



Capital Communiqué

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

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Bill DeGagne

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OTTAWA VALLEY CHAPTER

e-mail: contact@ashrae.ottawa.on.ca

February 2003

PROGRAM

DATE: February 18, 2003

THEME: MEMBERSHIP

PROGRAM: THE NIST ADVANCED MEASUREMENT LABORATORY - A CASE STUDY OF DESIGNING FOR NANOTECHNOLOGY

OVERVIEW: Nanotechnology facilities present unique design challenges for the architects and engineers. The National Institute of Standards and Technology's (NIST) Advanced Measurement Laboratory (AML) in Gaithersburg, MD is designed to feature the "world most stable environment". The NIST AML design criteria requires precise temperature and humidity control, a high level of cleanliness, limited vibration and acoustical interferences, tight control of EMI and RFI while requiring a high level of electrical power quality. In certain areas, the temperature control criteria required ± 0.01 °C accuracy with humidity to be maintained within $\pm 1.0\%$.

As a case study of the NIST AML, this presentation includes an overview of its design features and focuses on the testing results of mock-ups associated with its design. The presentation will have a special focus on the issues of HVAC design with emphasis on high accuracy temperature control.

SPEAKERS: Ahmad Soueid, RA Principal/Senior Vice-President
Ted Zsirai, PE Senior Vice President/Mechanical Section Manager
HDR Architecture, Inc. Alexandria, VA

Ahmad Soueid work over the past ten years focused exclusively on the design and construction of advanced technology facilities for both private and public sector clients.

Ted Zsirai has over 25 years of experience in HVAC. His responsibilities have included the design of complex engineering systems for courthouses, hospitals, laboratories and other high technology facilities.

PLACE: Capone's Banquet Facility, Nepean Sportsplex, 1701 Woodroffe Ave, Nepean

TIMES: Social: 17:30 Dinner: 18:30 Program: 20:00

MENU

Ravioli Tomato Soup Ginger Saffron Chicken Pesto Penne & Seasonal Mixed Vegetables Raspberry Mousse

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PRESIDENT'S MESSAGE

ASHRAE as a Society exists through its members. It is only with their participation and support that our Society can thrive. We need to bring in new members so experience can be shared and ideas exchanged. Our theme this month is Membership so let invite a colleague or a business contact to our monthly meeting and introduce them to what ASHRAE is all about.

Besides from our technical program, we also have a lot of fun at social function: the Curling Bonspiel is scheduled for March 28. I have been told you don't have to be an experienced curler to participate. We will see !

I look forward to seeing you on February 18, 2003.

Lan Chi Nguyen Thi, P.Eng.

TECHNICAL SESSION:

Please see the chapter website for late breaking news on this months technical session.

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WHAT YOU MISSED

TABLE TOP DISPLAY

Mechanical Trade Sales will be presenting Raypak's new, fan assisted, low NO_x (less than 20ppm), 84% efficient Hi Delta™ boiler and water heater products that have been introduced to the market within the last two years. Hi Delta™ products are available in sizes from 300,000 BTUH to 2,340,000 BTUH, and offer side wall venting flexibility that is unmatched in the industry. In addition, Hi Delta™ boilers can be stacked to reduce use valuable mechanical room floor space by using Raypak's sturdy SureRack™ system.

Breck-Mar will display the following products from Peake Industries: 18,000 btu Mini-split, New sleek ultra slim line design. Ceiling concealed fan coil unit PDC-018. available in D/X and chilled water..!

For future tabletop presentations please contact Gary Hartmann @ Breck-Mar Sales Ltd.
Tel: 613-728-0060
Fax: 613-725-2637
e-mail: gary@breck-mar.com

ASHRAE OTTAWA VALLEY CHAPTER MEETING LOCATION

Our meeting location is **Capone's Catering** at the Nepean Sportsplex, 1701 Woodroffe Avenue, Nepean. We meet in the "Richmond Room". Enter Capone's from the rear of the Sportsplex at Entrance #4. Parking available at the rear.

Make sure you lock your car and bring your valuables with you.

A very interesting tour was held at the newly unveiled University of Ottawa S.I.T.E. Building - Kevin Courneya gave a report on the afternoon tour and thanked the representatives present from the University of Ottawa for allowing the membership to get a glimpse of energy efficiency through technology at work. Frank Vaculik reviewed the TEGA Award Criteria and stated his wish that the S.I.T.E. Building be nominated for its design and application.

Frank Bann and Mike Swayne distributed some of the 2001-2002 season's ASHRAE Research awards to those members present. Awards will be distributed at each upcoming meeting for the remainder of the season.

We were very fortunate to hear Mr. Julian R. de Bullet, Senior Applications Manager, McQuay International speak on the subject of Chiller Plant Design, Variable Flow Systems & Low Delta T Syndrome. Mr. de Bullet also has the distinction of being the ASHRAE Society Vice-President, and the Ottawa Valley Chapter appreciated the opportunity to share our January meeting with him.

CAREER FAIR

Our annual Career Fair for employers and students is being planned for March 5th 2003 to be held at Ottawa University in the Engineering Building, Colonel By Hall, basement and ground floor lobbies. Any questions or comments, please contact me directly or contact Chris Frauley at R.J. McKee Engineering, 723-9585, email chrisf@rjmeng.com.

Donating Old ASHRAE Handbooks

If you are interested in making a donation to a Student Branch, please contact me directly to make arrangements. These are very much appreciated.
Thank you.

Patric Renault email: patric@dilfo.com
Student Activities Chair , 613-741-7731



Longhill Energy Products (Eastern) Ltd.
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CURLING

Date: March 28, 2003
Location: Nepean Sportsplex
Time: 1:00 to 6:45
Dinner: 7:00 PM
Cost: \$240.00 per team
To register a team, please contact:
Christine Kemp (christine@walmar.net)
or Chris Healey (chris@walmar.net),
by phone 225-9774 or by fax - 225-2972

RESEARCH

The research campaign is will on its way to being a great success. With your help and the help from our local industry and corporations we are closing in on our goal of \$17,553. Contributors to date are:

Bann, Frank
Doshi, Jay
Godin, Cathy
MacMurdo, Jason
Nguyen Thi, Lan Chi
Ron Engineering & Construction (Eastern) Ltd.
A few nice guys at the Chapter meeting Oct.15th/02

New Contributors:
Accu-Fab Metal Products Ltd.
John S. Schermerhorn Ltd.
Leo Groulx Plumbing & Heating Ltd.
Rocque Mechanical Contracting Ltd.

Thank you for your support

Frank Bann
ASHRAE OVC - Research Promotion

MEMBERSHIP PROMOTION

The Ottawa Valley Chapter would like to welcome Andrew Douma and Anthony Simmons as new society members to our area. We would also like to congratulate Lan Chi Nguyen Thi and Daniel Roy for advancing to the grade of full member, and to Christian Workman for advancing from student member to associate member.

This month's chapter meeting theme is membership promotion. In light of this, I would like to challenge all members to bring a young person from their workplace, to introduce them to the benefits we all receive from our ASHRAE chapter meetings. I would also ask that everyone make an effort to introduce themselves to any new faces at the meeting to make them feel welcome.

The membership promotion committee is putting together this year's roster. At February's chapter meeting we will be posting the roster for review. Please check it to ensure we have your correct information. If you see a discrepancy, mark the changes on the posted sheet **and** either go to ASHRAE's web site (www.ashrae.org) or call 1-800-5-ASHRAE to update your information. This is your last chance to make any corrections before we finalize the roster. If your address is wrong, we cannot guarantee that the roster will get to you.

It is that time again when your friendly neighborhood membership promotion committee members will be calling to remind you to please pay your annual society dues. If you have not already paid your society dues for this year, please do so as soon as possible.

If you require society and/or chapter application forms, they are available on line at www.ashrae.org and www.ashraeottawa.on.ca. There will also be forms available at the next chapter meeting or you can contact Robert Lefebvre at 727-5111, rlfebvre@gwal.com.

Robert Lefebvre, P.Eng.
Membership Promotion Chair – Ottawa Valley Chapter

SIEMENS

Siemens Building Technologies, Ltd.

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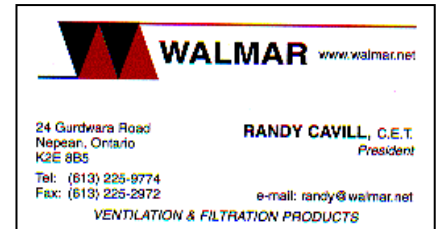
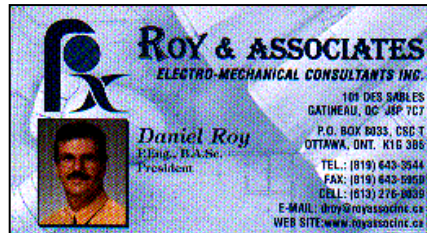
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TEGA Awards

The purpose of the ASHRAE Technology Awards program is to:

- Recognize ASHRAE members who design and/or conceive innovative technological concepts that are proven through actual operating data;
- Communicate innovative systems designs to other ASHRAE members;
- Highlight technological achievements of ASHRAE to others, including associated professionals and societies worldwide, as well as building and facility owners.

Awards are presented first to the chapter's TEGA committee, then it may be presented to the Region. And the best submissions for the region may be presented to Society. These awards are grouped in seven different categories:

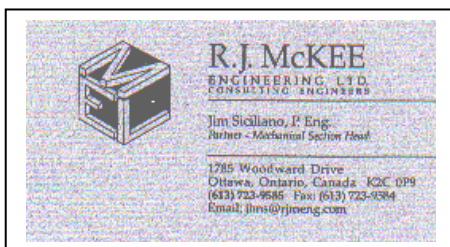
- Commercial Buildings (New and Existing);
- Institutional Buildings (New and Existing);
- Health Care Facilities (New and Existing);
- Industrial Facilities or Processes (New and Existing);
- Public Assembly (New and Existing);
- Residential (New and Existing);
- Alternative or Renewable Energy Use.

At the Society level, for each category a first, second, and honorable mention winner may be named. Also, one of the category first place winners may be selected to receive the ASHRAE Award of Engineering Excellence. The recipient will have demonstrated the best overall compliance with the judging criteria.

The submissions for the chapter awards are very simple. A short form is filled out and presented to the TEGA chair (Joel Primeau) or the TEGA awards coordinator (Frank Vaculik). Joel and Frank can help you fill out your form.

This is a great opportunity to toot your own horn. We tend to downplay our engineering and design skills as ordinary when in fact the work we do is important, challenging and extraordinary. Don't be shy! If you think you might have a good project to submit, then you probably do!

Joel Primeau, TEGA Chair





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HISTORY – 50 YEARS AGO

1953-54

The first monthly meeting of the new season was held at the Prescott Hotel on October 20th 1953 at 7:00pm. George Ostiguy was president. The president would call the meeting to order and presented a toast to the Queen. This was followed by a standing roll call and a welcome to new members and guest. The minutes of the previous meeting were read and a motion was carried to adopt the minutes as read. Treasurer Ed. Schoenherr then gave a short financial report and asked that members promptly paid their society and chapter dues. He also noted that the November meeting notice would include a bill for chapter dues. The speaker for the evening was Mr. J. A. Neilson of Foster-Wheeler Limited. His subject was on the standardization of the water tube boiler in Canada. At the November meeting the delegate and alternate would be selected for the chapters regional conference CRC Bill Robinson as Delegate and Bill Pennock as alternate. It was unanimously decided that the December meeting would be mixed meeting with wives and friends. The speaker for the evening was Bill Colborne a Queens graduate. His subject was on research and its value in the industry. December meeting was a Christmas dance meeting with wives and friends in attendance. Each member brought a gift which was donated to the Children Aid Society a total of 31 gifts were donated in all. The evening started with a great meal followed by singing, live entertainment and dancing. Januarys meeting was a last minute discussion due to the unavoidable absence of the guest speaker Mr. Phipps of Preston-Phipps Inc. The topic was a panel discussion on the business of shopping by contractors and sub-contractors. A very lively discussion then ensued during which all sides, engineers, suppliers and contractors stated their view, and was agreed by all that this business of shopping was very bad. Many opinions were given on how to stop this practice, among these being tighter specifications, naming of sub-contractors and suppliers of equipment on tenders, and the practice of the owner trying to get the general contractor to lower his bid to cease, as after all, the owner will only get what he is willing to pay for. Februarys meeting treasurer Ed. Schoenherr reminded members to pay their dues as at this time there were still a large number of unpaid dues. The evenings speaker was Mr. Wheeler and Mr. Pandy of the Ric-Wil company on pre-fabricated piping for underground and outside. A Thirty six members and guests attended the meeting which was very gratifying as unfortunately the meeting was held in the middle of the worst sleet and snow storm of the winter which virtually tied up traffic and many members had to shovel plenty of snow in order to attend the meeting. At the march meeting the chapter was graced by the presence of Mr. John E. Haines, the first Vice-president of A.S.H.V.E.. Mr Haines congratulate the chapter on their attendance and enthusiasm. He then outlined the goals of the society and the responsibilities of each member. The society has grown from 3000 to 10,000 in only ten years. One of the main activities of the society is to maintain its own research laboratory and its work in conjunction with universities.

Mr Haines then closed with the following five proposals for the future:

- Quit talking about a recession
- Believe in North America (Canada and U.S.A.)
- Be optimistic of the future
- Do not be satisfied with existing conditions
- Believe in the aims of the society

The procedures for the election of the nominating committee was carried out with the following members elected to the committee C. Watson, E Hargreaves and J. Klassen. The speaker for the evening was Mr. Hayward Murray of Montreal. His subject was on the difference in comfort and industrial air conditioning. April's meeting was the first meeting were the past –president pin was presented to Bunny Stotesbury. The speaker for the evening was Mr. Judges. His topic was refrigeration. May's meeting was the last for the 1953-54 chapter year. The new board of governors were elected in.

President - W.J. Robinson

Vice-President - E. Schoenherr

Secretary - N. J. Howes

Treasurer - D. Banton

Board of Governors -G. Ostiguy, J. Partington, L. Greenough, S. Bullis



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The gavel was then turned over to the new president W.J. Robinson who then thanked G. Ostiguy for his untiring efforts and thanked the chapter for honoring him by electing him as president of the chapter. Societies new proposed zoning of the chapters was described to the chapter members where the zoning would be north-south with Canada as a separate zone would be broken up. Considerable discussion took place with chapter solidly behind the executive in opposing the new zoning. A motion was then made by G. Ostiguy, seconded by E. Schoenherr that the proposed zoning be solidly opposed by this chapter and that the new executive so inform the chapters relations committee. This motion was carried without a single dissenting vote. The speaker for the evening was Mr. Phipps of Montreal. His subject was Pneumatic Ash Conveying systems.

Key events in Ottawa's History during this year:

Prime Minister : Louis St. Laurent (1948-57) Liberal

Governor General: Vincent Massey (1952-59)

Canadian Dollar: \$1.02us

Toronto Stock Exchange: TSE

Date - Event

November 28th 1953, Toronto - Hamilton Tiger Cats beat Winnipeg Blue Bombers, 12-6 to win 41st Grey Cup game.

1953, Edmund Hilary and Tenzing Norgay become the first humans to reach the summit of Mount Everest.

September 5th 1953, Carlington Park water reservoir officially opened.

Stanley Cup & events in NHL Detroit Red Wings

-Canadians sign Jean Beliveau (Rookie) for a 5-year \$100,000 contract. At the time the highest contact ever awarded.

–Red Kelly of the Detroit Red Wings is the first recipient of the James Morris Trophy .