



NEWSLETTER

INFORMATION & NEWS FROM ASHRAE
OTTAWA VALLEY CHAPTER

NOVEMBER, 1985

P.O. Box 3123 Station "C" Ottawa, Ontario K1Y 4J4

MEETING

Date: November 19, 1985
Time: 4:30 - Tour
5:30 - Social
6:30 to 8:00 - Dinner
8:00 p.m. - Program
Place: Cathay House Restaurant
228 Albert St. (upstairs)

PROGRAM

Speaker: Jim Potter
Wing Co.
Technical Sales Manager and
Manager of Canadian Operations
Subject: Energy Recovery using
Thermal Wheels and Other Systems

TOUR PROGRAM

The Education Committee is pleased to offer as its second tour of the season the one year old Co-generation/Energy Cascading facility at the Central Plant, Ottawa University Campus. The Energy Cascading facility represents a very significant step in the University's attempts to improve the efficiency of the Physical Plant. Through a very active program Physical Plant personnel have managed to reduce the amount of annual energy required on campus from 2600 Mj/m²/yr (68 kWh/ft²/yr) to 1100 MJ/m²/yr (28 kWh/ft²/yr). Key components of the Energy Cascading System are: Gas-fired Co-generation Unit Motor Generator Set, High Temperature Heat Pump and Hot Water Storage Tank, Vapour Recompression Equipment, and Computerized Monitoring and Control System. Ed Butterworth of the Physical Plant will present a chalk board briefing session and a guided tour will follow. All are welcome. We will meet at 4:30 November 19, at the Power Plant reception area, Protection Area, 41 Louis Pasteur. Any questions or problems on how to get there should be directed to Pierre de Gagné at 733-4160.

RESUME of DR. BARTLETT'S SPEECH

Dr. Albert A. Bartlett, Professor of Physics, University of Colorado, addressed the Canadian Institute of Energy on October 17 upon "The Forgotten Fundamentals of the Energy Crisis - A Canadian Prospectus".

ASHRAE members had been invited to attend and those who didn't missed a lot. His principle message was that any finite resource subjected to a logarithmic growth has but a short future. When our political leaders plan ahead only to the year 2000, they are planning only far enough to ensure that we will reach disaster and not be able to take steps to avoid it. In fact, through such day-to-day (on resource life basis planning), they may be aggravating the disaster which is certain to come. In summation, he stated several times that any industrial nation which exported energy reserves should have "its head read". Tackling population growth in developing countries by industrialization is working to the benefit of the industrialized nations and the ruination of the developing nations. China's experiment in working towards a static population by the year 2000 may well be the biggest boon to mankind in the last several thousands of years. These are hard ideas to accept, but his logic seems harder to refute.

PRESIDENT'S MESSAGE

As has been the custom in our Chapter, November is designated as membership month. It is always a good idea to review old customs and see whether they still serve a useful purpose. We know from experience how meaningless certain habits can become in time, even those that once inspired us. Why, indeed, is there a membership month? Don't we have a committee to do all that for us?

The truth is that we do have a committee. It is, in fact, the largest one in the Chapter: every member belongs to it. Those who have attended a few meetings have already heard this, but how many have really thought about it? Let's use then this month to find out what we really think about being ASHRAE members. Our Society is a technical organization with over 50,000 members world-wide. It seems that everyone in the HVAC industry belongs to it. True? Certainly not! Look around your workplace and see how many are really ASHRAE members. And how many members have actually joined our Chapter. It will become clear very quickly that we still have a long way to go.

But how can we convince someone to apply for membership? The answer is really very simple. All we have to do is to ask ourselves why we are ASHRAE members. That reason will be the best "sales pitch" that anyone could recommend, even the professional recruiters. And that is why every member is qualified for the membership committee, working on expanding our Society. Weren't you glad that you became an ASHRAE member? Would you want to deny this happiness to your associates? Think about it. November is membership month ...

Gabriel Laszlo

CHAPTER COMMUNICATIONS

The Board of Governors (BPG) has decided to implement a new regular feature in the Newsletter, starting with this issue: A report on the main presentation of the previous month's meeting, reprinted from the minutes of that meeting. This, we hope, will provide some information for those who were not able to attend.

The BOG has also clarified the approval of the minutes of the regular monthly meetings. According to the recently published Manual of Chapter Operations the minutes will be approved by the BOG, and a copy will be posted on the bulletin board at the Cathay Restaurant. As a matter of fact, all Chapter documents and proceedings are and have been always available to every member.

And finally, a reminder to everyone that the BOG meetings are also open to members: on the Monday, following the monthly meeting, at 5:15 p.m. in Room C-535 of the Tupper Building.

MEMBERSHIP NEWS

We welcome the following 19 new members to our society:

Donald E. Buchan	Buchan Lawton Parent Ltd.
Ezzio M. Dimillo	Public Works Canada
Jerry Dostal	J.G. Knowlton Ltd.
Robert J.P. Fortier	E.B. Eddy Forest Products
Chris R. Frauley	BFH/Shawinigan/Lavalin
Raymond C. Gee	Ontario Hydro
Daniel F. Jamieson	Ottawa Gas
James F. Jefferies	Johnson Controls Ltd.
Steve A. Keeler	Nortec Air-Conditioning
Ross E. Laird	Canadian Blower/Canada Pumps
Larry J. Moffatt	Nortec Air-Conditioning
Stephen W. Parenteau	J.L. Richards & Associates
Lionel J. Parsons	RETROTEC
Francois A. Patry	Desmarais & Associates Inc.
Ed G. Plett	ASECOR Ltd.
Jean D. Sauve	Bell Northern Research
Paul E. Seguin	Parson Refrigeration
Tony Sottile	Sayers & Associates Ltd.
Kevin D. Thompson	J.L. Richards and Associates

AND we also welcome those Society members who have recently moved into our Ottawa Valley Chapter area:

WELCOME TO OTTAWA!

Dennis J. Capstick	Engineered Air (New Branch)
John A. Edgar	--
Paul A. Fabbro	Ottawa Board of Education
Victor L. Gunhouse	Climate Master
Malcolm W. Mason	--
Jorge E. Medieta	Versatile Systems Eng. Ltd.
Jocelyn M. Richardson	--

THINKING ABOUT RETIREMENT?

If you have been an ASHRAE member for a total of 15 years, and are retired, and if you are over 60 years of age, then you may qualify for "retired" status. For further details simply call our Chapter Membership Chairman, Keith Murfin at 226-3300.

NOVEMBER IS "MEMBERSHIP MONTH"

Come to the meeting ... bring a guest ... tell an Associate ... meet a new member ... and say "WELCOME TO ASHRAE".

MEMBERSHIP GRADE "ADVANCEMENTS"

If you have been an Affiliate or an Associate member for a number of years, then YOU may qualify for a "grade advancement". For further information just speak to any Membership Committee Member at this November "MEMBERSHIP MONTH" Meeting, or call Keith Murfin at 226-3300.

The forms for application for ADVANCEMENT are new, and are simpler than ever, and will be available at this Chapter meeting.

A NEW ROSTER

With a little bit of luck a new updated Chapter Membership ROSTER will accompany this Newsletter. If so, it will be mailed to ALL CHAPTER MEMBERS, and to all those OUT OF TOWN, but with very limited other distribution by this means.

If you are a chapter member and wish to obtain your free copy, you may do so at the NOVEMBER CHAPTER MEETING, or by contacting Randy Snow or Simon Jol, at 728-3571.

AWARD TO JAKE KLASSEN

George Buckler, our new Regional Chairman, presented the Regional Award of Merit certificate to Jake Klassen at the October meeting of the Chapter. The citation summarized Jake's activities over the years in the service of ASHRAE at the chapter, regional and Society levels. A charter member and past president of the Ottawa Valley Chapter, past Regional Chairman, member of numerous committees at the Society level, a Fellow; Jake is not resting on his laurels - he is as active in ASHRAE as ever.

Our congratulations for a well deserved award.

AWARD TO FRANK VACULIK

Our immediate Past President, Frank Vaculik, received recognition for his leadership during a very successful chapter year in 1984-1985. The Presidential Award of Excellence was delivered by George Buckler, who commended Frank for his efforts in leading our Chapter to a banner year.

Congratulations, Frank!

MONTREAL'S 50TH

The Montreal Chapter will celebrate its 50th anniversary on November 30, 1985. A dinner-dance will be held in the main ballroom of the Chateau Champlain, and all Ottawa Chapter members are invited. For further details and reservations contact Gilles Thompson in Montreal, (514) 332-3730.

EXTRACT FROM 85-10-15 CHAPTER MEETING MINUTES

Dan McKinnon proceeded with an introductory video which described stall conditions in axial fans. A graphic illustration showed that reduction of flow by use of a damper created severe pressure surges as the fan reached stall condition. Axial flow changed to radial flow with resulting overload and stall conditions. Use of a bypass created an anti-stall condition by reducing turbidity at blade tips. We were advised to avoid selections in the stall area and it was suggested that selections be made 10 per cent below the stall zone to reduce problems. Stall results were: reduced performance/flow, noise level increase.

Problems with stall conditions: bearing failure, duct failure, unstable controls (continuous hunting), parallel fan operation causes other fans to experience stall condition (requirement to feather down and up each additional fan). Condition typical on supply rather than return fans, condition more on high pressure applications with large hub ratio fans.

Detection of Stall: use of audio sensor; alarm indicator with total pressure less static pressure sensed.

Anti-Stall Fans: perform stall free, stable in performance, increased performance range, uniform noise spectrum (easy to silence), forgiving to system design, stable to control, require minimum control, make use of chamber to deflect flow back into fan wheel.

Existing fans can be retro-fitted with anti-stall device to give features such as low noise, high efficiency.

FOURTH CANADIAN BUILDING CONGRESS REPORT

Over 400 delegates attended the National Research Council Canada's Fourth Canadian Building Congress in Ottawa, 6-8 October 1985. Canadian building specialists and noted British and American speakers delivered 38 papers ranging from the legal problems of salt damage in parking garages to issues surrounding CAD. Local ASHRAE members Jack Forest and Bruce Findlay served on the Congress organizing committee. Jack also chaired a session on air quality while Bruce chaired one on computers in the building industry and delivered a paper on building energy analysis. Congress proceedings will be available in early 1986.