribution.

More than 30 sessions related to sustainability are included in the program, with its theme of Reaching New Heights in Net-Zero Energy Design.

What is a net-zero energy building? The official ASHRAE definition is "buildings which, on an annual basis, use no more energy than is provided by on-site renewable energy sources." A forum on Jan. 23 explores other definitions and the impact of such buildings on the environment.

A Transactions session on Jan. 22 examines case studies of low-energy buildings, focusing on evaluation of individual technologies, design processes, lessons learned and long-term measured performance.

A Jan. 23 seminar looks at low- and zero-carbon cities of the future, presenting plans by London, Barcelona and Manchester to lower their carbon emissions. Learn how HVAC and related technologies are critical to success.

A Jan. 20 forum looks at the role of energy storage in net-zero buildings, discussing grid impacts, system sizing and costs. Held in conjunction with the ASHRAE meeting is the ASHRAE co-sponsored AHR Expo, taking place Jan. 22-24, Javits Convention Center. Please note that the Expo is being held Tuesday-Thursday this year instead of its regular Monday-Wednesday schedule.

'08 Winter Meeting

Lessons Learned in Sustainable Design Highlighted in ASHRAE Roundtable

ATLANTA - New York City is home to some of the world's best known green buildings and leading design firms that test new boundaries in high-performance, sustainable design.

In a special roundtable session at ASHRAE's 2008 Winter Meeting, 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, at ASHRAE's meeting, Jan. 19-23, New York City. Registration is required to attend.

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.

"The building market is transitioning to high-performance green buildings," Kent Peterson, ASHRAE president, said. "It is essential that ASHRAE continue to educate owners, contractors and designers on both the challenges and successes in delivering such buildings. This roundtable offers participants the chance to hear what it takes to provide buildings that perform and are environmentally responsible."

Participants in the session are:

Donald J. Winston, P.E., director of technical services, The Durst Organization, Inc., whose buildings include Bank of America Tower at One Bryant Park, 4 Times Square and the Helena, all of which are featured on technical tours at the ASHRAE meeting. Tom Scarola, director of engineering, Tishman Speyer, whose buildings include the Chrysler Center.

Scott Frank, P.E., partner, Jaros Baum & Bolles, whose buildings include One Bryant Park, World Trade Center Site (Towers 1 through 4) and World Trade Center 7.

Daniel H. Nall, P.E., senior vice president/director-advanced technologies, Flack + Kurtz, whose projects include The New York Times Headquarters, The Hearst Headquarters and the Verdesian.



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ASHRAE Expands Certification to Testing Centers Worldwide

ATLANTA – ASHRAE's first certification program is now available in testing centers in 22 countries. The certification, Healthcare Facility Design Professional (HFDP), is a computer-based examination that tests an applicant's mastery of a body of knowledge. "An indoor environment that is safe, comfortable and enhances productivity at minimum impact to the environment is a basic need throughout the globe," Richard Hayter, chair of ASHRAE's Certification Committee, said, "One way by which ASHRAE addresses that need is through its certification programs."

In addition to the United States and Canada, the exam is now offered in Australia, China, Egypt, Guam, India, Italy, Japan, Jordan, Kuwait, Lebanon, Philippines, Puerto Rico, Qatar, Saudi Arabia, Singapore, South Africa, South Korea, Taiwan, the United Arab Emirates, and the United Kingdom.

Applicants first apply for the examination through ASHRAE, and if they meet the certification qualifications, register for the examination at a testing center.

ASHRAE's certification program identifies individuals who have mastered a body of knowledge covering successful design and operation of healthcare facilities. Future certifications are planned for sustainable facility design, commissioning, and operations and maintenance.

The technical content for the HFDP exam was developed in cooperation with the American Society for Healthcare Engineering (ASHE) of the American Hospital Association (AHA).

Membership in ASHRAE is not required to participate. A list of recommended resources on healthcare facility design from ASHRAE and other sources is available. For more information, visit www.ashrae.org/certification.

In addition, ASHRAE will offer an onsite HFDP exam March 10, 2008, at the Gaylord Palms Hotel & Convention Center in Orlando, FL. This exam administration is being offered in conjunction with ASHE's Planning, Design and Construction Conference.

ASHRAE Receives NCEES Accreditation for Educational Programs

ATLANTA – ASHRAE has received accreditation for its education program from the National Council of Examiners for Engineering and Surveying (NCEES).

This accreditation from NCEES' Registered Continuing Education Providers Program (RCEPP) gives ASHRAE's educational offerings, part of the ASHRAE Learning Institute, another level of creditability in the eyes of licensing and renewal authorities. ASHRAE Learning Institute offers on-site and online educational programs addressing a wide variety of engineering topics, such as commissioning and compliance with ASHRAE standards. For more information, visit www.ashrae.org/ali.

RCEPP is a comprehensive registry of continuing educational providers that have demonstrated adherence to high-quality, effective practices in the development and delivery of professional education activities for engineers and surveyors.

08' ASHRAE

ASHRAE's Role in Providing Guidance for Contractors Explored in Forum

ATLANTA – To ensure design and construction of the most efficient and comfortable buildings possible, ASHRAE is working to provide its technical guidance to all members of the building team.

Input on guidance needed from ASHRAE to best serve contractors and design build firms is sought in a forum at ASHRAE's 2008 Winter Meeting, Missing the Bus: What is ASHRAE Not Doing for the Contractor? It takes place from 12:15-1:15 p.m. Jan. 22, Javits Convention Center.

"ASHRAE isn't looking to reinvent the wheel on training documentation targeted to contractors and design-build firms but instead to work with existing organizations to market a more comprehensive suite of training information for contractors," Jim Fields, chair of ASHRAE's task group on HVAC contractors and design-build firms, said. "One of our primary goals is to see how we can make existing products, such as standards and design guides, more user-friendly for contractors."

ASHRAE formed its task group earlier this year. Fields said more active involvement with contractors and design-build firms will help strengthen the level of understanding between design engineers and these other disciplines.

For more information about the ASHRAE meeting, Jan. 19-23, at the New York Hilton, visit www.ashrae.org/newyork. Held with the ASHRAE Winter Meeting is the ASHRAE co-sponsored International Air-Conditioning, Heating, Refrigerating Exposition, Jan. 22-24, at Javits Convention Center. For more information, visit www.ahrexpo.com.



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

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Hugh Palser ph: 519-471-9382 hpalser@palserent.com

Newsletter

Tom Pollard ph: 519-685-2570 tpollard@execulink.com

TOPIC:

THE MOST POWERFUL TOOL YOU CAN HAVE WITH R401A

"KNOWLEDGE"

MR GARTH DENISON

SPORRAN VALVE - DIVISION OF PARKER HANNIFIN CANADA

Sr. Product Application Engineer

Meeting - Mon Jan 28/2008

THE LAMPLIGHTER INN, 591 Wellington Rd., London

London Chapter Members = \$25.00 Students = FREE Others = \$35.00

HISTORY & STUDENT NIGHT

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





http://LondonCanada.AshraeChapters.org Mon Jan 28/2008 Page 2

President's Message

I would like to welcome everyone back in 2008 and hope the holiday season was good to you & your family. I'm confident that you'll find our upcoming 2008 schedule of events to be as enjoyable & informative as the first half of our chapter program. Our November meeting on the Green Globes Environmental Assessment System for Building was a fine way to end 2007, Mr. Daryl Boyce of Carlton University provided an excellent overview on the benefits of using Green Globes during building design and how it compared to the more widely-known LEED system for green building assessment.

I would like to extend an invitation to all members to come & join us on January 28th to kick off our 2008 schedule of events. Mr. Garth Denison, Senior Product Application Engineer for Sporlan Valve will be presenting important facts on the refrigerant R-410A. Garth is a well-known and respected expert in the field of refrigeration. He has presented & written several articles on all aspects of refrigeration over the years and I consider our chapter very fortunate to have him speaking to us this month. For other upcoming speakers, topics and dates, please check out the London ASHRAE website, at http://LondonCanada.AshraeChapters.org.

The ASHRAE Society Winter Meeting and AHR Expo Show is currently underway in New York this week. I know a few members of the London ASHRAE Chapter are attending the event. I have asked Mr. Eric Shaw, our Chapter Vice-President, to provide us with a brief summary on the Winter Meeting during our meeting. As well, Tom Pollard has offered to speak on the HVACR Heritage Centre Canada, a group of individual striving to preserve and promote the HVACR industry. I expect both talks to be very enlightening.

This month's meeting will also be our second Student Activities night for the season. We are hoping that several engineering student from the University of Western Ontario will be able to attend on Monday. I would ask all members to take the time to welcome the students and invite them to sit with you & your colleagues during dinner. Meeting ASHRAE members is a great way for the students to find out more about ASHRAE and the industry we work in.

With that, I hope to see you all on January 28th.

Scott Edmunds **ASHRAE London President**

Speakers Bio

Garth Denison

Sporlan Valve - Division of Parker Hannifin Canada. Sr. Product Application Engineer

Garth Denison has had some 42 years of experience in the refrigeration and air conditioning industry and is one of the most sought after speakers in North America. His topics range from Refrigerants to Lubricants in Refrigeration, refrigerant controls, and compressor technology in refrigeration and air conditioning.

Garth retired from DuPont Canada in 2002 as Senior Technical Consultant, Fluoroproducts Division, and then accepted a position with Sporlan Canada.





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Nov 2007 Meeting Summary

Green Globes Presentation by Darryl Boyce of Carleton University

On November 26th, 2007, Darryl Boyce of Carleton University came to speak to the London Chapter of ASHRAE on the topic of the Green Globes Design Rating System,

He gave an overview of the Green Globes system explaining that the Green Globes Design is both a guide to integrating green design principles, and an assessment tool that uses an "on-line" questionnaire to produce recommendations and a report.

He explained that the objectives of Green Globes are to:

- · Evaluate energy and environmental performance of buildings.
- · Encourage peer reviews of design and management practices.
- · Increase awareness of environmental issues amongst building owners, designers and managers.
- Provide action plans for improvement at varying stages of project delivery.
- Provide certification and awards for green building design and management.

He explained the similarities and the differences between the LEED Building design system, and the Green Globes system, and how he felt that the Green Globes system was a better representation of what the building owner/operator would want to see in the planning/building design stage - right through to the completion of construction.

The meeting was well attended by the membership, and some invited guests and new faces as well.

Eric Shaw

ASHRAE London Vice-President & Program Chair

HVACR Heritage Centre Canada

visit www.hhc-canada.net

HVACR Heritage Centre Canada is to preserve and record the history of the heating, ventilating, air conditioning and refrigeration technologies and their essential contributions to Canada's rich heritage and way of life.

Upcoming Meetings & Events

Mon Feb 25/2008 ASHRAE London Chapter Meeting CFD Analysis in HVACR Applications Mr. Paul J. MacDonald - ANSYS Canada Ltd.

Mon March 31/2008 ASHRAE London Chapter Meeting Global Warming - Differing Perspectives Mr Victor Goldschmidt - Northport MI ASHRAE DISTINGUISHED **LECTURER**

Wed April 16, 2008 Chapter Technology Transfer Committee Satellite

The broadcast will focus on "Integrated Building Design." Watch for additional information regarding the Broadcast/Webcast via ASHRAE Insights and www.ashrae.org.









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http://LondonCanada.AshraeChapters.org Mon Jan 28/2008 Page 4

08' ASHRAE

Refrigerated Shipping Celebrated in ASHRAE Technical Program Session

ATLANTA – Londoners enjoying a lamb chop dinner tonight should take time to celebrate a milestone anniversary in the history of refrigeration.

This year marks the 125th anniversary of the first frozen shipment of meat from New Zealand to Europe. In 1882, the Dunedin carried 3,521 sheep and 449 lamb carcasses, arriving in London in good condition after a 98-day voyage. "Early attempts to meet the English demand by exporting canned meat failed, as it was an unreliable product disliked by the English population," Dr. Richard Love, lecturer, Massey University, New Zealand, said. "Fortunately, worldwide technology was being developed at this time, and there were several candidate technologies available, such as absorption systems, mechanical compression systems and air-cycle systems, to ensure successful refrigerated shipping."

Love will share findings from his historical research, Early Refrigerated Meat Shipping from New Zealand, in the poster session at ASHRAE's 2008 Winter Meeting, Jan. 19-23, New York City. The poster session is held from 11 a.m.-1 p.m. Jan. 22 at the New York Hilton.

The Dunedin used an air-cycle refrigeration system, which was seen as more reliable than a mechanical compression system on an ocean voyage, as it could not suffer from refrigerant leaks, according to Love. In the decades that followed, carbon dioxide- and ammonia-based mechanical compression systems became much more popular.

"Today, New Zealand still exports a large amount of frozen product around the world – 92 percent of New Zealand lamb is exported, and meat exports comprise about 14 percent," Love said. "Refrigerated shipping remains an important technology for the country."

For more information about the ASHRAE meeting, Jan. 19-23, New York Hilton, visit www.ashrae.org/newyork. Held with the ASHRAE Winter Meeting is the ASHRAE co-sponsored International Air-Conditioning, Heating, Refrigerating Exposition, Jan. 22-24, at Javits Convention Center. For more information, visit www.ahrexpo.com.

ASHRAE Studies Heat, Moisture Production Rates of Swine, Houses

ATLANTA – The proverbial "little pig who stayed home" will be assured of good indoor environmental quality under proposed research from ASHRAE.

The Society is funding research to update heat and moisture production rates from pigs and their housing facilities, which are the foundation for effective design and operation of HVAC&R systems.

"Without proper heat and moisture production values, ventilation systems will be inadequately designed and operated, resulting in unsuitable building environments for animals and workers," said Lingying Zhao, Ph.D., a member of ASHRAE's technical committee on plant and animal environment, which is sponsoring the project. "Incorrect data about those values also can create potential moisture buildup that could lead to premature building failure."

The project is one of 16 currently out for bid by ASHRAE. Complete information on all of the projects and bid submittal information can be found at www.ashrae.org/research.

Currently available data on heat and moisture production rates is nearly 50 years old. Since that time, swine production has undergone significant changes in terms of genetic potential, nutrition, housing strategies and production systems, all of which affect swine heat and moisture production rate.

New feeds, for example, can affect the heat production rate from the actions of eating, digestion, and absorption and utilization of the nutrients. The amount pigs are fed today on a regular basis has changed throughout the years as well as differences in the nutrients contained in today's feed.

Types of housing also impacts swine heat and moisture production rates. Although pigs have a few sweat glands, they mainly stay cool due to other moisture sources in their pen evaporating from their skin, according to Zhao.

There are several other projects out for bid including:

1216-RFP.Inlet Installation Effects on Bi/Airfoil Centrifugal Fans, Air & Sound, sponsored by TC 5.1.

1267-RFP, Development of an ASHRAE Design Manual for District Heating and Cooling Systems, sponsored by TC 6.2.

1345-RFP, Waterside Fouling Performance of Brazed-Plate Type Condensers in Cooling Tower Applications, sponsored by TC 8.5. 1356-RFP, Methodology to Measure Thermal Performance of Pipe Insulation at Below-Ambient Temperatures, sponsored by TC 1.8

1387-RFP, Thermal Energy Storage Design for Emergency Cooling, sponsored by TC 6.9.

1408-RFP, The Effect of Lining Length on the Insertion Loss of Acoustical Duct Liner in Sheet Metal Ductwork, sponsored by TC 2.6

1418-RFP, Indoor Environment Modeling, sponsored by TC 4.10.

1475-RFP, Updating Heat and Moisture Production Rates of Modern Swine and Their Housing Systems, sponsored by TC 2.2.

1480-RFP, Island Hood Energy Consumption and Energy Reduction Strategies, sponsored by TC 5.10.

1481-RFP, Economic Data Base In Support of Standard 90.2, sponsored by Standing Standards Project Committee 90.2.

1482-RFP, Update to Measurements of Office Equipment Heat Gain Data, sponsored by TC 4.1.

1484-RFP, Energy and Performance of Secondary Coolant Low-Temperature Refrigeration Systems, sponsored by TC 3.1.

1486-RFP, Fault Detection and Diagnostics for Centrifugal Chillers - Phase III: Online-Time Implementation, sponsored by TC 7.5,



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ASHRAE Launches New Magazine Dedicated to High-Performing Buildings

ATLANTA - ASHRAE has launched a new magazine to help decision-makers in the building community learn about the latest developments in innovative technologies and energy-efficient design and operation.

Targeted at building owners, facility managers, architects and engineers, High Performing Buildings features working case studies of exemplary buildings developed by leading practitioners in the sustainability movement.

Also included is a "lessons learned" section in each article where building designers and operators explain what went right, what went wrong, how problems were resolved and what could have been done better.

"It is essential that ASHRAE share both the technologies and measured performance of high-performance buildings to change the status quo and help transform the building industry to a more sustainable built environment," said Kent Peterson, ASHRAE president.

ASHRAE's goal is to advance the concept of integrated building design with a focus on measured building performance, not just design of sustainable buildings. The cases studies featured will provide performance data, verifying actual sustainability performance.

The cover story of the first issue focuses on Heifer International. By providing gifts of livestock and plants to financially disadvantaged families around the world, Heifer International teaches sustainability by showing recipients how to use those gifts wisely.

The importance of passing on the gift of sustainability is also highlighted in the organization's Arkansas headquarters, which features earth-friendly designs such as a constructed wetlands, a gray-water tower and energy-saving techniques.

"One thing that Heifer understands is that if we are going to have a lasting impact on world hunger, everything we do must be sustainable - that is, the means for production of food and income must renew the environment and not deplete it," Jo Luck, Heifer's CEO and president, said. "In conceiving and constructing our new office building, we are striving to live up to the aspirations of Heifer's own mission of ending hunger and saving the earth."

To learn more or to subscribe, visit www.HPBmagazine.org. The quarterly magazine will be distributed via print and digitally.

Database of Building, Equipment Owning, Operating Costs Provided by ASHRAE

ATLANTA – Every day, engineers are asked to advise building owners and managers on strategic decisions involving the life cycle and functionally of buildings.

In the past, lack of valid data has left engineers without a solid basis for making these decisions.

A new free online database from ASHRAE provides engineers with equipment service life and annual maintenance costs for a variety of building types and HVAC systems. The database can be accessed at www.ashrae.org/database.

It contains more than 300 building types and more than 38,000 pieces of equipment with service life data. The database allows users to access up-to-date information to determine a range of statistical values for equipment owning and operating costs. With this, ASHRAE is providing the necessary methods and information to assist in using life-cycle analysis techniques to help select the most appropriate HVAC system for a specific application.

"Life-cycle evaluations provide the most effective method for determining the best value of HVAC system alternatives," said Lynn Bellenger, chair of ASHRAE's Technology Council. "In order to facilitate the use of life-cycle analysis techniques by decision makers, the necessary data must be available, current and correctly applied. This database provides that needed data." As part of the project, users are encouraged to contribute their own service life and maintenance cost data, further expanding the utility of this tool. Over a period of time, this input will provide sufficient service life and maintenance cost data to allow the comparative analysis of many different HVAC systems types in a broad variety of applications. Data can be entered by logging into the database and registering, which is free.

Information from the database also is used to update the ASHRAE Handbook. Chapter 36, Owning and Operating Costs, of the 2007 ASHRAE Handbook, HVAC Applications, contains median equipment service life data from the first 163 commercial buildings that were used to seed the database, with updates to come as the database grows.

The database is the result of ASHRAE research project 1237, Interactive Web-based Owning and Operating Cost Database, sponsored by ASHRAE's technical committee 7.8, Owning and Operating Costs.

ASHRAE Seeks Papers on Sustainable Urban Design

ATLANTA – ASHRAE is seeking papers focused on sustainable urban design for its 2009 Winter Meeting, Jan. 24-28, Chicago. Papers and programs should present the latest developments in sustainability as applied to systems and equipment, application of their use in different types of buildings and, especially, the impact on urban settings. Topics include energy conservation, indoor environmental quality, application of ASHRAE guidance to achieve high-performing sustainable results, and international sustainability efforts.

The deadline for paper submittal is April 4. Submit papers online at mc.manuscriptcentral.com/ashrae or contact Mary McGee, meeting program administrator, at mmcgee@ashrae.org for more information. The deadline for other technical program submissions is Aug. 8.



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ASHRAE Publishes User's Manual for Standard 62.1

ATLANTA - A manual to help users navigate the changes in ASHRAE's 2007 ventilation standard is now available.

The Standard 62.1-2007 User's Manual provides users with a better understanding of the design, installation and operation requirements in ANSI/ASHRAE Standard 62.1-2007, Ventilation for Acceptable Indoor Air Quality.

The standard, published last year, contains new requirements for separation of environmental tobacco smoke (ETS) spaces from ETS-free spaces, clarification of humidity control design requirements, and the inclusion of new rates for high-rise residential occupancies.

"The manual provides guidance for designers and contractors to clarify the requirements, explains why the requirements are included (in some cases), and how to comply," Roger Hedrick, vice chair of the 62.1 committee, said.

The cost of the user's manual is \$69 (\$55, 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, or visit at www.ashrae.org/bookstore.

ASHRAE to Host Satellite Broadcast on Integrated Building Design

ATLANTA - A free satellite broadcast and Webcast, Integrated Building Design: Bringing the Pieces Together to Unleash the Power of Teamwork, will be held from 1-4 p.m. EDT on April 16. The ASHRAE program focuses on whole-building integrated design.

"The broadcast explains what you and other members of the building team must do to advance high-performance buildings with improved design, construction and operations processes," said Bill Williams, chair of the event. "Buildings that meet the needs of occupants and truly achieve sustainability objectives can only be created if the building community shares its knowledge and experiences."

Online registration opens March 1 for satellite broadcast site coordinators and Webcast participants. Registration for satellite downlink viewers opens March 15. For more information, visit www.ashrae.org/IBDbroadcast. Registration is free.

New Datacom Book Offers Structural and Vibration Guidelines

ATLANTA - Shock and vibration can be problems for datacom facilities, causing equipment and structures to degrade over time. With a new publication from the American Society of Heating, Refrigerating and Air-Conditioning Engineers, datacom design teams and equipment manufacturers can learn how to prevent such issues from occurring.

Structural and Vibration Guidelines for Datacom Equipment Centers is the fifth publication in the ASHRAE Datacom Series. Shock and vibration sources can include internal equipment that transmit vibration to their surroundings as well as external sources such as trains, construction activities, airports, earthquakes and weather events. To control these sources, datacom equipment centers must consider the performance of the building structure; the building infrastructure such as power, cooling, flooring and ceiling systems; and the equipment itself, including servers, storage and network equipment.

"This book discusses datacom equipment as well as a building's structure and infrastructure in a holistic way while providing best practices for their design and installation," says Budy Notohardjono, vice chair of the book's committee. "Since structural systems are increasingly integrated and specialized to meet the needs of data centers, it is important for not only designers but also owners and operators to know the basics of structure and vibration."

The cost of Structural and Vibration Guidelines for Datacom Equipment Centers, is \$48 (\$38 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, or visit at www.ashrae.org/bookstore.

ASHRAE Continues Building Community of HVAC&R

ATLANTA - Eighty-five years after creating its first chapter outside the United States, ASHRAE has chartered its 170th chapter, based in Indonesia.

"ASHRAE recognizes that technology developed outside North America enhances our knowledge base," Kent Peterson, ASHRAE president, said. "One way we can share that knowledge is by bringing members together via chapters, which allows them to work together, share ideas, and advance the standards of practice to improve the built environment. We see our chapter program as a way to build the community of HVAC&R."

ASHRAE's continued growth is part of its overall strategic plan, which calls for the Society to be a global leader in the HVAC&R community.

In addition to chapters in the United States, Puerto Rico, Canada and Mexico, ASHRAE has chapters in Brazil, Argentina, Singapore, Hong Kong, Malaysia, Taiwan, Philippines, Thailand, India, Saudi Arabia, Egypt, Lebanon, Kuwait, Greece, Sri Lanka, Pakistan, the United Arab Emirates, Portugal, Romania, Poland, Bahrain, Spain and Indonesia.

ASHRAE formed its first non-U.S, chapter in Toronto in 1922. The first chapter outside North America was formed in Singapore in 1984.



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

LONDON CANADA CHAPTER #116

http://LondonCanada.AshraeChapters.org

Mon Feb 25/2008

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TOPIC:

SIMULATION DRIVEN DESIGN OF BUILDINGS & HVAC SYSTEMS

MR PAUL MacDONALD PEng

ANSYS CANADA LTD / ANSYS INC Senior Account Manager

Meeting - Mon Feb 25/2008

THE LAMPLIGHTER INN, 591 Wellington Rd., London

London Chapter Members = \$25.00 Students = \$10.00 Others = \$35.00

MEMBERSHIP NIGHT

CASH BAR 5:15-Social

ALL YOU CAN EAT BUFFET

6:00-Dinner 7:15-Program





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Mon Feb 25/2008

Page 2

President's Message

I hope those of you who made it out to our October meeting enjoyed the presentation of Mr. Garth Denison on refrigerant R-410A. Garth's knowledge and experience in refrigeration, and particularly refrigerants, was well evident and as mentioned in our previous newsletter, I consider our chapter very fortunate to have had him speaking to us last month.

This month, Mr. Paul J. MacDonald, P.Eng., Senior Account Manager with ANSYS Canada Ltd. will talk on the role and value of applying simulation software, such as computer-aided engineering (CAE) and computational fluid dynamics (CFD), to the design of HVAC & other building systems. For all future speakers, topics and dates, please check out the London ASHRAE website, at http://LondonCanada.AshraeChapters.org

This month's meeting will also be our second Membership Promotion night. As previously mentioned, our goal for this year was to raise local membership by 10 new members. We have not met our goal yet so if you know of anyone who would benefit from being an ASHRAE member, please let myself (sedmunds@uniongas.com) or our Membership Chair, Karl Gilroy (kgilroy@prive-hvac.com) know. Better yet, if you know someone who would enjoy attending one of our monthly meetings to hear a speaker, such as Mr. Paul J. MacDonald from ANSYS Canada, please invite them to come along as your guest. If nothing else, I certainly hope you can make it out to our meeting on February 25th.

Scott Edmunds ASHRAE London Canada Chapter President

Speakers Bio

Paul MacDonald P.Eng Senior Account Manager

ANSYS, Inc., founded in 1970, develops and globally markets engineering simulation software and technologies widely used by engineers and designers across a broad spectrum of industries. The Company focuses on the development of open and flexible solutions that enable users to analyze designs directly on the desktop, providing a common platform for fast, efficient and cost-conscious product development, from design concept to final-stage testing and validation. Headquartered in Canonsburg, Pennsylvania, U.S.A., with more than 40 strategic sales locations throughout the world, ANSYS, Inc. and its subsidiaries employ approximately 1,400 people and distribute ANSYS products through a network of channel partners in over 40 countries.

Paul J. MacDonald, P.Eng., is a Senior Account Manager with ANSYS Canada Ltd., a wholly-owned subsidiary of ANSYS, Inc., based in Waterloo, Ontario. Paul has nearly 9 years of experience helping engineers and designers implement and apply ANSYS simulation software, including ANSYS CFX, Fluent, and ANSYS Multiphysics. Paul also enjoys helping his customers extract maximum value from their application of ANSYS software.

Paul's presentation, entitled Simulation Driven Design of Buildings & HVAC Systems, will introduce the role and value of applying simulation software to the design of HVAC & other building systems. Several real-world case studies will be presented to illustrate how simulation software can help improve efficiency, increase safety and reduce costs.

Pete Edmiston



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http://LondonCanada.AshraeChapters.org Mon Feb 25/2008

Jan 2008 Meeting Summary

THE MOST POWERFUL TOOL YOU CAN HAVE WITH R401A "KNOWLEDGE" by Garth Denison

Mr Denison spoke about the upcoming requirements to reduce CFC and HFC use in all types of equipment. Some manufacturer's have already switched to R401A or other alternate refrigerants. Garth spoke about problems with conversions of existing equipment to R401A and also what to watch out for with new equipment as new charging equipment may be required.

Upcoming Meetings & Events

Wed March 26/2008 The Commissioning Process in New and Existing **Buildings - Metro Toronto Convention Center** www.ashrae.org/education/page/1605

March 27-29/2008 CMX CIPHEX 2008 Metro Toronto Convention Centre www.cmxciphexshow.com

Mon March 31/2008 ASHRAE London Chapter Meeting Global Warming - Differing Perspectives Mr Victor Goldschmidt - Northport MI ASHRAE DISTINGUISHED LECTURER

Wed April 16, 2008 Chapter Technology Transfer Committee Satellite Broadcast/Webcast

The broadcast will focus on "Integrated Building Design."

Watch for additional information regarding the Broadcast/Webcast via ASHRAE Insights and www.ashrae.org.

ASHRAE RESEARCH

I would like to take this opportunity to thank the following contributors to the ASHRAE Research Canada London Chapter 2008 Campaign:

Individual Contributors:

Mr. Jamie Kruspel

Mr. Scott Edmunds

Mr. Jason Vandenberghe

Mr. Eric Shaw

Mr. Richard Hammond

Mr. Jack Maynard

Mr. George Qubty

Company/Corporate Contributors: Johnson Controls

ASHRAE Research Promotion plays a key role in funding various projects. Whether you specialize in IAQ, sustainable building design, tools and applications for refrigeration, ASHRAE has research projects focused on your field and specific topics that affect your business the most. If you have not already done so, please consider investing in ASHRAE Research. You can either donate on line at https://www.ashrae.org/aboutus/resource_promotion.asp (ensure to select ASHRAE Research Canada), or send a cheque made out to ASHRAE Research Canada to address listed below. Once again thanks you for your continued support of ASHRAE Research Canada.

Scott Turner Research Promotion Chair - London Canada Chapter









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http://LondonCanada.AshraeChapters.org Page 4 Mon Feb 25/2008

ASHRAE Course Before CMX/CIPHEX

Wednesday, March 26, 2008 9:30 a.m. - 4:30 p.m. EDT Metro Toronto Convention Center. 255 Front Street West, Toronto, Ontario

ASHRAE will present, in conjunction with CMX/CIPHEX 2008, the ASHRAE Learning Institute Seminar, The

Commissioning Process in New and Existing Buildings.

Seminar Summary: Learn the fundamentals of the commissioning process through each step of a new construction project from pre-design to occupancy and operations. Attendees will become familiar with the benefits of commissioning and gain an appreciation for how the process can improve the built environment, reduce environmental impacts through responsible resource utilization, improve the quality of design and construction, and raise the professional reputation of the entire commissioning team. Attendees will discuss the documentation that is created during the process, including specifying commissioning for new construction. Students will take away compelling information and case studies that demonstrate the value of investing in the commissioning process.

Who should attend: Designers, Owners, Architects, Contractors, Operators, Code Officials

To learn More About the Seminar visit www.ashrae.org/education/page/1605

ASHRAE Publishes Book on Hot, Humid Climate Building Design Guidance

Building operators and designers around the world face common issues related to thermal comfort, ventilation and energy. But these measures take on greater concern for buildings in hot and humid climates. In addition, areas with these climates,

such as South Asia, are experiencing rapid construction growth.

Design guidance on critical issues for achieving excellence and long-term sustainability in these climates is contained in a new book from ASHRAE. The ASHRAE Guide for Buildings in Hot and Humid Climates identifies and explains key issues for owners, architects, HVAC designers, contractors and building owners as they plan, build and operate air-conditioned buildings - in a sustainable way - in hot and humid climates.

"All countries want to achieve high standards of energy efficiency," author Lew Harriman said. "But recent history warns that mold and mildew problems in hot and humid climates can overshadow any gains made through energy reduction. On the other hand, the practical experience of ASHRAE's members shows that by focusing on several critical building enclosure design details and by keeping the indoor air dry, owners and designers can avoid mold problems and have high indoor air quality, while their buildings use much less energy than outdated designs.

Topics covered in the book include improving thermal comfort, managing ventilation air, reducing energy consumption and avoiding bugs, mold and rot. The book explains ASHRAE's standards in these areas. It also highlights common problems seen in

hot and humid climates, along with practical alternatives for avoiding such problems.

"The guide was created in part because of requests from designers and owners in North America, but also because of requests from government agencies in developing countries that are working to establish robust building codes to guide energy use and indoor environmental quality," Harriman said. "When balancing the equally important concerns of low energy consumption, high thermal comfort and healthy indoor air, ASHRAE's experience and internally-informed consensus standards can be very helpful." A second edition is planned for January 2009 that will add more information arranged into sections aimed at each different member of the construction and delivery team.

The cost of the ASHRAE Guide for Buildings in Hot and Humid Climates is \$59 (ASHRAE members, \$49). To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, or

visit at www.ashrae.org/bookstore.

New Publication Provides Energy Efficiency Guidance for K-12 Schools

A full 16 percent of schools districts' controllable costs is spent on energy. A new publication written specifically for K-12 school buildings will aid design teams in constructing energy-smart schools using off-the-shelf technology that can cut energy use 30 percent or more annually.

The Advanced Energy Design Guide for K-12 School Buildings, published by the American Society of Healing, Refrigerating and Air-Conditioning Engineers, instructs architects, engineers and others on building design teams how to use best design practices to create energy-saving buildings. Written in partnership with the American Institute of Architects, the Illuminating Engineering Society of North America, the U.S. Green Building Council and the U.S. Department of Energy, the book is available for free in electronic form at www.ashrae.org/freeaedg. Hard copies are available for purchase.



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Energy Efficient Buildings Encouraged Through Free Download of Advanced Energy Design Guide Series

To encourage energy efficient design in a range of building types, ASHRAE and its partnering organizations are making available for free the Advanced Energy Design Guide series.

Electronic versions of the newest book in the series, Advanced Energy Design Guides for K-12 School Buildings, as well as the existing guides on small office and small retail buildings are available for free download at www.ashrae.org/freeaedg. Future guides, including one focused on warehouses to be published this spring, will be available for free electronic download as well.

Energy efficiency is still a vast and underutilized energy resource that is essential to the long-term survival of our world," says ASHRAE President Kent Peterson. "Buildings consume approximately 40 percent of the primary energy in the United States. As part of our energy efficiency market deployment strategy, we want to get this valuable building guidance into the marketplace and into the hands of owners, contractors and design teams. The technology is available today to construct substantially more efficient buildings. Free distribution of the Advanced Energy Design Guide series will help educate the marketplace on how to build energy efficient buildings that use significantly less energy than those built to the minimum code requirements.

The Illuminating Engineering Society of North America (IESNA) supports the electronic distribution of the Advanced Energy Design Guide series to ensure widespread availability of these voluntary recommendations," said Rita Harrold, IESNA member of the AEDG Steering Committee. "Offering these important Guides for free download to a large audience of users will help further

the partnering organizations' efforts to create a more secure energy future."

In addition, the K-12 guide was sent to nearly 14,000 school systems around the country to assist with the design of energy-efficient schools that create safe and comfortable environments conducive to learning.

Partnering organizations include the American Institute of Architects, the Illuminating Engineering Society of North America,

the U.S. Green Building Council and the U.S. Department of Energy.

'Addressing energy use in our buildings is one of the most important measures we can take in our efforts to protect the health of our environment," said Brendan Owens, vice president of LEED Technical Development, U.S. Green Building Council. "The Advanced Energy Design Guide series are critical publications for the building industry. Every percentage point reduction in buildings' energy use brings us that much closer to our goal of mitigating climate change."

The importance for all design and construction professionals to move toward carbon neutral, sustainable buildings is of paramount importance to the American Institute of Architects," said Christine McEntee, executive vice president and CEO of the

AIA. "The Advanced Energy Design Guides are an approachable, important tool to help achieve that goal."

The guides provide a sensible, hands-on approach to design through use of products that are practical and commercially available as "off-the-shelf" technology. They offer designers and contractors the tools needed for achieving a 30% energy savings compared to buildings that meet the minimum energy efficiency requirements of Standard 90.1-1999.

Hard copies of all of the guides are available for purchase. For more information, visit www.ashrae.org/freeaedg.

ASHRAE Publishes Updated Version of Energy Efficiency Standard

Energy reduction through new requirements related to lighting, façades, and mechanical systems is achievable in the latest energy efficiency standard from ASHRAE and the Illuminating Engineering Society of North America (IESNA).

Just published, the 2007 version of ANSI/ASHRAE/IESNA Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings, provides minimum requirements for the energy-efficient design of buildings except low-rise residential

buildings. The standard contains changes made through 47 addenda to the 2004 standard. "One of the best ways to reduce building energy consumption is to reduce, or eliminate, the cooling or heating loads," Mick Schwedler, chair of the Standard 90.1 committee, stated. "By doing so, the systems installed in buildings become smaller and use less energy. For example, on a hot, sunny day, having more insulation in the roof and better glass on the southern and western façades of a building reduce the air conditioning necessary as well as its resultant energy use. Two of the addenda do this by enhancing the insulation and fenestration (or window) requirements for the building exterior."

The standard also addresses reduction of electrical and cooling loads and thus electricity by allowing less power for lighting. An addendum revised lighting allowances for retail displays, as it allows more flexibility for designers and better reflects actual retail

lighting function.

Schwedler cited forewords from three approved mechanical addenda to quantify a portion of the energy savings:

Addendum an: "...would save about 18 trillion Btu of gas and oil annually once the existing boiler stock turns over."

Addendum g: "will save an estimated 1.05 Quads of cumulative primary energy by 2035."

Addendum f: "will save an estimated 2.3 Quads of cumulative primary energy by 2035."

"These substantial savings are credited to the work of past Standard 90.1 Chair Jerry White, the Standard 90.1 committee, and those that aided in the rigorous public review process," Schwedler said. "We know that many projects are achieving considerable energy savings at reasonable costs and ask the entire design, operation, and owner communities to share these project ideas and contribute toward future energy and energy cost savings."

The cost of the I-P version of ANSI/ASHRAE/IESNA Standard 90.1-2007, Energy Standard for Buildings Except Low-Rise Residential Buildings, is \$119 (\$95, 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, or visit at www.ashrae.org/bookstore.



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Design of Energy Efficient Datacom Facilities Focus of ASHRAE Book

Datacom center energy use is typically large and concentrated (it can be 100 times the watts per square foot of an office building), with operations running 24 hours, 7 days a week, about three times the annual operating hours of most commercial properties. As a result, issues such as sustainable design, energy efficiency and operating cost become critically important for these facilities.

Guidance to assist those involved in the design, construction, commissioning, operation, implementation and maintenance of datacom equipment centers is available in a new book from ASHRAE, Best Practices for Datacom Facility Energy Efficiency.

"This book provides detailed information on the design of datacom facilities that will aid in minimizing life-cycle cost and maximizing energy efficiency," said Tom Davidson. "The overall goal is to minimize total cost of ownership (TCO) for the end user, while helping to conserve energy resources on a global scale."

Davidson is a member of ASHRAE's technical committee on mission control facilities, technology spaces and electronic equipment,

which wrote the book.

A sludy conducted by Lawrence Berkeley National Laboratory on average data center power allocation showed that only 46 percent of power was used by information technology (IT) equipment such as servers, while 23 percent was used by HVAC cooling equipment, 8 percent by HVAC fans, 8 percent by uninterruptible power supply equipment losses, and 4 percent by lighting. Another 11 percent was attributed to other uses, such as miscellaneous electrical losses, support office area, etc.

Since the infrastructure/energy cost is an increasing component of total cost of ownership, a strong emphasis must be placed on this cost to keep a datacom facility energy efficient and operating at the lowest cost to support the level of reliability and

availability of the equipment it houses," he said.

The book provides a listing of best practices in the areas of environmental criteria, mechanical equipment and systems, economizer cycles, airflow distribution, HVAC controls and energy management, electrical distribution equipment, datacom equipment efficiency, liquid cooling, total cost of ownership and emerging technologies. Examples of the best practices include: **Environmental Criteria**

Adoption of temperature and humidity ranges provided in ASHRAE's Thermal Guidelines for Data Processing Environments

publication can result in increased energy efficiency.

Mechanical Equipment and Systems For computer room air-conditioning equipment, focus the cooling solution on very high sensible/total cooling capacities per the revised ANSI/ASHRAE Standard 127-2007.

Economizer Cycles

Raising the supply air setpoint in a facility can significantly increase the number of cooling hours in economizer mode. Airflow Distribution

Recognize that datacom equipment loads will change over the next 10 to 15 years. Develop a cooling distribution strategy that can adjust to these changes.

HVAC Controls and Energy Management

- Investigate the costs and benefits of different methods for humidity control. System design and control algorithms should allow the primary cooling coils to 'run dry' and thus allow for chilled-water reset at light loads without impacting relative humidity. **Electrical Distribution Systems**
- Consider distributing high-voltage AC or DC power to point of use.

Datacom Equipment Efficiency

Select power equipment from the highest input voltage available within its input voltage rating range.

Consider the use of a cooling distribution unit (CDU) to isolate the liquid cooling loop from the building chilled-water cooling loop. This allows the liquid cooling loop temperature to be set above the room dew-point temperature, thus eliminating condensation.

Total Cost of Ownership (TCO)

Use energy system modeling software to aid in developing an accurate TCO.

Commissioning

Verify and document that the facility, its systems and assemblies are designed, installed and maintained in accordance with

the owner's program requirements.

The book is part of the ASHRAE Datacom Series, developed to provide a more comprehensive treatment of datacom cooling and related subjects. Other books in the series are ASHRAE's Design Considerations for Datacom Equipment Centers, Thermal Guidelines for Data Processing Environments, Liquid Cooling Guidelines for Datacom Equipment Centers, Datacom Equipment Power Trends and Cooling Applications and Structural and Vibration Guidelines for Datacom Equipment Centers. The cost of Best Practices for Datacom Facility Energy Efficiency is \$59 (ASHRAE members, \$47). To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, or visit at www.ashrae.org/bookstore.



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

LONDON CANADA CHAPTER #116

http://LondonCanada.AshraeChapters.org

Mon March 31/2008

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GLOBAL WARMING DIFFERING PERSPECTIVES

MR VICTOR GOLDSCHMIDT Ashrae Distinguished Lecturer

Professor Emeritus, Purdue University School of Mechanical Engineering Northport, MI

Meeting - Mon March 31/2008

THE LAMPLIGHTER INN, 591 Wellington Rd., London

London Chapter Members = \$25.00 Students = \$10.00 Others = \$35.00

MEMBERSHIP NIGHT

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





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President's Message

With less than 2 months left until the 2007-2008 (Annual) ASHRAE London Chapter Golf Tournament coming on June 2nd, and the departure of the wintery weather that we have all likely had enough of, our thoughts are turning to warmer conditions, and maybe even the coming "Predicted HOT" summer that is just around the corner.

Our meeting this month is a very special one, as we are welcoming Victor Goldschmidt, who is an ASHRAE Distinguished Lecturer to speak on Differing Perspectives into Global Warming.

I personally had the opportunity to hear Victor speak on this topic at the Region II CRC in August of 2007, and it was a very enlightening presentation - one that definitely will make you re-think the whole Global Warming and Greenhouse Gas problem as has been presented by industry and government.

We will also have a guest from the Hamilton ASHRAE Chapter on hand to help Victor -David Underwood from Isotherm Engineering, a former ASHRAE Region II Director at Large, and recently awarded the Fellow-ASHRAE designation - to add to the mix, as he and Victor definitely work the subject well together.

In April, for our Annual ASHRAE Technical Tour, we have arranged to visit the first LEED Green Building built in London - "The Sisters of St. Joseph's" Residence at Richmond Street and Windermere Road - the highlights of the tour will be to see the changes to building, systems, and controls that have helped the building to achieve a LEED-Gold candidate facility rating.

Looking forward to seeing you all at the March meeting

Eric Shaw ASHRAE London Canada Chapter Vice President

Upcoming Meetings & Events

Wed April 16, 2008 Chapter Technology Transfer Committee Satellite Broadcast/Webcast

The broadcast will focus on "Integrated Building Design."

ASHRAE London has arranged to have room at Univ of Western to host students and members who wish to review the presentation. Spencer Engineering Building Room 3109 1:00-4:00pm

Mon April 28, 2008

Building Tour SISTERS OF ST. JOSEPH'S 1st LEED project in London

* watch for April email and newsletter about time and location information

Mon June 2, 2008

ASHRAE London Golf Tournament see page in this newsletter *** payment must be received before May 15 **** Pete Edmiston

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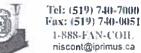
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Speakers Bio

VICTOR W. GOLDSCHMIDT, Ph.D.

Professor Emeritus, Purdue University School of Mechanical Engineering Northport, MI

Victor W. Goldschmidt, Emeritus Mechanical Engineering Professor, served at Purdue University from 1964 through 2000. He is currently serving as a Leelanau Township Trustee and Planning Commissioner as well as a facilitator and engineering consultant.

During his 36 years at Purdue University, Mr. Goldschmidt was responsible for educating mechanical engineering students, including the direction of graduate research in the HVAC area. Most of his service with graduate students was with the Ray W. Herrick Laboratories with heavy support from the HVAC industries. During early stages of his career, he served as Director of the Engineering Purdue Fellows in Latin America; during later stages he served as department head for Freshman Engineering. Prior to his academic involvement, he worked in Applications Engineering and Development Engineering with Honeywell.

Mr. Goldschmidt has taught almost every course in thermal sciences offered at Purdue, as well as a special upper level technical course on the "Creative Process in Engineering." He is trained as a Synectics (special brainstorming) facilitator and is currently engaged in the development of strategic plans and problem solving sessions

A past ASHRAE Director-at-Large, he also has served as a member of Publishing and Technology Councils. He is an ASHRAE Distinguished Service Award recipient and Fellow, as well as Honorary Member of IIR, ACAIRE, ASURVAC and AAF. He resides in North Michigan, above Traverse City.

Victor will be doing a lunchtime presentation to UWO students on Mon March 31st (UWO Weldon Library Room # 258 for those interested in this lunch time presentation)

Chapter Meeting

Differing Perspectives Into Ozone Depletion and Global Warming

This lecture is intended to provide a different perspective to the usual formal presentation on these topics. It was the consequence of attempting to analyze the available data to demonstrate the reality of ozone depletion and global warming. Unfortunately, the analysis led to the conclusion that the only reality is in the uncertainties in these areas. Data demonstrating the ozone depletion and global warming trends are summarized and the common understanding of terminology such as ODP and GWP is presented. The lecture ends with a listing of assumptions and aspects of the data that could raise questions as to the validity of the implied trends.

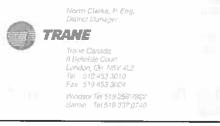
Feb 2008 Meeting Summary

CDF Analysis in HVACR Applications by Paul MacDonald, ANSYS Inc.

Mr MacDonald spoke about performing computer simulations and how setting up parameters and inputs can effect results. Sample of software applications and how to investigate methods and problem solving skills were shown.











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ASHRAE London New Student Members

The ASHRAE London chapter arranges for 3rd and 4th year UWO students to obtain an membership in ASHRAE. This is possible by using membership fees and corporate donors. Thanks to yo the following students have recent received new ASHRAE memberships:

Arman Shahabi Mike Mosnier Scott Ralph Robert Kennedy

*Andrew Villarico Ping Kwan Li *Mohamed Loulou Di Yuan Adam Anderson Maurice Pommerville Seyed Mohammad Hashemi Karouie

Basem Ismail *Eric Kazuo Sakauye *Daniel Taylor

*Ali Voureddin

*John Freeman *Hassan Qadri

*Nawaz Alam *Muhammad Fahim

*Suhail

If you happen to see a student at the chapter meetings, be sure to say hello and welcome them.

ASHRAE Course Before CMX/CIPHEX

Wednesday, March 26, 2008 9:30 a.m. - 4:30 p.m, EDT

Metro Toronto Convention Center. 255 Front Street West, Toronto, Ontario

ASHRAE will present, in conjunction with CMX/CIPHEX 2008, the ASHRAE Learning Institute Seminar, The

Commissioning Process in New and Existing Buildings.

Seminar Summary: Learn the fundamentals of the commissioning process through each step of a new construction project from pre-design to occupancy and operations. Attendees will become familiar with the benefits of commissioning and gain an appreciation for how the process can improve the built environment, reduce environmental impacts through responsible resource utilization, improve the quality of design and construction, and raise the professional reputation of the entire commissioning team. Attendees will discuss the documentation that is created during the process, including specifying commissioning for new construction. Students will take away compelling information and case studies that demonstrate the value of investing in the commissioning process.

Who should attend: Designers, Owners, Architects, Contractors, Operators, Code Officials To learn More About the Seminar visit www.ashrae.org/education/page/1605

Free Download Available of ASHRAE Advanced Energy Design Guides

Rising energy costs and the increased global awareness of the potential impact of climate change continues to drive home the message that low-energy, environmentally responsible, high-performance buildings are the future of the built environment.

In my theme this year, I asked our membership to be more innovative in our thinking and to seek elegant solutions that will help to provide better performance in buildings.

As part of our effort to provide our members and the building community with the tools to achieve this vision of the future, ASHRAE has made its Advanced Energy Design Guide series of publications available as free electronic download products. The current guides, now with three publications, have provided 30 percent energy reduction guidance for the following types of buildings:

- Small retail buildings
- · Small office buildings
- K-12 school buildings

Simply click on this link (www.ashrae.org/freeaedg) to go to the download page. If you would like something for your bookshelf, full color print copies may still be purchased from the ASHRAE bookstore accessible through the same link.

These free electronic books are being made available in partnership with the U.S. Department of Energy, the Illuminating Engineering Society of North America, the American Institute of Architects and the U.S. Green Building Council. ASHRAE also has sent free print copies of the Advanced Energy Design Guide for K-12 Schools to more than 14,000 school systems in the United States as part of the Society's effort to advance energy efficiency in schools.

We are also working on a new Advanced Energy Guide for Existing Buildings that will help building owners and managers achieve at least 30 percent energy savings in existing buildings. Our next step is to progress to the 50 percent energy reduction quides starting later this year. After the 50 percent series, we will progress straight to net-zero energy building guidance.

ASHRAE's intent is to ensure that design teams can readily use this valuable information. I hope you find these guides useful tools in your work as a building design, construction and management professional.

Thank you, Kent Peterson, P.E., Fellow ASHRAE **ASHRAE President 2007-08**

^{*}The ones with a star were able to attended the January meeting.



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ASHRAE '08: Reaching New Heights

Major announcements at ASHRAE's 2008 Winter Meeting included free electronic distribution of the Advanced Energy Design Guide series, publication of the 2007 energy conservation standard from ASHRAE and IESNA, and signing of memorandums of understanding with the Brazil Green Building Council and the Building Owners and Managers Association.

More than 2,700 people attended the meeting, held Jan. 19-23, New York City. Held in conjunction with the meeting was the Air Conditioning, Heating, Refrigerating Exposition, which set a new attendance record with 39,298 registered visitors (excluding exhibitors). Records for a Northeast HVAC&R event also were set with total number of exhibitors of 1,885 and square footage of exhibit space of 363, 505.

Centered on the theme Reaching New Heights, a nod to the skyscraper skyline of New York City, the ASHRAE meeting offered a technical program with more than 130 sessions, 21 educational courses and social events. The meeting also featured more than 500 meetings of technical, standards and standing committees, developing guidance for the future of the industry and ASHRAE.

"ASHRAE hit new heights at this meeting in regard to driving the industry forward through our distribution of technical information, educational offerings and networking opportunities," ASHRAE President Kent Peterson said. "Being surrounded by the thousands of buildings in New York City was a great reminder that ASHRAE and our industry must truly aim to reach new heights in creating high performing buildings. The accomplishments at this meeting certainly helped move us along the sustainability path."

At the meeting, President Peterson debuted a new video that highlights how existing design and technology can be used in creating net-zero-energy buildings. The video and his state-of-the-Society address can be found at www.ashrae.org/peterson.

"Since we last met in June, oil has hit the \$100-per-barrel milestone," he said in his speech. "As you recall, we were concerned in 2004 when the price of oil roughly doubled in a year to \$55 per barrel. Rising energy costs and the increased global awareness of the potential impact of climate change continues to drive home the message that low-energy, environmentally responsible, high-performance buildings are the future."

Meeting highlights include the technical program, with its theme of Reaching New Heights in Net-Zero Energy Design, featuring more than 130 sessions with presentation of 59 papers. The most well-attended sessions dealt with net-zero-energy design, exergy, designing for mold and dehumidification avoidance and energy efficient datacom facilities.

Top best-selling books at the ASHRAE Bookstore included the 2007 version of Standard 90.1, the Handbook CD+, the Spanish Pocket Guide and the new Advanced Energy Design Guide for K-12 Schools.

More than 900 people attended the ASHRAE Learning Institute's seven Professional Development Seminars and 14 short courses. The most popular courses dealt with health care, Standard 62.1 and natural ventilation.

ASHRAE and BOMA International Sign Memorandum of Understanding

Partnership will promote mutual interests of engineering and building operations and management

ASHRAE and the Building Owners and Managers Association (BOMA) International are pleased to announce the signing of a Memorandum of Understanding (MOU) in recognition of shared technical interests to foster superior building performance. Both organizations will work together to achieving, among others, the following goals:

Identify opportunities for shared operation services

Identify opportunities to collaborate on product development, and to give presentations at each other's conferences Where mutually beneficial, jointly promote educational programs to members and jointly identify, create and identify new products and services

Encourage continuing dialogue between ASHRAE and BOMA at national, regional and local levels on issues of importance to engineers and building professionals

Encourage collaborative and cooperative activities to promote continuing professional development

BOMA and ASHRAE commit to support each other and fully participate in standard development areas, initially centering around ASHRAE standards 62.1, 90.1, 180P and 189.1P working within the ANSI consensus standards development process.

"We are pleased to collaborate with ASHRAE and work toward our shared goal of promoting superior building performance," said BOMA International Chairman and Chief Elected Officer Brenna S. Walraven, RPA, CPM, executive managing director, national property management, USAA Real Estate Company. "ASHRAE and BOMA are on the forefront of developing standards that significantly inpact building owners and managers, and we look forward to working more closely with them on these matters."

"BOMA and ASHRAE share many of the same objectives and we are excited to strengthen our relationship" says ASHRAE President Kent Peterson, P.E., vice president and chief engineer of P2S Engineering. "We are all working toward optimal performance of both new and existing buildings and this partnership will be beneficial for both ASHRAE and BOMA members."

2008 LONDON & AREA ASHRAE GOLF TOURNAMENT

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ASHRAE Satellite Broadcast/Webcast

April 16, 2008 1:00– 4:00 P.M. EDT

INTEGRATED BUILDING DESIGN: Bringing the Pieces Together to Unleash the Power of Teamwork

This broadcast explains what you and other members of the building team must do to advance high-performance buildings with improved design, construction and operations processes. Buildings that meet the needs of occupants and truly achieve sustainability objectives can only be created if the building community shares its knowledge and experiences. Join ASHRAE in learning more about your role in integrated building design and helping to create a sustainable built environment.

This free program is sponsored by ASHRAE's Chapter Technology Transfer Committee. For complete details, visit our website at www.ashrae.org/ibdbroadcast.

How to Participate

- · You may host a broadcast site for your colleagues.
- · You may register to view with others at a site near you.
- You may register to view the Webcast on your PC.

PDH Credits

Three (3) Professional Development Hours or three (3) AIA Learning Units will be awarded to viewers who complete the "Participant Reaction Form" following the broadcast.

Univ of Western Ontario

Location: Spencer Engineering
Building Room: SEB 3109

Date: Wednesday, April 16 Time: from 1:00 to 4:00 PM

About the Presenters

Kent Peterson, ASHRAE's 2007-2008 president, will introduce the broadcast program

- Walter Grondzik, Architectural Engineer and Professor in the Department of Architecture, Ball State University, Muncie, Indiana—"What is Integrated Building Design?"
- Charles Gulledge III, P.E., MAI, CSI, ASHRAE Distinguished Lecturer, Senior Mechanical Engineer, AC Corporation, Greensboro, North Carolina, "The Integrated Design Process"
- Drury B. Crawley, Technology Development Manager, U.S. Department of Energy, Washington, DC
 —"Achieving Net-Zero Energy Buildings Through Integrated Building Design?"
- Paul Torcellini, Team Leader for Commercial Buildings Research, National Renewal Energy Laboratory, Golden, Colorado—"Bringing the Pieces Together—Actual Applications"

New Member Discount

Non-member participants will be given a \$50 discount for applying for ASHRAE membership. A special membership application will be available at satellite broadcast sites or by request at membership@ashrae.org.

Registration

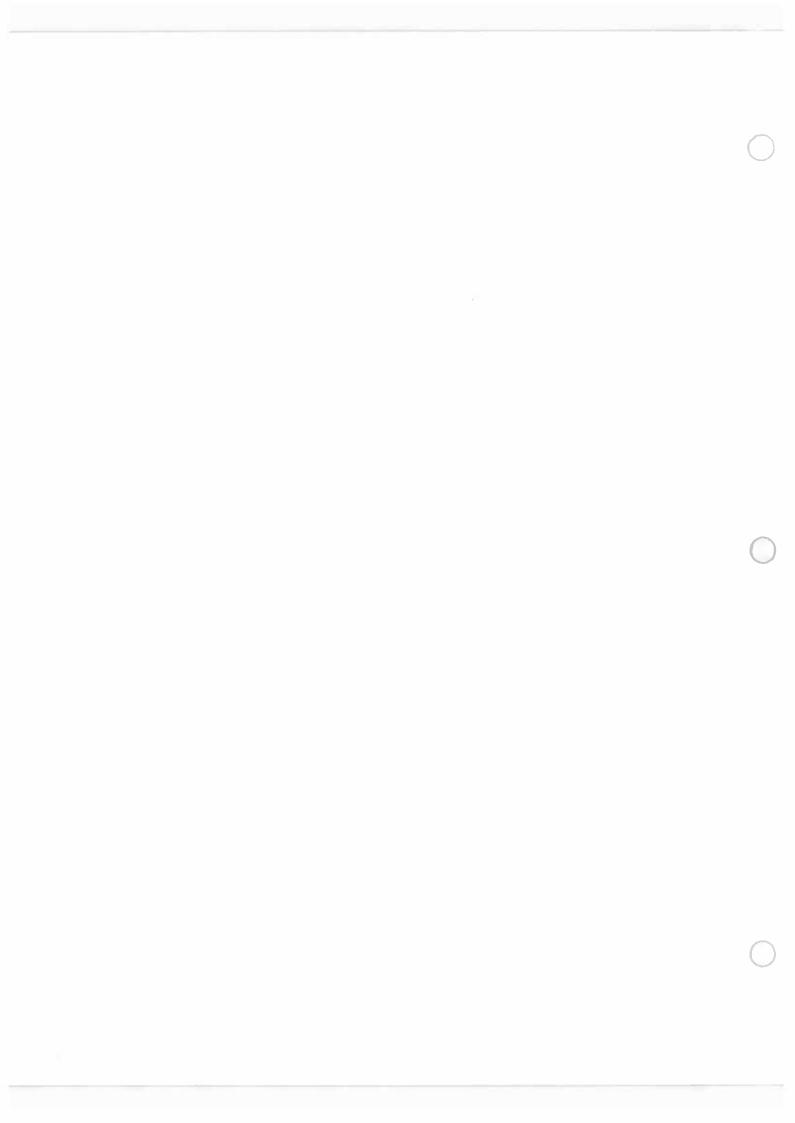
Online registration for satellite site coordinators and Webcast viewers will begin March 1, 2008, at www.ashrae.org/ibdbroadcast. Satellite viewer registration will begin March 15, 2008. There is no fee for registration. If you have any questions, call 678-539-1139 or email ashrae-satellitebroadcast@ashrae.org.



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LONDON CANADA CHAPTER #116

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

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Mon April 28/2008

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TOPIC:

BUILDING TOUR THE SISTERS OF ST JOSEPH

of the Diocese of London

485 Windermere Road London

LEED GOLD CERTIFIED

Meeting - Mon April 28/2008

London Chapter Members = \$25.00 Students = \$10.00 Others = \$35.00

TOUR NIGHT

5:00pm Tour 485 Windermere Road

6:00pm Diner - East Side Mario's 94 Fanshawe Park Road East





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President's Message

I hope those of you who made it out to our March meeting enjoyed the presentation of Distinguished Lecturer, Mr. Victor Goldschmidt, While I was unable to stay and hear Victor's presentation on Differing Perspectives in Global Warming, I was fortunate to hear him speak on the same subject during the Region II CRC held in Moncton last summer. No doubt, Victor's topic was both thought provocative and politically bold, to say the least.

Last week, a few members had the opportunity to watch the free ASHRAE Webcast on Integrated Building Design at the University of Western Ontario. The four Webcast speakers spoke to many project delivery & design issues that an integrated building design team can better manage & collaborate on than traditional building teams. ASHRAE will be offering a DVD version of the live broadcast in the near future.

Our last official meeting for the 2007/2008 year will be our upcoming technical tour. We have been fortunate enough to arrange a tour of the first LEED-rated building in London, the Sisters of St. Joseph's Residence at the corner of Richmond Street & Windermere Road. I would like to thank Derek Vakaras of Chorley & Bisset for helping to arrange the tour. Following the tour, we have made dinner reservation at East Side Mario's north of Masonville Mall.

As many of you know, the ASHRAE London Golf Tournament is scheduled for Monday June 2nd, 2008 at the Forest City National Golf course. Hugh Palser has confirmed that the tournament is now fully booked and any further registrations received will be put on a waiting list. All foursome that have been confirmed however must provide full payment to Hugh by May 15th or risk having their reservation cancelled and filled by the first foursome on the waiting list. If you have any questions about your reservation and/or final payment, please contact Hugh via email at hpalser@palsemet.com. Once again I would like to thank Hugh Palser and his staff for their hard work & dedication in organizing this event.

As this year's program winds down, our Research Promotion fundraising drive will kick into full swing. Letters will be sent out shortly asking for your support of ASHRAE Research. Please consider making your annual contribution to this very worthwhile cause that benefits all of us in the HVACR industry.

Lastly, I would like to thank everyone on the ASHRAE London Board of Governors for their support and hard work over the last year. ASHRAE is a volunteer organization and the time & effort contributed by a few members in running the chapter is greatly appreciated. Without them, the monthly technical meetings and other events wouldn't be possible. Once again, we are looking for new members to join the Board of Governors and would welcome your participation. Nominations for next year's Chapter Board of Governors are now being accepted by Dennis Dawe up until the golf tournament. If you are interested in helping out, please contact Dennis at dennis.dawe@chorley.com

I certainly hope to see you out to our technical tour on April 28th and I'm sure I'll see many members and new faces on June 2nd.

Scott Edmunds ASHRAE London Canada Chapter President Pete Edmiston



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Mon April 28/2008

Upcoming Meetings & Events

Mon June 2, 2008

ASHRAE London Golf Tournament - SOLD OUT

*** payment must be received before May 15 ****

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Daryl Somers, cer

96 Meg Drive London, Ontario

Tel: (519) 681-1977 Fax: (519)686-9324 Mobile: (519) 670-7720

email dary@somersco.com

March 2008 Meeting Summary

GLOBAL WARMING DIFFERING PERSPECTIVES by Victor Goldschmidt ASHRAE Distinguished Lecturer Professor Emeritus, Purdue University

Mr Goldschmidt presented a number of ideas in regards to the global warming that is making the news recently. Victor showed that maybe more investigation if required to determine the causes and effects.

Victor also visited the Univ of Western at lunch time and spoke to the engineering students about "Creativity and Problem Solving" in which he explained that not all problems can be solved by using equations found in text books.

<u>ASHRAE LONDON ELECTIONS</u>

The Board of Governors elections are now open. Society would like to see committees with at least 3 people so that each is not overworked. Currently the London Chapter operates with just one dedicated person per chair position who have volunteered their time. WE NEED ADDITIONAL CHAPTER MEMBERS TO VOLUNTEER.

If you are interested and can assist in any way, please contact Scott Edmunds <sedmunds@spectraenergy.com> or Dennis Dawe <dennis.dawe@chorley.com>.

Free Download Available of ASHRAE Advanced **Energy Design Guides**

www.ashrae.org/freeaedg

- 1) Small Warehouses and Self-Storage Buildings (** NEW **)
- 2) K-12 School Buildings
- 3) Small Retail Buildings
- 4) Small Office Buildings

These guides have been developed through the collaboration of ASHRAE, the American Institute of Architects (AIA), the Illuminating Engineering Society of North America (IESNA), and the U.S. Green Building Council (USGBC), with support from the Department of Energy (DOE), to help meet all of an owner's energy performance requirements. In an effort to promote building energy efficiency, ASHRAE and its partners have made these guides available for download (PDF) at no charge.



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BACnet Unplugged: Updates Made to Building Controls Standard

Advances related to the BACnet standard, including recommending public review for an addendum that would tunnel

BACnet over ZigBee wireless networks, were made during ASHRAE's recent Winter Meeting.

Proposed Addendum q would lead to a significant reduction in the cost of installation at the sensor and controller level by reducing the amount of wired networking required in a building automation system, according to Jerry Martocci, convener of the BACnet committee's Wireless Networking working group.

"Marrying these two technologies seemed obvious," said Martocci. "BACnet already had the object and services model designed specifically for building automation but no wireless network, and ZigBee had the wireless capabilities but no object model

for building automation. We just had to put the two together to benefit from the synergies."

The addendum recommendation began about two years ago with meetings between BACnet and ZigBee experts. "During this time we learned about ZigBee's data communications, and they learned about BACnet's networking and objects and services model," said BACnet chairman Bill Swan. "Together, we looked at a number of approaches and discussed the pros and cons of each."

For various technical reasons, battery-operated devices, including sensors, will probably be ZigBee only, but powered controllers would have BACnet/ZigBee capability. Martocci notes that the "mesh" networking among ZigBee nodes leads to self-healing networks, so that even if a link between two nodes is obstructed, the "mesh" network can route around the obstructed link, leading to reliable networks.

In other developments, the BACnet committee worked toward approval of nine additional addenda during the meeting. "Only a few of these are going out for first public review," said Swan, "but it is our expectation that these are all likely to pass

without significant comments."

One such addendum is Addendum j, support for physical access control. This was drafted by the Life Safety and Security working group, comprised of BACnet and experts from the physical security industries. Public reviews of Addendum j have been announced in journals and other media serving the security industry, with long review periods to help ensure it gets the most complete review possible.

Another addendum being prepared for public review is Addendum i, support for lighting applications. This addendum was drafted by the Lighting Applications working group, comprised of representatives from lighting controls manufacturers and BACnet

experts.

The BACnet committee continues to work on a broad range of other items, such as integrating buildings and the energy utilities, developing standard profiles for various building automation devices, CCTV control, and elevator monitoring.

ASHRAE High-Performance Building Design Professional Certification Now Available

ASHRAE's new certification program provides the necessary training and tools for the design of high-performance buildings that live up to their performance capability.

Registration is now open for ASHRAE's high-performance building design professional certification. The first exam will take place June 25 at ASHRAE's 2008 Annual Meeting, June 21-25, Salt Lake City. Exams at testing centers around the world will become available in the fall. For more information or to register, visit www.ashrae.org/certification.

This new certification program will allow practioners to demonstrate a well-rounded understanding and knowledge of how HVAC&R design is integrated into high-performing buildings to achieve the overall goal of sustainable practice used in green buildings," Kent Peterson, P.E., ASHRAE president, said. "The program combines the criteria of ASHRAE Standards 90.1 (energy efficiency), 62.1 (ventilation) and 55 (thermal comfort) with the innovative approaches included in the Advanced Energy Design Guide series in an integrated design approach that strives to achieve practical, cost-effective high-performance building designs."

The content of the exam includes sustainability concepts, HVAC and sustainable processes and environmental improvement programs and rating systems; energy analysis; indoor environment; controls and monitoring; benchmarking with performance metrics; water conservation, commissioning in sustainable construction; and operation and maintenance of

high-performance buildings. The high performance design professional certification is renewable every three years, and those certified must earn 45 professional development hours during that time.

"This program has been designed so that it is inclusive of global design approaches and tools," Peterson said.



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Lessons from ASHRAE Roundtable on High-Performing Buildings Shared in Video

Early involvement by all members of the building team is crucial to the success of high-performing buildings, according to panelists in a new video from ASHRAE.

"You can't operate efficiently if the building hasn't been designed with that in mind," said Don Winston, P.E., director of technical services, The Durst Organization, Inc. "The operators will always win in the end. If you don't design it in a way that it can be operated in accordance with its performance goals, it won't be....it really goes back to the design process and a level of cooperation. Everyone has to be in on it, including the operations team, from day zero."

Lessons learned in sustainable design can now been seen via a free online video at www.ashrae.org/roundtable. The video is a recording of a special roundtable, High-Performance Buildings: Lessons from the Leaders, originally presented at ASHRAE's 2008 Winter Meeting.

The panelists discuss owner motivations, technical challenges, design choices and trade-offs, costs for these projects, and share perspectives about whether the expectations set early in the design process have been met once the buildings are occupied.

The panelists include representatives of New York's best-known owner/developer firms, along with the engineering designers who bring their projects to reality. Their projects include some of the most sustainable buildings in New York City, such as 4 Times Square, the Chrysler Center, One Bryant Park and the New York Times Headquarters.

"What does high performance mean?," questions panelist Tom Scarola, director of engineering, Tishman Speyer. "Up until even a few years ago, buildings were designed very prescriptively based on meeting codes, not challenging whether they could perform better. What we do today is called high performance but it is just good and efficient design. It is reasonable to believe that the issue is no longer if it is a high-performance building, the question is how high. Building a high-performance building means never having to say you're sorry."

The panelists agree that it is essential that planning for the design, operation and maintenance of high performing buildings start early and involve all members of the building team. They also agree that designers and engineers should strive to incorporate new technologies and design methods.

"Put behind you what've done for the last 20 jobs," suggests panelist Scott Frank, P.E., partner, Jaros Baum & Bolles. "Get in the habit of saying 'how can we do this differently,' ask 'why not' at every turn, worship the god of common sense, and be sure every decision and recommendation you make is backed up by rigorous engineering."

Dan Nall P.E., senior vice president/director-advanced technologies, Flack + Kurtz addresses sustainability outside the U.S. market.

"Perhaps the most informative experience I have had is working on projects in the Middle East, where the entire support infrastructure is being built at the same time as the buildings. This provides an opportunity to investigate the relations of multiple buildings to their support infrastructure and the opportunities that exist to create a complex cascading utilization of resources. The answer doesn't lie in making individual green buildings – it lies in making green cities."

Building Performance Highlighted in ASHRAE's 2008 Annual Meeting

The mountains of Salt Lake City provide the perfect backdrop for scaling the peak of performance at ASHRAE's 2008 Annual Meeting.

"Are you looking to advance your career?" ASHRAE President Kent Peterson said. "Or maybe you're seeking to improve performance of the buildings you design, construct and operate. Either way, ASHRAE's meeting and its focus on building performance is the place for you. Advance your knowledge by taking advantage of ASHRAE's education and technical program. Improve the performance of your buildings by learning how to apply the latest technologies that your fellow members share at the meeting. We hope to see you there."

The meeting takes place June 21-25, Salt Lake City, Utah. To register or for more information, visit www.ashrae.org/saltlake. Most events take place at the Salt Palace Convention Center.

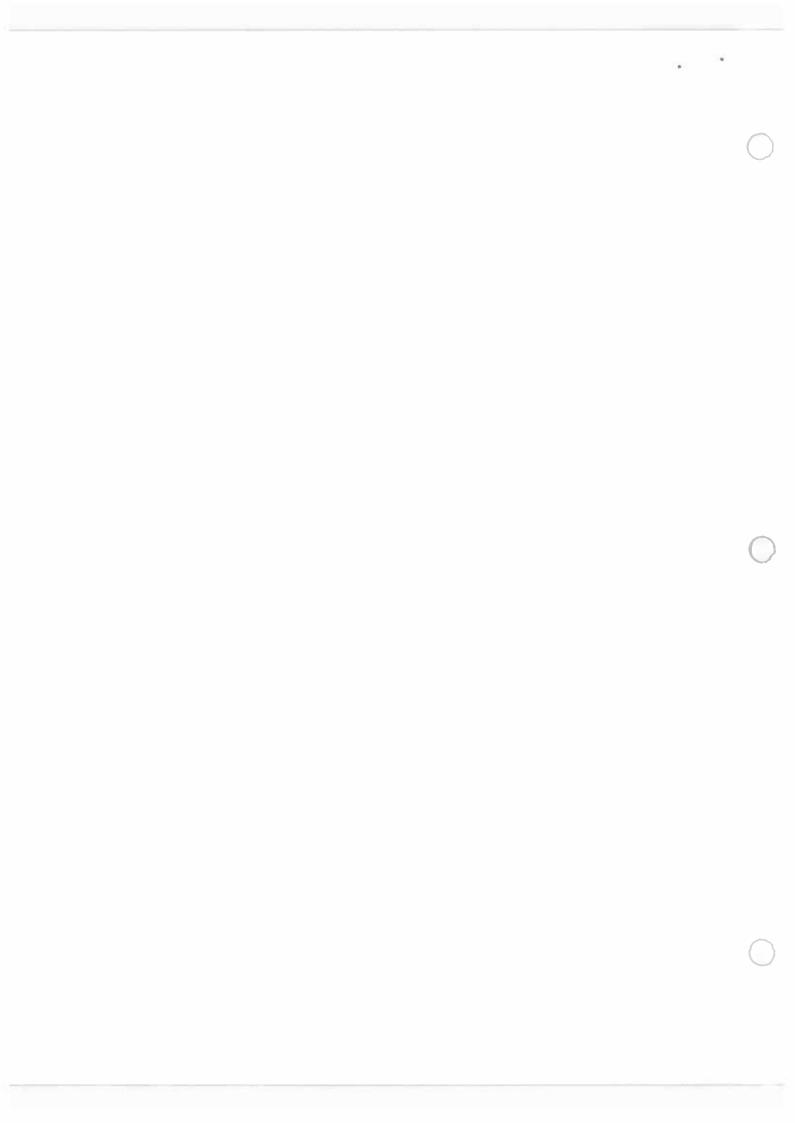
A highlight of the meeting includes Ira Magaziner, chairman of the Clinton Climate Initiative, as technical plenary speaker. The program takes place at 2 p.m. Sunday, June 22, at the Salt Palace Convention Center. Registration is required to attend.

As chair of the Clinton Climate Initiative (CCI), formed in August 2006, Magaziner oversees the mission of applying the Clinton Foundation's business-oriented approach to the fight against climate change in practical, measurable and significant ways. ASHRAE is a partner in the Initiative.

The ASHRAE technical program, with more than 100 sessions, will focus on benchmarking, establishing a basis for measuring future performance. The program takes place Sunday-Wednesday at the Salt Palace Convention Center.

The ASHRAE Learning Institute will offer two professional development seminars and four short courses, focusing on a range of HVAC&R related topics. The seminars provide guidance on complying with Standards 62.1 and 90.1, while short courses cover topics related to sustainability and energy reduction in buildings.

ASHRAE also will launch its new certification program - high performance building design professional. Candidates who earn the certification will have demonstrated a well-rounded understanding and knowledge of how HVAC&R design is integrated into high-performing buildings to achieve the overall goal of producing a sustainable design. For more information, visit www.ashrae.org/certification.



2008 LONDON & AREA ASHRAE GOLF TOURNAMENT

DATE:

MONDAY JUNE 2, 2008

PLACE:

FOREST CITY NATIONAL 16540 ROBIN HILL ROAD LONDON, ONTARIO

TEE OFF:

SHOTGUN START @ 11.30 A.M.

SCRAMBLE FORMAT

4 SOMES ONLY/SOFT SPIKES ONLY

COST:

GOLF & DINNER.....S150.00 DINNER ONLY.......S45.00

- LIGHT LUNCH INCLUDED
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- LIMITED SPACES AVAILABLE

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