POWUr NEWS
Saskatoon Chapter News
April 5, 2004

Meeting Notice/Site Tour

Tuesday
April 13, 2004

Canadian Light Source Tour

Space for the Tour is Limited to 30 People Max – only the first 30 to register may attend

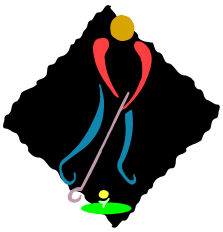
4:00 PM **Canadian Light Source Reception**

Will meet back at the Construction Association for Dinner and Meeting after the Tour

AMERICAN SOCIETY OF HEATING, REFRIGERATING, AND AIR-CONDITIONING ENGINEERS
ASHRAE SASKATOON

ASHRAE Saskatoon
P.O Box 7043
Saskatoon SK
S7K 4J1

2004 Golf Tournament



May 13
The Willows

Registration Form Enclosed

NEWS:

In regards to the local funspiel we had 18 curlers, 2 people short of 5 full teams. A good time was had by all and Ryan McGillivray, Doug Freeman and Brenda Ingalls had their names engraved on the trophy as this year's winners.

The John Ross playoff is to be hosted by the Calgary Chapter, but will not be held until September, in the new ASHRAE year.

Region XI 2004 CRC

Let me start by thanking everyone that has already committed to assisting with the upcoming Chapters Regional Conference.

Once every 12 years (approximately) it is both our privilege and responsibility to host the CRC and it will take the assistance of all chapter members to make it a success. In less than 6 weeks we will be hosting representatives from the various Chapters within our region as well as Society level guests including:

Ronald Vallort, 2003 – 2004 President Elect
Kent Peterson, 2003 – 2004 Vice President

If you have not already determined how you will assist our chapter in running a successful CRC please do not delay.

I will be calling each of you personally to request your support.

Sincerely,

Jonathan French
Region XI 2004 CRC – General Chairperson

Also included this month:

- CRC Technical Seminar Form
- CSC Volunteer Sign Up Sheet
- ASHRAE News Releases
- March 2004 General Meeting Minutes

Membership News

Previous Meeting Attendance: Many thanks to those who attended the March 2004 local Chapter and listen to the presentation by Alf Dyck on Displacement Ventilation Systems. Those in attendance were,

Jeff Frie	Mike Carr	Travis Braid	Bob Daniels	Marvin Akister
Ted Guadet	Keith Morson	Kevin Thurston	Murray Guy	Kirk Campbell
Dean Bilodeau	Shawn Yuskiw	Steve Hendricks	Bob Cowan	Brad Chisan
Paul Khanna	Mike Osborn	Norm Hain	Reg Hofmann	Conrad Iskra
Dan Thompson	Chris James	Ryan Basaraba	Bill Dean	Jack Scott
Ryan MacGillivray	Alf Dyck	Grant Roming	Janine Paul	Myles Bantle
Jason Praski	Chris Conley			

Rosters: Saskatoon Chapter 2003-2004 rosters are available. Attend our monthly meeting to receive you copy.

ASHRAE News Release: Refer to the enclosed pages for current ASHRAE News Releases.

CRC Volunteers: Refer to the enclosed CRC volunteer list to confirm your time(s). To commit to a time frame, show up at out next meeting and list the volunteer poster.

Web Site: A new home for the Saskatoon Chapter of ASHRAE is located at the following address: http://www.saskatoon.ashraechapters.org

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

Region XI, 2004 Chapter Regional Conference
Technical Seminar Registration Form

Saskatoon, Saskatchewan
May 13, 2004

To: All individuals interested in increasing their Mechanical Pumping System knowledge!

Greetings to all! Each year the **American Society of Heating, Refrigeration and Air-Conditioning Engineers** (ASHRAE) holds a regional conference, this year Saskatoon is playing host to this wonderful event that only comes around every 12 years!

As part of the conference, a Technical Seminar will be held at the Saskatoon Sheraton Cavalier. Mark Hegberg from ITT Bell & Gossett, ***Little Red School House Training Institute***, will host this Seminar. The Seminar will be a review of Hydronic System Design that will cover the following topics:

1. Hydronic System Types
2. Pump Selection & Application
3. Control Valves & Flow Analysis
4. Primary Secondary Pumping
5. Variable Speed Pumping
6. Balanced System Design

The seminar is designed to be applicable to Engineers, Designers, Suppliers, Installers, Owners and Maintenance Technicians who are practicing in the field of hydronic heating and cooling. This seminar reviews fundamental ideas and methods of the design and application of hydronic systems. It doesn't matter whether you are a seasoned veteran or just starting out, this course will benefit you and your company! You will not find a better session for the price anywhere.

For a biography of Mark Hegberg refer to January's CRC E-News. A copy of which can be found at the following link;
ASHRAE 2004 CRC News - January 2004
(http://www.saskatoon.ashraechapters.org/e-news/ASHRAE 2004 CRC News - January 2004.htm)

Seminar Information

Date: May, 13, 2004

Location: Sheraton Cavalier

Time: 8 am to Noon

Cost: $50.^{00} ASHRAE Members
$60.^{00} Non-ASHRAE Members

Name _____ Position _____

Company _____

Address _____

City / Prov. _____

Postal Code _____

Phone _____ Fax _____

E-Mail _____

Please submit a copy of this Invoice and Payment for Technical Seminar Registration.

Send to:

Travis Braid
ASHRAE Saskatoon Chapter
P.O. Box 7043
Saskatoon, Saskatchewan Canada
S7K 4J1

Make Cheque Payable to:

ASHRAE Saskatoon CRC 2004

Region XI, 2004 Chapter Regional Conference
Golf Registration Form

Saskatoon, Saskatchewan
May 13, 2004

The local ASHRAE golf tournament will be held at the Willows Golf and Country Club (Lakes and Islands) on **May 13th** in conjunction with the Chapter Regional Conference (CRC) that is being held in Saskatoon. To ensure your spot, please forward a cheque to "ASHRAE, Saskatoon Chapter" by **May 1st** for the following. Club rentals and driving range balls are at your own cost.

It promises to be an enjoyable day, so please forward your cheque today. Please note that it will be first paid first served. If you need more information or would like your name on the list, call;

Jack Scott	931-4773
Mike Carr	653-5291
Bob Daniels	477-0678

If you have a cash or merchandise prize to donate, please advise Mike prior to May 1st and then drop it off at the address below or bring it to the tournament.

Golf Tournament - Willows Golf and Country Club — $100.00 ea _____
- ☐ Golf Registration *includes 18 Holes of Golf and CRC Welcome Reception Dinner*

Golf Tournament Only - Willows Golf and Country Club — $70.00 ea _____
- ☐ Golf Registration *includes 18 Holes of Golf*

Dinner Only - Willows Golf and Country Club — $35.00 ea _____
- ☐ *CRC Welcome Reception and Dinner*

Total Enclosed $ _____

Name _____

Company _____

Address _____

City / Prov. _____

Postal Code _____

Phone _____ **Fax** _____

E-Mail _____

Please submit a copy of this Invoice and Payment for Golf Registration.

Send to:

Mike Carr
c/o Engineered Air
102 - 2366 Ave C North
Saskatoon, Sask.
S7L 5X5

Make Cheque Payable to:

ASHRAE, Saskatoon Chapter

2004 CRC Saskatoon, Saskatchewan May 13 to May 15, 2004
Volunteer sign-up sheet

	Wednesday May 12th			Thursday May 13th			Friday May 14th			Saturday May 15th		
	Morning	Afternoon	Evening	Morning	Afternoon	Evening	Morning	Afternoon	Evening	Morning	Afternoon	Evening
Registration	Not Required	Not Required	1) Ryan MacGillivray 2) Travis Braid	1) Ted Gaudet 2) Steve Hendricks 3) Manfred Gerber	1) Bob Cowan 2) Lloyd Labas	1) 2)	1) Chris Conley 2)	1) Kirk Campbell 2)	1)	1)	Not Required	Not Required
Hospitality	Not Required	Not Required	1) Mike Osborn	1)	1)	1) Dan Thompson	1)	1) Travis Braid	1) Jeff Frie 2) Mike Osborn	1)	1)	Not Required
Room Monitor	Not Required	Not Required	Not Required	1) Kirk Campbell	Not Required	1) Norm Hain	1) Norm Hain 2) Bob Cowan 3) Steve Hendricks 4)	1) Chris Conley	1)	1) 2) 3) 4) 5)	1) Kirk Campbell	Not Required
Transportation	Not Required	Not Required	1)	Not Required	Not Required	1) 2)	Not Required	Not Required	Not Required	Not Required	Not Required	1)
General / Floater	Not Required	1) 2)	1) 2)	1) 2)	1) 2)	1) 2)	1) Blake Alberts 2) 3)	1) 2) 3)	1) 2)	1) 2)	1) 2)	1)
Companion Programs	Not Required	Not Required	Not Required	1) 2)		Not Required	1) Laurel Frie 2)		Not Required	1) 2)	1)	Not Required

Summary of Volunteer Duties

1) Registration
Welcome CRC Registrants and Companions. Ensure all receive registration packages. Take new registrations and print ID cards.

2) Hospitality
Welcome CRC Registrants and Companions. Serve drinks, ensure snack tray are full. Ice, mix etc.

3) Room Monitor
Sit in on workshops, business session. Get extra chairs etc. which are required to operate the sessions

4) Transportation
Ensure everyone knows where and how to get to locations away from the Sheraton, assist in transporting Society Members

5) General/Floater
Jack of all trades / Master of none.

6) Companion Programs
Escort the companions on the daily activities

ASHRAE News Release March 8, 2004

ANSI Approves ASHRAE Residential Ventilation Standard

ATLANTA - ASHRAE's residential ventilation standard has been approved by the American National Standards Institute (ANSI).

ANSI/American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings, is the only nationally recognized indoor air quality standard developed solely for residences.

The approval means the ANSI Board of Standards Review has determined that the standard met the consensus requirements set by the accrediting standards-writing organization. The standard will carry ANSI in its title.

"This approval from ANSI illustrates industry acceptance for 62.2," ASHRAE President Richard Rooley, FREng, said. "ANSI's approval means that ASHRAE has successfully demonstrated that we complied with ANSI procedures, which include their 'cardinal principles' of openness, balance, due process and consensus, in the development of the standard."

The standard is intended for use by code bodies with many of the requirements already existing in one or more codes. It can be applied to new or existing houses. The standard provides the minimum requirements necessary to achieve acceptable indoor air quality for dwellings.

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.

ASHRAE News Release March 10, 2004

ASHRAE Begins Work on HVAC System Maintenance Standard

ANAHEIM - Enhanced maintenance can reduce HVAC system operational problems related to energy usage and indoor air quality.

Yet lack of a broadly accepted standard maintenance practice makes it difficult for building owners and operators to budget for inspection and maintenance of HVAC systems.

A proposed standard from the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) will provide a document that owners and operators can rely on to guide their operational planning.

Proposed ASHRAE Standard 180P, Standard Practice for Inspection and Maintenance of HVAC Systems, will establish minimum inspection points and/or maintenance intervals for HVAC and filtration systems in commercial, residential, institutional and public buildings.

Creation of a committee to write the standard was approved during ASHRAE's 2004 Winter Meeting held here Jan. 24-27.

Proposed standard 180P will define the maintenance required to minimize degradation of the building asset without compromising indoor air quality and other operational conditions and specify ventilation system periodic maintenance requirements for occupied indoor spaces.

"In the past, operation and maintenance of HVAC systems has been considered the responsibility of manufacturers of system components and owners and operators," Robert Baker, chair of the 180P committee, said. "As systems have grown more complex, the maintenance direction provided by the manufacturer of one component of a system has become less useful as the proper operation depends on all components working together."

Those interested in serving on this committee are asked to indicate their interest and obtain the necessary forms from www.ashrae.org/template/TechnologyLinkLanding/category/1638 or from the assistant to the manager of standards, ASHRAE, 1791 Tullie Circle, N.E., Atlanta, GA 30329-2305; phone 404-636-8400, ext 1125; fax 678-539-2134, e-mail: standards.section@ashrae.org.

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ASHRAE News Release March 12, 2004

Public Comment Opened Today
ASHRAE Proposes Removal of Residential Backdrafting Test

ANAHEIM - Combustion appliance backdrafting test requirements would be removed from the American Society of Heating, Refrigerating and Air-Conditioning Engineers' (ASHRAE) residential ventilation standard under a proposed addendum.

ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings, is the only nationally recognized indoor air quality standard developed solely for residences.

Proposed addendum 62.2a was approved for a first public review at ASHRAE's 2004 Winter Meeting held here Jan. 24-28. It opened for public comment today, March 12, and will close April 26.

The proposed addendum is the first for the standard, which was published in December 2003.

Backdrafting prevents exhaust from appliances such as furnaces from entering the house. The proposed addendum addresses concerns about the backdrafting test.

"The test was based on the best industry-accepted method found in the National Fuel Gas Code but questions have arisen about its application to solid-fuel burning appliances," committee chair David Grimsrud said. "There also is concern about it not being possible to perform the test until the home is completed, opening the potential for having to perform remedial balancing at a difficult stage of construction and sale."

Although the proposed addendum eliminates the test requirements, it sets an upper limit of exhaust flow to 15 cfm/100 square feet when natural-draft combustion appliances are present. It requires designers or installers to address the level of depressurization at a stage where the problem can be fixed, he said.

A draft of the proposed addendum is available only during the public review period. To obtain an electronic draft version of addendum 62.2a during the comment period, visit the "standards for public review" shortcut on ASHRAE.org.

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ASHRAE News Release March 12, 2004

Public Comment Opens Today
Requirements on Separating ETS Areas Proposed by ASHRAE

ANAHEIM, CALIF. - An addendum to the American Society of Heating, Refrigerating and Air-Conditioning Engineers' (ASHRAE) ventilation standard that contains requirements for separating smoking and non-smoking spaces opened for public review today, March 12.

ANSI/ASHRAE Standard 62-2001, Ventilation for Acceptable Indoor Air Quality, sets minimum ventilation rates and other requirements for commercial and institutional buildings.

Proposed addendum 62g was approved for a fifth public review at ASHRAE's 2004 Winter Meeting held here Jan. 24-28. The comment period for addendum 62g starts March 12 and ends April 26. It will be open as an independent substantive change, meaning only limited portions will be available for public comment at this time.

The addendum proposes requirements to separate environmental tobacco smoke (ETS) areas from ETS-free areas through a combination of pressurization and airtightness as well as through limitations on air transfer and recirculation, according to David Butler, chair of the Standard 62 committee.

The proposed addendum allows an exception to the requirements for solid partitions between smoking and non-smoking spaces.

The exception allows openings, such as doorways, between smoking and nonsmoking spaces as long as the system is designed so that air flows from the nonsmoking space to the smoking space. Interruptions to the air flow due to localized recirculations effects (eddies) or short duration events (wind gusts) are allowed.

A draft of the proposed addendum is available only during the public review period. To obtain an electronic draft version of addendum 62g during the comment period, visit the "standards for public review" shortcut on ASHRAE.org.

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ASHRAE News Release March 22, 2004

New Education Course on Standard 62.2 Offered by ASHRAE

ATLANTA - A course on how to comply with the requirements of the American Society of Heating, Refrigerating and Air-Conditioning Engineers' (ASHRAE) residential ventilation standard will be offered for the first time at the Society's 2004 Annual Meeting.

ANSI/ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings, is the only nationally recognized indoor air quality standard developed solely for residences.

Designing Residential Ventilation Systems to Meet ANSI/ASHRAE Standard 62.2 will be offered by the ASHRAE Learning Institute at ASHRAE's 2004 Annual Meeting, June 26-30, Nashville, Tenn. The short course will be held from 2-5 p.m. Tuesday, June 29.

"Knowledge gained by attendees will help improve the indoor air quality in new and existing homes for occupants and homeowners throughout North America," Don Stevens, instructor, said.

The course will provide an overview of fundamental ventilation and indoor air quality principles, including infiltration, natural ventilation, mechanical ventilation and source control, as applicable to low-rise residential buildings.

It will include background on the development of Standard 62.2 followed by discussion on to comply with its requirements. A variety of mechanical ventilation approaches based on local design conditions will be discussed along with examples on how to meet the standard requirements for single family and low-rise multifamily ventilation systems.

Sections on the design, sizing, testing, selection and installation of compliant systems will help attendees better decide how to approach the ventilation of low-rise residential buildings, according to Stevens.

The cost of Designing Residential Ventilation Systems to Meet ANSI/ASHRAE Standard 62.2 is $110 ($95 ASHRAE members). Attendees will earn three professional development hours.

To register, visit the "ASHRAE Learning Institute" shortcut on ASHRAE.org or 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.

Registration for the 2004 ASHRAE Annual Meeting is $580 ($340, ASHRAE members) prior to May 21. After May 21, the registration fee will be $680 ($440, ASHRAE members). For more information or to register, visit ASHRAE.org.

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ASHRAE News Release March 30, 2004

Addenda to ASHRAE Energy, BACnet Standards Approved by ANSI

ATLANTA - Eight addenda to the American Society of Heating, Refrigerating and Air-Conditioning Engineers' (ASHRAE) energy conservation and building controls network standards have been approved by the American National Standards Institute (ANSI).

Also receiving approval from ANSI's Board of Standards Review was ANSI/ASHRAE 158.1-2004, Methods of Testing Capacity of Refrigerant Solenoid Valves, which prescribes a method of testing the capacity of refrigerant solenoid valves for use in refrigerating systems.

Five addenda to ANSI/ASHRAE/IESNA Standard 90.1-2001, Energy Standard for Buildings Except Low-Rise Residential Buildings, were approved. The standard provides the minimum requirements for the design of energy efficient buildings.

Three addenda to ANSI/ASHRAE Standard 135-2001, BACnet - A Data Communication Protocol for Building Automation and Control Networks, were approved. This is the only open, consensus-developed standard in the building controls industry.

All of the addenda can be downloaded for free through the "standards addenda" shortcut at ASHRAE.org.

The approval means the ANSI Board of Standards Review has determined that the addenda and the standard met the consensus requirements set by the accrediting standards-writing organization.

The following addenda were approved:

* Addendum 90.1h updates the references in Section 12 and the test procedure references in sections dealing with building material thermal properties and assembly U-factors.
* Addendum 90.1p contains requirements to ensure that building energy simulation programs remain bug free. The addendum requires that the programs be tested with ANSI/ASHRAE Standard 140-2001, Standard Method of Test for the Evaluation of Building Energy Analysis Computer Programs.
* 90.1o revises an exception to Section 6.3.1., economizers, to indicate that it applies only to heat recovery systems that are required by Section 6.3.6.2., heat recovery for service water heating.
* 90.1r adds requirements regarding return duct insulation.
* 90.1s revises exceptions (g) and (i) in Section 6.3.6.1., exhaust air energy recovery.
* Addendum 135a changes the way schedules are represented and maintained in BACnet systems.
* Addendum 135c contains eight new features that include enhancements to the life safety objects and services and the ability to represent utility meters and other measuring devices that provide pulsed outputs.
* Addendum 135d contains information on how to interconnect BACnet devices with devices that use the EIB/Konnex protocol.

The cost of Standard 158.1 is $18 ($14 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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ASHRAE News Release April 1, 2004

ASHRAE Undergraduate Grants
Students Seek Practical Application of Engineering Concepts

ATLANTA - Despite sophisticated energy management and control systems, HVAC equipment routinely fails to meet performance expectations.

These failures also often go unnoticed for extended periods.

A diagnostic tool to service systems for residences is being developed by students at California State Polytechnic University, Pomona, Calif., through a grant from the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

Twenty-two grants, totaling $100,000, have been awarded by ASHRAE to colleges and universities worldwide to promote the study and teaching of HVAC&R, encouraging undergraduate students to pursue related careers. The grants are used to design and construct projects.

ASHRAE's Student Activities Committee received 33 applications for the 2004 Senior Undergraduate Grant Program, an increase of 24 percent over last year. Grants will be awarded ranging in amounts from $5,000 (the maximum amount available per project) to $2,065.

Equipment failures go unnoticed for several reasons. Data collected by energy management and control systems may overwhelm building operators because there is little effort to consolidate the information, according to Henry Xue, faculty advisor for the project. Operators and homeowners also may overlook symptoms of a failure because they do not understand the energy management and control strategies used.

"Today's energy management and control systems lack the convenient tools necessary to detect problems and assist owners in diagnosing problems that arise," he said.

The diagnostic tool, for use by onsite building HVAC service assistants, would inspect air-conditioning units and collect field data; analyze performance and diagnose problems; estimate efficiency and potential savings; and document the work and report to supervisors, managers and customers.

"Once the air-conditioning system is routinely serviced, the report will assess energy savings and smart maintenance planning and facilitate repair decisions," he said.

Another project will focus on design modification of a gas furnace to meet ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings. Students at Indiana University, Indianapolis, Ind., will examine using the circulating blower and duct system in existing gas furnaces by routing a small duct from the outside ambient to the return duct of the furnace.

Use of this method would allow contractors to avoid added cost of having to install a heat recovery ventilator or separate ventilation system to meet the requirements of the standard, according to Ramana Pidaparti and Sivakumar Krishnan, faculty advisors.

Students will examine potential problems known to exist by using this strategy while looking to minimize installation cost, achieve the requirements in 62.2 and maximize furnace durability and occupant comfort, all with minimum impact on operating cost.

Other recipients are:

* American University of Beirut, Philippines, desiccant evaporative cooling demonstration unit for lab use;
* California Polytechnic State University - San Luis Obispo, San Luis Obispo, Calif., axial fan experiment for fluid mechanics laboratory;
* California State University, Northridge, Northridge, Calif., design and construction of a heat transfer test facility;

* Central Piedmont Community College, Charlotte, N.C., variable air volume demonstrator enhancements;
* Florida International University, Miami, Fla., construction of evaporator circuitry test apparatus in thermal engineering lab;
* Indiana University - Purdue University Fort Wayne, Fort Wayne, Ind., experimental apparatus for demonstrating solar water heating concept;
* Instituto Tecnologico Y De Estudios Superiores De Monterrey, Monterrey, Mexico, analysis of a diffusion absorption refrigerator using solar energy;
* Lamar University, Beaumont, Texas, design and construction of a laboratory unit for convective heat transfer;
* Louisiana Tech University, Ruston, La., solar powered cooler design competition;
* Oklahoma State University, Stillwater, Okla., design and construction of an experimental HVAC system for room airflow studies;
* Oklahoma State University, Stillwater, Okla., design and fabrication of a window blind thermal test unit;
* Pennsylvania State University, University Park, Pa., an experimental study of air-water HVAC system benefits;
* Purdue University Calumet, Hammond, Ind., design, construction and testing of a smart air distribution system to cool a model of a data center;
* Tri-State University, Angola, Ind., design and construction of a hydronic system simulator;
* The University of Hong Kong, Hong Kong, design and construction of a demonstration unit for airside systems of air conditioning;
* University of Missouri-Columbia, Columbia, Mo., feasibility of a direct contact heat exchanger in a residential HVAC system;
* University of North Texas, Denton, Texas, design and development of modules for thermal conductivity and fin analysis;
* University of Texas at San Antonio, San Antonio, Texas, laboratory demonstration of a pump energy savings using variable frequency drives;
* University of Windsor, Windsor, Ontario, Canada, HVAC volumetric flow rate estimation test rig;
* University of Wisconsin-Milwaukee, Milwaukee, Wis., design and implementation of a multimode heat transfer experiment for use in two sequential thermal science courses.

Since its inception in 1995, the undergraduate grant program has benefited over 100 institutions by providing financial support toward the purchase of materials for engineering, architectural and technical school senior projects. Many of the proposed senior design projects for 2004 will be used as teaching aids in HVAC&R-related courses and laboratories.

Engineering instructors advising senior design projects on any HVAC&R-related topic are invited to submit applications for the 2005 grant program. The 2005 Undergraduate Senior Project grant announcement will be posted on ASHRAE.org in late September. Applications should be submitted to ASHRAE by Dec. 1, 2004.

For more information, visit The Student Zone on ASHRAE.org.

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ASHRAE® American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

ASHRAE Chapter 102
Saskatoon

Monthly Meeting Minutes:
DRAFT COPY
For March 9, 2004 Meeting

Travis Braid called meeting to order.

Introductions

Motion to adopt minutes as posted in newsletter by Jack Scott.
2nd by Mike Osborn.

Passed unanimously.

Old Business

None

Reports

Treasurer (Reg Hoffman)

Financial figures were given.

Programs (Mike Osborn)

Today's Speaker will be Alf Dyck from E H Price talking on Displacement Ventilation.
April will have a tour of the Light Source.
Golf tournament will be in May.

Research (Bob Daniels)

No report.

Membership (Jeff Frie)

There are Rosters still available. See Jeff if you want one.

Welcome new members Kirk Cambell, Jason Praski, Kevin Thurston.
Deliquency is currently at 6.8% and goal is 5%.
Membership advancement forms have yet to go out but will shortly.

Tega / Refrigeration (Vacant)

Travis reports that it is still vacant.

History (Jack Scott)

Local curling funspiel tournament had 18 curlers. Ryan Macgillivray, Doug Freeman, Brad Chisan, Brenda Ingalls were the winners.
Out of last years winning team, Travis Braid, Doug Freeman, Steve Kuzma cannot make it to this years John Ross Tournament. Only Ryan Macgillivray can make it this year. A new team has been formed and includes Ryan Macgillivray, Jack Scott, Merv Buhl, Brad Chisan unless someone else would like the chance of participating on the team.

Student Affairs (Paul Khanna)

Students have received an information package from Society.

CRC Report (Bob Daniels)

Jonathan French is in Seattle so Bob is reporting in his absence.
Reg Hoffman is in charge of Hospitality
Travis Braid is in charge of Registration.
There is a chart on the wall for signing up for volunteer positions. Please sign up. If you don't sign up, you will contacted and asked (told) to fill one of the empty time slots.
CRC is from May 13th thru May 15th.
Jeff Frie will have the sign up chart so you can contact him to volunteer. He will try and post it on the Web.
Chapter Delegate early registrations have been received.
U of S students are welcome to apply to volunteer at the CRC as they should be done classes then.

New Business

Bill Dean, Director and Regional Chair gave a report on the January Anaheim Meeting and Trade Show.

Motion to Adjourn by Brad Chisan.