

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

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

Volume 1, Issue 2

November 2000

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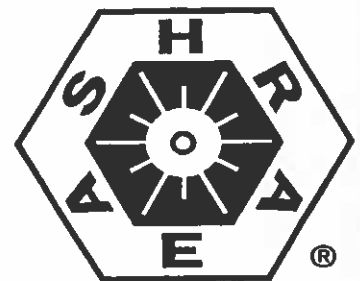
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Topic: Balancing Hydronic Systems

Speaker: Eric Kudlik, P. Eng
S.A. Armstrong

Mr Kudlik P Eng is a graduate of University of Western Ontario in 1979 and has been in the HVAC industry as a Sales Engineer/Marketing Manager since 1983.



Eric has been with S. A. Armstrong company since 1992 and is currently in the function of Sales Engineer covering Consulting Engineering firms in the Toronto area. Previous positions include Marketing Manager for the Engineered Product Group (including balancing valves) and Expansion for S A Armstrong worldwide.

Topic of discussion: Balancing Hydronic Systems

The benefits of balancing valves including economic returns. Discuss how to determine the correct setting for the balancing valves during balancing of a system. How the valves integrate into a system employing VFD pumps. How to correctly size the valve based on flow rate, related pressure drops of other components, and valve authority of the control valves.

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

BUFFET MENU

Roast Beef, French Mustard Glazed Ham, Pasta Salad, Potato Salad, Green Salad, Creamy Caesar Salad & Desert Bar

Meal Cost \$30.00, Or Meal Plan (see inside)
Students \$15.00

Monday Dec. 4, 2000

Social—5:00pm

Dinner—6:00

Program—7:15 (Approx.)

President's Message

The attendance at the October Chapter Meeting was excellent. It was nice to see 47 people out for a Chapter Meeting. Hopefully we can keep the attendance up for the remainder of the year. At the November Board of Governors' Meeting, it was decided that all of the remaining meetings for the 2000-2001 ASHRAE year will be held at the Lamplighter Inn. Overall, the feedback we received from the Chapter Members was very positive regarding the meeting location.

We are still planning a noon hour tour of the refrigeration room at Thompson Arena for early February 2001. We will have a confirmed date in December and will provide all of the details in the January Newsletter.

Just a reminder to all members that the November Meeting is the last chance to take advantage of the reduced rate for the Meal Plan. With 7 Chapter Meetings scheduled, the Meal Plan this year provides additional savings over previous years. Hopefully everyone takes advantage of the rescheduled November Chapter Meeting to go out and vote in the Federal Election. See you soon.

Dennis

Membership

Please ensure that your Society dues are paid as we will be using the Society list for paid members as of Dec 31 for the publication of the roster. The roster will contain the names of those that have paid the \$35.00CAN chapter dues. If you have any address corrections, please ensure that they are forwarded to a member of the executive.

We had a large number of guests at the last meeting. The London ASHRAE Chapter would be interested in knowing of anyone else that you may know who may benefit a Society membership. By being a Society member, you receive the yearly handbook, monthly Insights magazine, and can purchase ASHRAE standards at a discount.

November is the opportunity to purchase meal plan packages for the upcoming year. Please bring your cheque to the Dec 4 meeting or mail to ASHRAE LONDON CHAPTER, c/o Tom Pollard PO Box 22089 London, Ont. N6C 4N0

Technical Sessions

Scott Harris Johnson Controls

Discussion on sizing of control valves, and the pit falls of over and under sizing valves.

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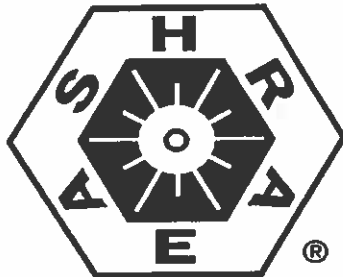
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District Manager

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Student Activities

Anyone attending a carrier day, supporting the Jobs don't grow on trees program, or the bring your grade 9 to work with you, please send Brenda Stonehouse a note regarding the date of the event with a brief description of the location and age group. This information is greatly appreciated and will help the chapter meet ASHRAE awareness goals in the community for the student activities. I will also be looking for 2 volunteers to help out on the committee anyone interested please do not hesitate to call.



TEGA

This month's TEGA Issues Update concerns phasing out of HCFC production around the world. This should be of particular interest since progress in meeting the Kyoto and Montreal Protocol goals is frequently in the news these days. For any interested parties, the ASHRAE position paper on climate change is available from Derek Vakaras at derek.vakaras@chorley.com

(See page 5 for details)

See you in the new year

Have a Merry Christmas and
Happy New Year

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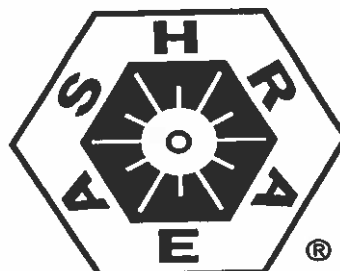
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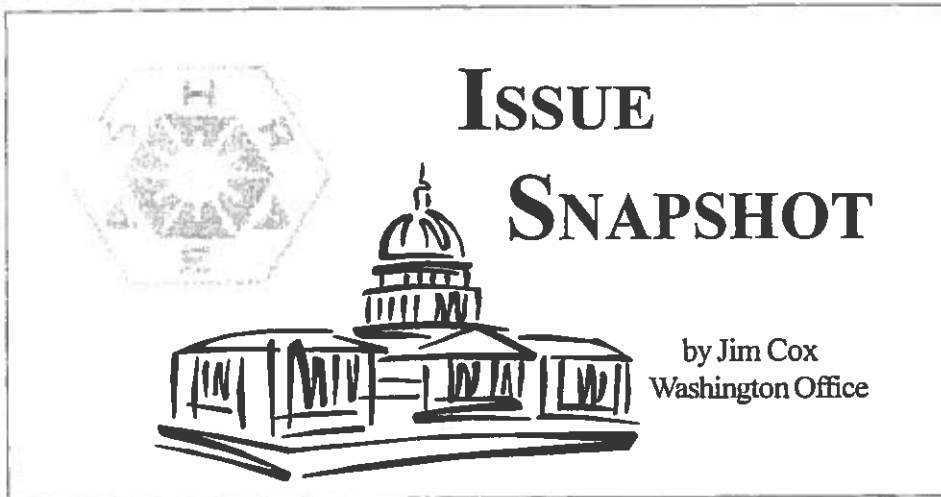
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ASHRAE London Chapter Program 2000 / 2001

Date	Topic	Speaker	Organization	Tech Session	Table Top
Monday Sept. 25, 2000	Changes To Weather Data	Bob Morris	Environment Canada		
Monday Oct. 30, 2000	Changes To NFPA-96, 1998	Tom Mills	Spring Air Systems	Kitchen Exhaust Sizing Bill Rutherford, P.Eng.	Somers Env. Products Kitchen Exhaust Products
Monday Dec. 04, 2000	Balancing Of Hydronic Systems		S.A. Armstrong	Balancing	
Dec - No Meeting					
Monday Jan. 22, 2001	Venting Of Fuel Appliances	Darryl Mathews	Union Gas	Vent Sizing	
Monday Feb. 26, 2001	Ultraviolet Technology in HVAC	Derald Welles	Sterl-Aire	Filtration	EH Price U.V. Products
Monday Mar. 26, 2001	Presentation Of ASHRAE 90.1 Video	Derek Vakaras	Chorley & Bisset		
Monday Apr. 30, 2001	Gas Monitoring Technology	Louis Biondo	MSA Canada		Somers Env. Products Gas Detection
Monday May 28, 2001	Tour Of GM Diesel	-	-	-	-
June	Golf Tournament / Membership Promotion				





November 2000

No.3

HCFC RESTRICTIONS DIFFER AROUND-THE-WORLD

The Montreal Protocol addresses the protection stratospheric ozone by phasing out various groups of compounds over a period of decades. Each group is treated collectively by the Protocol. Among those groups of compounds are chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs). The Protocol does not single out a particular compound in a group (such as HCFC-22) but rather addresses HCFCs as a whole.

Provisions differ for developed countries and developing countries, with developing countries granted additional time. Each individual country (whether developing or developed) retains flexibility in how it attains compliance with the Protocol. Therefore, domestic implementation is left to the discretion of the individual country. With this flexibility, a variety of compliance programs exist between individual countries.

Monitoring restrictions in individual countries is complicated, because internal policies and regulatory procedures differ significantly from country-to-country. Some countries have more complex regulatory or legislative mechanisms. Frequently, it is unclear whether a proposed regulation has taken effect or remains a proposal under consideration. As a global industry, the HVAC&R community has the task of determining provisions in effect in those countries in which business is conducted.

Updated Information

Since 1981, an alliance of manufacturers and users of fluorocarbons has been involved in activities related to the stratospheric ozone issue. The Alliance for Responsible Atmospheric Policy maintains an internet site with useful information related to the issue. The Alliance provides it's "best understanding" of current country-specific regulations on HCFCs and other affected chemical compounds (<http://www.arap.org/docs/regs.html>). The non-U.S. country information was obtained through this website.

ISSUE SNAPSHOT

by Jim Cox
Washington Office

The Montreal Protocol

The Copenhagen Amendment of 1992 established the following provisions for developed countries:

CFCs:	Production ban	1 Jan 1996
HCFCs:	Consumption Phase Out Schedule	
	Cap*	1996
	85%	2004
	35%	2010
	10%	2015
	0.5%	2020
	-0-	2030

*Where CAP = 1989 HCFC production PLUS 2.8% of 1989 CFC production (Ozone Depletion Potential weighted). The calculation formula for the CAP reflects the later Vienna adjustment.

For developing countries, a CFC production freeze (at an average level of 1995-1997) became effective mid 1999. Production is to be phased out in incremental steps prior to the year 2010. In 2016, there will be a consumption freeze on HCFCs at 2015 levels. An incremental phase-down schedule terminating in the year 2040 is under consideration.

Both developing and developed countries may choose to treat individual HCFCs differently as does the United States or to treat all HCFCs identically. Information pertaining to domestic restrictions in selected individual countries (or group of countries) is provided. The cited information is not necessarily complete. For more details on these countries and for information on other countries along with recent updates, check the Alliance web page.

The U.S. HCFC Schedule

In order to comply with the provisions of the Montreal Protocol, the U.S. has established numerous programs. A phase out schedule for individual HCFCs has been established with those HCFCs with higher ozone depletion potentials on a more rapid phase-out schedule:

Year HCFC	Action
2003 141b	Production ban
2010 22 & 142b	Production level freeze and ban on new equipment usage
2015 all other	Production level freeze
2020 22 & 142b	Production ban
all other	Ban on new equipment usage
2030 all other	Production ban

Canadian Provisions

Canada has banned small containers of HCFCs except in applications exempted. On 1 January of the years indicated, no manufacture, use, sell, or import is permitted of the following HCFCs:

2010	HCFC 141b, HCFC 142b and HCFC 22
2015	all other HCFCs* (other than HCFC 123)
2030	HCFC 123

*except quantities for export purpose and quantities used as refrigerants (until 2020)

On 1 January 2020, no products containing HCFCs can be manufactured or imported. Also on that date, no manufacture, use, sell or import of HCFCs (other than HCFC 123) employed as refrigerants is permitted.

European Union (EU) Regulations

The EU regulations were issued August 2000 indicating that effective 1 January 2001, HCFC producers and importers are not to exceed their 1996 market share with certain exemptions. HCFC refrigerants are prohibited in domestic refrigerators and freezers, public warehouses, mobile air conditioning, public transportation and rail air conditioning.

In refrigeration applications, HCFCs are banned in all systems except for reversible heat pumps and smaller units with cooling capacities below 100 kw. The ban for the smaller units is 1 July 2002 and for the heat pumps is 1 January 2004. Service of equipment with virgin HCFCs is permitted until 1 January 2010.

German Ban

Germany has banned the use of HCFC 22 in new refrigeration and air conditioning equipment. There is also a phase out of other HCFCs from 1 January 2005.

Japan's Program

Japan has not issued more prescriptive details than are specified for developed countries in the international agreement (the Montreal Protocol).



