



Airways

Hamilton Chapter No. 037

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American Society of Heating, Refrigeration and Air Conditioning Engineers

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Our 48th Year

February 2007

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Tuesday, February 6, 2007

Solar Heat Exchangers for Hot Water Applications

Feature Speaker

Mike Cox, P. Eng.
Enerworks Inc.

EnerWorks Inc. is a Canadian company which was formed in 1999 to bring to market a unique **solar thermal hot water system**. Many of the innovations came from Queen's University – developed by people involved in solar thermal systems for over 30 years and incorporating improvements learned and developed during that time.

EnerWorks' vision is to incorporate automotive manufacturing techniques to lower manufacturing costs, while incorporating the best of the best in the world – in both materials and technology. EnerWorks manufactures both residential and commercial systems in their Dorchester, ON factory.

Mike will provide a global perspective on solar thermal heating. His presentation will include a description of the technology as well as case studies and performance simulations.

(Note that the Chapter's February and March "feature speaker" topics
have been switched due to scheduling problems.)

Royal Hamilton Yacht Club
North End of McNab, On Hamilton Harbour

5:00 pm – Social Hour & Technical Session

6:00 pm – Dinner & Business Meeting

7:00 pm – Feature Speaker

Technical Session/Dinner/Feature Speaker

Chapter Members - \$30.00 • Guests - \$40.00 • Students - \$15.00 • Meal Plan - \$135.00

Technical Session and/or Feature Speaker (without Dinner)

\$15.00



President's Report

The January meeting provided the Hamilton membership with the opportunity to listen to Art Stokman, the President of Guelph Hydro, talk about the City of Guelph's recent undertaking in their planning for a more sustainable future. The city of Guelph's Community Energy Plan is to be comparable to Sweden (Garforth International), which is considered to be an aggressive benchmark in the Energy Use Index. Hopefully we can have Guelph Hydro return in the future to see how and what accomplishments they have achieved.

For February, we have a night planned which includes discussion of current codes and regulations, and will be of special interest to all, especially if you're currently involved in the consulting industry, or if you obtain the services of a consultant. A representative from the Ontario Society of Professional Engineers will be at our meeting to talk about the latest status of Regulation Bill 124. Also, the "Feature Speaker" for the evening is Michael Cox, from EnerWorks, who will talk solar heat exchangers for hot water applications.

Also, our Chapter has decided to host another annual ASHRAE Satellite Webcast and Broadcast for the membership on the topic of Indoor Environmental Design (IED). It will be held again at the Crossroads facility in Burlington, Ontario and will take place on April 18th, 2007, and not our usual 1st Tuesday of the month. This webcast will serve as our monthly meeting for the month of April. Please refer to upcoming Airways Editions for further information and sign-up availability.

Warmest Regards,

David Hills, A.Sc.T., President 06/07



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Technical Session

This month's "technical session" will be presented by **Daniel Young, P. Eng.**, President and Chair of the Ontario Society of Professional Engineers (OSPE).

Mr. Young will provide a brief overview of the **OSPE and its commitment to the engineering community**. As Chair of OSPE's Bill 124 Working Group, he will also review OSPE's involvement in discussions with the Ministry of Municipal Affairs and Housing (MMAH) as relating to **Bill 124** and provide an overview of the current status as well as future expectations for this legislation.



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January Meeting Recap

On Tuesday January 2, 2007 Art Stokman, P.Eng, President of Guelph Hydro was our feature speaker for the evening. Art spoke about the Community Energy Plan (CEP) which he is the co-chair of this committee. This committee consists of local stakeholders such as the 2 local school boards, University of Guelph, the City of Guelph, Union Gas, Guelph Hydro, Guelph Homebuilders and Development Associations, and many more civic groups and individuals. The City of Guelph-CEP vision is to create a healthy, reliable and sustainable energy future by continually increasing the effectiveness of how Guelph uses and manages their energy and water resources.

Canada currently has a 6.4 energy use index per capita use, the highest in the Organization for Economic Co-operation and Development (OECD) among the 30 member countries. The CEP hopes to reduce the energy index to that of Sweden which is currently at 3.5 and has a similar climate to that of Guelph. An assessment of the energy use of existing residential, commercial and institutional buildings has been completed and the resulting greenhouse gas creation has been calculated. The City of Guelph Planning/Traffic Department has assembled critical zoning, building code, and neighbourhood information to help build the baseline framework that will drive conservation of energy and water resources in the future. Public engagement is on going to inspire and gain the support of the citizens of Guelph. The final CEP document will be presented to the Mayor and City Council later this spring for approval and implementation. The CEP document is meant to be a fluid plan that will evolve over time and be interfaced with planning, infra-structure renewal, code and municipal bylaws to make the vision have meaning and relevance.

There was a great deal of interest and questions for Art as he presented to the Hamilton ASHRAE group. We look forward to being able to present hi-lights of



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the final document later this year once the plan is approved by City Council. Thank you Art for a very informative and exciting hi level overview of the CEP for the City of Guelph!

Submitted by Mike Krewski - T.E.G.A. Chair 06/07

Upcoming Chapter Meetings

Tuesday, Mar. 6/07
Theme: Membership

Technical Session - **George Menzies, P. Eng.**, ASHRAE Hamilton Chapter Historian, will discuss **TC65.08 – Industrial Ventilation**.

Feature Speaker - **Mike Seiling** from the City of Kitchener will talk about **changes to the 2006 OBC**.

Wednesday, Apr. 18/07 (not the normal Tuesday)
Theme: I.A.Q.

ASHRAE Satellite Broadcast - Indoor Air Quality at the Crossroads Communication Centre, Burlington



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Upcoming Events of Interest

ASHRAE Toronto Chapter
Seminar and Exhibition

Engineering for Sustainability

Thursday, May 17, 2007
Marriott Toronto Airport Hotel

*(see last page of this month's Airways
for additional details and registration form)*



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ASHRAE News Releases

Indoor Environmental Design Focus of ASHRAE Satellite Broadcast

ATLANTA – Specific solutions to the everyday challenges of achieving indoor environmental quality within real-world budget constraints will be presented by ASHRAE in an upcoming satellite broadcast/webcast.

Major Study of Aircraft Cabin Air Quality Launched by ASHRAE

ATLANTA – Good afternoon and thank you for flying with us. We want to make sure you are as comfortable as possible during the flight, so please let us know – how's the air quality? Is the temperature OK? Do we need to adjust the lighting? Thanks again for flying Indoor Comfort Airlines.

Click here for complete news releases.

Historical Profile Delhi Industries

The following history was assembled by David Rasmussen, one of the Hamilton Chapter's longest serving members and the current Social Chair. Dave has been employed at Delhi for 21 years. We appreciate his efforts at assembling information about this company which has interested many of us for years as we have asked many questions about the famous "green blower".

The Company was founded in Delhi, Ontario, in 1939, by Lewis R. McClatchie and conducted business under the name Delhi Sheet Metal Works. The owner, having spent a lifetime in manufacturing plants in Quebec and Ontario, decided it was time to be in business for himself.

At that time, the most common method of heating a home with warm air was by means of a gravity furnace. Moving air through the furnace by mechanical means was relatively new and the owner, seeing a future in this concept, decided to manufacture blowers. Business was conducted in rented facilities on King Street in Delhi.

In 1943, second generation family members, Samuel F. and Gordon K. McClatchie joined the firm as partners. Gordon became active in the day-to-day operations of the Company upon his return from military service in September of 1945. He was as a veteran of WWII having served in the Royal Canadian Air Force 418 Mosquito Squadron. In 1946, W. U. (Doc) Lumley joined as an active partner (Doc was a brother-in-law to the McClatchie boys). Another of the founder's sons, Jack L. McClatchie, elected to join as a silent partner at the same time. Jack's son today is a Consulting Engineer with a firm in Ottawa and specs Delhi often.

In 1947, the Company changed its name to Delhi Industries and moved into a new 6,000 sq.ft. building at its present site on James Street. The founder's dream was just beginning to come true when he died on January 25, 1948. He had previously stated that "it would be a good business when production levels reached 10 blowers per day".

The company reorganized and a new partnership of Samuel F., Gordon K., and Jack L. McClatchie and "Doc" Lumley embarked on a period of growth and property acquisition, which saw building additions of 2,400 sq.ft. in 1948; 3,600 sq.ft. in 1950; and 9,000 sq.ft. in 1953, together with an additional 1,047 sq.ft. of office space. Since it's beginning, the Company had imported all of its blower wheels from the United States. By 1955, the annual volume of 33,000 blowers justified the expense of tooling to manufacture them in Delhi. A

major purchase of machinery and dies was initiated and the workload necessitated a further expansion of 7,800 sq.ft., which was completed in 1956.

Samuel F. McClatchie died on October 10, 1970 and on April 1st of the following year the firm incorporated under the name of Delhi Industries Ltd. By this time, the Company had established itself as a major supplier of blowers to Canadian furnace manufacturers. By 1972, annual production was exceeding 100,000 units. In November of that year, controlling interest in the Company was sold to the Canadian Corporate Management Company Limited, a Toronto based holding Company. This would ensure that Delhi Industries would continue to be a Canadian owned and operated company. Gordon K. McClatchie was named as President.

During the 70's and 80's the Company continued to build on its reputation for customer service. Increasing demand and an increased range of products resulted in further building additions, 14,000 sq.ft. in 1974 (including 3,800 sq.ft. of office space) to accommodate the added welding stations and storage of distributor line parts, and 9,660 sq.ft. in 1977 for warehouse space to stock more finished goods so that wholesaler customers would be better served.

In 1982, Gordon retired from active duty with the Company, but remained as a member of the Board of Directors. Walter Woods was elected President and General Manager. Dennis Banning was hired as Sales and Marketing Manager. Both were involved with activities in the Hamilton Chapter.

In 1984, Delhi Industries merged with Sheldon Engineering to form Delhi-Sheldon's Inc. with two separate operating divisions.

In 1985, a United States rep. was hired to help develop growth in the U.S. market. Brian Rayle remains today as Delhi's U.S. rep. and is based just outside of Tampa, Florida.

In 1986, Canadian Corporate Management Company was purchased by Federal Industries Limited from Winnipeg. At this time, David Rasmussen was hired to cover Canadian Distributor sales as well as OEM accounts. Dennis Banning, being bi-lingual, looked after the Quebec accounts.

Sheldon's Engineering Division was sold off near the end of 1997. That same year, Ensis Corporation was formed from 7 companies within Federal Industries.

In January 1988, the heat transfer coil operation, purchased from Sheldon's Division moved into a

recently acquired existing building at 14 Shaver Street in Cainsville which is just outside Brantford, with 40,000 sq.ft. of manufacturing space plus 8,000 sq.ft. of office space. A portion was designated for warehouse space for finished goods from the Delhi plant.

In January 1989, the manifold operation was moved into the Cainsville facility. Delhi Industries sell manifolds primarily to gas furnace manufacturers.

In the early 90's Walter Woods retired as President and currently resides near Mount Hope. David Barclay assumed the role as President.

In 1994, David Beatty, President of Canarm in Brockville, Ontario, purchased a large portion of the company with Delhi management each having part ownership as well.

On April 21, 2005, Gordon McClatchie passed away. Gordon frequently visited Delhi Industries offering his valued input toward the company his father started.

In 2006, David Beatty purchased 100% of Delhi Industries. Canarm purchased Leader Fans in Toronto. Now all three companies are merging thus expanding the Delhi product lines even more. David Barclay sadly has stepped down as President due to health problems. Also in 2006, Dennis Banning retired and hired David Thurgood as his replacement. David will be joining our local Hamilton Chapter following the list of long time Hamilton Chapter supporters over the years, Walter Woods, Dennis Banning, Neil Rutherford and David Rasmussen. As well as supporting the Chapter, Delhi Industries continues to invest yearly to ASHRAE Research Canada.

The burning question on most people's mind is always "Have Delhi blowers always been Green?" The answer is YES. Gordon replied to David Rasmussen years ago "I suspect my father chose green because green was a war colour as in camouflage green. We never changed that to show company stability. To this day, everybody knows it's a Delhi by its colour. It was by no means the cheapest paint on sale that week" he joked.

Today Delhi Industries employs over 150 workers in 3 plants. Over 63% have been with the company over 10 years.

*Submitted by George Menzies, P. Eng.
Historian 06/07*

2006 – 2007 Meeting Schedule

This year's meeting schedule is summarized below. Except for some special events, all meetings will be held at the Royal Hamilton Yacht Club, at the north end of McNab St. on the Hamilton Harbour (If you need a map, visit our web site). During the 5:00 pm to 6:00 pm Social Hour, a half hour "technical session" is presented on the basics of a particular subject relating to our industry. If the session sounds interesting to you, feel free to attend. These sessions are presented by our members and are open to any one wishing to share his or her expertise. New products and/or services are presented informally via a "table top demonstration". After dinner, the main topic of the evening is presented by the "feature speaker". If you are interested in presenting a technical session, booking table top space to promote your product and/or service or, if you have a suggestion for a feature subject and/or speaker, please contact Nathan Martin (Programs Chair). There is a charge of \$75.00 for "table top demonstration" space and this includes a business card ad for two months.

ASHRAE Hamilton Chapter Program Activity				
Date	Theme	Technical Session 5:00 pm – 6:00 pm	Table Top Demonstration	Feature Speaker
February 6, 2007	T.E.G.A.	Daniel Young, M. Eng., P. Eng. (OSPE) Ontario Society of Professional Engineers Bill 124 – Update		Mike Cox, P. Eng. Enerworks Inc. Solar Heat Exchanger for Hot Water Applications
March 6, 2007	Membership	George Menzies, P. Eng. ASHRAE Hamilton Chapter Historian TC65.08 – Industrial Ventilation		Mike Seiling City of Kitchener Changes to the 2006 OBC
April 18, 2007 (not 1st Tuesday)	IAQ	Satellite Broadcast – Indoor Air Quality Crossroads – Burlington, ON		
May 1, 2007	Membership Special	The Chapter is working on organizing a special event. Topic: Legionnella		
June 6, 2007 (not 1st Tuesday)	Social /Research	Legends on the Niagara — Ussher's Creek Course Annual Golf Tournament		

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ASHRAE Toronto Chapter is Proud to Present
A Seminar and Exhibition on

Engineering for Sustainability

Thursday May 17, 2007

Marriot Toronto Airport Hotel

901 Dixon Road, Toronto, Ontario, M9W 1J5

7:30 AM – 8:00 AM Reception

8:00 AM – 4:00 PM Seminar & Exhibition

Agenda Includes:

- 1 – Terry Townsend, P.E., ASHRAE Society President
- 2 – Darryl Yahoda, Union Gas
- 3 – Shane Pospisil, Ontario Energy Association
- 4 – Cengiz Kahramanoglu, P. Eng., Ministry of Municipal Affairs
- 5 – Professor Gary Johnson, Seneca College
- 6 – Stephen Carpenter, P. Eng., LEED-AP, Enermodal Engineering
- 7 – Dan Larson, P. Eng., LEED-AP, Smith & Andersen



Early Registration (On or Before April 20th, 2007) \$125.00*

On-Site Registration \$150.00

Students \$75.00

For Registration Contact: Ms. Sabrina Tai – ASHRAE Toronto Chapter

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To register for the event, please complete form and send form and/or cheque to Sabrina Tai.

*All early registration payments must be received on or before April 20, 2007, to receive the \$25 discount.

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