

## 50 Years of ASHRAE Hamilton Chapter History

You will notice that in on our Airways title page, it states "in our 50<sup>th</sup> year". I will briefly summarize our first 50 years. ('59 to ' July 09)

1959, our start was in the same year ASHRAE officially started operations after a merger of two groups. ASHRAE was formed by a merger of two engineering societies - ASHAE - the American Society of Heating and Air Conditioning Engineers which was founded in 1894 and ASRE - the American Society of Refrigerating Engineers founded in 1904. The new Society was called ASHRAE and officially began operations on Jan 29<sup>th</sup>, 1959 with Headquarters in New York NY in the United Engineering Centre. Some 20,000 members were in ASHRAE after the merger and 87 chapters were in existence, one called the Ontario Chapter was located in Toronto. Canada also had chapters in Quebec City, Ottawa, Montreal, Manitoba, and British Columbia.

With many Society members from the Niagara Peninsula as chapter members in the Ontario Chapter, Lloyd Algie believed there would be enough members in this area to warrant their own chapter and have meetings in Hamilton. ASHRAE had a requirement that they would consider a documented petition from a minimum of 20 Society members from an area to incorporate a stand alone chapter. Lloyd was surprised at the local interest and quickly had 20 members willing to sign a petition - the names are listed in the front of our roster. Charter members Ken Crean, Gary Elliott and Don Harper still attend our meetings today. The inaugural organizational meeting took place March 1<sup>st</sup>, 1959 at the Fischer Hotel on York Street in Hamilton when Lloyd got his signatures.

At the Annual Meeting of ASHRAE in June of 1959, The Board of Directors accepted the petition and agreed to charter their 88<sup>th</sup> Chapter in Hamilton Ontario to be known as the Niagara Peninsula Chapter. In 1971, the name was changed to the Hamilton Chapter to reflect its meeting location.

Charter Night was October 22<sup>nd</sup>, 1959 with Society Vice-President Walter A. Grant presenting the charter to the chapter's first President Lloyd Algie with D. L. Angus Region 2 Director in attendance. The banner was also presented that night as well. Gary Elliott was Chapter Vice President.

In the '60s HVAC was expanding rapidly into industry, schools and offices. Our membership grew to more than 50. The Chapter had both a spring and fall golf tournament which were extremely popular. We moved the chapter meetings to a new location - the Chamber of Commerce Room in the Professional Arts Building 155 James St South in Hamilton because urban renewal leveled the original location - Fischer Hotel on York Street

In '60 Gary Elliott moved from VP up to be President; '61 Bill Carr was President; '62 Don Harper was President and ASHRAE had grown to 96 chapters with Saskatchewan being the latest addition. In '63 the President was Doug McCoppen; '64 Mike Murray; '65 Cliff Hepburn, the year I joined the chapter. In '66 Dave Brown was President.

This was a significant year as in 1966 on May 4<sup>th</sup> to the 6<sup>th</sup>, we hosted our first 3 day Chapters Regional Conference (CRC) of all the chapters in Canada (Region 2) - some 11 from Halifax to Edmonton (we eventually gained chapters in London, Moncton, and Windsor). We met at the new Holiday Inn now the Ramada on King East in Hamilton.

In '67 the chapter President was Vince Szabo; in '68 Dan Tyrell a fellow grad from McMaster who worked for C.C Parker Consultants. In '69 Jim Gordon of Keeprite became President. In '70 Frank Smith was President who unfortunately died three years later in Sept 1973 while playing in the ASHRAE Golf Tournament. Our low gross trophy awarded at our spring golf outing is named after Frank.

In '71 yours truly *George Menzies* was President and during the year, we worked on a petition from 20 members in the London area for a chapter to be setup there. I had the opportunity to present this petition at the Regional Conference in May of '71 and it was approved by the Society's winter BOD Meeting in New Orleans in January 1972.

The London Canada Chapter was presented with their charter which was presented May 8<sup>th</sup>, 1972 and a large delegation present from the Hamilton Chapter.

Also at that '71 CRC meeting, as Chapter Delegate, I argued that the Society research fund raising campaign in Canada was at a disadvantage as Canadian investors in ASHRAE research could not get a tax receipt. *Hay Murray*, the Regional RP Chair from Montreal who recently died while in retirement in Oakville, took up the challenge and had his company's legal department prepare a request to Ottawa for the formation of a corporation in Canada devoted to ASHRAE research. It was accepted in 1972 by the Feds and was called ARC - ASHRAE Research Canada. Its sole role is to give Canadian members a taxable benefit when money is contributed to ASHRAE deductible under Section 37.1 of the income tax act. Today ASHRAE through ARC is spending millions on research in Canada through the generous contributions by ASHRAE members round the world.

*Ed Vance* followed me as President in '73; *George Buckler* in '74. *George* eventually rose through ASHRAE ranks to become Society Vice President, the highest position anyone has reached in Society from this chapter. *Hugh Crowther* may do better... but is now a US citizen.

In '75 *Roland Clee* was President and we relocated our meetings to *Roberts Restaurant* on King St East because of the need to improve food quality while holding costs down. *Tom Poolton* was the next President. But attendance was dropping and we were looking around for a good location for the next year's CRC. So in '76 we relocated to the *Royal Connaught* on King East, where we held the spring Region 2 CRC and our all our chapter meetings.

It was a great CRC conference with delegates from every province in Canada and many visitors from the US. It also taught us a financial lesson. We overspent. We commenced a new policy to put funds away every year so when the next Hamilton CRC in '86 would be held, we would have sufficient funds to cover an outstanding event. Most of the chapters have now followed this format.

In '76 *Frank Spina* was President; in '77 *Carl Ljungberg* and for the first time we had a repeat President in '78 with *Frank Spina* again leading us. This was a significant year as in '78 we sponsored a new Student Branch Chapter at *Niagara College*. This branch operated very successfully for a number of years under the leadership of *George Takata* and produced many current Hamilton chapter members such as our golf director *David Rasmussen*. It dissolved a number of years later when HVAC was dropped as a course.

In 1979, we had *Jack Keon* as President and this was also our 20<sup>th</sup> Anniversary year as a Chapter. We had a well attended meeting at the *Connaught* with Society President *Morris Backer* in attendance. He presented the Chapter with the Presidential Award of Excellence for our performance. It was in this period I served on the Society Board of Directors for 3 years and was Regional 2 Chair as well. Unfortunately, ASHRAE had chartered too many chapters in some regions and commenced a discussion period to divide up the chapters into new smaller more manageable regions. I fought hard to retain Canada as a single region based on the input I was given at the CRC conferences as I represented chapters from Halifax to Edmonton. However, Society elected to split Canada into 2 regions with Region 2 now only having about 9 eastern Canada chapters. Other Directors were *Gerry Kowalyshyn* Pres-elect, *Geo Tanaka* VP, *W. Korolenchuk* Secretary, *Pete Bevan* Treasurer. Dinners were \$10.00

In 1980 *Gerry Kowalyshyn* was President and he made sure the golf events were highlights.

During '81 when Geo Takata from Niagara College was President, Henry Ramsey Pres-Elect, John Tuck VP, Frank Parson Secretary, Pete Bevan Treasurer, ASHRAE left NY city as its Headquarters because of a need for more space and more realistic rental rates. As part of the search committee, the Society BOD through the insistence of President Hugh McMillan approved a purchase of a building in Atlanta now worth many millions more than its purchase price. This has been a great investment for the Society. Originally it leased the 2<sup>nd</sup> floor but now occupies the whole building and was recently upgraded to ASHRAE standards. Great place to visit on Interstate 81. The chapter meeting on April 12<sup>th</sup>, 1982 featured professors heading up RP project 247-solar heat pumps, which was being paid by our research fund. Dinners cost \$12, students \$6. Spring golf was at The Galt country Club in Galt at \$30 for golf and dinner. On May 10<sup>th</sup>, a seminar was held at the Royal Connaught prior to the regular meeting at a cost of \$5.00.

In 1982, while Henry Ramsey was President, ASHRAE held their Annual General Meeting or summer meeting in Toronto, one of the few times it is held outside of the USA. 1000s of Americans were in Toronto for the last week in June. John Tuck was Pres-Elect, Bob Morris VP, Secretary Brian Kingdon, Peter Bevan Treasurer, meetings were at Royal Connaught Hotel and cost \$12, students \$6. The fall golf was at the Beverly Golf Club in Copetown @ \$18 + \$18. In Oct 12<sup>th</sup>, a tour of the new steel plant at Lake Erie took place with dinner back at the Erie Beach Hotel. Cost was \$20.00.

In the fall of '83 with John Tuck at the helm, we relocated to the Royal Hamilton Yacht Club because of all the construction in downtown Hamilton and the lack of parking. It was at the RHYC where we held our 25<sup>th</sup> Anniversary event. About this time we renamed our Newsletter "Airways". Bob Morris was Pres-Elect, Ray Jacobs VP, Secretary Brian Kingdon, Treasurer Pete Bevan, Dinner cost \$13,  $\frac{1}{2}$  for students. Meal plan with 6 meals cost \$80.00.

In '84 Bob Morris became President and he went on to be Nominating member for the Region for the following 6 years. He is now President of the Life Members Club for the Society and is in charge of fund raising for the Canadian Bursary Fund of ASHRAE. In this year '84 we celebrated our 25<sup>th</sup> Anniversary on Monday December 10<sup>th</sup>, 1984 at the RHYC. Executive Director of the Society Frank Coda presented a special citation to Chapter President Bob Morris.

In '85 Ray Jacobs was President; and in '86 Joe "the filter man" Vassallo was President. We had 114 chapter members. Jack Vallentyne "Mr Green" and renowned entertainer was our Christmas and Past President night speaker. You still see him on TV now carrying the world on his back. We also hosted another successful CRC at the Park Hotel in Niagara Falls one of the best ever held in Region 2 and was one of the first CRCs that was financially realistic for the chapters attending... The last low cost registration cost CRC was again run by the Hamilton Chapter in 1997 and with a \$15,000 budget broke even - more about this later. The spring golf was at Galt Country Club at \$25 + \$20 for dinner. For the October meeting we had a distinguished lecturer from the U of Colorado discussing "Zero Energy Growth" who conducted an all day seminar the next day at the RBG sponsored by the Federal Government.

We relocated again now due to what appeared to be the probable closure of the Royal Hamilton Yacht Club, to the Hillcrest Restaurant on Hamilton Mountain 510 Concession St. Plan "A" cost \$110 with annual dues at \$35.00. The spring golf was held Hidden Lake in Burlington Wed June 17<sup>th</sup>, 1987 -\$20 golf + \$20 dinner. The executive for 86-87 was Joe Vassallo Pres, Cliff Schemmer Pres-Elect, Frank Spina VP, Randy St. Jacques Secretary, Gary Romagnoli Treasurer, Dave Rasmussen MP chair, Walter Woods SA Chair, Tom McCarthy TEGA, Ray Jacobs RP chair John Reiding Newsletter, Historian George Menzies who remained in that job for the next 18 years... We stayed at the Hillcrest till the fall of '90 when we relocated to the Pinetree Restaurant on 20 highway at the QEW which was more convenient to the members from Niagara and Burlington regions..

In '87 Cliff Schemmer was President and we will never forget our Christmas Past President's night when the City Forensic Pathologist showed slides of decayed bodies - not too great after a full supper. I still vividly recall the slide of contents of the box car behind Gage Park - no one will forget that image! We moved into a new format that year by having summer summits to plan for the following year events and we continue this today.

In '88 Gary Romagnoli was President and we had chapter member George Buckler as Society Vice-President in attendance at many of our meetings.

In this period, ASHRAE held 2 more Annual summer Meetings in Canada - '88 in Ottawa, and '89 in Vancouver. Our American members love Canadian ASHRAE meetings. The next one is in Quebec City in June 2006

In '89 Jim Buchanan was President and the summer summit was at his home in Ellicottville NY. Chapter meetings continued at the Hillcrest Restaurant. Golf was held the Whirlpool golf course June 13<sup>th</sup>, 1990 -\$28 + \$25 for dinner. Race Nite was held April 2<sup>nd</sup>, 1990 at Mohawk Raceway. The Feb meeting was at the Hillcrest, the March meeting all day at Conestoga College in Kitchener March 12<sup>th</sup>, \$15 members, \$20 guests. Doug McCoppen Past-pres died in Dec a regular member for many years. By May the meetings had switched to the Pinetree Restaurant in Stoney Creek. The upcoming CRC was held in Montreal Aug 23<sup>th</sup> to 25<sup>th</sup>,

In '90 Ray Bates was President; in '91 David Rasmussen was President - he was Student President of the Niagara Student Branch some years earlier when he was at the age of 19. He had been on the chapter Executive since '81 and continues to be on the Board of Governors. Dave has been Region 2 Nominating Committee member for the past 6 years. Meetings were at the Hillcrest Restaurant at \$20 for members, \$25 for guests. Fall golf was held September 26<sup>th</sup>, 1990 at Southbrook Golf Club in Binbrook. Cost was \$21 and included dinner.

In '92, Daryl Somers was President and many chapter members attended the CRC in Halifax. We relocated to the Pinetree on 20 Highway for better access for our many out-of-town members who welcomed the better location. Attendance went up.

In '93 Wilfred Laman was President and again many of us visited the CRC in Quebec for training at the various workshops. Wilfred has continued to be involved in the Region as a Regional V-C since then and will be Chair of the new Society Tech Transfer Committee in 2004-05. In was in this period that we started to prepare our docs electronically and by 2003 all Newsletters would be issued only via email. Brian Beninger our Newsletter editor though the next 10 years got from paper to paperless. The DRC was Dalton McIntyre in his last of 3 years as DRC. Sagony Lac-St-Jean dissolved as a chapter during year. Hamilton had 191 assigned Society members (region 2 had 2785) and raised \$6,985 for research. Average attendance was 30.

In 1994, with Tony Rocco as President, we relocated to John Does Place just a few blocks up from the Pinetree on 20 Highway because of a potential meal cost increase at the Pinetree. However, later that year, the restaurant got into trouble for failing to submit their meal taxes to Revenue Canada and the place suddenly closed. We then returned to the Pinetree where we celebrated a big 35<sup>th</sup> Chapter Anniversary. Jim Hill, Society Treasurer and future Society President was in attendance and spoke of 100 years of ASHRAE. The CRC was in Ottawa August 11<sup>th</sup> to 13<sup>th</sup>, 1994 at the Chateau Laurier, with Tony Rocco Delegate and Chris Van Gerwen, Alternate. Norm Johnson was RVC MP, Danny Castellan RP RVC, Darryl Boyce Nominating Member, Laurier Nichols TEGS RVC, John Dugan the new DRC, Bill Manning Society President, Don Holte Society VP. Steve Comstock was staff rep. Our RVC of RP D. Castellan reported that the chapter collected \$6,910 vs a goal of \$8,000 with 41 contributors. Region collected \$81,000. note - in President's report to CRC, Tony Rocco reported that some \$9444.00 was collected. Will need to verify this number. Average attendance was 36 up from 30 in 93-94. Golf was at Niagara Whirlpool Golf Club. Membership was ..... With 2630 assigned members in Region 2 down 5.5% from 1993

In '95 Chris Van Gerwen was President and we agreed at the summer summit to return to the Pinetree for all our Meetings. The Region 2 CRC that year was in at the King Edward in Toronto August 10 to 12<sup>th</sup>, 1995. Chris Van Gerwen was Delegate and Darryl Singleton Alternate. The chapter membership was 99 members down from 105 in 93-94. Assigned Society members were 194 up from 191 in prior year (Region 2 had 2582, down from 2630). Seven new members joined chapter down from 9 in 93-94. students were at 26, which is half of the prior year's 52 student members. Research contributions was up to \$9444, \$1444 over the goal, vs \$6985 in 93-94. Meeting attendance was 36 average vs 30 the prior year. On our 35<sup>th</sup> Anniversary meeting on December 6<sup>th</sup>, 1994, Dr. James Hill Society Treasurer spoke about 100 years of ASHRAE. Also present was DRC was John Dugan and MP RVC Norm Johnson. Some 52 were present. Darryl Singleton was Pres-Elect, Frank Stempski VP, Ed Cazzola Secretary, John Pollock Treasurer, Ed Molnar MP Chair, Hugh Crowther Refrig. Chair, Art Rebek TEGA, and Tony Rocco RP Chair.

Golf was held June 14<sup>th</sup>, 1995 at the Niagara Whirlpool Golf course.

In '96 Darryl Singleton was President, Frank Stempski Pres-Elect, Ed Cazzola V-P, Wilf Laman Secretary, John Pollock Treasurer, Hugh Crowther, Refrig. Chair, Art Rebek TEGA, Ed Molnar MP Chair, Rick Nafziger SA Chair. We had 85 chapter members and averaged 32 at the 10 chapter meetings, up from 30 in 1995. Area assigned members were 192 up from 184 (Region 2 had 2517 down from 2582). We had 11 new members, same as in 1996. Student membership was 28, same as prior year as well. During his leadership, we sponsored a highly successful Energy Forum at the Holiday Inn in Burlington with many senior government officials as speakers. Our best program was on NFPA Life Safety. Golf was at the Whirlpool in Niagara Falls. During year we developed a chapter home page - [www.vaxxine.com](http://www.vaxxine.com). Brian Beninger was the Newsletter Editor. A chapter library was created with standards, codes and other publications for borrowing by chapter members. Research contributions were \$9005, higher than goal of \$7500 with 43 investors. We have \$14,000 in reserve funds. The CRC was in London where they paid \$4000 for a motivational speaker. The event eventually produced major benefits for ASHRAE as he looked into the format for joining ASHRAE and offered many recommendations which as member on the Membership Promotion Committee. As the Regional VP and eventually Chair of Membership Promotion, I got to implement the recommendations. Sometimes a motivational speaker can produce valid long term results rather than just entertain.

In 97, Frank Stempski was President, John Pollock Pres. Elect, Wilf Laman Secretary, Ed Molnar MP Chair, Ed Cazzola Program Chair, Bob Mosley Refrig Chair, Darryl Singleton RP Chair Art Rebek TEGA, Brian Beninger Webmaster. We had now 95 local members who all worked hard as hosts for our 4<sup>th</sup> CRC, this time at the Venture Inn now the Travelodge in Burlington August 14<sup>th</sup> to the 16<sup>th</sup>, 1997, overlooking Lake Ontario-great setting for a conference. Daryl Boyce was DRC for the meeting. Chapter President Frank and CRC Chair David Rasmussen put on an event we will find hard to top. The dinner and party at the Hamilton Warplane Museum was one all the American visitors have not stopped talking about. The murder mystery dinner banquet got everyone in attendance involved - all the CRC delegates, alternates and guests and proved to be entertaining. And as reported earlier, even with low registration costs, we still broke even. Chapter membership was 95 up from 85 in 97-98 (Region 2 was down to 2477), with Society assigned membership at 189 down from 192 in prior year. Chapter gained 5 new members vs 11 in 96-97. Chapter raised \$8465 for research less than the quota of \$9000.00. Chapter had 39 student members up from 25 in 96-97. chapter meals cost \$20, guests, \$25 with a \$95 year meal plan. Chapter dues were at \$65.00. The Oct meeting had Rob Robertson present a talk on the internet and access to HVAC info. Dec meeting had a talk on Democracy in Bosnia by Cliff Shemmer's wife Jean from her first hand experience. Golf was at Niagara Whirlpool wed June 17<sup>th</sup>, 1998 at \$100/person

In '98 ASHRAE returned to Canada for their Annual summer Meeting in Toronto where they had a record attendance - largely because of our Canadian dollar... John Pollock was Chapter President and has been involved with this chapter as Treasurer for many years till 2004 when he handed over the function to some younger members. The summer summit was held at Wilf Laman's house/pool July 14<sup>th</sup>, 1998. John was our Delegate at the

CRC in Moncton September 10 to 12<sup>th</sup>, 1998, with Geo Robb as Alternate. Golf continued at Niagara Falls at the Whirlpool. Society assigned members were .....with 2399 assigned to region, down for the past 6 years of records.

In '99 Ed Cazzola was President and the CRC was in Montreal. The chapter made many motions at the conference to challenge the way the region was operating. During the year the average attendance rose from 23 in 1998 to 33 in 1999 largely from the renewed actions of a telephone committee. A chapter scholarship was initiated for children or grandchildren of local members. Assigned members were..... with 2336 in region, again down.

In '00 and again in '01 Geo Robb was President for 2 consecutive years - a first for the chapter. Steve Hay was Pres-Elect, Chris McClelland Secretary, Al Curzon as Treasurer, MP chair Steve Hay, SA Darryl Singleton, David Stacey Program Chair, RP chair Ed Cazzola, Steve Glover TEGA, Menzies again Historian., Initially we met at the Pinetree, but since the fall of 2001, we have been meeting at the RHYC with our chapter member Wilf Laman, now Commodore of the club as our sponsor. Windsor was the site of the 2000 CRC soon to be followed by Halifax in 2001. The Windsor Chapter spent \$33,597.78 to operate the CRC \$5000 over planned budget. George Robb was Delegate and David Stacey was Alternate at the CRC held in Windsor Ontario Aug 24<sup>th</sup> to 27<sup>th</sup>, 2000. Hugh Crowther was in his first year as DRC. During year John Pollock was RP chair. On October 10<sup>th</sup>, 2000 we had then Society President Wolf speak to the chapter and an interview with local TV was done as well. Duse continued at \$65 with about  $\frac{1}{2}$  the membership accepting the newsletter by email. The chapter continued to sponsor chapter member's participation at the CRC. Finally we were up in assigned members in region - up 3 to 2339. Chapter membership was 103 in 00-01 with 192 assigned members, and down to 90 chapter members in 01-02 with assigned 182 members. In 01-02 we had zero student members and up to 2 students in period 02-03. In 00-01 we had \$7296 in research contributions. Chapter attendance was 35 in 00-01. The December family meeting was a tour of Niagara Under Glass, a new concept in growing plants which went bankrupt shortly after our visit. The May 8<sup>th</sup>, 2001 tour was through Westcast foundry in Brantford. Golf in June was back at the Whirlpool.

In 2001-02, we had George Robb as President for a second year, Hugh Crowther our local member was Region 2 Director (would be his second and last year as he moved to Washington USA in May) with Dave Rasmussen as Region 2 Nominating Member at the CRC held in Halifax August 23<sup>rd</sup> to 25<sup>th</sup>, 2001. Wilf Laman was RVC Program, George Menzies V-C Society Membership. George Robb was Delegate. Bill Coad was Society President. CRC registration cost \$250 for the Delegate and partial was at \$160.00. Society assigned members were 2396, up slightly for the second year with 162 assigned to the Hamilton Chapter. We had 20 students in 00-01 which dropped in next 2 years. In 01-02 we had \$7729 in research investments. Chapter attendance was 32 down from 35 in prior year.

In '02 and again in '03 our President was Ralph Kosir. In '02, we had no Pres-elect or VP, Natham Martin was Treasurer, secretary was Mike Carr, RP chair, Geo Robb, Steve Glover TEGA, David Hills MP Chair, Chris McClelland Program Chair, G.Menzies Historian, Brian Beninger Webmaster, In this period and for about 8 years running (since 1994), our June golf day was held June 12<sup>th</sup> at the Niagara Parks Whirlpool Golf Club - one of the finest courses in Ontario. About 80 golfers tour the course followed by an outstanding dinner and awards. Dave Rasmussen organizes this event and has a well-defined format. Hamilton Chapter jackets are given to every golfer. The golfers tell Dave to sign up club for the following year - as there is no need to change format. The CRC was in Quebec City at the Mt St. Anne ski club. The chapter budgeted for \$40,220 revenue, got \$46,448.00 and spent \$40,844.23 resulting in a surplus of \$5,603.77. The Hamilton Chapter won the Meatball award for having the most attendees times distance -the second time we've won this award. The first was at the Moncton CRC in '98. The summer summit was at Brian Beninger's home in Beamsville.

Chapter membership was 95 local paid-up members at \$65 up from 90 in 01-02, and 193 assigned Society members up from 162 in 01-02. Chapter had the lowest delinquent membership in years due to the dedication of MP chair David Hills. Region had 2460 assigned members, again up slightly some 2.6%. Chapter had only 2 students as no student branch is in the chapter boundaries. \$8405 was collected for research better than the goal of \$8304 as a result of the dedicated efforts of past-president George Robb. Meeting attendance averaged 27 not including

social events. This was lowest average in past 3 years. May's meeting focused on UV lamps for odour and microbial control which eventually resulted in the chapter pursuing a motion at the next CRC to get ASHRAE to write a standard for assessing the performance of UV lamps. The Newsletter featured monthly bios of past presidents and other veteran members. Some \$16,550 was in reserves for 02-03 up from \$15,325 in 01-02 but not to the \$17,306 in 00-01.

In 2003/04, we elected to suspend any mailing of the printed Airways - it would be offered only in electronic form. The chapter roster was also done in electronic format only. The chapter excellent technical programs topped in April 2004 by a distinguished lecturer provided by the Society - Society Past President from 95/96, Dr. Richard Hayter from Kansas City who delivered a motivational talk on the future of energy design for buildings. At this meeting we presented a student award to Chris Hadlock of Waterloo U. His Prof Dr. Michael Collins was present. Dr. Collins is also on ASHRAE TCs and is a Chapter member. The talk was followed by a tour of the new Federal Building in downtown Hamilton. The year opened with a tour of the new Niagara Falls View Casino. And for this particular year Ralph Kosir Chapter President will receive recognition for achieving above par in all PAOE categories as the chapter was very successful in many areas - in chapter programming, student activities, technical and research fund raising. Research was at \$7854 down from the \$8304 collected in 02-03. In 03-04 we had 196 assigned Society members up 3 from 02-03 and 110 chapter members up from 95 in 02-03. We had 5 new members down from 7 in prior year. Delinquents were at 7 up from 5 in 02-03. Meeting attendance was an average of 29 in 03-04 vs 27 in 02-03. Students were at 19 from the U of Waterloo primarily through Dr. Mike Collins a prof at the U of W. Social events included a Christmas party, visit to the Flamboro Downs race track and golf June 9<sup>th</sup> at the Whirlpool Golf Club again at \$150/golfer. Reserves were at \$16,400 slightly down from \$16,550 in 02-03 and \$15,325 in 01-02. Chapter meeting attendance was steady at 29 up from 27 in 02-03 and down from 32 in 01-02.

Our usual summer summit where a full year's program is discussed was held July 13<sup>th</sup> 2004 at Beninger Engineering Ltd. (Man-Room) at Brian Beninger's home. In August 2004, the annual regional CRC was held in Toronto at the Hilton Hotel in August 19 to 21<sup>st</sup>, 2004 with Bill McCartney as Delegate, George Robb as Alternate and George Menzies filling in for Gail Menzies as CRC Recording Secretary. The London Chapter presented a budget of \$22,696 for the Aug 2005 CRC in Grand Bend

On Sept 27, 2004 we lost George Buckler to cancer. As a Hamilton Chapter member, he rose to be a Society vice-President in 1988 to 1990. He served a Chapter President in '73, was RVC MP, ARC president and a DRC before in became Society VP. He had retired from Rheem Canada and was living back in the area where he was born - Tatamagouche NS.

For our year Sept 2004 through to August 2005, the chapter continued to hold their monthly meetings at the Royal Hamilton Yacht Club. Cost was \$30 for chapter members, \$40 for guests, and \$15 for students with the pre paid meal plan set at \$135 for the year. Attendees could skip dinner and pay \$15 for the technical presentation. Chapter dues remained at \$65. Bill McCartney was President, Geo Robb Secretary, Wilf Laman Treasurer, David Hills Membership Chair, Geo Menzies, Historian and Student Chair, Nathan Martin, CTTC Chair, Dave Rasmussen Social Chair, Brian Beninger Webmaster, and Allan Antcliffe Newsletter Editor. The year opened with the usual summer summit again this year at the home/office of the Webmaster Brian Beninger. During year, we started receiving our Newsletters in colour a first for the chapter. The program was diversified ranging from a lawyer Howard Wise a partner in Goodmans LLP a specialist who discussed Construction Lien Law, a Distinguished ASHRAE Lecturer Manuel del Valle, PE, director of HVAC design at Flour Daniel who enlightened those in attendance on the topic of clean rooms for pharmaceutical and biotech facilities. Manuel discussed clean room designations, and presented the HVAC requirements for these spaces. With an extensive portfolio of past projects, Manuel was able to demonstrate how his design team approached these projects, outlining the equipment required for a successful installation. He spoke the prior night in Toronto. We had to a tour of Toyota in Cambridge - where some 50 were present. Attendance averaged 27 down from a 29 average in prior year but equal to 27 in the year 02-03. The distinguished lecturer's talk was at luncheon meeting which proved only modestly successfully but was necessary to

capture the speaker from his visit to Toronto chapter the previous night. The opportunity of having an outstanding speaker available the day following Toronto's chapter meeting resulted in the chapter meeting night being permanently shifted to the first Tuesday of each month. The spring golf was again in Niagara Falls this time at the Legends where a recent LPGA was held. We had a record 88 golfers and we finally made a profit of \$1428.32 not including \$360 contributed to ASHRAE Research from a challenge hole. The attendance at the golf was not added into our monthly average. He had 110 chapter members paid up with 182 assigned Society members and 19 students same as prior year. Society membership dropped from 196 in 03-04 to 182 while chapter membership held. We gained 3 new members, down from 5 in 03-04 and 7 in 02-03. Using the lists of chapter members in electronic version, we were able to "blast" the membership for Society requests regarding technical judges and other competency requests. The Historian was able to add 4 bios to the Newsletter during the year.

The December meeting was held at the Aviary in Niagara Falls with disappointing attendance.

Research contributions were down significantly to \$4636 vs \$7854 the year before and \$8405 in 02-03.

At the Society level, in the year 04-05 Wilf Laman was Society CTTC Committee Chair with George Menzies in his final year on Honours and Awards Committee. Bill McCartney continued to serve on several TCs.

Chapter Membership was 95 for 02-03; 110 for 03-04; same 110 for 04-05 and would be again 110 for 05-06.

Society membership for 04-05 was 176 paid, 4 unpaid - a record low thanks to the through job by David Hills MP Chair, 9 paid students and 14 unpaid students for a total assigned society Membership of 203 (would be up to 228 in 05-06). The PAOE final stats for 2004-2005 follow:

Chapter #	Chapter Name	Membership Promotion Points *Minimum = 400 PAR = 800	Student Activities Points *Minimum = 300 PAR = 500	Research Promotion Points *Minimum = 800 PAR = 1050	History Points *Minimum = 100 PAR = 200	Chapter Operations Points *Minimum = 300 PAR = 500	Chapter Technology Transfer Points *Minimum = 450 PAR = 850	Chapter PAOE Point Totals
13	Quebec	305	1186	476	225	678	1085	3955
14	Montreal	1420	4322	1029	250	978	2205	10204
15	Ottawa Valley	760	965	321	100	927	1590	4663
16	Toronto	1545	2037	1666	200	859	1520	7827
37	Hamilton	525	295	241	500	431	985	2977
100	Halifax	145	275	253	75	482	565	1795
116	London	300	1055	420	125	725	1030	3655
117	NB/PEI	570	655	1127	275	600	1110	4337
141	Windsor	100	310	300	75	510	765	2060

#### 2005-2006

On July 14<sup>th</sup>, 2005 the Summer Summit was held at Allan Antcliffe's residence 190 West River Road in Cambridge. With the CRC scheduled for Hamilton in 2006, focus was on arrangements for the August 27 to 29, 2006 regional meeting in Niagara Falls. David Rasmussen is the CRC General Chair, Wilf Laman V-C and Treasurer.

At the August 27<sup>th</sup> to 29<sup>th</sup> CRC held at the Oakwood Resort in Grand Bend, Bill McCartney was Delegate, David Hills Alternate. George Menzies is official Region 2 Mentor. Gail Menzies is back in her role as Recording Secretary. Bill McCartney as Chapter RP Chair, Dave Hills as Membership, and Nathan Martin as CTTC chair attended workshops. Dave Rasmussen as upcoming 2006 CRC Chair, attended to get experience with running our CRC next year in Niagara Falls.

Concerning chapter events, it was agreed to continue holding the monthly meetings at the RHYC again with prior meal prices. However, the chapter elected to change the meeting date to the FIRST TUESDAY of the month to

enhance our programming and to take advantage of sharing speakers who might be at the Monday meeting of the Toronto Chapter and could speak at our meeting the next night - in particular distinguished lecturers.

Bill McCartney continues for his second term as President which will help the chapter through the heavy activities associated with the upcoming CRC in Niagara Falls. David Hills is President-Elect, George Robb Secretary, Wilfred Laman Treasurer, George Menzies BOG and Historian, Nathan Martin CTTC Chair, David Rasmussen Social Chair, Brian Beninger Webmaster, Allan Antcliffe Airways Editor.

The meetings were at the *Royal Hamilton Yacht Club* North End of McNab, On Hamilton Harbour with the schedule being 5:00 pm - Social Hour & Technical Session 6:00 pm - Dinner & Business Meeting, 7:00 pm - Feature Speaker. Costs continued again this year at: Chapter Members - \$30.00 · Guests - \$40.00 · Students - \$15.00 · Meal Plan - \$135.00. Technical Session and/or Feature Speaker (without Dinner) was \$15.00

The first meeting was Tuesday, September 6, (not the normal 2nd Tuesday) with the topic *IAQ and You (Filtration)* with Feature Speaker: Rick Boonstra *Cimatec Environmental Group*. Some 11 were in attendance. This initial September meeting on filtration stirred up a lot of questions and answers regarding the current standards of filtration rating and the real concerns involving filtration. At the 5 PM technical session, Rick and Rob Gerritsen of Cimatec offered some interesting insights into the current concerns and problems with the standards that are currently viewed as acceptable. For those chapter members not at this meeting we announced that the first ten, first time, Chicago 2006 Winter or Quebec City 2006 Summer attendees from the Hamilton chapter, will get the other half of their full registration paid for by the Hamilton chapter. This is in conjunction with the Headquarters announced incentive for these meetings.

The next meeting was Tuesday, October 4th, with the topic **ARI 1060 Standard V - Energy Recovery Equipment**. With speaker Ian Anderson, Canadian Sales Manager for Venmar CES. It was noted that Venmar participates in the ARI testing standards for air-to-air heat exchangers for energy recovery equipment, specifically, ARI 1060 Standard V. This October meeting presentation drew some 25 members, a good size crowd. The material presented detailed ARI Standard 1060 and Guideline "V" which have been developed for the proper analysis of the various heat recovery methods available. For those chapter members not at this meeting we re-announced that the first ten, first time, Chicago 2006 Winter or Quebec City 2006 Summer ASHRAE Meeting attendees from the Hamilton chapter will get the other half of their full registration paid for by the Hamilton Chapter. This is in conjunction with ASHRAE Headquarters announced incentive for these meetings. We already have four members who have requested to take advantage of this offer. The Table top display was Venmar CES Inc. ARI 1060 Standard V Energy Recovery Equipment. Dave Rasmussen announced that we have signed up with Legends on the Niagara for the Golf Tournament again in 2006 and for the same deal they provided us for 2005. We are going to try again to get the 120 golfers required for a shotgun arrangement.

More Colours in Airways - Allan Antcliffe, Airways Editor expanded the use of colour in the Airways which was well received.

The next chapter meeting was Tuesday, November 1st, entitled Refrigeration 101 "Catch 22". Feature Speaker was renowned educator Garth Denison Sr. Product Application Engineer Sporlan Valve Division of Parker Hannifin Canada. Garth Denison has had some 42 years of experience in the refrigeration and air conditioning industry and is one of the most sought after speakers in North America. Garth retired from DuPont Canada in 2002 as Senior Technical Consultant, Fluoroproducts Division. At the November meeting we really put the "R" in ASHRAE. The evening was started off with Refreshments, Renewal of acquaintances, and robust exchange of ideas. During the Tech Talk there was the presentation of the Revised Refrigerant Regulation Rules in Ontario by Bill McCartney. After the meeting started we had the Research Award Recognition and presented the commemorative coins to all those in attendance. After an excellent Repast, Garth Dennison (Sporlan) provided a presentation on Refrigerants, Retrofits, and their Replacements. That should just about take care of the R in ASHRAE for this year. Some 24 were in attendance for R night.

In November, Mike Krewski (Union Gas) volunteered to join the Chapter executive. Mike was promptly assigned the position of T.E.G.A. Chair and, as such, will keep an eye on "government activities" which may affect our industry.

Also Featured in the November Airways was a Historical Profile of KeepRite Refrigeration which was born in 1945 as WW II came to a close in 1945; Keeprite had an initial staff of nine people.

Our December meeting Tuesday, December 6th, was Recognition of Past Presidents & 25 Year Members. Feature Speaker was professional motivator Connie Jasinskis, M. Sc. whose topic was "Humour for the Health of It". Madok sponsored the meeting. Connie has been promoting excellence in health and fitness since 1981. She is an International Author and Speaker through her company: **For the Love of Fit**. Audiences in England, Portugal, South Africa and across Canada have benefited from her expertise and sense of humour. Her accomplishments include bicycling from Vancouver Island to Ontario and being a breast cancer survivor-thriver. She works in Cambridge providing aquatic rehabilitation for people with back injuries and exercise for people with osteoporosis and fibromyalgia. We had 27 present who enjoyed an excellent social evening.

David Rasmussen who is in charge of our library summarized what is available -: Cogeneration Design Guide; Design of Smoke Management Systems; Engineering Manual of Automatic Control for Commercial Buildings; Industrial Ventilation -23rd Edition; Duct Fitting Loss Coefficient Tables; Fundamentals of Thermodynamics & Psychrometrics; Cooling and Heating Load Calculation Principles; Laboratory HVAC; HVAC Air Duct Leakage Test Manual; Cold Air Distribution System Design Guide. Many ASHRAE Standard Manuals and CD's are also available.

The Airways included a BIO for JAMES BUCHANAN PAST CHAPTER PRESIDENT, SOCIETY LIFE MEMBER who joined ASHRAE in 1961, just a couple of years after the ASHRAE Hamilton Chapter was chartered.

The first meeting of 2006 was a tour Tuesday, January 10th, @ 5:30 p.m. of the Cambridge EMS Facility 100 Maplegrove Road, Cambridge, ON. Speakers included Kari Feldman, P.Eng., Regional Municipality of Waterloo Richard Lay, P.Eng., Enermodal Engineering Lou Lima, P.Eng., Enermodal Engineering. This was a tour of the first LEED GOLD certified building in Canada. The Regional Municipality of Waterloo (RMOW) graciously opened the doors of their Cambridge EMS (Emergency Medical Services) facility to the members of ASHRAE. Kari Feldman will discuss the initiatives being taken by the region to promote "Green" buildings. Recently, the RMOW adopted a minimum LEED SILVER standard for all new facilities greater than 500 m<sup>2</sup> (5,382 ft<sup>2</sup>) showing their dedication to the environment. The mechanical systems serving the facility were designed by Enermodal Engineering in Kitchener. Richard Lay and Lou Lima lead a tour of the facility followed by a presentation on the building design and energy efficiency. The attendance overflowed the conference with some 50 in attendance. Dinner followed and was at Moose Winooski's on Sportsworld Drive.

At this chapter meeting it was announced that Wilf Laman as been nominated to be appointed DRC for Region II, starting July 1st 2006. In the Airways was a bio on Frank S. Spina the first two-time past chapter president. Frank joined ASHRAE in 1970 some 11 years after the chapter was chartered.

The Feb Chapter meeting was held Tuesday, February 7th, with the topic - Changes to Heating Codes. Susan Cooke, M.A.Sc., P. Eng. Technical Leader - Fuels Safety Program Technical Standards & Safety Authority (TSSA) discussed the latest changes to the heating codes As Technical Leader of the Fuels Safety Program, Sandra Cooke is fully responsible and accountable for all fuels safety engineering design reviews, custom equipment approvals, regulatory maintenance, development and adoption of codes/standards for the Province of Ontario. This role also is responsible for the supervision of the engineering team, the Fuels Safety operational plan and the engineering budget. Sandra represents Ontario on the Interprovincial Gas Advisory Council which authorizes the use of codes/standards for Canada. Sandra's background included other positions within the TSSA as well as with Underwriters' Laboratories of Canada, Fuelmaker Corporation and Ontario Hydro Research Division. Sandra obtained her Master and Bachelor of Applied Science degrees in Mechanical Engineering at the University of Toronto and holds the designation of Professional Engineer. She impressed the 30 in attendance with the knowledge of the subject She detailed the workings of a not-for-profit government agency that touched our industry with their involvement with fuel burning appliances. It was quite interesting that a lot of questions

regarding the practices and requirements of contractors in that field were brought forward by everybody but contractors. Bill McCartney noted that as contractor I have been aware and involved with TSSA since they surfaced at our office in 1997 but it became obvious that those not involved directly were quite appreciative of Sandra's answer to their questions. At the Tech session at 5 PM we had Glen Gray, P. Eng. from Maxon Industrial Equipment provide an in-depth history of direct fired burners for make-up-air systems. His presentation dealt with the advancements over the last fifty years and how they have been able to improve efficiency and provide considerable energy savings through product design.

In the Airways for the month was a Historical Bio for Louis Sentesy, C.E.T.,F.C.A.M. Hamilton Chapter Charter Member, Society Life Member. Lou has been a life long member of ASHRAE, joining the Society February 1st, 1952. He became a Charter Member of the Hamilton Chapter in 1959 and a Life member January 31st, 1987

On Tuesday, March 7th, the chapter meeting featured topic was *VAV & FPVAV Applications*. with speaker Jim Aswegen from Titus a manufacturer of grilles, registers, diffusers and air terminal units. His topic was VAV and FPVAV air terminal units. The discussion focused on the following: Application - VAV vs. FPVAV; Series vs. Parallel Selection - Sizing, sound considerations, etc. Operation - Getting the most out of your design. Some 25 were in attendance. Jim Aswegen elaborated on his many years of experience in the air distribution industry. Jim is also involved with ASHRAE, sitting on several TC committees researching air distribution. The 5 Pm Tech session had Dave Lipsit from AirAudit Inc. who discussed air balancing with a focus on VAV and FPVAV systems. He displayed some of the tools and techniques used to perform air balancing. Air Audit provides air and water balancing, indoor air quality monitoring and water and air survey services. Dave founded Air Audit, certified by the National Environmental Balancing Bureau (NEBB), in 1987. He is an active member of ASHRAE, regularly attending Hamilton Chapter meetings. *The Table Top Demonstration was by O'Dell Associates* who displayed a couple of new products from Titus including: the Titus Model DTFS fan powered VAV box with ECM motor and a Titus Model T3SQ variable geometry thermal diffuser.

The April Chapter Meeting was held Wednesday, Apr. 19th (not the normal Tuesday) with the Theme: Sustainability and the Building Environment and consisted of an ASHRAE Satellite Broadcast giving information regarding building sustainability principles, practices and emerging concepts. The format was as follows 12:00 p.m. - Lunch; 1:00 p.m. - Introduction & Welcome; 1:03 p.m. to 2:15 p.m. - Presentations

• Sustainability: What does it Mean and Why is it Important? • If It's Not Energy Efficient, It's Not Sustainable: How to Ensure Top Energy Performance in Green Buildings • Integrated Design for Sustainability; 2:15 p.m. - Q&A 2:30 p.m. - Break; 2:40 p.m. to 3:35 p.m. - Presentations; • Better by Design - Project Studies; • Green Buildings and Sustainable Communities; 3:35 p.m. - Q&A; 3:55 p.m. - Closing; 4:00 p.m. - Break; 4:15 p.m. - Tour of Mechanical Room, Studios and Broadcasting Centre. The meeting was sponsored by York Johnson Controls.

*The chapter announced in Airways the following new additions to the Executive: Mike Krewski - Mike is a graduate of Wilfred Laurie University (formerly Waterloo Lutheran) and also holds a business administration diploma. He is currently enrolled in TEMOL (Training in Energy Management) - a 14 module/100 hour program which leads to the*

Energy Institute's Certificate of Competence in the Fundamentals of Energy Management. Mike has 25 years experience in the energy sector including stints with Texaco and Sunoco. He is currently a Commercial/Industrial Account Manager with Union Gas promoting natural gas technologies and energy efficiency. Mike joined ASHRAE in 2005 and is an Associate Member. He is also involved in other industry related organizations including HRAI, Skills Canada and the Energy and Environment Forum at the Greater Kitchener-Waterloo Chamber of Commerce. As T.E.G.A. Chair, he maintains contact with various government (all levels) organizations in our Chapter area to promote ASHRAE and monitor activities which may affect our industry.

**Adam Werthmiller, C.E.T.** - Adam is a graduate of Niagara College's Mechanical Engineering Technology program.

Early in 2002, he joined TMP Niagara (The Mitchell Partnership) as a CAD Designer under the supervision of Lee Norton. With TMP, Adam has worked on a wide range of projects including renovations to the Skylon Tower, Niagara Detention Centre, St. Catharine's Courthouse, Niagara Casino and a number of other well-recognized

buildings. Adam received his C.E.T. designation and joined ASHRAE as an Associate Member in 2004. He is also a member of ASHRAE's YEA (Young Engineers in ASHRAE). As Student Activities Chair, Adam maintains contact with universities/colleges in our Chapter area and is looking to increase our ASHRAE student membership and establish one or more student chapters.

**John Loncar**, P. Eng., MBA - John graduated from the University of Waterloo with a B.A.Sc. in Civil Engineering and, a few years later, from Wilfred Laurier University with a MBA. John worked in the construction industry in various roles (consulting to technical sales) prior to joining Union Gas in 2001. Within Union Gas, he has enjoyed positions as a Service Manager in Operations, a District Engineer and is currently an Account Manager, Commercial/Industrial Marketing. John became a Member of ASHRAE in 2006. John is currently slated to assist Nathan with Programs and possibly take over that position as Nathan moves up in the ASHRAE hierarchy.

The Chapter Meeting for May was held Tuesday, May 2nd, with the main topic *Commissioning Special Facilities*. Some 21 were present. The speaker was Bill McCartney, a Partner at Isotherm Engineering who presented a symposium paper on commissioning special facilities which he delivered at the ASHRAE meeting in Denver in 2005. Bill used this opportunity to explain how the whole process for a symposium paper evolves, as well as involvement of technical committees and program and society meetings. Bill has been a commissioning specialist since 1994 and a partner at Isotherm Engineering since 1997. Bill has been an ASHRAE Member since 1974 and to say that he is involved would be an understatement: • Member - TC 7.3 - Operation and Maintenance Management (past Chair) • Member - TC 7.9 - Building Commissioning • Member - Refrigeration Volume 2002, 2006 and 2010 • President - ASHRAE Hamilton Chapter 2004 - 2006.

At the meeting was another Canadian Life Members Bursary presentation - this time to Vivek Kansal of the University of Waterloo. In this month's Technical Session, Dave Rasmussen - our Chapter Social Chair - will provide some insight into the structure of the ASHRAE organization. The Table Top Demonstration was by Peter Turk - Sales Representative for the Victaulic Company of Canada - will do a brief presentation on the background and benefits of Victaulic piping components. He also covered some new products being introduced.

At the meeting it was announced that Long time ASHRAE member Dennis Banning retired on April 13th, the boss of David Rasmussen of 20 years, Dennis Banning retired from Delhi Industries. Most of you were able to send him best wishes at the past CMX show. Dennis is now an ASHRAE Life Member. The new manager is David Thurgood who plans to join our chapter in September.

David Rasmussen reported that a record 112 golfers played on a hot humid at this years outing at the June 7th Legends GG in Niagara Falls. Many were glad it was a best ball Tournament. We had only one group that was made of single golfers as most provided their own foursomes. The made-up group won the Tournament! Congratulations to Gary Knowles, David Benedetti, Peter Turk, Stuart Lockhart. There was a surplus of \$361.26 even after paying for the 8 we needed to get to 120 for the shotgun start. It was agreed to do it again at same golf course next year with same format and same price \$150/golfer and \$40 for dinner only. Next year's event will be held at the other course-Usher's Creek on June 6<sup>th</sup>, 2007.

Regular meeting attendance averaged 29 for the year, which was about the same as the last 5 years.

At the June Annual society Meeting **Wilfred Laman received the Society Distinguished Service Award** for his participation on many Society committees including Chair of CTTC in 04-05, the first year this committee operated - committee combined TEGA and Program. Wilf was elected by the Society Membership as a whole to be a Director and Regional Chair for Region 2 at this Annual Society Meeting as well. He will serve from July 2006 till June 2009 in this capacity.

Research investments almost doubled this year from \$4636 to \$8740 primarily to the efforts of Bill McCartney and an extensive team. The Chapter got > par in all categories for the first time in recent memory. Society membership was 195 paid vs 176 last year, the first jump in years. With students we show some 228 paid members vs 203 last year. Chapter membership has been 110 for 3 years straight. Student membership was up to 27 paid vs 9 last year. The final PAOE 2005-2006 results follow:

Chapter #	Chapter Name	Membership Promotion Points *Minimum = 400 PAR = 800	Student Activities Points *Minimum = 300 PAR =500	Research Promotion Points *Minimum = 800 PAR = 1050	History Points *Minimum = 100 PAR = 200	Chapter Operations Points *Minimum = 300 PAR = 500	Chapter Technology Transfer Points *Minimum = 450 PAR = 850	Chapter PAOE Point Totals
13	Quebec	275	709	732	250	550	810	3326
14	Montreal	1620	4925	601	425	1570	2570	11711
15	Ottawa Valley	630	1695	448	100	1230	1718	5821
16	Toronto	1275	4600	1511	525	1110	840	9861
37	Hamilton	605	628	975	400	840	1185	4633
100	Halifax	125	400	195	25	410	330	1485
116	London	690	1135	1280	100	895	895	4995
117	NB/PEI	660	1001	1128	350	845	1630	5614
141	Windsor	300	1290	428	125	225	515	2883

## 2006-2007

The traditional Summer Summit was held Wednesday July 26th, 2006 at the residence of Bill McCartney #7-31 Sunvale Place, Stoney Creek ON. Meeting attendees were: Bill McCartney, George Robb, Dave Hills, Wilf Laman, Dave Rasmussen,, Adam Werthmiller, Allan Antcliffe, Brian Beninger, Nathan Martin, George Menzies. Absent Mike Krewski, John Loncar. Wilf Laman (Treasurer) stated that the current bank balance is \$ 25,334.49 as of June 30, 2006 which is compared to the same month balance last year \$ 25,375.22 as of June 30, 2005. It was agreed that our chapter contribution to the upcoming CRC will again be \$3,500.00. With W. Laman now the DRC, Bill McCartney accepted the Chapter Treasurer's job. Much discussion was on new all electronic CRC coming in August in Niagara Falls.

The Hamilton Chapter hosted the CRC. The event was held at the Hilton Doubletree Resort, 6039 Fallsview Blvd, Niagara Falls, Ontario, Canada August 25<sup>th</sup> to 27<sup>th</sup>, 2006. It is believed we set a Region 2 record attendance. At the awards presentation, our

DRC Wilfred Laman introduced the Mayor of Niagara Falls and announced that George Menzies would MC today's awards function. The chapter then received many awards: In research promotion, Bill McCartney RP Chair got a Certificate for achieving Goal; the High 5 Certificate for highest amounts collected in past 5 years and a Certificate for exceeding Challenge Goal which was assigned by the RVC Jeff Clarke. Winning in the PAOE - Presidential Award of Excellent Points, Hamilton Chapter President Bill McCartney President accepted PAOE Honour Roll status as the chapter achieved par in 4 key categories for at least four consecutive years. The award is a PAOE certificate and honor roll emblem. The chapter also received the Special Citation Award (chapter needed to get >4300 pts, actually 4633 pts) which includes a special citation ribbon. Plus the chapter got the Star Award for having reached par in all categories - awards consists of a PAOE emblem, star award certificate, star award pin. For personal awards, **Chapter Service Award** were presented to: **George E. Menzies and David Rasmussen**

Chapter meetings soon followed the CRC. Our Airways headline stated Hamilton Chapter No. 037 Volume 48, No. 1 Our 48th Year September 2006 edition. The executive of the chapter for 06-07 consisted of President David Hills, A.Sc.T.; Treasurer & Research Chair William McCartney; Secretary George Robb, P. Eng.; Membership Chair & Student Activities Chair, Adam Werthmiller, C.E.T.; George Menzies, P. Eng. ROH; C.T.T.C. Chair Nathan Martin, P. Eng.; T.E.G.A. Chair, Mike Krewski; Social Chair, David Rasmussen, C.E.T.; Programs Co-Chair, John Loncar, P. Eng.,

MBA; Programs Co-Chair, Terry Fowler, P. Eng.; Webmaster, Brian Beninger, P. Eng.; Airways Editor, Allan Antcliffe, P. Eng.; Region 2 DRC, Wilfred Laman, P. Eng. Regular meetings were held at **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. The cost was the same as previous years; 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

**The Tuesday, September 5, 2006** Feature Speaker was **Doug Graham of T. A. Morrison & Co. Inc.** T. A. Morrison & Co. Inc. TAMCO, is located in Stittsville, ON, and is a manufacturer of dampers and air control products serving commercial, industrial and institutional markets. They entered the ventilation industry in 1955. In 1980, TAMCO began to produce their own line of aluminum dampers and later introduced louvers and insect screens. Doug Graham of discussed dampers including design, application and installation. Doug enlightened those in attendance about the effect dampers can have on energy conservation, demonstrating the energy losses due to infiltration and conduction. Selection of dampers based on application and location was also a topic that promoted great discussion. Thermal break technology, offered by many manufacturers, is important to ensure proper operation through our cold winters. In the end, Doug stressed the importance of installation on the performance of the dampers. The key to high performance is a well supported, square and true installation by a reliable contractor.

In the Sept Airways, the following article was inserted as it affects many of us: *Air-Conditioner Turns Cool 100* - was submitted by chapter member Wilfred Laman. There are plenty of important events worthy of celebrating on their anniversaries. Weddings, birthdays, the signing of the Declaration of Independence. But here's an anniversary that should have champagne corks popping: Air-conditioning was invented 100 years ago. Bernard Nagengast, a historian with ASHRAE, said the term air-conditioning was first used in 1906 by Stuart Cramer, a textile engineer from Charlotte, NC in a patent application. That same year, a patent was filed by Willis Carrier, who is commonly called the father of air-conditioning, for his method of heating and humidifying air. His intention was to regulate humidity but his method had a fortuitous side affect: comfort cooling. "Nowhere in the patent description or claims is there any mention of using it to cool air but the methodology was used later for that purpose," Nagengast said. Although it would be some years before air-conditioning as we know it would become widespread in homes, the patent marked the start of a new era of comfort cooling for buildings. And it is the main reason so many of us can live any where in north America in the summer. Wilfred Laman, notes that Willis Carrier was employed by Buffalo Forge at the time. Carrier asked to be released from Buffalo Forge to concentrate on air conditioning. He may even have received a loan to get started as Buffalo Forge wanted to concentrate on the fan business.

For the tech session George Menzies, Chapter Historian discussed some current government activities and then briefly reviewed the history of the chapter since it was chartered in 1959. This will soon lead to the 50th anniversary in October 2009!

The Tuesday, October 3, 2006 Meeting topic was *Wind and Air Flow Modelling for Design of Low Energy Buildings - Ventilation & Load Management*. This presentation was designed to support ASHRAE President Terry Townsend's presidential theme "The ASHRAE Promise: A Sustainable Future". The Speaker was *Duncan Phillips, Ph.D., P. Eng. RWDI Consulting Engineers*. Duncan is a chapter member and has a Ph.D. in Mechanical Engineering from the University of Waterloo. During his graduate work he investigated the measurement and quantification of room air and contaminant mixing within occupied spaces. This work involved both the development of instrumentation for, and measurements of, contaminant transports. Duncan joined Rowan Williams Davies & Irwin (RWDI) Consulting Engineers in 2000. He is a Project Director/Senior Specialist for Ventilation and Computation Fluid Dynamics (CFD). His role at RWDI is to technically oversee the execution of client based projects. These projects include the design & implementation of high performance ventilation systems for applications ranging from contaminant control and thermal comfort to thermal load management and sustainable building design. Prior to dinner, the

**Technical Session** will also be presented by our Feature Speaker - **Duncan Phillips**. He covered some of the basics - call it **WindTunnel, Computational Fluid Dynamics (CFD) & Energy Modelling 101** - to prime you for the main program later in the evening.

*The Airways featured a HISTORICAL BIO of JOE VASSALLO, HAMILTON CHAPTER PAST PRESIDENT*  
 Joe joined ASHRAE and the Hamilton Chapter in the late 60s not too long after the chapter was chartered and was soon involved in the executive of the Chapter. He supported the chapter and quickly influenced many other associates to get involved in the chapter with two also becoming Chapter Presidents. Joe says that he plans to wind down and retire during 2007, but many of us have said similar things.... He said he acquired many lasting friendship thanks to all the contacts he made in ASHRAE and he will enjoy many of these well after retirement.

The Tuesday, November 7, 2006 featured a speaker from the *Distinguished Lecturer Program*. Topic was *Operation & Maintenance of HVAC Systems for Improved Comfort and Air Quality* - The HVAC industry affects the public's quality of life in many ways, from indoor airquality, to conserving energy in buildings, to the development of refrigerants that donot harm the environment. Indoor air quality is of increasing concern as society redefines the needs of the indoorenvironment. This talk presents a new perspective on the topic, starting with the proper preventative program and how to reduce the probability of bad indoor airquality resulting from an improper maintenance program. We will look at the location of outside air intakes, air handling systems, cooling towers as well as other areas. Feature Speaker was *Carl N. Lawson PWI Commissioning Services - Durham, NC* who is a Commissioning Authority for PWI Commissioning Services. Mr. Lawson has been involved in the ASHRAE Commissioning Process since 1984 and has remained active on the respective committees since that time. He has been involved in the commissioning process since 1962 when it was called "Total Quality Management" Over his career he has been involved in design, construction and owner representative. Prior to joining PWI, he was responsible for the commissioning process at Duke University Medical Center. He has commissioned hospitals, medical clinics, prison laboratories, high tech facilities, medical office buildings, and office buildings projects in the U.S. and abroad. He has been responsible for developing a large number of the protocols that used today in the commissioning industry. Mr. Lawson is a pioneer in the commissioning industry and a frequent lecturer on the process.

The feedback after the presentation was extremely positive from the members in attendance. President Hills said that many of us, regardless of our current field of the HVAC business, walked away that night with an extra insight to just how important Commissioning is to every project, new or retrofit. industry.

At this month's "technical session", **Bill McCartney**, ASHRAE Hamilton Chapter Treasurer & Research Chair, presented **ASHRAE Research Recognition Awards**.

**Saturday, December 9, 2006 was our Family Christmas Event Lunch and Tour of Dundurn Castle 2:00 p.m.**  
 One of Hamilton's most-recognized landmarks, Dundurn Castle is a National Historic site that illustrates the life and times of Sir Allan Napier MacNab (1798 - 1862). Dundurn Castle was constructed over a three-year period, and completed by 1835. Designed by a young English Architect, Robert Wetherall, Dundurn was built around the brick shell of Colonel Richard Beasley's colonial home. Designed as a fashionable Regency style villa, Dundurn (Gaelic for "strong fort") was nicknamed "Castle" by the citizens of Hamilton. Today, Dundurn Castle has been restored to the year 1855 when MacNab was at the height of his career as a lawyer, landowner, railway magnate and Premier of the United Canadas (1845-56). Over forty rooms, above and below stairs, have been furnished to compare the life of a prominent Victorian family with that of their servants. Costumed staff guide visitors through the home, illustrating daily life from the 1850s.

The meeting drew 23 visitors, consisting of members and their spouses. After the luncheon, and before the Castle tour, two awards in total were handed out. The recipients in attendance were Leon Yaskowich and Bob Schock, who

received their 50 year memberships. Two other award recipients that were not able to attend were John Pollock and Peter Graham, for their Life Member awards. [ for the record John Pollock died in 2009]

**A Historical bio for one of the winners was placed in Airways - Robert (Bob) E. Shock** - Bob was born in Kitchener in 1925 and attended King Edward public school and K.C.I. He then served in WW II with the Fleet Air Arm of the Royal Navy. Upon being discharged he went to Queen's University graduating in 1948 with a Bachelor of Science degree in Mechanical Engineering. He immediately went to work for the Canadian Blower and Forge Company Ltd. In Kitchener as an engineer in training. In 1952 Bob went to the CB&F Sales office in Toronto. He then joined ASHRAE Toronto Chapter and also served on their Board of Governors. In 1966 he was transferred to the New York City Sales office of CB&F's parent company Buffalo Forge of Buffalo, New York. While in New York Bob sold all the air handling equipment for the famous Twin Towers in New York City.

The new year started promptly with a meeting Tuesday, January 2, 2007. topic was **City of Guelph — A Plan for Sustainability**. Attendees were provided with an overview of the vision that the City of Guelph is currently finalizing a plan to reduce their energy use. "Guelph will create a healthy, reliable and sustainable energy future by continually increasing the effectiveness of how we use and manage our energy and water resources". Canada currently has a 6.4 energy use index per capita use — the highest in the OECD (Organization for Economic Co-operation and Development). The City of Guelph's "Community Energy Plan" hopes to reduce the city's energy index to that of Sweden which is 3.5. Feature Speaker was **Art Stokman, President Guelph Hydro**. He is also the President of Guelph Hydro and the co-chair of the City of Guelph's "Community Energy Plan".

The Technical Session was presented by Frank Bailey, Team Leader/Inspector TSSA Act, Fuels Safety Program — who talked about the latest changes to the Gas Code

Tuesday, February 6, 2007 meeting was on Solar Heat Exchangers for Hot Water Applications with 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 provided a global perspective on solar thermal heating.

This month's "technical session" was presented by Daniel Young, P. Eng., President and Chair of the Ontario Society of Professional Engineers (OSPE). Mr. Young provided a brief overview of the OSPE and its commitment to the engineering community. As Chair of OSPE's Bill 124 Working Group, he reviewed 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.

This month's Airways featured an article on the history of Delhi Industries. 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. 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 9,000sq.ft. in 1953, together with an additional 1,047 sq.ft. of office space. 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 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..

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. 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. 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 Tuesday, March 6, 2007 featured Changes to the 2006 Ontario Building Code with Feature Speaker Mike Seiling, C.E.T. Acting Chief Building Official City of Kitchener. Mike Seiling, CET, CBCO earned his Diploma in Architectural - Construction Engineering Technology from Conestoga College in Kitchener. During his career he has experienced life in both the private and public sectors, including working for an architect for five plus years, estimating, building inspection and plan examination. For the last 15 years he has been a public servant while presently serving as the Acting Chief Building Official for the City of Kitchener. During this time he has completed and approved in excess of 5,000 plan examinations on various projects ranging from new single family dwellings to 18 storey high apartment buildings. Kitchener issues approximately 2,500 building permits per year resulting in 350 million dollars worth of construction value. There were many questions about the new requirements which will be phased in till 2011

The March tech presentation was done by George Menzies who updated the action of TC 5.4 Air Pollution and TC 5.8 Industrial Ventilation. He answered many questions about research activities and future actions that will affect our industry.

Hillcrest Gone!!! The ASHRAE Hamilton Chapter's meeting location during the late '80's was recently torn down to make room for a Shoppers Drug Mart. Submitted by David Rasmussen, March 07.

It was also announced that, effective this fall, the ASHRAE Hamilton Chapter will be returning to having its meetings on the second Tuesday of the month. The first meeting of the "fall season" will thus be on Tuesday, September 11, 2007.

The Chapter decided to host another annual ASHRAE Satellite Webcast and Broadcast for the membership on the topic of Indoor Environmental Design (IED). again at the Crossroads facility in Burlington, Ontario and it took place on April 18th, 2007. Meeting started starts with a light lunch in the Atrium at the Crossroads at 12:00 noon. Meeting finished at approximately 4:00pm. The format was as follows

1:00 p.m. - Introduction & Welcome; 1:03 p.m. to 1:50 p.m. - Presentations • "An Overview Perspective on Indoor Environmental Quality" - Bill Coad, P.E., President, Coad Engineering Enterprises • "Ventilation Air - First, Do No Harm" - Lew Harrington, Director of Research, Mason-Grant Consulting • "Ventilation System Design - Avoiding Three Common Mistakes" - Hoy Bohanon Jr., P.E., President, Bohanon Engineering; 1:50 p.m. - Q&A; 2:20 p.m. -

Break; 2:30 p.m. to 3:20 p.m. - Presentations • "Behind the Access Door - Advances in Affordable Filtration for IAQ" - Chris Muller, Technical Director, Purafil Inc. • "Noise, IAQ and Thermal Comfort - Can You Have It All?" - Dan Int-Hout III, Chief Engineer, Krueger 3:20 p.m. - Q&A 3:55 p.m. - Closing

*The broadcast was sponsored by York Johnson Controls*

The chapter president reported that for 06-07, the Hamilton Chapter Executive Committee has once again achieved the Research Promotion *Full Circle Award*, for all officers and the Research Promotion Chairperson making contributions towards research.

It was also announced that ASHRAE Hamilton Chapter Members would Receive Society Awards at the annual meeting in Long Beach California: Bill McCartney -- Distinguished Service Award - the award recognizes ASHRAE members who have served the Society faithfully and with distinction on committees or have otherwise given freely of their time and talent on behalf of the Society. *Also* Dr. Michael Collins and Dr. John Wright of the University of Waterloo winner of the 2006 Crosby Field Award -- the award is presented to the author(s) of the best paper published by the Society during 2006 and consists of a plaque and a honorarium of \$750.00 (\$375.00 each).

The Tuesday, May 1, 2007 Meeting consisted of feature Speakers Dr. James Scott, Assistant Professor Occupational & Environmental Health Department of Public Health Sciences, Faculty of Medicine University of Toronto Dr. James Scott spoke about the habitat, the biology and the detection of Legionella. Also speaking was Gary Sweeney, Director of Business Development CTM Inc. Gary Sweeney and his crews are exposed to Legionella on a regular basis during the cleaning and maintenance of cooling towers and similar equipment. Gary will discuss how to deal with any Legionella bacteria found—including the safety precautions required to work around and with it. May Speaker Bios Dr. James Scott is Assistant Professor of Occupational and Environmental Health in the Department of Public Health Sciences at University of Toronto and is cross appointed to the Dept of Pediatrics. His research and teaching deal with occupational and environmental hazards posed by microbes. James graduated with a B.Sc. in phytopathology (1990) and a PhD in mycology (2001), both from the University of Toronto. Gary Sweeney is the Director of Business Development for CTM Inc (Cooling Tower Maintenance) and a Director of GTT Onset. He spent 28 years with the Trane Company working in office administration, the Parts Department, achieved third year standing as a refrigeration apprentice, dispatcher and job coordinator, Service Salesman, Service Sales Manager, Vice President and General Manager Service and finally, General Sales Manager for all equipment, temperature controls and aftermarket sales. After leaving the Trane Company in 1999, Gary worked as an independent consultant to Enwave District Energy and the ECE Group before joining CTM Inc. Gary has a HBA from the University of Western Ontario. He is a member of ASHRAE and BOMA.

The final meeting of the year was held **Wednesday, June 6 2007** with the theme: Social/Research. It consisted of ASHRAE Hamilton Chapter Golf Tournament at Legends on the Niagara (Ussher's Creek course) - Niagara Falls. Some \$580.00 was raised by challenging the golfers to hit and stay on an easy 157 yard hole. Only 8 hit green, so little pay out to the golfers! Best income to date for the challenge.

David Rasmussen stated that some 114 golfers played which used a "shot-gun" start so all would finish at the same time. David announced at the dinner that next year's outing will be on the Legends course June 4<sup>th</sup>, 2008. David also announced that we have a new chapter member David Thurgood . David is the Sales and Marketing Manager at Delhi Industries (Delhi, ON). He has been a Society members since 2005.

Chapter #	Chapter Name	Membership Promotion Points *Minimum = 400 PAR = 800	Student Activities Points *Minimum = 300 PAR =500	Research Promotion Points *Minimum = 800 PAR = 1050	History Points *Minimum = 100 PAR = 200	Chapter Operations Points *Minimum = 300 PAR = 500	Chapter Technology Transfer Points *Minimum = 450 PAR = 850	Chapter PAOE Point Totals
13	Quebec	1175	850	1470	300	1430	950	6175
14	Montreal	1615	3342	1240	600	1045	2620	10462
15	Ottawa	935	2155	1420	350	1005	1310	7175

	Valley							
16	Toronto	930	2420	1530	325	1370	2855	9430
37	Hamilton	850	650	1110	450	1140	1135	5335
100	Halifax	440	460	1060	175	1075	1425	4635
116	London	765	1116	2452	200	955	1085	6573
117	NB/PEI	510	300	1370	25	1025	1115	4345
141	Windsor	390	1120	2026	100	920	625	5181

## 2007-2008

This year's CRC was held in Moncton NB August 23 to 27<sup>th</sup>, 2007. The Conference Chair was Wilfred Laman from the Hamilton Chapter. Other Hamilton Chapter attendees were Regional Treasurer Bill McCartney, David Hills Delegate, Adam Werthmiller Alternate, David Rasmussen RVC Research Promotion, George Menzies Regional Historian, Terry Fowler, Chapter Chair CTTC. In the Chapter Report, David hills reported that our delinquents were up to 19, the highest in years, with 31 student members up from 22, Society assigned members 187 up from 176. Dues were \$135 but would rise to \$145 next year. Attendance was 25 vs 29 the previous year. The chapter again participated in the Society Web Cast event. Our student chapter is lead by Michael Collins Liaison at the University of Waterloo. Enermodal Engineering of Kitchener was the successful candidate of a CTTC award. The chapter's investors contributed \$8,461 to research, just \$39 short of goal. A local contractor Numerical Logics of Waterloo was recently awarded an ASHRAE contract for research. Our assigned Society Members were 191 with 32 students.

During the first business session the DRC asked David Rasmussen to present the final report on last year's CRC in Niagara Falls. David Rasmussen, the Chair of the 2006 CRC commented on the financial report. Surplus was \$748.81 with \$374.41 transferred to the Region Fund. The income was supported by a \$6.00 contribution for each chapter member (*Regional Motion A-1-89*) for a total of \$8466.00 which helped keep the CRC virtually a break-even event. When questioned, David noted that the 2006 had no sponsors to supplement the income. It was then moved by Nicolas Lemire seconded by Doug Cochrane *that the CRC 2006 Financial Report be accepted.* Approved unanimously.

At the awards banquet, the PAOE awards for 2006-07 were announced. George Menzies MC described the specific PAOE awards:

PAOE Award - Minimum points achieved in four of the following five categories: Chapter Operations, Chapter Technology Transfer, Membership Promotion, Research Promotion and Student Activities - Chapter receives a PAOE certificate, PAOE red emblem for banner

Special Citation Award (ribbon) - Minimum in 4 of 5 categories, with a minimum of 4300 points total - Chapter receives a special citation blue ribbon for banner

STAR Award (pin) - PAR achieved in all 5 categories - chapter receives a PAOE Red emblem, star award certificate, star award pin for banner

Honor Roll - PAOE min. in 4 categories for four consecutive years. The award is a PAOE certificate and Silver/Blue emblem

High Honor Roll - STAR level with PAR in all categories for > four consecutive years. The award is a PAOE certificate and a High Honor Roll Royal Blue Emblem

The Hamilton Chapter Delegate David Hills accepted the following awards: Honour Roll (achieved PAOE for >4 years) PAOE certificate and honor roll silver emblem. Special Citation Award (>4300 actually 5335 up from 4633 pts in 05-06) Special Citation ribbon, Star Award - par in all categories PAOE red emblem, star award certificate, star award pin.

The first regular meeting was held **September 11, 2007** at the Royal Hamilton Yacht Club on Hamilton Harbour. The Chapter Executive consists of David Hills President in his 2<sup>nd</sup> term, Bill McCartney Treasurer and RP chair, Brian White Secretary, Adam Werthmiller Membership and Student Activities Chair, George Menzies, Historian, David Rasmussen Social Chair, Mike Krewski CTTC Chair, Terry Fowler, Programs, John Loncar Co-Chair Programs, Webmaster and Airways Editor, Allan Antcliffe.

The meeting featured Victoria Serda Deputy Leader of the Green Party of ON and a Councilor in Port Elgin ON. She talked about Al Gore's message about the threat of global warming which was derived from his best selling book and Oscar winning film. Prior to the talk, George Menzies reviewed some of the highlights from the recent Society meeting.

**October 9<sup>th</sup>, 2007** focused on Demand Kitchen Ventilation with speaker George McGrath President of Melink Canada. Melink is the leader in demand ventilation for Intelli-Hood kitchens across Canada. He covered the excess energy used in most kitchens and that the use of variable speed fans and other controls can effectively reduce energy use. Prior to the program, Mike Krewski and John Loncar from Union Gas discussed utility cost saving programs. The attendance was 22.

**November 13<sup>th</sup>, 2007** featured details about the ASHRAE research program with ASHRAE being the only engineering association doing basic research in the world. Dave Rasmussen the Region 2 RVC for research outlined the purpose for doing research and the need for contributions. After dinner, Dr. Didier Thevanard Ph.D of Numerical Logics Inc. updated the chapter on ASHRAE research project 1453 which covers the updating of climatic design conditions for the 2009 ASHRAE Handbook of Fundamentals and Standard 169. His company also conducted prior research for ASHRAE which updated the 2005 Handbook. 20 attendees learned about how mean averages are calculated and what they are based upon.

The annual Christmas event was held this year **December 4<sup>th</sup>, 2007** at the Royal Hamilton Yacht Club with chapter members paying \$40 and guest \$45 - an event not included in the prepaid meal plan. The speaker was George Rotor P.Eng. who talked about the engineers role to end extreme poverty. George and fellow engineer Parker Mitchell co-founded 8 years ago "Engineers Without Borders" to help mobilize engineers to use their unique problem-solving approach as agents for social change. Madok Manufacturing sponsored the speaker. 21 attended including several past chapter presidents.

The January meeting was held Tues **January 15<sup>th</sup>, 2008** at the University of Waterloo Faculty Club with many of the members of the Student Branch from Waterloo in attendance- in fact a full house so attendance was limited! A first for the chapter. Brian Monk an ASHRAE Distinguished Lecturer spoke about Hospital Filtration Systems and Airborne Contaminant Control. An hand was Region 2 RVC for CTTC who presented awards to Enermodal Engineering and the Regional Municipality of Waterloo for Canada's first LEED Gold building at the Emergency Medical services building in Cambridge. Special thanks to our student liaison Dr. Michael Collins who coordinated the event and sponsors Union Gas and Madok Manufacturing. Some 56 attended, a record in recent years. Society returned to New York after an extended absence for the Winter Meeting and Expo January 17 to 23<sup>rd</sup>, 2008. Many chapter members attended. The show had record attendance of over 60,000.

The **February 12<sup>th</sup>, 2008** meeting was back at the Yacht Club for a talk on computer Room Glycol Cooling bt Shehwar Haque P.Eng., Manager of engineering and Applied Sales for Ecosaire Precision A/C Systems form Dectron International. He Haque has been a member of ASHRAE since 1983 and was responsible for setting up a Psychometric, Calorimetric and Acoustical Testing Facility in Courtland NY for the purpose of in-house and 3<sup>rd</sup> party rating of HVAC equipment. Only 9 braved the snow storm to attend.

In March the chapter went on a tour of a new \$10 million grocery store in Oakville **March 11<sup>th</sup>, 2008**. Neelands Refrigeration, a long time contributor to ASHRAE research arranged for the members to get a first hand look at a

fully integrated designed and built food store. Bob Gentile construction Manager and Tom Quaglia Project Manager lead the discussion. Dinner was served in the in-house restaurant. Attendance was less than expected, but those present were impressed with new concepts in today's food operations. 15 were in attendance.

In March many chapter members attended the CMX/CIPHEX show at the Toronto Convention centre March 27-29

The April meeting was concurrent with ASHRAE satellite broadcast **Wednesday April 16<sup>th</sup>, 2008** 1PM to 4 PM. It was again held at the Crossroads Communication Centre in Burlington ON. The broadcast was sponsored by York Johnson Controls. Topic was "Integrated Building Design: Bringing the Pieces Together to Unleash the Power of Teamwork. Kent Peterson Society President opened the session. Only 15 attended, lowest in the three years of the satellite broadcast.

The bio of TMP Consulting Engineers who just celebrated 50 years in business was included in the Newsletter. Many ASHRAE Members and ASHRAE Fellows have been involved in this consulting business.

The final technical meeting was held **Tuesday May 13<sup>th</sup>, 2008** at the Yacht Club. The speaker was Chris Bellshaw of Daikin AC Inc who spoke on Variable Refrigerant Flow in Cooling Systems. The technical session featured Bob Mosley from HTS engineering who discussed equipment that incorporates variable refrigerant control. A historical bio for Philip Doyle Manufacturing was included in Airways. Attendance was 22.

In June the annual chapter Golf tournament took place back at the Legends On-The-Niagara **June 4<sup>th</sup>, 2008** using a scramble format. Cost continues at \$150/ thanks to 13 sponsors. David Rasmussen arranged the event again. He reported that 107 golfers played [we had to pay for 120 to close course]. Some \$570 was raised from the challenges at the "research hole". A new venue is being considered for next year such as Penn Lakes.

The chapter research fund raising totaled \$7,845.00 vs. a goal of \$8,500; for the region, some \$125,899 was collected vs. a goal of \$120,150. As usual, the chapter got the "Gold Circle" award for having the entire executive invest at least \$100 in research. The chapter ended up with \$9698 vs. \$7258 last year, the increase coming mainly from 110 chapter member at \$65/yr chapter dues. Chapter fees for 08-09 will be \$75/yr up \$10. Meal plan stays at \$150. CRC budget is \$5000 for the Aug meeting in Montreal, up significantly due to the downtown Hyatt Regency Hotel location selected by Montreal. Chapter Delegate was Terry Fowler with Mike Krewski Alternate. Sergio Pinto from Applied Energy Systems is the new chapter Secretary.

The 2008 Summer Summit was held at David Hill's cottage at the Resort village near Port Maitland on Lake Erie.

#### REGION II

#### 2007-2008 Presidential Award of Excellence

*\*Minimum and PAR points indicated are for 2009-2010.*

Chapter #	Chapter Name	Chapter Members	Membership Promotion Points *Minimum = 400 PAR = 800	Student Activities Points *Minimum = 300 PAR = 500	Research Promotion Points *Minimum = 800 PAR = 1050	History Points *Minimum = 100 PAR = 200	Chapter Operations Points *Minimum = 300 PAR = 500	Chapter Technology Transfer Points *Minimum = 450 PAR = 850	Chapter PAOE Point Totals
13	Quebec	244	175	709	1660	360	615	925	4444
14	Montreal	428	1970	5135	1300	575	1365	2435	12780
15	Ottawa Valley	294	2270	1234	1190	725	950	1190	7559
16	Toronto	950	1215	4300	1210	450	1125	1235	9535
37	Hamilton	191	925	500	1060	500	675	1050	4710

100	Halifax	131	410	847	1090	325	615	1285	4572
116	London	107	615	1795	1915	250	870	835	6280
117	NB/PEI	106	615	1574	1800	475	1480	2960	8904
141	Windsor	48	135	900	2087	0	40	50	3212

## 2008-2009

At the beginning of 2008 we had 211 assigned Society Members and 32 students up from 191 and 31. [With the 2009-10 year we had 219 assigned Society members and 35 students]. Through the year we had 81 Chapter Members.

The executive consisted of **President** Terry Fowler, P.Eng. [terry.j.fowler@jci.com](mailto:terry.j.fowler@jci.com); **Research Promotion Chair** David Hills, A.Sc.T., [hamilton@engineeredair.com](mailto:hamilton@engineeredair.com); **Treasurer** William McCartney [w.mccartney@isothermengineering.com](mailto:w.mccartney@isothermengineering.com); **Secretary** Sergio Pinto [sergio@applied-energy.ca](mailto:sergio@applied-energy.ca); **Membership Chair** Adam Werthmiller, C.E.T. [awerthmiller@tmpniagara.com](mailto:awerthmiller@tmpniagara.com); **Student Activities Chair** Brian White, B.A.Sc. [hamilton@engineeredair.com](mailto:hamilton@engineeredair.com); **Historian** George Menzies, P.Eng. [gemenzies@bell.net](mailto:gemenzies@bell.net); **Social Chair** David Rasmussen, C.E.T. [drasmussen@delhi-industries.com](mailto:drasmussen@delhi-industries.com) [briefly]; **C.T.T.C. / T.E.G.A. Chair** Mike Krewski [mkrewski@uniongas.com](mailto:mkrewski@uniongas.com); **Programs Chair** Reaz Usmanali, LEED®AP [reaz.usmanali@jci.com](mailto:reaz.usmanali@jci.com); **Homepage & Airways Editor** Allan Antcliffe, P.Eng. [allan@madok.com](mailto:allan@madok.com); Region 2 **DRC** Wilfred Laman, P.Eng. [wflaman@vaxxine.com](mailto:wflaman@vaxxine.com)

In August, a team of Hamilton Chapter members headed to Region 2 CRC held in Montreal, Quebec, at the Hyatt Regency Hotel, 1255 rue Jeanne-Mance, The CRC was from Friday August 22nd, to Sunday August 24th, 2008 and was hosted by the Montreal Chapter. Chapter reps included Wilfred Laman, Director and Regional Chair for Region 2; Gail Menzies, Recording Secretary; Regional Historian George Menzies; Regional V-C of Research Promotion David Rasmussen; Regional Treasurer Bill McCartney; Chapter Delegate Terry Fowler and Chapter Alternate Mike Krewski.

During the business session, Chapter President Terry Fowler reported the following: "Assigned members were 209 up from 199; chapter members 105 down from 110; new members 16 down from 23; students 17 up from 9 with one very active branch. Attendance was 25 down from 27[snow issues]. RP was \$7845 vs. goal of \$8,500, and last year raised \$8460. Challenges are: Maintaining and growing the monthly meeting attendance; serious financial impact to Chapter resulting from the cost of the Satellite Broadcast; missing Research Promotion Goal; increasing Student Membership. Highlights included having Victoria Serda, Deputy Leader of the Green Party of Ontario open season in September 2008; Distinguished Lecturer - Brian Monk speaking at student night at U of Waterloo with a capacity attendance; meeting featuring a speaker from Numerical Logics Inc. who was the principle researcher for ASHRAE Research Project 1453-RP; a special insider refrigeration tour of a new Longos Supermarket which demonstrating integrated design - a Society theme; with another successful and slightly profitable Golf Tournament. Chapter met challenge to reach par in all PAOE categories. Another highlight was chapter gained some new people in Excom allowing other veteran volunteers to be reassigned".

At the Awards banquet, the chapter won the full circle chevron as a result of all the Chapter Executive Officers investing a minimum of \$100 in ASHRAE Research Canada. For the PAOE [Presidential Award of Excellence], the **Hamilton Chapter** with David Hills as a 2<sup>nd</sup> term President won 2 awards: 1. **High Honor Roll** (chapter has achieved the Star award for 5 years having achieved par in at least 5 categories for 5 consecutive years. Award consists of an upgraded Presidential certificate with "High Honor Roll" embossed in upper left corner and a Royal Blue Emblem for the awards banner; and 2. **Star Award** - achieved par in all categories - award has upgraded Presidential certificate with Star Award embossed on certificate in upper left, plus a **gold star pin** for banner. Chapter had a total of 4710 points for 07-08.

**A Chapter Service Award to George B. Robb**, a hard working and well organized past president of the Hamilton Chapter.

In the business session many motions were discussed. One initiated from Hamilton was Motion S-4 "Moved by the Hamilton Chapter, seconded by Toronto that ASHRAE add under Honors and Awards section of the ASHRAE website, details about the chapter PAOE awards and the PAOE history and purpose. Background information: There is little if no detail readily available to chapter members under chapter awards section of the ASHRAE website about the meaning of the different levels of certificates, ribbons, pins, plaques, and chevrons. Fiscal impact: No Cost Vote 9 for; 0;0 Motion passed unanimously

The first meeting of the year was held Tuesday, **September 23, 2008** which not our normal 2nd Tuesday, and was held at the facilities of RWDI in Guelph ON. With over 400 employees, RWDI (Rowan Williams Davies & Irwin Inc.) is a comprehensive, unique blend of senior scientists, engineers, specialists, meteorologists, engineering technologists, modelers, technicians and support staff. The firm's key clients include leading architectural, mechanical, and structural engineering firms plus private and public facility owners. Facilities include four boundary layer wind tunnels, an open channel water flume and advanced computer modeling capabilities including Computational Fluid Dynamics (CFD). RWDI also has an in-house model shop that uses stereolithography technology, integrated data acquisition, storage and processing systems, computer-aided drafting and a broad base of specialized instrumentation. The facility tour included presentations by some of their specialists. These presentations covered topics such as: integrated sustainable design including energy modeling & daylight simulation; high performance ventilation and cooling/heating concepts; building envelope design topics (including load and gain determination); acoustics, noise and vibration; exhaust stack and intake design to minimize re-entrainment of pollutants that cause health and odour concerns. Some 28 members attended the most interesting tour. Dinner was at the **Turtle Jacks Restaurant 515 Woodlawn Road West (across from RWDI)** Mike Krewski at [mkrewski@uniongas.com](mailto:mkrewski@uniongas.com) handled all the arrangements.

On **Tuesday, October 14, 2008** the topic was *Wireless Field Controller Bus Communications*. ASHRAE is adding wireless communications capabilities to the BACnet standards using ZigBee™ technology with BACnet messaging. ZigBee provides inherently reliable, ad hoc forming, self-healing wireless radio communication capabilities. This Meeting explained the concepts, illustrate the perceived and real radio interference issues, and show how it can provide for lower installation and lower life cycle costs for buildings owners. The speaker was **Joseph H. Klotz, CEM** Johnson Controls Product Sales Manager. Joe is responsible for all Johnson Controls product sales in Canada, including all BAS, HVAC and refrigeration controls and control devices, VFD's, fire, security and DVN systems sold through JCI Branches and independent third party channels. Joe has extensive experience in the HVAC / BAS industry since 1981 as a facilities manager, public works director, international business manager, and as CEO of a BAS manufacturer. He is an ASHRAE member, and a member of the Association of Energy Engineers. We also had a Tabletop Demonstration by **Johanna Mitsopoulos** Johnson Controls Regional Product Account Manager who showed a table top display of wireless BACnet products. Some 19 members were present at **Royal Hamilton Yacht Club North End of McNab, On Hamilton Harbour**. The format for the meetings for 08-09 continue with a 5:00 pm Social Hour followed 6:00 pm Dinner and at 7:00 pm the Feature Speaker  
Costs in 08-09 are as follows Chapter Members - \$30.00 • Guests - \$40.00 • Students - \$15.00 • Meal Plan - \$150.00.

The November meeting was held Tuesday, **November 11, 2008** with the topic Hydrolyser™ Hybrid Energy Storage System. The speakers were Jim Fonger, President and CEO of H2Green Energy Corporation and Dr. Jim Cotton, Associate Professor- Department of Mechanical Engineering at McMaster University, will introduce the Hydrolyser™, a Megawatt scale hybrid energy storage system now under development at the University of Toronto and McMaster University. Research is now being conducted at McMaster University to identify and quantify the

opportunities of utilizing Thermal Capture and Storage to increase the overall efficiencies of the system. The implications of integrating the Hydrolyser™ into existing and future ICI HVAC systems will also be reviewed. H2Green and McMaster will be applying for an unsolicited ASHRAE Research grant this Fall to assist in next phase Thermal system R&D. Subsequent to this meeting Dr. Cotton invited the chapter to speak at an undergrad and grad class at McMaster to help jump start a student chapter. Some 21 attended the meeting.

The annual Christmas meeting where past president are encouraged to attend was held **Monday, December 1, 2008** which featured a Food & Wine Pairing at an exclusive Hamilton Restaurant - the Purple Pear. The featured Speaker was Suzy Podrebarac, Multi-Store Manager of the Colio Estate Winery [daughter of George Menzies] The **Purple Pear** is on Barton Street East in Hamilton — a fine dining establishment familiar to many local ASHRAE members, and formerly known as Martin's Steak House, one of Canada's original steak houses. Wines from Colio Estate Winery, Lake Erie North Shore's award winning winery, were free flowing throughout the evening. The Purple Pear's culinary team prepared a special menu to compliment the Colio wines. The cost was \$50.00 per person all inclusive. Some 24 attended. Restaurant opened for only our ASHRAE party.

In supporting meetings away from the immediate Hamilton area, the January meeting was held at the *Grand Valley Golf Club* 1910 Roseville Road, Cambridge, ON N1R 5S3. The meeting was held **Tuesday, January 13, 2009** with 31 in attendance. Topic was *Selling Green 101 The HVAC Engineer as a Salesman*. The Speaker was Joel Primeau, Director of Sustainable Design at Genivar and also an ASHRAE Region 2 Regional Vice-Chair Student Activities. Joel Primeau is Director of Sustainable Design for GENIVAR. Based in Ottawa, he leads the efforts of his firm in the design of high performance, sustainable buildings. He graduated in mechanical engineering from the Royal Military College in Kingston and, after a brief career as an army engineer (in Winnipeg and Quebec City), he has worked for over 15 years in the HVAC industry in consulting, facilities management and technical sales. Joel is a Past-President of the Ottawa Valley ASHRAE Chapter.

Joel's technical expertise has centered on energy efficiency and indoor air quality. Recently, he gravitated to the world of sustainability, LEED and Integrated Building Design. Joel was among the very first engineers to obtain ASHRAE's new High Performance Building Design Professional (HBDP) designation. He's currently working on an ASHRAE short course on Integrated Building Design. Joel key point was that selling green building design is not an easy task. Owners, contractors, architects and engineers can come up with many objections to green designs.

The February meeting was again at the Royal Hamilton Yacht Club, on Hamilton Harbour Starting with a 5:00 pm - Social Hour the dinner meeting fees were: Chapter Members pay \$30.00 • Guests - \$40.00 • Students - \$15.00. Some 17 members attended. The meeting was held **Tuesday, February 10, 2009** with the topic Ontario Power Authority High Performance New Construction Program. Discussed was the Ontario Power Authority new building construction incentive program for builders and their design decision-maker (architect, consulting engineer, etc.). The High Performance New Construction (HPNC) Program provides design assistance and significant financial incentives for new construction or additions, and major renovation projects that exceed Code. The greater the electricity savings, the greater the incentives. The Speaker was Ryan Shaw, BSc., MBA, Account Manager HPNC Energy Advisor (Union Gas). Ryan graduated from St.Clair College in Windsor with a diploma in Mechanical Engineering Technology and also one from Lawrence Technological University in Southfield, MI with a BSc. in Engineering Technology. He followed that up with an MBA from the Ted Rogers School of Management at Ryerson University in Toronto. Ryan's work history includes stints with Westport Innovations (in Vancouver) developing natural gas engines and power generators, Gates (in Windsor) as a process engineer and Chromalox (in Markham) as a Sales Manager for electric heating devices. He currently works for Union Gas delivering financial incentives for energy conservation.

**Monday, March 2, 2009**, a joint meeting was held with the Toronto chapter at the Holiday Inn Oakville Centre 590 Argus Road, Oakville, ON L6J 3J3. Te meeting room was packed with 29 members from the Hamilton Chapter present. **The topic was "Green Buildings, LEED and the ASHRAE Standard 189.1"**

The topic "Green Buildings, LEED and the (Proposed) ASHRAE Standard 189.1" was presented by ASHRAE

Designated Lecturer Thomas M. Lawrence, Ph.D, P.E., LEED-AP, Faculty of Engineering, University of Georgia, an internationally recognized expert in the HVAC&R field. Thomas M. Lawrence is a Public Service Associate with the University of Georgia, and has over 25 years of professional experience in engineering and environmentally related fields. Before going back for his Ph.D. in Mechanical Engineering at Purdue, he spent approximately 20 of those years in progressively more responsible engineering and management positions in industry and consulting. He will take over as Chair of ASHRAE Technical Committee 2.8, "Building Environmental Impact and Sustainability", in July of 2009 and is a member of the Special Project Committee 189 writing an ASHRAE standard on high-performance green buildings. Dr. Lawrence has previously presented papers on building energy usage and indoor air quality at conferences in the U.S. and Europe, and has published papers on sustainable design and energy usage in buildings in journals such as ASHRAE Journal, Solar Today, and Buildings and Environment. At the University of Georgia, Dr. Lawrence teaches or has taught courses in Building Environmental Control, Green Building Design, Industrial Green Building Design, and Industrial Ventilation.

The Chapter continued its policy for selling "Gold Cards" at a cost of \$150.00 for a package of 4 individual dinner meeting for members who plan on bringing guests from time to time.

On March 17<sup>th</sup>, 2009, a series of meetings with undergrads, faculty and grad students was held at McMaster University in order to reestablish the ASHRAE Student Branch. Dr. Jim Cotton P.hD, P.Eng., Associate Professor of Mechanical Engineering and a regular attendee at the chapter meetings has been spearheading the campaign. Also assisting was the Dean of Engineering David S. Wilkinson, Dr Hamed Mechanical Eng. And the chair of Mechanical Eng Saeid Habibi. Terry Fowler, George Menzies and Brian White addressed about 100 undergrads and 120 faculty and grads in two concurrent meetings. Many students and grads asked about job opportunities and scholarships available through ASHRAE. By May, Dr. Cotton advised that September 2009 will be the target to get enough numbers to restart the student branch.

The April meeting consisted of a tour at McMaster University. Prior to the meeting, chapter members met at 5:30 pm - 7:00 pm at Kelsey's Restaurant 875 Main St. W. (at Longwood Rd. S.), Hamilton L8S 4P9 where Everyone paid for their dinner/drinks. At 7 PM, we car pooled to McMaster for a Tour of David Braley Athletics Centre. This is a LEED Building. Tour Organizer / Presenter was Tony Cupido, P. Eng. Assistant Vice-President, Facility Services McMaster University. Tony detailed that McMaster University is committed to energy conservation and responsible environmental management. As evidence of this commitment, the David Braley Athletics Centre achieved LEED certification. The building is a 12,000 m<sup>2</sup> student athletics and recreation centre. Facilities include a rock climbing wall, squash courts, sports hall, fitness centre, an indoor track (the only one in Hamilton) and a sports medicine and rehabilitation area. Because this project is both a recreational and an educational facility, occupant health and comfort were of paramount importance to the design team. As a result, particular care was taken with respect to indoor air quality, material selection and lighting. Tony also enlightened us about the less successful parts of the LEED design and subsequent modifications to some of the services. The event will be a tour followed by a presentation. Tony noted that there was a thoughtful selection of construction and finishing materials to greatly reduce the ecological "footprint" of a building by reducing the resources and energy used to manufacture materials. Almost one-quarter of the materials used to construct the Braley Athletic Centre are from recycled sources. These materials include concrete containing SCMs, rebar, gypsum board, ceiling tiles, steel studs, concrete block, and insulation. Locally sourced and manufactured materials were given preference during building design. The use of these materials benefits the local economy and reduces the transportation impacts of construction. About 32% of the materials used to construct this building are from local sources. Examples include concrete, concrete block, gypsum board, and landscaping materials. In addition, he noted that many efforts were made to implement a "good neighbour" philosophy that minimized the impact of the project on the local community. Because building construction can pollute of lakes and streams far away from the immediate site, extensive measures were taken to reduce soil erosion during construction. In addition, a filtration system greatly reduces the total suspended solids and phosphorous that leaves the site during a rainstorm. He also stated that McMaster University has a comprehensive program to reduce car usage. The campus is a hub for the municipal transit system. Bike storage/racks and shower facilities are provided for

building users and staff, and a campus wide car pool program is in place. To avoid contributing to the "heat island effect," landscaping materials with high reflectivity are used at the Centre. These materials reflect the sun's radiant heat and thus do not warm the urban atmosphere as do dark coloured materials such as asphalt. Light pollution is reduced through the use of full cut-off or shielded exterior light fixtures. Interior light fixtures are oriented to ensure that almost all the light falls within the Centre. For more information, contact Enermodal Engineering Limited LEED Consultant

In the April 2009 issue of ASHRAE Insights two ASHRAE Hamilton Chapter members - **Audie Ditschun** and **Chris McClelland** were listed as approved for advancement to full Member grade from Associate grade. This promotes them to full voting members on Society issues, standards and research projects plus allows them to be voting members on a number of Society and Regional Committees.

The May 12<sup>th</sup> 2009 meeting was a tour of Sleeman Breweries tour 551 Clair Road W., Guelph, ON one of the oldest craft breweries in Canada. The tour included an introduction to the facility, an overview of the brewing process, a review of the refrigeration system and the opportunity to sample Sleeman's fine products and ask questions. Tour was led by Jamie Hickey, a refrigeration technician, who will explain Sleeman's refrigeration and chiller systems as part of the tour. There was a \$4.00 charge for the tour. Only 28 people were allowed on the tour. Reaz Usmanali made the arrangements for this special event. Prior to tour, the chapter met and had Dinner at Shoeless Joe's Restaurant 5 Clair Road W., Guelph, ON N1L 0A6 Everyone paid for their own dinner/drinks

In May, a historical bio was done for Madok Manufacturing Limited, a long term supporter of the Hamilton Chapter. Bio stated the following: Irvin M. Bodine, P.Eng. joined ASRE [American Society of Refrigerating Engineers - the predecessor to ASHRAE] in 1948 and became the ninth president of the Ontario Chapter in 1956/57. ASHRAE was formed in 1959. In 1974, as a Vice-President of KeepRite Incorporated, Irvin arranged for his daughter-in-law to fabricate copper sub-assemblies for KeepRite. So, with one person working out of a garage, the enterprise which would become Madok had a very modest beginning. HVAC Business was "booming" in the mid 1970's and, when a heating or cooling coil failed, delivery of a replacement from a major manufacturer could take several weeks. Irv. recognized that there was a market for "one-off" replacement coils with fast delivery. Madok Manufacturing Limited was incorporated, in April of 1975, to fill this "niche". Why "Madok"? Irvine formed the name using the first letters of the first names of family members Mary, Donna and Ken. Madok's first manufacturing facility was a small leased building on Spalding Drive in Brantford. In 1986, Irv. resigned as President of Madok and his son, Ken Bodine, assumed this position. Irvine had started negotiations with Heresite Protective Coatings, Inc. to become the Heresite licensee for Eastern Canada. The agreement was completed and Madok purchased its present manufacturing facility at 50 Morrell Street in Brantford. Irv's passing, later that same year, was a great loss. Extensive building renovations were necessary to accommodate the Heresite coating operation. Irv., as an engineer, had intended to do the design work himself. With his passing, Bob Morris, P.Eng. was hired, out of retirement, to design the necessary facilities. In October 1987, Madok held an "open house" to introduce the new Heresite coating area. At the same time, the Mayor of Brantford presented a street sign for a new street to be named "Bodine Drive". Katy, Irv.'s widow, attended the ceremonies and proudly patted her large purse proclaiming that Irv. (she had nicknamed him "Herbie") would be very pleased and proud. Irv.'s ashes were in her purse for the occasion. In early 1988, Ken Bodine, due to medical problems, hired Bob Morris as General Manager. In 1989 Ken and his wife, Donna, resigned and Bob was appointed President. During the next few years, Bob and his wife, Laura, purchased the majority of the outstanding Madok shares from various members of the Bodine family. In 1993, Irv.'s widow, Katy, passed away and the company redeemed the shares from her estate. In 1994, Allan Antcliffe, P.Eng. was hired as General Manager. The following year, Allan purchased the remaining Bodine family shares from Mary Clarke (nee Bodine) and, one year later, Allan and his wife, Margot McCurry, purchased the company from Bob and Laura Morris. Allan retained Bob to assist in running the business and Bob is still assisting today, though he claims to be "part-time retired". Incidentally, four Bodine family members remain employed by the company today. Bob Morris and Allan Antcliffe are long time ASHRAE members and both have been actively involved in Hamilton Chapter activities. Madok regularly "invests" in ASHRAE Research and, through

Heresite Protective Coatings, has participated in numerous AHR Expo events. Since 1994, the company has expanded its product offering to include 5/8" tube coils and the purchase of various pieces of production equipment has significantly improved operating efficiencies. Madok just recently obtained certification (a Canadian Registration Number or CRN) for its coil products in accordance with the Boilers and Pressure Vessels Regulation. And, with the January 2010 elimination of HCFC refrigerants (in new equipment), the introduction of 3/8" tube coil products is being planned to handle the higher operating pressures of condenser coils using refrigerant R-410a. To accommodate future growth, Allan is also planning for an expansion of Madok's manufacturing facility. So, from a modest beginning, Madok Manufacturing Limited has thrived and grown into a very successful business and a significant part of the Hamilton Chapter.

In Airways, an early announcement of our 50<sup>th</sup> Anniversary Meeting was included - Don't forget that October 22nd, 2009 marks the 50th Anniversary of our ASHRAE Hamilton Chapter. Incoming Society President Gordon Holness, P.E. will join us for our celebration at a special event. Gordon will be presenting the presidential theme "Energy Efficiency in Existing Buildings - Our Greatest Opportunity for a Sustainable Future."

As has been the pattern for the past 50 years, the June meeting is a golf outing. This year's event was a scramble golf tournament held Wed, June 10, 2009 with a shotgun start at 1:00 p.m. sharp. The location was the Peninsula Lakes Golf Club, Fenwick, ON with a cost of \$150.00 per person. Fee included: 9 holes on "quarry" course / 9 holes on "Hillside" course; one power cart per two golfers supper free access to driving range.

Again David Rasmussen (Social Chairman and Region 2 RVC Research Promotion) ran the Annual Golf Tournament held for the first time at Peninsula Lakes located in Fenwick, Ontario. 94 golfers played the course. The weather again co-operated with sunny skies and 23 deg C. For the first time ever, 3 ladies participated, leading to the first ever Longest Drive for Ladies, this year won by Sarah Van Der Paelt from Union Gas. Jim Hickey won the Men's Longest Drive. It was a scramble format, however 4 Drives from each player made it trickier. The Group Consisting of Allan Antcliffe, Terry Murison, Len Patterson, Allan Dunford won with a score of 5 under par. Phil Mahannah drove in from Quebec for the 16<sup>th</sup> straight year! Christine Kemp (Ottawa Valley Chapter President-Elect) and Chris Healey (Ottawa Valley Social Chairman) also drove in and played in the Tournament. George Menzies, chapter historian again headed up action at the "research promotion hole". Some \$425.00 was contributed by the golfers who failed to land on the par 3 green which was 194 yards from the tee. Seven golfers did make it on the first ball. The ribs at dinner were a genuine treat.

At the end of year- June 2009, the PAOE results were

REGION II 2008-2009 Presidential Award of Excellence <i>*Minimum and PAR points indicated are for 2009-2010.</i>									
Chapter #	Chapter Name	Society Assigned Members	Membership Promotion Points *Minimum = 400 PAR = 800	Student Activities Points *Minimum = 300 PAR = 500	Research Promotion Points *Minimum = 800 PAR = 1050	History Points *Minimum = 100 PAR = 200	Chapter Operations Points *Minimum = 300 PAR = 500	Chapter Technology Transfer Points *Minimum = 450 PAR = 850	Chapter PAOE Point Totals
13	Quebec	217	445	500	2140	335	520	1110	5050
14	Montreal	458	2700	4930	2270	250	820	1680	12650
15	Ottawa Valley	343	603	820	1850	610	780	940	5603
16	Toronto	958	890	3565	1650	460	730	2280	9575

<b>37</b>	<b>Hamilton</b>	<b>211</b>	<b>730</b>	<b>610</b>	<b>945</b>	<b>335</b>	<b>600</b>	<b>1230</b>	<b>4450</b>
100	Halifax	134	580	640	1275	235	360	455	3545
116	London	110	600	2844	1848	235	950	655	7132
117	NB/PEI	115	800	3393	2155	430	1105	2845	10728
141	Windsor	53	235	585	2000	0	0	0	2820

Our funding raising for research promotion in our region lead by our own David Rasmussen was \$142,626, some 116% above goal. The chapter did not meet their goal.

The summer summit this year will be at the home of Terry Fowler. It was held Wednesday July 22<sup>nd</sup> from 2:00pm to 5:00pm followed by Dinner/Social 5:00pm to 6:30pm [salads, Wing-It, , BBQ, Tums, etc.] the location was: Fowler residence, 195 Stagecoach Drive, Mount Hope, ON LOR 1W0. Those in attendance were host Terry Fowler, Mike Krewski, Bill McCartney; David Rasmussen with a new email dave@ventexinc.com; Brian White, and George Menzies. The program for 09-10 was set with various members "championing" a meeting.

The CRC is set for Windsor August 2009 with Gail Menzies coming out of retirement to do the CRC Minutes.

August 10<sup>th</sup>, 2009