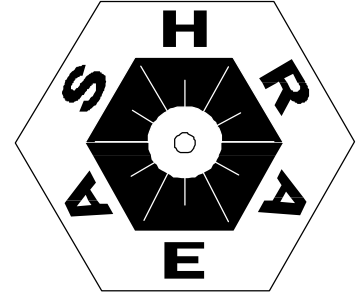
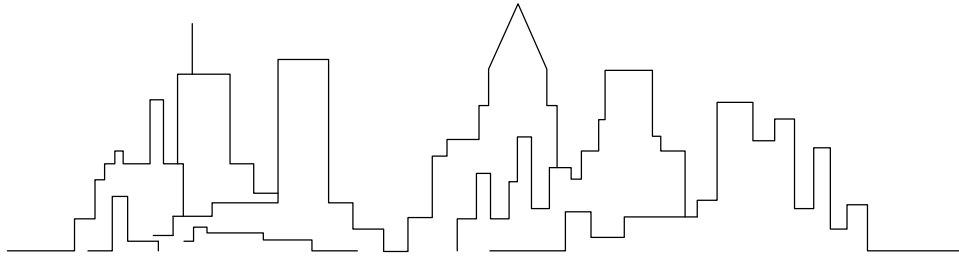


The EXCHANGER



Minnesota Chapter

www.mnashrae.org

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.

c/o Karges-Faulconbridge Inc., 670 County Road B, Saint Paul, MN 55113

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Presidents Corner

Submitted by Paul Quirin

Our February Chapter meeting was held at the Four Points Sheraton hotel in St. Paul. The morning seminar featured four prominent Minnesota Chapter members speaking on a variety of refrigeration related topics focusing on central plant refrigeration systems and commissioning. The lunch presentation was delivered by ASHRAE Distinguished Lecturer Mr. Wayne Kirsner with Kirsner Consulting Engineering in Atlanta, GA, presenting on "The Demise of the Primary-Secondary Pumping Paradigm for Chilled Water Plant Design". The speakers were tremendous and matched the fabulous turnout by our membership. The impressive attendance was a tribute to the strength of the seminar presenters and topics.

The Chapter encourages you to try the on-line meeting registration through the Region VI website. A total of 26 of the 109 total attendees used this method for the February seminar. Please consider taking advantage of this fast and efficient way to register. You can reach the on-line meeting registration through a link on the Chapter website (www.mnashrae.org).

The March Chapter meeting will be in recognition of one of the Chapter's Golden Circle (minimum \$10,000) Research Promotion contributors, Mammoth Inc. The evening meeting will be held at the Double Tree Park Place hotel on March 14, starting at 5:00 p.m.

The April Education seminar will be held at the Four Points Sheraton on April 11. Additional meetings will also be held in the Rochester Section on March 21 and April 18 and the Northern Lights section on April 12 in Grand Forks. See the attached meeting inserts and schedules at the back of the Exchanger for more details. Also, keep April 19 available in your calendar for the Society satellite broadcast presentation on Sustainability and the Building Environment. The Minnesota Chapter will be co-sponsoring a site and providing lunch, look for specific details to be released in the April Exchanger.

The transition into the new Society year begins this month with the enclosed 2006-2007 officer and board of governors' ballot. Please take a moment to vote and send in the ballot.

As you scan over the slate of board members and officers, please consider volunteering your time to serve as a member of a committee or as co-chair or chair of one of the 22 active committees listed on the front of each Exchanger. There are almost no limits to the number of members that participate on any of the committees. Each year, a Chapter member is nominated to the board based on their committee participation, leadership and willingness to contribute to the Chapter. The board members then, typically, follow a path through the board and officer positions, eventually

becoming President of the Chapter. It is a rewarding commitment with many opportunities for growth in knowledge and leadership. Please contact any of the current Board members or officers for further information regarding committee assignments, co-chair and chair position availability for the upcoming year, beginning on July 1, 2006.

I look forward to seeing you at an upcoming Chapter meeting!

Society Information

Chapter Business Meeting Minutes – January 14 2006 Submitted by Brian Shablow – Secretary

Call to Order – President Paul Quirin – 12:10PM

Guest(s) Attending:

1. John H. Parks – Hallberg Engineering

Presidents Comments:

1. Reminder about the Education Seminar April 11, 2006.
2. Notice of May meeting will not include a Technical Session due to length of Business Meeting.
3. Notice about the Chapter co-sponsoring a satellite broadcast in April. More information to follow. Check the website for upcoming information.
4. Notice that the CRC – Chapter Regional Conference is in session April 27-29. Friday includes numerous technical sessions for PDH credits. If interested the Chapter will give \$50.00 for any member wanting to attend. You can find out more information on the Region 6 web site.
<http://www.ashrae6.org>.
5. Congratulated David Grimsrud for becoming a Fellow Grade member of the Society.
6. Congratulated Richard Hermans for his Distinguished Service Award for his Chapter, Regional and Society participation and achievements. Richard's efforts and contributions are greatly appreciated.
7. Reminded all to complete the Distinguished Lecturer Evaluation Sheets after the presentation for submitting to Society for review.
8. SPECIAL PRESENTATION: Carol Marriott and associates of McQuay International presented a \$10,000 check to the Chapter for Research Promotion classifying McQuay as a Golden Circle contributor. The MN Chapter thanked McQuay for the contribution and helping the Society's research efforts.

Committee Reports:

Nominations Committee – Chairperson Richard Hermans

1. Nominations are open for Governors At Large and Treasurer. Contact him with nominations. Ballots will be mailed to membership in the Exchanger. Please complete and send in your ballots. Results will be announced at the April meeting.

Table Top Displays:

1. MMS Midwest Mechanical Solutions
2. Mulcahy – ABB VFD's and Bell Gossett Pumps
3. Schwab Vollhaber Lubratt, Inc. – Turbocor Compressors & McQuay
4. Siemens Building Technologies, Inc.

Technical Session:

A morning seminar (Refrigeration Seminar) preceded the Business Meeting and was well attended. The seminar included four topics and presenters of related topics.

Lunch Program:

ASHRAE Distinguished Lecturer: Wayne Kirsner, Kirsner Consulting
Engineering Presentation Topic:

The Demise of th

Wayne's presentation was about central chilled water plant systems and the often occurring "Low Delta T Central Plant Syndrome" that results in: Excess chilled water flow, Inability to load chillers, and Low or reverse flow at far loads – because building pumps are in series with system pumps.

Premises identified: Low Delta T Central Plant System; and, if exists in every system, recognize as design problem and not a maintenance problem; and are, Primary/secondary pumping is inherently susceptible to low Delta T.

He proposed a Variable Primary pumping central chilled water central plant designed for the possibility that it would experience "Low Delta T Central Plant Syndrome". Design considerations included: Design to anticipate Low Delta T – Infrastructure for up to double the design flow; gang pumps with Variable Frequency Drives' versus dedicated chiller pumps; select chillers for less than 5.5 fps; control chillers by leaving chilled water supply temperature versus flow switches in the de-coupler line; allow pumps to operate while sequencing chillers on/off.

A final note was the suggestion that balancing valves at the building(s) were a detriment to variable flow central plant distribution systems.

Adjournment: 1:30 PM.

Sustainable Design Committee News

Submitted by Betti Iwanski

MASDeC On-Line

We have been meeting this year, but you probably can't tell by looking at the MN Chapter website. We will be uploading 2005-2006 meeting minutes, MBO, meeting presentations and information from our Fall Social, held September 20, 2005. Presentations include *DDC controls and LEED* and *Duct Cleaning and Indoor Air Quality*. Check out our website in the next couple of weeks at mnashrae.org – Committee Activity - MASDeC. If you want to be included on our email list, contact Betti Iwanski at biwanski@gausman.com, 651-604-3172.

Satellite Broadcast – Sustainability and the Building Environment

MASDeC is co-sponsoring the national ASHRAE satellite broadcast on April 19th, from 1:00 – 4:00 pm. We are currently looking for a host site that will accommodate 30 people, or more. The program is also available by web casting, which is difficult to make work for groups of more than two people. If you can generously supply the satellite hook-up and seating, we will call it a lunch meeting and set-up catering for a reasonable charge to participants. Please contact us if you have satellite capability and we'll sort out the details. Email or call biwanski@gausman.com, 651-604-3172.

Site Coordinator and Web cast Registration for the April 19, 2006 Sustainability and the Building Environment" Satellite Broadcast/Webcast will begin March 1 at <http://www.ashrae.org/greenbuildingsbroadcast>. Please visit this link for Frequently Asked Questions, the Satellite Broadcast Coordinator's Guide, the Web Cast Guide, and information regarding the speakers and program. A Promotional Flyer is also available at this link should you need it for your Chapter Newsletter or other activities. Additional promotional materials will be mailed to you in the next several weeks.

Please contact Rosy Douglas at rdouglas@ashrae.org or 678/539-1128 if you have questions

MASDeC Fall Seminar

The MN Chapter found out that we had a great sit down dinner with a good turn out for our Fall Social and now want us to share. So we are stepping up to the plate to sponsor the November Chapter meeting on Sustainable Design. We have some ideas, but in the spirit of sharing, invite Chapter members who are eager to present, are eager to listen or are eager eat a good dinner to contact MASDeC with ideas and suggestions. Of course, we will be inviting some of our friends who attended the Fall Social, which means architects lighting and energy engineers, plumbers, teachers, and students. Contact Betti Iwanski biwanski@gausman.com, 651-604-3172 or Todd Courneya at todd.courneya@mmstwincities.com, 952-738-5230. Or better yet, attend our March 28th meeting, noon – 1:15 pm at Gausman & Moore.

USGBC and MASDeC sponsor March 9th Tour

MASDeC is a co-sponsor with AIA Minnesota a tour of sustainable design in the new Minnesota State Capitol complex project. HGA Architects and Engineer sand BWBR Architects will present sustainable design incorporated into both the architecture and engineering of three State of Minnesota Projects. HVAC systems to be highlighted include under floor air distribution in office spaces, manifolded AHU's and looped supply air distribution, and total energy recovery wheels serving 250,000 square feet of laboratory space. Tour is March 9th from 5:30 – 7:30 pm, meeting at the Orville L. Freeman office building main entrance. See the attached flyer for registration and parking information.

Greetings from the Nominating Committee Submitted by Rick Hermans Chairman Nominating committee

Each year about this time your chapter nominating committee prepares the slate of candidates for the following year to serve as Governors at Large and for all officers except President. As President-Elect Curt Ratajczak will automatically become our 2006-2007 Chapter President. Once again this year, in accordance with the bylaws, we will ask you to submit your candidates names at our March meeting on March 14th. Before we can accept a name you should obtain permission in advance from the candidate and inform us that the candidate is willing to serve.

Our chapter bylaws are quite interesting in that they require the Nominating committee to submit one name for each position and accept a single opposition candidate from the floor in March. If more than one candidate is put forth from the floor we are to hold an immediate run-off election to select the one opposition candidate. I don't recall this ever happening since I joined the chapter in 1979.

The rest of the process is pretty straight forward. At the end of the March meeting we close nominations and the chapter secretary prepares a ballot to be used by the membership to vote. This ballot will appear in the March and the April Exchangers. The April ballot will include any nominations from the floor of the March meeting. The election occurs during the April meeting. This is, of course, always a suspenseful event.

Installation of your new Governors and Officers takes place at the May meeting and they begin their respective offices on July 1st.

I look forward to seeing you at a Chapter meeting soon.

Minnesota Student Branch Update

Submitted By Steve Schreurs

The Minnesota ASHRAE student branches have been very active this year with perhaps the most exciting events taking place in Mankato. At the recent ASHRAE Winter Meeting in Chicago four students from the University of Minnesota Mankato were honored for their third place entry for systems selection in the student competition. All four students have now graduated and are working in industry. Jared Mohr and Mike Fellows are with Holabird and Root. Jennifer Gabrielson is working for Cargil while Jason Quint is with Kato Manufacturing. Congratulations on bringing this award home to the Minnesota Chapter!

The Mankato group has recently submitted the ASHRAE paperwork to become a new student branch. Patrick Tebbe is the ASHRAE student advisor for U of M Mankato. Temporary student officers have been elected and the group is hoping to become an official student branch of the Minnesota Chapter this spring.

Student activities are taking place at the University of Minnesota Minneapolis and Dunwoody College student branches as well. The Minnesota Chapter held a student night on October 11 in conjunction with the Guthrie Theater tour. The event was attended by nine students from Dunwoody, along with student advisor Chuck Taft. Two students from the U of M Minneapolis attended the meeting with student advisor Dr. Tom Kuehn. The U of M Minneapolis students also organized an HVAC tour of Mariucci Arena.

Nick Stanley of the U of M Minneapolis attended the ASHRAE winter meeting in Chicago and presented a program on the Minneapolis student branch activities. All of the Minnesota students attending the Chicago meeting participated in the awards banquet. Other activities include a tour of the art museum at Northwestern University, the product exposition and several vendor hospitality events. Student activities chair George Rothenberger was instrumental in making the Chicago arrangements. The Minnesota Chapter can be proud of this new generation of students as they focus on pursuing technical careers in ASHRAE-related fields.

Upcoming Events

Minnesota Chapter Meeting & Event Calendar

- ü October 11, 2005 Dinner
Meeting Topic: Tour — Guthrie on the River
- ü November 8, 2005 Seminar/Lunch
Health & Life Safety Seminar
- ü December 13, 2005 (Tuesday) Lunch
Meeting Topic: TEGA
- ü January 10, 2006 (Tuesday) Lunch
Meeting Topic: AHRAE Standards Update
Rick Hermans
- ü February 14, 2006 (Tuesday)
Seminar/Lunch
Refrigeration Seminar
- ü March 14, 2006 (Tuesday) Dinner
Meeting Topic: Research Promotion and
Support Appreciation
- ü April 11, 2006 (Wed.) Seminar/Lunch
Meeting Topic: Education Seminar
- ü May 9, 2006 (Tuesday)
Seminar/Lunch
Meeting Sub-topic: Installation of
Officers/Past Presidents Day/History -
Utility Night
- ü June, 2006
Golf Outing

Northern Lights Chapter

- April 12, 2006 Lunch/Tour
City: Grand Forks – Cirrus or
LM Glassfiber (Wind Turbines)
(TBD)
- June 22, 2006 Golf Tournament
City: TBD

Rochester Section Schedule

- ü September 20, 2005 Lunch
MN Board of Engineering
- ü October 18, 2005
Chilled Water Systems
- ü March 21, 2006 Seminar/Lunch
Energy Solutions
- ü April 18, 2006 Lunch/Seminar
Tour -TBD
- ü June 2006
Golf Outing

ASPE Meeting Schedule

*Submitted by Renae Torborg, Newsletter
Editor*

- October 10, 2005
ASPE Local Convention
- October 17, 2005
Rib Eating Contest
- October 19, 2005
Plumbing in Zero G
- November 16, 2005
Plumbing Vent Basics
- December 21, 2005
Valve Design and Application
- January 13, 2006
Holiday Party Rolling Green GG
- January 18, 2005
“Sewer Cam Process”
- February 15, 2006
Fossil Fuel vs. Electric
- March 15, 2006
Siphonic Roof Drainage (Includes Tour)
- April 19, 2006
Oil Water Separators
- May 17, 2006
ASME B-31-9 Update

Professional Directory



Space for Rent!

2005-06 Student Dinners Graciously Sponsored by:

Midwest Mechanical Solutions
R.M. Cotton Company
Minnesota Air
Campbell Seavey
Schwab Vollhaber Lubratt
TMS Johnson
General Mills

**Publication Deadline for the
April Exchanger; March 10th, 2006**

**All submissions must be in electronic format and should be emailed to the
Editor: Daniel Chudecke**

ñ ñ Society and/or Chapter dues Paid?

First **Yes/No** on Mailing Label = Society Dues

Second **Yes/No** on Mailing Label = Chapter Dues

**INSIDE: Insert: April Seminar Notice
March Meeting Notice
ASHRAE Ballot
USGBC Tour Notice**