

ASHRAE

2006 REGION 2 CRC – NIAGARA FALLS, ONTARIO, CANADA

AUGUST 25TH, TO 27TH, 2006

HOST: ASHRAE HAMILTON CANADA CHAPTER

ORIENTATION SESSION

At 1:03 PM Friday, August 25th, 2006, Director and Regional Chair (DRC) Wilfred Laman welcomed all the Chapter Delegates and Alternates, Regional Representatives and the visiting dignitaries and guests to the Region 2 CRC at the Doubletree Lodge, Fallsview, 6039 Fallsview Boulevard, Niagara Falls, Ontario, Canada. L2G 3V6, Great Room B.. Chairman Laman noted that this is Region 2's first paperless meeting plus a shift of one day later. This conference was held from Friday at 1 PM to Sunday adjournment at 11AM. Chair Laman also announced that ASHRAE Research Canada Special Meeting would be held a 7:00 a.m. on Saturday and that Darryl Boyce ARC President would chair the meeting.

Chair Laman introduced Kent Peterson, Society President-Elect, Bill Harrison, Society Treasurer, Liz Baker, Manager of Membership Development, Jeff Dimond, Manager of Marketing and David Underwood, DAL from the Toronto Chapter.

Chairman Laman reviewed the protocol for the Caucus which immediately followed the Orientation Session. The Delegates and Alternates relocated to the Hotel "Library" room for deliberations. Daryl Somers, Nominating Committee chaired this meeting. George Menzies as Regional Mentor was invited to the caucus to explain the Awards process.

Chairman Laman called for a motion to elect the Recording Secretary for this meeting. It was moved by David Hills of the Hamilton Chapter and seconded by Frederic Desjardins of the NB/PEI Chapter that Gail Menzies be appointed for this position.

Chairman Laman reviewed the proposed agenda for the next 2 days and asked for a motion to accept the agenda as detailed on the screen. Motion by David Hills of Hamilton Chapter, "to adopt the agenda as shown on the screen" was seconded by Robin Labbe of La Ville de Quebec Chapter. There was no discussion and this Agenda was approved unanimously.

Chairman Laman asked for a motion to approve the CRC 2005 Minutes. On motion by Rejean Blais, Montreal Chapter, seconded by David Hills of Hamilton, it was moved to accept the 2005 Minutes as issued and posted on the Regional Website in September, 2005. No errors or omissions were brought forward and motion was approved unanimously.

Chairman Laman then introduced David Rasmussen CRC 2006 General Chairman who outlined the activities planned for that evening and the following day. David indicated that the registration showed this CRC had a record attendance.

It was advised by the official Region 2 photographer that the Delegate/Alternate picture would be taken during the Caucus coffee break.

The Caucus then followed.

All nine chapters had their Members and Alternates present during the deliberations. G.Menzies Society Honours and Awards past member reviewed the criteria for several awards and answered questions. Daryl Somers Region 2 Nominating Committee Member then requested names for all the categories listed on the worksheet supplied to the Delegates electronically transmitted from Headquarters. At the conclusion of the meeting Daryl acknowledged that names were brought forth for all positions.

CHAPTER REPORTS:

Chair Laman asked that each Delegate report on their chapter's operation for the past year. (Note - detailed Chapter Reports, Information Questionnaires and each Chapters' Summary Reports are available in power point form from the DRC. The following is a brief summary from those reports.

HALIFAX

Steven Ramsay, President of the Halifax Chapter and Delegate reported that their year started off very well. They had ASHRAE recognized on a monthly radio station CBC on a noon time program. HVAC questions from the public were called in and answered. The financial situation in the Chapter is better which allowed the Chapter to send more people to the CRC. Their golf tournament is run as a fund raiser. Research took a hit as 2 major donors had advertised in the monthly newsletter and informed the fundraiser that this was their contribution this year to the Chapter. Funds raised were \$1575 vs. \$6750 last year. The Student Activities has just become viable in the last three years and the Chapter will work on this in the coming year. Attendance at meetings was 21 up from 17. Assigned members were 130+ 9 students up from 123 and 36 students. Chapter had 13 delinquents.

NEW BRUNSWICK/PRINCE EDWARD ISLAND

Frederic Desjardins, President of the NB/PEI Chapter and Delegate reported that their chapter meeting attendance was up to 33 members from 27. They have a new person handling the Historical program and it is doing well. Their meals are sometimes sponsored. The Chapter is trying to get young blood on the executive and obtain quality speakers in order to attract more members. Bill Harrison asked how many assigned member they had and it was reported to be 105 with 42 students. Previous year was 104 + 37 students. The New Brunswick/PEI chapter will host next year's CRC.

MONTREAL

Rejean Blais, Delegate, President of the Montreal Chapter and Delegate reported that his Chapter had a successful year. The Chapter Dues had \$5.00 added and this had not had an effect on meeting attendance-averaged 123 vs. 106 in prior year. Their golf tournament was well attended and they used 2 golf courses for the Tournament. Five Chapter Tech. awards will be presented. Research goal surpassed for a total of \$39,650 up from 30,012. Bill Harrison commended the delegate for the number of members who attend their meetings. Assigned members was 419 + 214 students, up from 402 and 212 students

La VILLE de QUEBEC

Robin Labbe, President of the La Ville de Quebec Chapter and Delegate reported a drop in average attendance to 43 from 62. RP investments were down to \$10,975 from 11,800. Major drop in students to 76 from 93. Assigned members were up 24% to 233 from 195, largest net increase in Region 2. Bill Harrison issued congratulations to Quebec Chapter for hosting a wonderful Summer Society Meeting this past June.

OTTAWA VALLEY

Glenn MacLean, Ottawa Valley President and Delegate advised that the area assigned members are 330 up from 328. Chapter paying members had dropped significantly and they had just realized this situation. Frank Bann has been appointed to investigate this problem. They had a rookie membership chair this past year and he was not given much guidance. Attendance at chapter meetings was 70 down from 72. There were 2 social events this past year. Our research goal was \$16,000 and we achieved \$15,460.00 up from \$11,500. They have two student chapters, one at Algonquin College and the other Carleton University. Student members are 27 down a bit from 29 in prior year.

TORONTO

Michael Rosenblitt, President of the Toronto Chapter and Delegate reported that they have a computer sign-in at their monthly meetings and this works very well. Their monthly meetings move around the town and attract different members as Toronto Chapter covers a large area. Two student scholarships are awarded. RP was \$34,072 up from \$33,506. Assigned members were 876 up from 866 with students 74 up from 70. Monthly attendance was 71 up from 66. Chapter dues are \$170 up from 165 and includes meals.

HAMILTON

David Hills, President of the Hamilton Chapter and Delegate reported that delinquents are up at 19, the highest in years and does not know why. Follow-up letters and more phone calls are planned. The Chapter has 31 student members up from 22 and this is attributed to a young person working on this. They will try to reactivate the Student Activities program. The Chapter meets the 1st Tuesday of each month to be one day later than TO. This has changed from the second Tuesday. The Research program is back on track with \$8740 vs. 4386 last year. They will try to use the Chapter Website to more advantage. Dues and meal plan cost is \$135.00 and is collected by Society. Average

attendance was 25 vs. 29 last year. The past 5 years attendance has been 27 on average. Hamilton Chapter took part in the Society web cast. Society assigned members were 187 up from 176, students 31 up from 22.

LONDON

Scott Turner, President of the London Chapter and Delegate advised that London had a successful year. London City economics are good and they were able to reduce the meal costs. The increase in the bank balance was due to the successful golf tournament. They held a refrigeration night and part of tour was refrigeration based. Attendance was good with 44% assigned members showing up average is 46, same as prior year. The University has an HVAC program and some ASHRAE members teach a regular program. This is good education for people to eventually come into our industry. RP was \$11,900 vs. \$8989. Net membership was up 6 but 10 delinquents. Assigned members were 106 vs. 96; students were 32 vs.31.

WINDSOR

Bill Davies, President of Windsor Chapter and Delegate reported they have 56 area assigned members up from 55. The student branch has 35 members with 1 advisor. They had two social events, the golf tournament and a Christmas party which were very successful. One of the highlights of the year was the presentation by Bill Coad, DL. The Board of Governors attended a meeting in Detroit. They are not on the Web at present. Their challenges for the year are to try to increase membership, staffing of committees and obtain high quality speakers. Their call list needs work.

Chairman Laman thanked the Delegates for their Chapter Reports.

STATUS OF THE SOCIETY MOTIONS FROM PRIOR CRCs

Chair Laman displayed a listing taken from the ASHRAE Website under CRC –Status of Regional Motions. He noted that each Society Motion was presented at Member Council. Some were withdrawn by the DRC based on the information provided. Others were assigned to other Councils or Committees for action or were referred to staff for action. Chair Laman read much of the following:

REGION 2 FALL CRC MOTIONS (from 2005 and prior years if they were since were being answered).

London Chapter – Motion 3 (10/30/05):

That Society allow Research Contributions that are post marked by June 30th to be included in the chapter's totals effective this fiscal year, 2005-2006.

Motion 3 was defeated because of the IRS requirements, guidelines and the ethical choice made by Society.

London Chapter – Motion 4 (10/30/05):

That Society allow regional websites within ashraechapters.org web area.

Motion 4 was withdrawn because this is already in place.

Hamilton Chapter – Motion 5 (10/30/05):

That all Society members including Life members assigned to a chapter be invoiced for chapter dues by ASHRAE Headquarters when annual dues notice is sent out.

Status (10/30/05): Motion 5 was postponed until the 2006 Winter Meeting in Chicago.

Motion 5 was defeated because Life members are exempt from Society dues and only a handful of chapters charge them chapter dues. This would not be an effective use of resources to change the dues billing process based on previous results. (01/23/06 – 2006 Winter Meeting)

Toronto Chapter – Motion 6 (10/30/05):

That Society shall improve procedures when assigning new members to chapters. Chapter boundaries in Region II are not being assigned properly.

Motion 6 was withdrawn because the procedures have already been improved. The current problem indicates there is no way to determine which chapter is the correct one and the chapters involved have been non-responsive to requests from headquarters for information.

Toronto Chapter – Motion 7 (10/30/05):

That Society shall forward the names of ASHRAE members attending Society Annual and/or Semi-Annual Meetings to the chapter presidents of the chapters that these members have been assigned to, effective January 2006.

Motion 7 was withdrawn because this is already available upon request.

Hamilton Chapter – Motion 23 (10/30/05):

That ASHRAE should make permanent the first time registrant annual/semi annual incentive that has been offered for the Chicago 2006 and/or Quebec City meetings.

Motion 23 was defeated because of the following reasons: the procedure is already in place and has been for three or more years; this is offered at both Society meetings; chapter presidents are notified before each meeting.

Toronto Chapter – Motion 24 (10/30/05):

That Society shall improve its logging of dues payments made by indicating receipt of payment from members.

Approved by Members Council.

Answer (10/30/05): With the new computer system, the chapters will be able to print a Chapter Dues Paid Report using a date range they specify. Presently, we have the capability to send a Chapter Dues Paid Report monthly to the Treasurer with the check which includes the date the payment was received by Headquarters and we will begin this process immediately.

Quebec Chapter – Motion 25 (10/30/05) – Referred to Technology Council

That ASHRAE develop an effective strategy for clothes dryers exhaust under Standard 62.2 “Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings.”

Status (01/09/06): Technology Council refers this motion to SSPC 62.2 and TC 5.12 for action at their meetings in Chicago with emphasis to consider Members Council’s recommendation to evaluate thoroughly the way in which ventilation in hot humid areas are addressed in Standard 62.2.

Status (03/27/06): There seem to be two issues in the Motion – 1) the Dryer Booster Fan, and 2) the use of ventilation in hot, humid areas.

Don Stevens, who is chair of the systems subcommittee of SSPC 62.2, has prepared the note below concerning dryer booster fans. It appears that this issue will be handled by UL and CSA.

[As it happens, I am the Chair of the Dryer Booster Fan Task Group of the Home Ventilating Institute (HVI) and am also working with UL and CSA on a test standard for these fans. The booster fan is intended to be used when the location of the dryer precludes the limited amount of duct (25 feet of smooth duct) allowed by the IRC and IBC. The booster fan is in fact used to overcome the added pressure drop for these applications and can often add 100 feet to the allowable length. So this is a valid question for ASHRAE to discuss, but it falls under UL 705 and CSA C22.1. Don Stevens]

The issue of ventilation requirements in 62.2 for hot, humid regions of the country continues to be difficult. The minimum ventilation requirements that are contained in 62.2 to provide acceptable indoor air quality in low-rise residential buildings exist regardless of the humidity in the outdoor air. Admittedly, the problem is more difficult in hot humid climates where care must be taken to assure that humidity is controlled in the indoor air. Our committee adopted the following resolution.

SSPC 62.2 prepared the following statement to respond to Motion 17C from the 2003 Regions Council Annual Meeting:

[Standard 62.2 requires what we consider to be minimal levels of continuous ventilation (for example 60 CFM in a 2000 square foot, 3-bedroom home). Occupants in hot-humid climates need this ventilation as much as occupants in other climates. If minimal ventilation in humid climates creates a concern with high humidity, the systems need to be designed to control that humidity.]

The envelope subcommittee of the SSPC approved this statement 26 Jun04 by a vote of 4/0/0 CNV.

The committee approved the statement 26 Jun04 with a vote of 12/0/0 CNV.

2004 MOTIONS**Toronto Chapter – Motion 7 (10/09/04) – Has been postponed until the 2005 Annual Meeting in Denver:**

That Society offer monthly electronic direct bank deposits for chapter dues.

Answer (06/27/05): The cost per transaction for Canadian bank in Canadian funds: ASHRAE fee 40CD – chapter fee 10-30CD; Canadian bank in US funds ASHRAE fee \$31 – chapter \$8-23.

US bank US funds ASHRAE fee \$25-30 – chapter fee \$10-25; other international countries: ASHRAE \$28-50 - Other countries would be charged depending on the amount of the EFT (\$30-50). **Fees could vary slightly depending on size of the banking institution- smaller banks would have larger banking fees.

There are several issues regarding the EFT option. Once the transfer leaves our bank we have no way to track the funds at the other banking institution. It will then be the chapter treasurer’s responsibility to check with their bank if the funds are not credited to their account. The other issue is documentation-the information we give to the bank regarding the reason for the transfer usually is not passed on to the account that receives the transfer. In other words you will not have any information except that you received a transfer from SunTrust or CIBC (Canadian account)

and the \$ amount. You probably will not receive the information that ASHRAE sent the transfer. There are additional charges to receive a confirmation from your banking institution.

Motion 7 was defeated because the fiscal impact outweighs the benefit.

Toronto Chapter – Motion 8 (10/09/04):

That the Northern Section of the Toronto Chapter be dissolved.

Approved by Members Council.

Toronto Chapter – Motion 9 (10/09/04):

That the honors and awards listing for members denote the year that the award was received (currently it does not).

Approved by Members Council.

Montreal Chapter – Motion 10 (10/09/04):

That the Society give each chapter participating in the chapter website hosting program its own URL. (Example: <http://www.ashrae-MTL.org>)

Motion 10 was defeated because ASHRAE has purchased one domain name for the hosting of chapters' program. This provides consistency, but also means that the Society does not have to select, register and maintain each individual domain name for chapters (and TCs). In the case of the Montreal Chapter, the domain name would be: <http://montreal.ashraechapters.org>. The chapter can designate itself anyway it wants before the first dot. If the web site is designed properly how the site is named should not make a difference to a search engine. Through the chapter hosting service, ASHRAE is not trying to be a commercial service provider. It is simply purchasing space from a service provider and offering that space in subdivided fashion at no cost to chapters and TCs.

Action: An action item was assigned to staff to communicate what needs to be included on the website to be found by search engines. It would be useful to communicate this to all of the chapters via an FAQ page in addition to notifying the Montreal Chapter.

Montreal Chapter – Motion 11 (10/09/04):

That the required template background listed in the dictated guideline requirements for web pages be eliminated.

Motion 11 was defeated because this is a template only for use when ASHRAE hosts the sites. The template is invisible except for a banner ad at the bottom. ASHRAE hopes to sell these spaces as run of site banner ads to pay for the hosting service. Chapters are not charged for their sites being hosted. The template does not require FrameMaker. It is a simple HTML file. Chapters can do what they want in that space.

Action: An action item was assigned to staff to create (or expand) an FAQ section on website development.

Montreal Chapter – Motion 12 (10/09/04):

That Society investigate increasing the limit on the size of the website from 15MB to 100MB.

Motion 12 was defeated because the current limitation is 30MB not 15. The limitation is flexible. Any chapter that needs more should tell us what they need. The 30MB size seems to have worked well for chapters using the hosting service so far. We will put a statement in the chapter hosting information indicating that space can be expanded if needed.

Action: This information will be included when implementing the FAQ section on website development. Staff was also assigned an action item to include a statement in the chapter hosting information that indicates space can be expanded if needed.

Hamilton Chapter – Motion 18 (10/09/04) Referred to Technology Council:

That ASHRAE develop a set of standards for testing the performance of industrial air filtration systems used to recirculate air back in occupied space.

Answer (10/06/05): This motion was originally referred to TCs 2.3, 2.4, and 5.4 and SSPC 52.2 in January 2005. In June 2005 TCs 2.3 and 2.4 responded that ASHRAE Standards 145.1, 145.2, and 145.3 address gaseous air filtration for such industrial applications. However, TC 5.4 noted that these standards do not address particulate air filtration and recommended that a new standard for the performance of pulse-cleaned dust collectors be developed. At the Technology Council meeting on October 3, 2005, it was reported that TC 5.4 will prepare a proposal for such a standard. Thus while the need cited in Motion 18 above is already partially met by existing ASHRAE standards, TC 5.4 will develop an additional standard to address the remainder of the need. While Tech Council will continue to follow this item we consider our response complete and that this item is closed. **(Complete)**

2003 MOTIONS

Halifax Chapter – Motion 6 (10/18/03) Referred to Technology Council:

That ASHRAE discontinue the practice of continuous maintenance of standards and institute the practice of issuing new editions of standards at discrete intervals such as five years and errata correcting only mistakes once each year.

Answer (10/22/04): This motion has been considered by both the Standards Committee and the Board Policy Committee

for Standards (BPCS). The Standards Committee has been addressing this issue for quite some time in the context of its charge from the Board to streamline the ASHRAE standards development process and has communicated closely with the BPCS, which discussed the issue of continuous maintenance standards at the Anaheim Winter Meeting in January 2004. Both of these committees agree that the frequent issuing of addenda for these standards presents problems to designers and code officials.

In May of 2004 the BPCS approved a position on this issue by letter ballot. Their position was that "the fundamental issue is not that of the Continuous Maintenance procedure itself but rather the excessive number and frequency of issuance of addenda." Thus they recommend that "the number of addenda authorized for publication per standard, in any given Society year, be limited to three, and that publication itself only occur once per year."

At the June 2004 Annual Meeting in Nashville the Standards Committee directed the liaisons to the Standing Project Standard Committees (SSPCs) to discuss with the SSPC chairs regarding options for limiting the number of addenda and the implications thereof. The results of these discussions were incorporated into procedural changes approved at Tech Weekend in October 2004 that **limit publication of addenda for all standards to once every 18 months.**

Furthermore, code intended standards will be republished on a three-year cycle that is coordinated with the ICC code change cycle.

As for the number of addenda to be published, no limits have been placed on them. This matter was discussed thoroughly and it was agreed that while SSPCs are strongly encouraged to bundle addenda so as to limit their number, no firm limitations are advisable.

In summary the Standards Committee and BPCS have concluded that the practice of continuous maintenance of standards should be continued to facilitate keeping standards up to date with rapidly changing technology and practice.

However, they have limited the frequency of addenda, if not the number of addenda. Thus we consider this item to be closed. **(Complete)**

Quebec Chapter – Motion 7 (10/18/03) Referred to Technology Council:

That Society must test to define the effectiveness of UV Lamps in HVAC systems. Results of testing will have to establish standards on performance and recommendations how to design and give installation information to maximize results for a better indoor air quality.

Answer (05/18/05): This motion was originally referred to TC 2.3 (Gaseous Air Contaminants and Gaseous Air Contaminant Removal Equipment) and then to TC 2.4 (Particulate Air Contaminants and Particulate Contaminant Removal Equipment). At the Orlando meeting in January 2005, TC 2.4 recommended to the Standards Committee that a Title, Purpose, and Scope (TPS) of a new ASHRAE standard on this topic be approved. At the Orlando meeting, formation of a Standard Project Committee on "Method of Testing UVC Lights for Use in Air Handling Units or Air Ducts to Inactivate Airborne Microorganisms" was approved by the Board. This standard will establish a test method for evaluating the efficacy of UVC lights for their ability to inactivate airborne microorganisms. In addition, TAC believed that this was such an important topic that it approved establishment of a Task Group TG2.UVAS (Ultraviolet [UV] Air Surface Treatment) to continue to address issues related to the efficacy this technology.

Seldom does a chapter motion get such direct and complete action as was done in this case. It took a while for the TC to develop its course of action but it has acted strongly and positively. **(Complete)**

London Chapter – Motion 8 (10/18/03):

That Society revise the handbook CD-ROM plastic case insert cover so that the handbook name be included on the small edge of the CD plastic cover (i.e., 2003 ASHRAE Handbook CD-HVAC Applications).

Approved by Regions Council.

London Chapter – Motion 9 (10/18/03):

That Society add to the website an input page for Chapter Information Questionnaire that only requires registration number for each chapter chair position.

Motion 9 was defeated because this is part of the proposed CIQ revision for 2004-05 and would not be a good idea, if the membership number is off by one digit then we would not know who the individual is in the position. However, with the current CIQ form if the individual is serving in more than one position, then the chapter could complete all the information in one position and give the individual's name in the next position and indicate on the form "same as (enter position name)."

London Chapter – Motion 10 (10/18/03):

That Society adds to the CD that is distributed to Delegates and Alternates for the CRC blank Microsoft Word files for Motions and Chapter Summary Reports.

Approved by Regions Council.

Windsor Chapter – Motion 11 (10/18/03):

That we give local chapter officers the ability to “view only” the biographical information of the local chapter members that impacts consideration for awards, honors and upgrades through the secure chapter activities area.

Motion 11 was defeated because this is available now. Upon request, the Regional Nominating Member (RNM) is given an ID number and password to access the bios over a set date of time (usually until the beginning of the CRC) so that the RNM can view the bios. The RNM is allowed to give this information (ID, password, etc.,) to members in the region that need this information.

Quebec Chapter – Motion 35 (10/18/03):

That the deadline for PAOE be moved to June 15th instead of June 30th.

Motion 35 was defeated because PAOE is a management tool and the RVCs can control when they get the information from their chapters.

Toronto Chapter – Motion 36 (10/18/03) Referred to Technology Council/ASHRAE Program Committee:

That the Program Committee of Society consider advising the Technical Committees of possible inclusion of local host chapter members participating in programs being delivered at the Annual or Winter meeting of the Society.

Answer (06/08/04): The ASHRAE Program Committee reports that the Society Program Chair will contact the chapter president to solicit participation in the program by local members. Also Technical Committee chairs have been advised through the Society Program Committee Notes and at the Technical Committee Chair Breakfast to solicit chapter members for their proposed sessions. **(Complete)**

Toronto Chapter – Motion 37 (10/18/03):

That TEGA and Chapter Programs remain as two distinct committees across all levels of the organization.

Motion 37 was defeated because chapters and regions have the option of keeping these as separate positions and can be funded by the region and chapter.

Ottawa Valley Chapter – Motion 38 (10/18/03):

That we revise the travel reimbursement policy to allow alternate in place of chairpersons attending a CRC to be reimbursed as per Society's policy for chairs.

Motion 38 was defeated because this is not in the best interest of the chapters and may weaken the workshops at the CRCs. This will not solve the problem of Chairs not attending the CRCs.

Ottawa Valley Chapter – Motion 39 (10/18/03) Referred to the Student Activities Committee:

That Society assist post secondary institutions in the development of HVAC&R related curriculum.

Status: Regions Council referred this motion to the Student Activities Committee with the directive that they include this in their action plan for Strategic Goal 3. Region s Council is very passionate about this and would like to see programs created to implement this motion.

Answer (01/26/04): In general the Student Activities Committee already has several programs in place that support post-secondary HVAC&R curricula, such as the Undergraduate Senior Project Grant Program and the Student Design Project Competition, in addition to the many strong alliances that exist between Student Branch Advisors and Society. ASHRAE also makes selected course manuals and Self-Directed Learning Programs available to colleges for use in undergraduate and continuing education programs. This effort is further supported at the chapter level, albeit with limited success. One chapter worked diligently with a local community college to develop a 2-year program for HVAC design, but encountered resistance from other faculty members that ultimately prevented the program from being implemented. **(Complete)**

2002 MOTIONS**Hamilton Chapter – Motion 12B (10/19/02) Referred to the Honors and Awards Committee:**

That the Distinguished Service Point criteria for the Distinguished Service Award (DSA) and the Exceptional Service Award (ESA), Regional Award of Merit and Chapter Service Award be updated and under the point tally to include ½ point per year for a Chapter Webmaster and ½ point per year for a Regional Webmaster.

Action: This was added to the DSA/ESA point tally form. **(Complete)**

Halifax Chapter – Motion 15 (10/19/02) Referred to Technology Council:

That ASHRAE undertake a research project to investigate snow penetration of louvers with a goal of developing guidelines of how snow penetration can be reduced or eliminated. The conclusion would be included in a future edition of the handbook.

Answer (10/20/04): – The Research Administration Committee (RAC) first referred this motion to TC 5.4, which in turn referred it to TC 5.2 (Duct Design). TC 5.2 agreed that the topic of snow penetration of louvers is worthy of ASHRAE research and added it to its research agenda. The TC then prepared a Research Topic Acceptance Report (RTAR) (a pre-Work Statement) which was reviewed by RAC at the June 2004 Annual Meeting in Nashville. This RTAR needed further work so was returned to the TC. It is expected that a revised RTAR will come forward at the Winter Meeting in Orlando and will soon result in a successful Work Statement for an ASHRAE research project. Thus we consider the Halifax Chapter's request to be fulfilled and that this item is closed. **(Complete)**

REPORT ON ASHRAE

Chair Laman asked Society Treasurer Harrison to speak. Bill Harrison spoke about the history of CRCs – chapters regional conferences and they are 50 years old this year. Canada had their first chapters meeting in 1956 in Toronto. We are now 54,000 members strong in 135 countries, 168 chapters, have 99 TCs –technical committees, we look after 117 standards, have 45 standing committees, and with 5000 members actively involved in chapters and committees. Region 2 participates with two Board Members and 89 on other committees. Our expanded mission statement is now to advance the arts and sciences of HVAC and R and to serve humanity and to promote a sustainable world . He stated that ASHRAE now has a Sustainability Roadmap as detailed in a pamphlet available at the registration table. It's entitled "The ASHRAE Promise: A Sustainable Future" He asked that everyone pick it up and review the contents. He also discussed ASHRAE movement to a certification program. He said we are becoming a global society. He outlined the new software which will drive many activities including a new style website. He finished by describing the new upgraded ASHRAE Headquarters to meet our own energy standards. Bill invited everyone to Dallas for the Winter Society Meeting Jan 27, 2007.

REPORT ON HEADQUARTERS

Next to speak was the Marketing Director Jeff Dimond. He said this was his 21st day on the job. He described his 30 years in volunteer organizations and how his experiences lead him to ASHRAE. He plans to do a lot of listening over the next few months to assess the needs of the organization. If anyone wants to reach him use his email jdimond@ashrae.org. He described the staff at headquarters from Jeff Littleton down through the various Directors and Managers.

He then asked for the Delegates and Alternates to move to the Library where Kent Peterson would conduct a Chapter Operations Workshop.

CHAPTERS OPERATIONS WORKSHOP

The Delegates and Alternates moved to the Hotel Library where Society Pres-Elect Kent Peterson delivered a motivational speech on "Making Your Chapter Great".

Kent noted that he has been a chapter president, a DRC for Region 10 and has experience with guiding small and large chapters in ASHRAE. This enabled him to put together the following power point presentation.

The first screen was "Know The MCO" the manual for chapter operations. It gives details for every phase of a chapter operations and has two new Appendices RR1 is for chapter officers, RR2 is for chapter chairs. Both offer great ideas to be effective in your position.

Next screen entitled "Leadership" was directed towards the chapter President – set a vision, be a motivator, be open minded and accept new ideas, be committed, have a positive attitude, have enthusiasm, welcome any new members or attendees to meetings.

The 3rd screen "Striving for Success" stated you must plan early, use committees with clear duties, conduct effective BOD meetings – held on time. Next screen covered "Chapter needs Goals". An effective chapter sets goals for 1 to 2 years. Every meeting must be a value-added experience for all attendees. Next Kent reviewed topic of "Delegation" – get more members involved –they will enjoy the experience. The next screen was "We Need Volunteers" – You must ask others to help –spread the opportunities. The next screen was entitled "Reasons Volunteers Balk" – have no time available; burned out from prior experiences; unsure can do task; never asked; never thanked. President needs to address these types of concerns.

Next screen covered "Motivating Volunteers" – point out it is an opportunity for personal growth and positive feedback.

Final screen was “Position Your Chapter For Success” –develop a plan, lead, and manage. Kent opened floor to questions. Several asked about where this power point would be available as it focuses on many issues in chapters. Kent said he would send it if you emailed him kpeter@ashrae.org.

Chair and DRC Laman thanked Kent for an excellent talk –truly motivational.

The conference adjourned at 6:40PM with the upcoming Welcome Wine and Cheese Party scheduled from 7 PM to 8PM. Everyone was asked to enjoy the welcome, have some dinner and join the Hosts in the Hospitality Room in the lower lobby.

ASHRAE RESEARCH CANADA

At 7:00 am, Saturday August 26th, 2005, a special General Meeting of ASHRAE Research Canada Corporation was held with President Darryl Boyce conducting the meeting. Darryl reviewed the actions of the corporation during the past year and reviewed the financial statements and projects. He noted some \$700,000 is currently under contract in Canada. As President, Darryl will appoint the other four officers – Class “A” members once the results of the Society’s Nominating Committee Meeting are announced in January at the Semi-annual meeting. Meeting adjourned a 7:45 AM.



MINUTES OF SECOND BUSINESS SESSION

TIME: Saturday, August 26th, 2006 at 8:00 AM.

LOCATION: Great Room B, Doubletree Lodge, Niagara Falls, ON, Canada

CALL TO ORDER:

DRC Laman called the meeting to order at 8:03 AM. He noted that the session will be scheduled for one hour – till 9:00 AM, as the Chair of Nominating stated they do not need three hours for the Executive Session. Chair Laman invited everyone present to visit the Historical Displays setup on this meeting room floor.

ROLL CALL:

DRC Laman introduced the Head Table and guests and asked that those present to sign the attendance sheet being passed around.

CHAPTER	DELEGATE	ALTERNATE
Halifax	Steven Ramsay	Gary LeBlanc
NB/PEI	Frederic Desjardins	Cam Chevarie
La Ville de Quebec	Robin Labbe	Luc Giguere
Montreal	Rejean Blais	Nicolas Lemire
Ottawa Valley	Glenn MacLean	Robert Lefebvre
Toronto	Michael Rosenblitt	Doug Cochrane
Hamilton	David Hills	Nathan Martin
London Canada	Scott Turner	Scott Edwards
Windsor	Bill Davies	Mazen AbuOmar

Society Representatives, Headquarters Staff, Regional Vice-Chairs and guests in attendance are as follows:

Name	CHAPTER or SOCIETY	POSITION
Kent Peterson	Society	President-Elect
Bill Harrison	Society	Treasurer

Liz Baker	Staff – Headquarters,	Membership Development Manager
Jeff Dimond	Headquarters Staff	Marketing Manager
David Underwood	Toronto	Society DAL
George Menzies	Hamilton	Region 2 – Mentor
Guy Perreault	La Ville de Quebec	RVC-CTTC
Wilf Laman	Hamilton	DRC
John Luc Morin	La Ville de Quebec	Regional Historian
David Rasmussen	Hamilton	Region 2 CRC general Chair 2006
Isabelle Lavoie	Montreal	RVC Membership
Daryl Somers	London	Nominating Com Member
Nicolas Lemire	Montreal	RVC Student Activities
Jay Jayaraman	Ottawa Valley	Nominating Com Alternate
Jeff Clarke	Montreal	RVC Research Promotion
Doug Cochrane	Toronto	Nominating Com Reserve Alternate
David Rasmussen	Hamilton	General Co- Chair CRC 2006
Walter Marcon	Windsor	Chapter Historian
Darryl Boyce	Ottawa Valley	ARC – President
Michael Khaw	Toronto	Chapter CTTC Chair
David Underwood	Toronto	DAL
Bill McCartney	Hamilton	Region 2 Treasurer
Jean Bundock	La Ville de Quebec	Past DRC
George Menzies	Hamilton	Region 2 Mentor
Darryl Boyce	Ottawa Valley	President ARC
Jay Doshi	Ottawa Valley	Chapter Research Chair
Gerry Waselynychuk	NB/PEI	2007 CRC Chairman

RCV REPORTS

STUDENT ACTIVITIES

Nicolas Lemire Chairman reported on an excellent year. In fact, it was the best in 10 years. Again this year, it started promptly with a superb CRC held by the London Chapter in Grand Bend, ON. Almost all SA chairs were present or at least represented. At our student activities workshop, we also had the pleasure of having President-Elect Terry Townsend from Atlanta who shared his vision of student activities. The workshop was really dynamic and interactive. At the CRC Awards luncheon the Student Activity Committee of the year trophy was awarded to the Montreal Chapter and the Student Branch of the year trophy went to the Carleton University Student Branch of the Ottawa Chapter.

All Chapters this year had a really good year and all reached PAR. A particular attention had to be put at the Halifax Chapter again this year. Following my discussions with the former President of the Halifax Chapter, a new SA Chair is coming for 2006-07 that will probably help the cause.

On a chapter visit point score, the 2005-2006 year was less busy. I only visited two chapters compared to 5 last year. The visits of the Toronto Chapter and the Hamilton Chapter never occurred for various scheduling reasons. After authorization from our DRC, I went to visit the Windsor Chapter and was welcome as never before in a Chapter. I spent a whole day at the Windsor University looking at research facility, at a project, and talking with graduate students and attending the student night. The other visit was the student night of my home Chapter, the Montreal Chapter, which draw around 40 students from local universities and technical colleges.

Many Student Branches made their final report to the Society this year but there is still a lot of work to be done on that matter. Few active student Branches, especially in my own Chapter, did not send the paperwork. That tells me that some Student Branches considered inactive by the Society might be active in reality but just don't take the time to send the paperwork.

As mentioned earlier, it was a better year than last year regarding PAOE points in the way that all Chapters registered points this year and even reached PAR. However, again this year, the final reports of every SA activity Chairs were not submitted. Only 4 chapters out of 9 submitted one. I know that a lot of work have been done by all chapters but the final reports is the tool to finalize the year's activities.

Nicholas continued and reported that ASHRAE assisted financially in twenty-six research projects involving more than 90 students with a funding total of \$120,000. Our ASHRAE grant program continues to be a strong supporter of HVACR learning in the classroom and can often be what makes the class possible. Again this year, Region 2 received one Undergraduate Senior Project Grant and it was awarded to the Windsor University Student Branch at Dr. David Ting:

The Student Design Project Competition attracted 17 final entries for the 2006 competition at the Society level. The entries were judged from finalists representing 11 of 14 regions. For HVAC System Selection, the winners are: 1st place – The Pennsylvania State University, 2nd place – University of Central Florida, and 3rd place – Ferris State University. For HVAC System Design, the winners are: 1st place – The Pennsylvania State University, 2nd place – Ferris State University, and 3rd place – University of Florida. For Architectural Design, the winners are: 1st place – Savannah College of Art & Design, and 2nd place – Lawrence Technological University. The 2007 student competition will focus on a biotech research building located in New York City. An existing building will undergo a significant renovation from its present use as a UPS distribution center. Phase I will be a 127,165 SF renovation with new added space and Phase II will be an 11,700 SF new construction plus penthouse. Details of the competition are posted on the ASHRAE Student Zone. Like other years, we did not have entries in the Student Design Competition. This is an area that we need to improve on. We have a lot talent in our Colleges and Universities and we can compete with the other Regions.

Again this year at the Winter Meeting in Chicago, IL January 2006, Region 2 student branches were well represented at the Sunday morning Student breakfast with around 15 students coming from the Toronto Chapter and the Montreal Chapter. There was also a student branch presentation from Ryerson Polytechnic.

Planning is underway for the Student Program in Dallas at the 2007 Winter Meeting. In addition to the Student Program and Student Technical tour, we will host our second Student/YEA Mixer on Saturday night, and our first-ever ASHRAE Student Congress.

Student Branches represent our link to the future of ASHRAE. Six new student branches were chartered in Quebec City for a total of 13 in the 2005-2006 year.

Nicholas stated that he is now planning the final year of my mandate to improve further the efficiency of the local Chairs. Everybody is really busy at work so I'm trying to find solutions to make sure our local Chairs do not waste time looking for information. The more efficient they are, the more information goes to the students. I'm also convinced that we can do a lot more out of our Student Branches, active or officially inactive, and want to focus on that for 2006-07. They basically are the future of our industry and our Chapters. My involvement in the YEA committee is also a priority for me. The more we do for them, the best chances we have to keep them with us.

MEMBERSHIP PROMOTION

Isabelle Lavoie, Chairman reported on Membership. This report was prepared by Frank Bann, last year's chairman.

Frank stated that he issued 11 newsletters throughout the year to motivate his chairs. All chapters showed increased MP activities with most chapters at PAR. Both Montreal and Toronto had high PAOE. **Quebec City had a net growth of 23 % while London Canada had 10% growth.**

For the first time in memory all chapters had a member growth – all but 3 had a double digit increase and single digit delinquents. Mentoring is informal in most chapters with follow-up calls used to welcome new members. Frank indicted he visited 3 chapters during the year – Windsor in Sept, NB/PEI in Oct and Montreal in Feb.

Regional stats are 12.4% new members; 7.2% delinquents; 0.6% advancements, with 5.2% net growth best in many years.

HISTORICAL

Jean Luc-Morin reported that his principal duties as Regional Historian are archiving and safekeeping the various Regional Documents such as CRC Minutes, CRC and Regional Fund Financial Statements; List of Honours and Awards recipients, regional motions and the history of the regional officers and RVCs.

Jean-Luc stated that he attended the Society Historical Committee meeting in Quebec on June the 25th 2006. During the year, he sent emails regularly to chapter historians, sending information, asking for reports, inviting to attend the Summer Meeting in Quebec City and the CRC workshop in Hamilton. He received MBOs from most chapters early in September and year end reports in June. Besides contacting the Chapter historians, he also sent info to program chairs, newsletter editors and Web Editors to advise on new material being published. He advised that most chapters publish their newsletters and programs on their Web Site. He downloads each document for easy reference until the next CRC.

All chapters except Windsor, registered PAOE points on the Web Site of ASHRAE. 4 chapters reached par this year. Two chapters wrote one year of chapter history. One Gold Ribbon for Toronto Chapter History will be presented this year. He noted that Richard Manuel from the Toronto Chapter did a great job researching the chapter history and got over 500 PAOE points. Many chapters wrote histories of persons which were published in their newsletters. Chapters also get points for leadership recall while interviewing their past presidents.

Jean- Luc Morin, also noted that the Society Board approved a motion that all Regional Historians are now non-voting members of the Society Historical Committee which involves attendance at two meetings per year. He noted that as non-voting, the regional members do not have their transportation expenses covered by society. Chair Laman commented that the Regional Fund could be used to cover this expense if there is no support from the Chapter.

RESEARCH PROMOTION

Jeff Clarke, Chairman reported that as of July 7th, 2006, some \$115,870 was raised by the nine Region 2 Chapters. The regional goal was \$ 109,448. We are at 105.9% of this goal and 6.1% ahead of last year. Six of nine chapters met their goal. The goal this year was raised by 30% overall from last year. All Chapters reached Full Circle with the exception of Halifax. We have also obtained the regional Full Circle award once again this year. I have only recently learned that Halifax does not support the Full circle concept and he requested some background information which he will review with our DRC.

He visited the Toronto Chapter in December during their RP night and addressed the assembly to acknowledge their continual RP success. As well, he was able to review the Enbridge Gold Circle status with the Chapter President (Terry Whitehead of Enbridge) and he was able to convince his company to continue with the Gold Circle in 2005-2006. He did not take credit for this accomplishment, but he does acknowledge the fact that continued persistence and frequent reminders are the key to RP success. The best news of 2005-2006 is the fact that campaign contributions came early and they continued steadily all year to ultimately surpass goal.

Overall Picture: Jeff reported that in his second year of his RVC role he was determined to change the Region 2 tradition of the last minute June rally towards goal. He believes this effort has succeeded and the tide is changing as demonstrated by the YTD% change all year long. All Chapters are communicating efficiently and only Halifax remains questionable towards our Regional goals.

CTTC

Guy Perrault, Chairman commented that he was impressed with the chapters involvement in CTTC. At last year's CRC all 9 chapters had representation at the workshop with 7 being Chapter Chairs. This year 7 of 9 chapters made PAR of 750 points with Montreal earning the highest - some 2570 points. No Chapter Chair submitted for the Refrigeration Comfort Cooling Award probably as a new award, not many knew of it.

There are 5 Distinguished Lecturers/Speakers for chapter meetings available this year. Guy stated he made chapter visits to Montreal and London Canada. Guy noted that the smaller chapters have difficulty accomplishing many of the aspects covered by CTTC other than chapter programs. Guy noted that the revision process for clarifying some technology awards is moving very slowly because of poor feedback.

David Underwood pointed out that CTTC is the conduit between the technical aspects of ASHRAE and all its Technical Committees and chapters.

Chair Laman now asked that we review the regional finances.

FINANCIAL REPORT

Chair Laman showed on the screen the following regional financial report

**ANNUAL FINANCIAL REPORT
REGIONAL FUND ASHRAE REGION II
CRC 2006, Hamilton, Ontario
August 25-26-27 / 2006**

This report is to summarize the activities during the above financial period for the Regional Fund.

On December 20th/2005, all chapters for Region II, were invoiced for this fiscal year 2005-2006 concerning the CRC chapter assessment dues. The invoice was based on (motion R-1 A5-04) \$6.00/per member. The total amount of \$8,466.00 was collected during this period and was deposit for the end of May/2006. An amount of \$7,975.40, received from the London Chapter regarding the surplus from the CRC 2006 was also received. Additional income came from members we have invoiced for the Chicago regional Dinner (\$467.12) and the Quebec City Regional Dinner (\$3,725.14).

So all amounts totaled \$ 20,633.66.

When we deduct the total expenses of \$7,242.63 (for details, refer to the attached summary sheet) the final closing balance at the end of June 2006 is \$28,325.74. If no modification is forwarded at this meeting, the same method for invoicing the chapters should be taken for this coming year in January 2007. For our records and for your information, the financial report for 2004-2005 presented at the last CRC in London was audited and approved by a committee. But the confirmation of a signed copy was not returned to my attention as requested.

Finally, this report is forwarded to the next CRC host chapter in 2007 (Moncton Chapter) to be audited. After approval, the signed copy should be return to the Regional Treasury for records.

Note: The total amount that will be transferred to William McCartney the new Regional Treasurer as requested by Wilfred Laman DRC, should be \$ 19,844.74 after we deduct from the above closing balance. \$ 15.00 for 2 months of bank fee plus \$ 8,466.00 cheque # 56 issued for the CRC-2006 Chapters assessment on August 15th 2006.

Personally it has been an honor serving all members of Region II for the last 3 years.

Prepared and submitted by: **Robert E. Dollard Regional Treasurer**

P.S.: Please return a signed copy after approval to the next Regional Treasurer for records.

David Rasmussen, stated that the regional financial books were in exceptionally good order. Congratulations to Bob Dollard of La Ville de Quebec for such good work. The Hamilton chapter therefore signed off on the 05-06 books, with the audit form now included in the records as requested by former Regional Treasurer Robert E. Dollard.

For the prior year's financial activities and records, there was a Motion by Rejean Blais, Montreal Chapter seconded by Glenn MacLean of Ottawa Valley Chapter to accept the 2004-05 books as presented. All were in favour.

Gerry Waselynychuk will receive the books and do the audit at next year's CRC in Moncton.

There was a question about the Fund. Chair Laman explained that the Regional Fund was created to assist members to go to Society, Regional and Chapter Meetings. He noted that the Society allocates funds to the DRC. You can visit 9 chapters with the RVC's able to visit one to two chapters each year. The fund income comes from each chapter which contributes \$6.00 per member based on the year-end chapter membership numbers which is paid into the Regional Fund. Other potential income comes from a Chapter hosting the CRC with 50% of any surplus income from the CRC goes into the Fund and the Chapter keeps the other 50%. If Society does not pay travel to trips deemed necessary by the DRC, he can take it from the Regional Fund and this expense can be discussed at the next CRC when the Regional finances are reviewed and approved. These actions are covered in prior regional motions..

It was noted that until the fund goes below \$5,000.00, the Chapters will not be asked to pay an assessment beyond the current \$6.00/chapter for the CRC expenses.

Meeting was recessed at 9:00 a.m.

Executive Session and Regional Officers Meeting followed.

At 11:30AM all those present attended the Annual Regional Awards Luncheon and Presidential Address. It was held in the Great Rooms A&B in the Doubletree Lodge, 6039 Fallsview Blvd., Niagara Falls, ON.

DRC Wilfred Laman introduced the head table and announced that George Menzies would MC today's awards presentation. Chair Laman then said grace and saluted the flag of Canada. Lunch was served.

Chair Laman invited the Mayor of Niagara Falls to say a few words. His presentation was very motivational for the City of Niagara Falls and was well received.

AWARDS LUNCHEON

Lunch was served (*awards were presented throughout lunch to allow time for Presidential Talk*)

George M. welcomed everyone to the awards portion of the luncheon. He outlined the following:

Today's awards will be divided into several sections each honoring a specific phase of ASHRAE – technical, membership, research investments, chapter performance and finally personal awards. The following format was used.

1. CTTC – Guy Perreault
2. Membership- Isabella Lavoie
3. Research – Jeff Clarke - first the volunteer awards , then chapter performance awards
4. History- Jean Luc-Morin
5. Student Activities- Nicolas Lemire
6. PAOE – first individuals, then chapters – Wilfred Laman & Kent Peterson Pres-elect
7. Certificate of Appreciation – Wilfred Laman
8. Regional Award of Merit– Wilfred Laman
9. Chapter Service Awards– Wilfred Laman
10. Regional Communication Awards – Jean Bundock
11. Regional Meatball Travel Award– Wilfred Laman

The first presenter was Guy Perreault, CTTC RVC for Region II.

He announced the winner of the **CTTC Allen Hanley Plaque for The Best CTTC Chapter Chair** for Region II as Frédéric Genest of the Montreal Chapter with 2540 CTTC PAOE points. The award has been presented since 1997 and is in memory of an outstanding Montreal ASHRAE member who was involved in many ASHRAE technical activities. Note: This award is the property of the region and is to be returned to the next CRC.

Honorable mentions went to Niraj Chandra CTTC Chair, Ottawa Valley Chapter with 1718 PAOE points and to Dwight Scott, CTTC chair NB/PEI with 1630 points.

Guy Perreault then announced the following Regional Technology Awards from the latest ASHRAE Society competition. The certificates will be presented at the Chapter Meetings by Guy Perreault as he does his 2006-07 chapter visits:

New Commercial Building (FIRST PLACE): Ronald Gagnon, Concept-R, Montreal Chapter for the Comptoir Richelieu Botanix project
 Existing Industrial (FIRST PLACE): Daniel Paré, IBM Bromont, Montreal Chapter, IBM Bromont Enerstat project
 Existing Institutional Building (FIRST PLACE): Nicolas Lemire, Pageau Morel & Ass, Montreal Chapter, Henry F. Hall project

New Institutional Building (FIRST PLACE): Megan Wallace, Genivar, Ottawa Valley Chapter, NOTC (Venture) Phase II project
 New Public Assembly (FIRST PLACE): Marc Chiasson, Genivar, Ottawa Valley Chapter, Bell SENSplex project
 Existing Commercial Building (HONORABLE MENTION): Chris McKenzie and Jay Doshi, Siemens Building Technologies, Ottawa Valley Chapter, Fuller Building & 85 Albert Street project

The next presenter was Isabelle Lavoie RVC MP Region II. She announced the following **Membership Promotion Awards for 2005-06**

Blue Ribbon Award (FIRST PLACE) Montreal Chapter- Caroline Paquet with some 1620 PAOE MP points and 41 new members with a net growth of 4.36%

Red Ribbon Award (RUNNER UP) Toronto Chapter – Alan Porter with some 1275 PAOE points and 109 new members for a net growth of 4.26%

Honourable Mention – to Quebec City for a 24% net growth in new members

The next presenter was Jeff Clarke RP RVC who announced the winners in Research Promotion fund raising for 05-06. George Menzies MC provided details about the various chapter and volunteer awards before **Jeff Clarke made the presentations:**

Volunteer Awards

Top Five Award (this is a Society competition from 168 chapters in 14 regions world-wide – two were won in Region 2 this year. This award recognizes the top five RP Chairs throughout all of the Chapters in ASHRAE globally with winners selected from 4 size groups: 1-99 Society Members; 100 to 248; 250 to 499; and 500 + Society Members. The top winners in each of the 4 categories receives a framed motivational print; 2nd through 5th place finishers in each grouping receive a paperweight.

Although Region 2 had no overall top 5 winners from all the 168 Chapters based on chapter size as we did last year when Toronto won first place with David Underwood as RP chair, if we had a winner, they would receive a personalized 9 x 11 framed motivational print inscribed with the words “Top of the Top 5”

But we did have two Region 2 second place finishers – the winners are:

Toronto Chapter (Level 4 size chapter > 500 members) – John Mitterling RP Chair – receives Paper Weight for exceeding PAOE par; exceeding chapter RP goal, met challenge goal, had high \$\$\$/assigned member invested, and was a High Five in the 500+ size category

London Canada Chapter (Level 1 size chapter > 100 assigned members) – Derek Vakaras RP Chair receives Paper Weight for exceeding PAOE par; exceeding chapter RP goal, met challenge goal, had high \$\$\$/assigned member invested,

There are a number of other awards to recognize a chapter participation in the research investment program

Chapter Awards

Full Circle Award – This award is won when all the Chapter Executive Officers invest a minimum of \$100 in ASHRAE Research Canada. Chapters winning have their names published in Insights in February as well as listed in the October Journal. All Chapters except Halifax won this award in 2005-06

High Five Patch – This award is for consistency in fund raising activities – to win chapter must have attained a new high for the last 5 years AND have had highs in four of the preceding years. The patch has been recently redesigned to accommodate date chevrons for future qualifying years.

Chapter Treasury Ribbons – for chapters making significant contributions to research: Gold > \$10,000; Silver \$5000 to \$9999; Bronze \$42,500 to \$ 4,999.

Montreal and Ottawa Valley won Silver ribbon; Toronto Chapter won Bronze

Goalbuster Certificates – for the Chapter RP Chair volunteers – three ways to win: a) for exceeding chapter goal; b) for establishing a new chapter High Five – highest result in past 5 years; c) for exceeding the Chapter's challenge goal (High Five plus 5%)

The results for 2005-06 are as follows:

NB/PEI - Charles Edward RP Chair:	Certificate for achieving Goal; High 5 Certificate; Certificate for exceeding Challenge Goal
Quebec City - Andre Boivin RP Chair	Certificate for achieving Goal
Montreal - Marc Vadboncoeur RP Chair	Certificate for achieving Goal
Toronto – John Mitterling RP Chair	Certificate for achieving Goal; High 5 Certificate; Certificate for exceeding Challenge Goal
Hamilton – Bill McCartney RP Chair	Certificate for achieving Goal; High 5 Certificate; Certificate for exceeding Challenge Goal
London Canada – Derek Vakaras	Certificate for achieving Goal; High 5 Certificate; Certificate for exceeding Challenge Goal

Hayward Murray RP Trophy (Regional Award)

This is a regional award and is named after the individual who initiated the paperwork to form a Canadian corporation called ASHRAE Research Canada so businesses in Canada would have the same opportunity as in the USA for using their investment as a tax deduction.

Best RP Chapter Chair The RVC of RP makes the selection of the best RP chair for the year and is based on Improvement over prior years campaigns, the scope of the RP activities within the chapter and the actual funds based on assigned Society membership.

Jeff Clarke announced that **London Canada** won with a very close second being Toronto. The trophy is held for a year and is returned to the CRC for the next year's presentation.

Society Historical Award – Jean Luc Morin Regional Historian was pleased to award a Gold Ribbon and Certificate to Richard Manuel of the Toronto Chapter for 20 years of detailed history of the Toronto Chapter originally known when chartered as the Toronto Chapter. Richard acquired a great deal of information from 1922 when the chapter was chartered with complete information for the period 1975 till 2005. All the history is now on a CD.

Next, Nicolas Lemire announced the **Student Activities Awards for 2005-06**. In this region two SA special awards can be won. They are:

First award is: **Best Student Activities Committee** and is not based solely on the PAOE points accumulated during the year. The RVC looks at improvement over prior years, the quality of the activities organized for students, the dynamism of the SA committee and the overall impact on students in the chapter are all factors considered in this award

Second Award is: **Best Student Branch of the year**. Each chapter submits their choice of the best branch within their chapter territory to the RVC. The RVC then looks at each submission for the branch's participation in the ASHRAE program, plus the quality of the activities organized within the branch and finally the impact on the students.

Nicolas then made presentation to:

Best Student Activities Committee – Toronto Chapter with honorable mentions to Montreal for their total PAOE of 4925 points and to London Canada Chapter for their astonishing improvement with 690 points

Best Student Branch of 2005-06 – Windsor Student Branch

The next series of awards covers PAOE activities for 2005-06. Chair George Menzies asked DRC Society Pres-Elect

Kent Peterson to do the Presentations with time allocated for pictures.

Geo Menzies explained that the PAOE awards acknowledge outstanding chapters who have had successful activities in a number of different areas.

To get one of the Presidential Award of Excellence Awards known as PAOE awards, Chapters must acquire “minimum points” for chapter activities in some four PAOE categories such as membership growth, research investments, historical activities, student activities, chapter operations, technology transfer. There are no maximum limits on points earned in any category as you saw with Montreal getting 4925 points for SA.

Each category has a minimum and a par number of points – the par an objective for a chapter to reach. Most chapters exceed the par level in several categories where activities are well managed and effective.

Specific awards are issued at various successful levels of performance.

- **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 emblem (red)**
- **Special Citation Award** - Minimum in 4 of 5 categories, with a minimum of 4300 points – Chapter receives a **special citation ribbon**
- **STAR** - PAR in all categories – chapter receives a **PAOE emblem, star award certificate, star award pin**
- **Honor Roll** - PAOE for at least four consecutive years. The **award is a PAOE certificate and honor roll emblem**
- **High Honor Roll** - STAR for at least four consecutive years. **The award is a PAOE certificate and a High Honor Roll Emblem.**

The Chapter winners are

Hamilton Chapter- Bill McCartney President: Honour Roll (achieved POAE for >4 years) PAOE certificate and honor roll emblem. Special Citation Award (>4300 actually 4633 pts) special citation ribbon ,Star Award – par in all categories PAOE emblem, star award certificate, star award pin.

London Canada – Joseph Claessens President: Honour Roll (achieved POAE for >4 years),, Special Citation Award (> 4300 actually 4995 pts)

Montreal – Isabelle Lavoie President: Honour Roll(achieved POAE for >4 years), Special Citation (>4300, actually 11711 pts), Star Award –par in all categories,

NB/PEI Chapter – Ken Martin President: PAOE, Special Citation (>4300 actual 5614) Star – par in all categories.

Ottawa Valley – Jayendra Doshi President: Honour Roll(achieved POAE for >4 years), Special Citation (>4300 pts, actual 5821)

La Ville de Quebec – Milan Jovanovic President: PAOE

Toronto – Terry Whitehead President: Honour Roll (achieved POAE for >4 years), Special Citation Award (>4300 actually 9861 pts),Star Award – par in all categories

Windsor – Mason Hope President:Honor Roll (achieved POAE for >4 years).

Halifax – PAOE certificate, PAOE emblem (red) although they missed in Membership Promotion and History points, they did reach at least minimum or above in the other categories, scoring a total of 1485 points. They made PAOE last year as well.

Please note: the emblems and certificates awarded will depend on where the chapter is in PAOE points over several years.. For example, if the chapter has made PAOE for the last three years, then the fourth year, the PAOE emblem will be an honor roll; if the chapter has made par for the last three years, then the fourth year, the PAOE emblem will be high honor roll; some chapters may receive a regular PAOE emblem because they did not have consecutive years of making PAOE. The certificates may reflect the same: some chapters receive regular PAOE certificates; some chapters may receive one certificate that reads special citation and star award; or star award; or special citation. Again, this all depends on what the chapter award is.

The next series of awards is based on chapter assigned membership and are called **Highest Point Category Awards**

The Highest Point Category Awards for a chapter is based on the PAOE final number for each of the 6 categories

- Membership, Student Activities, Research Promotion, History Activities, Chapter operations, Technology Transfer.

The award is a ribbon and is given according to the 4 levels of chapter size and if they made the highest points in one or more of the 6 categories . The 4 levels are Level 1 = Less than 100 area assigned members; Level 2 = 100-249; Level 3 = 250-499 Level 4 = 500 or more.

Level 1 - Ribbons

Windsor and London Canada are in Level 1 size

Windsor was highest in 2 categories – History and Student Activities

London Canada was highest in the other 4 categories- Chapter Operations, Technology Transfer, Membership, Research Promotion.

Level 2 – Ribbons

Quebec, Hamilton, NB/PEI, Halifax are in Level 2 size.

Hamilton wins for one category – History

NB/PEI wins in all the other 5 categories – Chapter Operations, Technology Transfer, Membership, Research promotion, Student Activities

Level 3 – Ribbons

With assigned members of 250 to 499, Montreal and Ottawa Valley are in this size category

Montreal wins in all 6 categories – SA, RP, MP, History, Chapter Operations, Technology Transfer

Level 4 – Ribbons

For chapters with > 500 assigned members – only Toronto is in this category

Toronto wins six ribbons for highest in all categories- SA, MP,RP, History, Chapter Operations, Technology Transfer

DRC Laman then announced the following series of awards:

Certificates of Appreciation for outgoing RVCs and others were then presented to

David Rasmussen	CRC General Chair
Jean Bundock	Outgoing Region II DRC
Barry Willhelm	Outgoing Nominating Committee Member
Daryl Somers	Outgoing Nominating Committee Alternate
Frank Bann	RVC MP

Regional Award of Merit to:

Guy Perrault	La Ville de Québec Chapter
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Barry Wilhelm Toronto Chapter
 Dan Castellan DRC Bundock mentioned that he was eligible, but that he has received one already.

Chapter Service Award to:

George E. Menzies Hamilton Chapter
 David Rasmussen Hamilton Chapter
 Raynald Courtemanche Quebec City Chapter

The next two awards were selected by Jean Bundock who was DRC during the past ASHRAE fiscal year – July 2005 to 2006

Regional Communication Award – this award is given by the DRC for the chapter which communicates the most with the DRC. It is a discretionary award with the evaluation based on several factors: CRC participation, chapter Newsletters addressed to and received by DRC, MBO sent in to DRC, reporting regularly on the progress of the MBOs, a chapter budget sent to DRC, and ensuring all chapter minutes are forwarded to and received by DRC.

Regional Golden Gavel Award – is selected by DRC and is awarded to the chapter with the greatest PAOE points, plus chapter must met or exceed par in all categories except history, has shown an increase in PAOE over previous year. With such an extensive criteria, this award is NOT presented every year. The award is an engraved brass nameplate with an ASHRAE logo with a gavel embedded in the plaque

The winners were announced by G. Menzies with the presentation by Jean Bundock immediate past DRC

Regional Communication Award – Toronto

Regional Golden Gavel Award - Montreal

The next award was the **Regional Meatball Traveling Award** and it went to:

New Brunswick/ Prince Edward Island Chapter with 7 attendees to CRC. A close second was Quebec City with 17 attendees. The award is based on travel distance times the attendees at the conference and was stated by society President Barney Burrows in Oct 1988 while at CRC in Chicoutimi PQ. London Canada was the first winner in 1988.

PRESIDENTIAL THEME 2006-07

Following the awards, President **Elect Kent Peterson gave the Presidential Address for the year- Engineering for Sustainability – the Dawn of the new ASHRAE Era.** He used a PowerPoint presentation.

This is the first time in over 100 years that ASHRAE has had a Research Strategic Plan. ASHRAE now has a sustainability roadmap for internal guidance and a strategic plan whereby they polled the membership-what do you want put together to help direct this Society. This has helped the BOD plan for the future.

The next screen was entitled - **A sustainable future – The world is in a crisis.** Every 6 months we use up resources it took the earth over 50,000 years to make. ASHRAE responded to a similar crisis in 1970 when we developed our energy conservation standard – Standard 90.1. Every three years we publish upgrades to our standards. The ASHRAE promise is – A Sustainable Future. Working together we will make a difference. The goal is to advance energy design guidelines, expand guidelines to include existing buildings – accelerate efficiencies by 50% AEDGS by 2010. and reduce energy consumption by 70%. How do we plan to do it? Integrated systems design in order to reduce energy consumption. Previous focus on new construction which is 2% of the energy use , 98%are existing facilities and we need to work on this sector to reduce energy conservation. Next screen was Building Performance Metrics-we need good building metrics, trained building operators before and after to sustain the original design parameters. ASHRAE is working on carbon equivalent metrics from both construction and buildings already in operation. We need to reduce carbon emissions - currently rate is 6 kilos per day in Canada, 6.6 in America and a 2.2 in Switzerland which shows Europe is way ahead in energy use per population.. We need to increase stringency, improve usability and streamline the process. Where will we be in the year 2010? We need to be 30% more efficient. ASHRAE plans to develop a new standard for water conservation in collaboration with other groups. Our sustainability standard which we are working on is to publish soon a standard for sustainability. ASHRAE's vision for 2020 is net zero energy use guidance for buildings – commercial and residential. The current Hot Button is Sustainability—this is very advanced in Europe compared to NA. China is thirsting for information and is using many ASHRAE standards for

their new facilities. We need to partner with other sustainability and advocacy organizations to make sure our expertise is heard. ASHRAE is the global engine of sustainability. We need to focus on more membership, must work together like never before to make good on the ASHRAE promise of a Sustainable Future. ASHRAE members are most dedicated and we need your support. This is your organization, your motions, your ideas, and your people. We are a grassroots organization.

Chair Laman thanked Kent Peterson for the enlightening talk.

Next Chair Laman asked David Rasmussen to the podium. He thanked David for the great job as General CRC Chair and presented him with his certificate of appreciation.

Then David thanked the hotel staff, the Mayor of Niagara Falls, Angie Hills and Joanne Laman for coordinating the Ladies Program. He then identified each of his CRC team and thanked them for their support. He thanked the Moncton Chapter for the wine on the tables at lunch. Finally he presented gifts to the Society officials – Kent Peterson, Bill Harrison, Liz Baker, Jeff Dimond, Wilf Laman and Gail Menzies.

WORKSHOPS

Workshops followed immediately with those in attendance moving to the following locations at 2:00 PM till 5:30PM

Chapter Technical Transfer Committee	Library
Membership Promotion	Strategy 1
Student Activities	Strategy 2
Research	Great Room A
History	Great Room B

Following the workshops, the group met at the front door of the Hotel at 5:45 PM to be bused to Oh Canada Eh! for dinner and entertainment.

The Hospitality Room was open upon return to the Hotel where many enjoyed the food, refreshments and music till late into the night.



MINUTES OF THIRD BUSINESS SESSION

TIME: Sunday, August 27th, 2006 at 8:00 AM.

LOCATION: Great Room B, Doubletree Lodge, Niagara Falls, ON, Canada

CALL TO ORDER:

Wilfred Laman, DRC for Region 2 opened the meeting at 8:05 AM. He introduced the Head Table and asked that the Chapter Delegates, Alternates and other guests introduce themselves. Chairman Laman noted that the Delegate from Windsor has been called home due to emergency medical needs.

Chairman Laman asked for an attendance sheet to be circulated. The following signed in.

CHAPTER	DELEGATE	ALTERNATE
Halifax	Steven Ramsay	Gary LeBlanc
NB/PEI	Frederic Desjardins	Camille Chevarie

La Ville de Quebec	Robin Labbe	Luc Giguire
Montreal	Rejean Blais	Nicolas Lemire
Ottawa Valley	Glenn MacLean	Robert Lefebvre
Toronto	Michael Rosenblitt	Doug Cochrane
Hamilton	David Hills	Nathan Martin
London Canada	Scott Turner	Scott Edmonds
Windsor	Mazen Abu Omar	

Society Representatives, Headquarters Staff, Regional Vice-Chairs and guests in attendance are as follows:

Name	CHAPTER or SOCIETY	POSITION
Kent Peterson	Society	President-Elect
Bill Harrison	Society	Treasurer
Liz Baker	Staff –Headquarters, Atlanta	Manager, Membership
Jeff Dimond	Staff-Headquarters, Atlanta	Manager, Marketing
David Underwood	Toronto	Society DAL
George Menzies	Hamilton	Region 2 – Mentor
Wilfred Laman	Hamilton	DRC Region 2
Guyline Gagnon	LaVille de Quebec	Chapter MP Chair
John Luc Morin	La Ville de Quebec	Regional Historian
David Rasmussen	Hamilton	Region 2 CRC General Chair 2006
Isabelle Lavoie	Montreal	RVC Membership
Jean Bundock	La Ville de Quebec	Past DRC
Nicolas Lemire	Montreal	RVC Student Activities
Michael Khaw	Toronto	Chapter CTTC Chair
Jeff Clarke	Montreal	RVC Resource Promotion
Guy Perreault	La Ville de Quebec	RVC - CTTC
Gerry Waselynychuk	NB/PEI	2007 CRC General Chair

Chair Laman asked that Scott Edmonds of the prior CRC hosted by London Canada Chapter be prepared to present the final CRC 2005 financial report for the meeting held in Aug 2005 at Grand Bend, to the CRC next year in Moncton since the report was not available to be discussed at today's session. **Action Item - London.**

FUTURE CRC DATES AND LOCATIONS

NB/PEI Host Chapter	Location Moncton NB	Aug 23 to 25, 2007	General Chair –Gerry Waselynychuk
Montreal Chapter	Location -	Aug 3 rd week 2008	General Chair –
Windsor Chapter	Location – Windsor	Aug 3 rd week 2009	General Chair -

NOMINATING COMMITTEE REPORT

David Hills on behalf of Daryl Somers reported that there were no problems, all categories filled with sufficient names. He noted that Daryl Somers was re-elected as Nominating Member, Jay Jayaramam was re-elected Alternate with Doug Cochrane re-elected as reserve Alternate.

RESEARCH PROMOTION

Jeff Clark reported 5 of 9 Chapter chairs were present with 9 of 9 chapter represented. Two of the Chairs are going to the Special meeting in Chicago. They hope to start earlier this year on the campaign. No motions other than the one on RP locations will be brought forward.

CTTC

Guy Perrault reported that the workshop went quite well and the comments on the evaluation form were positive. Point of improvement...many asked for more time. Twenty-two people attended the workshop at one point or another. All 9 chapters were represented of which 6 were actual CTT chairs. About half the participants are in their second year at this position which helped generate exchange of ideas between the participants. The areas covered were CTTC duties, PAOE, Government Activities, CTTC Awards (Program Star, Dan Mills, GA, Milt Garland, Refrigeration Comfort Cooling and Technology Awards. Considering the amount of material to cover, some subjects were not presented in depth. The last portion of the workshop was dedicated to do 3 RVC planning sessions, in particular with the new chairs to help them prepare the MBO's. A particular regional objective this year: to develop a regional speakers list by the end of May 2007. The rest of the planning sessions will be done over the phone or in person when possible.

HISTORY

John Luc Morin reported good attendance at the workshop. Five chapter historians attended and all chapters had representation. In Region 2, two chapters have a new historian. Chapter historians talked about some of their practices that bring good results in their chapter historical activities. Jean noted that Montreal chapter supplied some very old controls as part of their history display. Many other chapters had displays including the one that won Toronto a gold ribbon.

MEMBERSHIP PROMOTION

Isabelle Lavoie reported 7 of 9 chapter chairs with only 1 returning chair were present. All chapters were represented. A few experienced ASHRAE people in the room exchanged some good ideas. If there is a question regarding chapter membership totals call Liz Baker directly and she will investigate.

STUDENT ACTIVITIES

Nicolas Lemire reported 7 of 9 chapter chairs were present and all chapters were represented. He then called upon John Willden, an instructor NB/ PEI and Chapter Student Chair. He gave an excellent summary of the activities in the Student Activities workshop. He said with student activities, it is a hands-on marketing function in HVAC and energy – more global. The workshop covered networking, scholarships, literature and trip opportunities. Nicolas thanked him for his report.

Chair Laman thanked the RVCs and their delegates for the good reports. He then called for the motions which he had already on his computer. He then displayed the first motion.

SOCIETY AND REGIONAL MOTIONS

Region 2 Society Motion No. S-1 August 27th, 2006

Moved by NB/PEI Fred Desjardins, Delegate, seconded by Halifax Steven Ramsay Delegate

That Society remove the age restriction for Student Members

Motion withdrawn as Liz Baker Membership Development Manager from Headquarters stated that there is no age restriction on a student member. Motion withdrawn

Region 2 Society Motion No. S-2 August 27th, 2006

Moved by Toronto Michael Rosenblitt, Delegate, seconded by Halifax Steven Ramsay Delegate

That Region 2 members should be sorted by mailing code or city to determine what chapter they are allocated to, to ensure Chapter assigned member numbers are correct.

Background Information

To many mistakes are being made in assigning of new members to the correct chapter for their location or geographical area.

Motion withdrawn as Liz Baker Membership Development Manager from Headquarters stated that she would take it as an action item with the Toronto Chapter .She would forward to the Chapter the current format the Headquarters uses to assign members to see if there could be improvements. Motion withdrawn

Region 2 Society Motion No. S-3 August 27th, 2006

Moved by Toronto Michael Rosenblitt, Delegate seconded by Ottawa Valley Glenn MacLean Delegate

That the Research Promotion Chair training remain part of Regional responsibility and continues to be held at a regional CRC.

Background Information:

Research fund raising varies based on region. Regional RP Chairs understand the players and the mechanics of fund raising in their region. Therefore having Chapter Chairs have training at a CRC serves ASHRAE better and more efficiently than in a central training session removed from regional input.

Fiscal Impact: Cost savings on transportation costs

Vote Count: For: 9 Against: 0 Abstained: 0 Chair Voting: No

Passed: Yes

Region 2 Regional Motion No. R-1 August 27th, 2006

Moved by Montreal Chapter Delegate Rejean Blais and seconded by Ottawa Valley Chapter Delegate Glenn MacLean

That Region 2 establish a Regional Scholarship Program consisting of two \$500.00 scholarships to be awarded each year at CRC

Background Information:

Financial needs are always a concern for students. Students are also the key element into maintaining our membership. By establishing a Region II scholarship program, we encourage student to get involve into the HVAC&R field quite early in the process. By getting in touch deep enough with the field, the student retention might be improved and this can even lead to an implication in chapter position from those students. Depending on the financial health of the local Chapter of the winning students, they can even attend CRC's Student Activities workshop to act as student consultants (as what is already done for SA Committee meetings at Society level). This would give to the winning students a great deal of experience while making them aware of the way ASHRAE is operating.

Scholarship shall be presented using the following criteria

	Region 2 Scholarship -	
	2 scholarship of 500\$ to be given out each year: 1 for a University student and 1 for a technical College Student	
	Judging to be done by RVC SA	
	Submission to be done through local SA Chairs by May 31st of each year. Maximum of one application per scholarship per Chapter.	
#	Mandatory Criteria	
A	Must be a student member of ASHRAE	
B	For University students - graduation date must be 1 year later than application	

C	For Tech College students - graduation date must be 1 year later than application or if not, student must be registered to a University degree for the upcoming year.	
D	Financial needs	
#	Criteria	Points
1	Implication in an ASHRAE Student Branch (president, vice-president, treasurer)	10 point for office held/per year
2	Interest in the field of HVAC	5 points/internship jobs
3	Implication in Chapter activities	1 point/monthly Chapter meeting attended
4	Academic performance (for University students)	1 point/point of global average
5	Academic performance (for Tech College students)	1 point/10 point of global average
	Submission form	
	Submission is done through local SA Chair.	
	A motivation letter must be supplied addressing all the criteria.	
	A table displaying the repartition of points must be attached to the letter of motivation.	

Fiscal Impact: Two \$500 per scholarship or \$1000 total per year taken out the Regional Fund.

Vote Count: For: 8 Against: 1 (TO) Abstained: 0 Chair Voting: No

Passed: Yes

Region 2 Society Motion No. S-4 August 27th,2006

Moved by La Ville De Quebec Delegate Robin Labbe, seconded by Montreal Chapter Delegate Rejean Blais

That ASHRAE point score for the Regional Award Of Merit be modified to add ½point/year for the position of Regional Treasurer

Background Information

For that award, points are allowed for all positions occupied at region level except the Regional Treasurer position. That position is important because of the legal liability.

Fiscal Impact: None

Vote Count: For: 9 Against: 0 Abstained: 0 Chair Voting: No

Passed: Yes

Region 2 Society Motion No. S-5 August 27th,2006

Moved by La Ville De Quebec Delegate Robin Labbe, seconded by Toronto Chapter Michael Rosenblitt,

That ASHRAE endorse the Kyoto protocol in order to promote sustainable development in accordance with its strategic plan approved by the Board Of Directors March 20, 2006, edited April 3, 2006 amended June 23,2006 to include Numbering Strategies and in accordance with it's Postion document on climate change approved by BOD in June 1999

Background Information

ASHRAE is a leader in advancement of the science of heating, ventilating, air conditioning and refrigerating. That leadership position has been established through the various publications of ASHRAE (Standards, Guideline, Guide, Design guide, etc), to Serve Humanity and Promote a Sustainable World. ASHRAE is a world class organisation with members from all around the planet; it's position is a signal to the HVAC industry and to his membership that they could have a significant impact on climate change through these various publications of ASHRAE. The Kyoto protocol is part of the convention on climate change of the United Nations. By that endorsement ASHRAE will be really pursue as a real leader in climate change.

See the following documentation

Article one

- Seminar 42 - Interactions of the Montreal and Kyoto Protocols: Findings of the IPCC/TEAP Special Report on Ozone Depletion and Global Warming

Global environmental issues are changing how we manufacture equipment and design buildings. Under the Montreal Protocol, countries are phasing out CFC/HCFC refrigerants and switching primarily to HFCs. However, global warming and the Kyoto Protocol are drawing pressure on growing emissions of HFCs. The environmental phenomena of ozone depletion and global warming have significant interactions, from scientific and engineering perspectives. The Intergovernmental Panel on Climate Change and the Technology and Economic Assessment Panel analyzed these interactions and reported on ways to protect the ozone layer and global climate system. This seminar will summarize the report's findings.

- Banks and Emissions of MAC Systems: Current Emissions and Future Trends
Denis F. Clodic
- Safeguarding the Ozone Layer and the Global Climate System: Issues Related to Hydrofluorocarbons and Perfluorocarbons (SROC)—Summary of Chapters 1 and 2 and Related Material in the TS and SPM
Susan Solomon
- Safeguarding the Ozone Layer and the Global Climate System: Issues Related to Hydrofluorocarbons and Perfluorocarbons—Summary of Chapter 4, Refrigeration
Donald B. Bivens
- The Future of Halocarbons
Nick J. Campbell

Article two

- **Published on ASHRAE Website - U.S. Mayors Agree to Follow Kyoto Protocol (June 14,2005)**

CHICAGO—The U.S. Conference of Mayors unanimously passed a resolution June 13 calling on their cities to try to meet or surpass emissions standards set by the Kyoto Protocol. The agreement was announced at the annual conference of the organization, which represents the mayors of more than 150 U.S. cities. The resolution also urges federal and state governments to meet or exceed the goal of reducing global greenhouse gas emission levels to 7% below 1990 levels by 2012. On June 12, U.S. and international mayors met in San Francisco to mark World Environment Day.

Article Three

- **Published on ASHRAE Website - Reducing Emissions Can Be Good Business (May 31,2006)**

NEW YORK—Some U.S. businesses are taking steps to reduce CO₂ emissions even though there are no rules in the United States regulating greenhouse gases comparable to the Kyoto Protocol. The measures taken by companies have also saved money. At DuPont, the savings from energy projects has totaled \$2 billion in the past 15 years. IBM has reduced 1.3 million tons of carbon emissions and saved \$115 million since 1998. Johnson & Johnson decided in the late 1990s to meet the Kyoto requirements in its operations worldwide. From 1990 to 2005, the company reduced carbon emissions 11.5%. Other companies, including Wal-Mart, 3M, Advanced Micro Devices and the Gap, have pledged voluntary reductions in their emissions.

Also as background is the Climate change document which is in Appendix S-6

Fiscal Impact: None

Vote Count: For: 9 Against: 0 Abstained: 0 Chair Voting: No

Passed: Yes

Region 2 Society Motion No. S-6 August 27th, 2006

Moved by Toronto Michael Rosenblitt, Delegate but withdrawn as the prior motion essentially covered motion

That the objective of the protocol is the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. the goal is to lower the overall emissions of six greenhouse gases - carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hfc's and pfc's calculated as an average over the five year period of 2008-2012. this falls in line with ashrae's stance on green buildings, sustainability. ashrae should support principles that affect all of its members globally.

Withdrawn

Region 2 Regional Motion No. R-2 August 27th, 2006

Moved by Hamilton Chapter Delegate David Hills ,seconded by Ottawa Valley Delegate Glenn MacLean

That the report of G.Menzies on the regional motions be adopted.

Background Information

The purpose of this report was to review existing Regional Motions and to recommend the continuation of all the motions that still apply, eliminating the motions that have been superseded, and clarifying the wording in some motions to ensure compliance.

Please note that last year's CRC Minutes detailed all the regional motions that the CRC updated after the 3rd Business session. It was apparent that several motions still needed input from the incoming DRC to clarify if the motion still was required based on current policies in ASHRAE.

It was therefore recommended at the 2005 CRC that the incoming DRC Wilfred Laman review each motion prior to the next CRC with the Region 2 Mentor G.E. Menzies and bring forth a report to the CRC in August 2006. This was done July 26th, 2006 at a meeting with G.E.Menzies. Menzies then prepared an updated list of motions – attached as Appendix A.

After discussion, delegates stated that the report was too extensive and they did not receive it in advance for consideration.

It was moved and seconded

To postpone motion until till Oct 31st, 2006 to enable electronic review and balloting.

Background Information

The entire report will be redone showing all deletions and rewording which will be forwarded to all Delegates and Alternates in Sept for input and suggestions which must be received by Sept 27th with a vote on report Sept 30, 2006

Fiscal Impact: none

Vote Count: For: ... Against: ... Abstained: ... Chair Voting: No

Region 2 Society Motion No. S-7 August 27th,2006

Moved by Hamilton Chapter Delegate David Hills ,seconded by NB/PEI Delegate Frederic Desjardins

That the Society Executive Officers review the honors and awards format at Chapter Region Conferences.

Background:

The purpose of this motion is to assess the volume and significance of the awards that are being presented at CRCs. Awards presently cover many of the following (both as individual Volunteer awards and as Chapter awards), in Student Activities, CTTC, Membership Promotion, Research Promotion, Historical, Chapter Operations (PAOE and other), plus many other personal volunteer awards such as Regional Award of Merit, Chapter Service, appreciation for committee service.

With the number currently being presented, plus addition regional awards for specific regions, the value and significance of each award is being diminished.

In addition, with a variety of ribbons, chevrons, pins, plaques, certificates and so on, only a very few ASHRAE members in attendance at the Awards Presentation have any idea the meaning of each award.

Plus there is no listing or details on the ASHRAE Website under Honours and Awards to inform ASHRAE chapter members the purpose and scope of each award along with the physical details of the award – letter, ribbon, pin, etc.

To ensure the Awards Presentation has a professional approach typical of an engineering society, it is appropriate that this current format be re-evaluated by our Society President, Pres-Elect, Treasurer, and Vice Presidents – the Society Executive Officers.

Fiscal Impact: none

After discussion, motion withdrawn as Kent Peterson President Elect offered to take it as an Action Item

No other motions were offered.

CRC BUDGET 2007 - MONCTON

Chair Laman asked Gerry Waselynychuk to present the CRC budget for 2007 and the details on registration costs.

Gerry said the meeting will be Moncton NB running from Thurs PM through to Sat PM as was the pattern in Region 2 recently expect for this CRC. Workshops will be a full 4 hours. They plan to bus everyone to Shediac on Fri Night for a cruise followed by the Awards Banquet back at the restaurant.
The RP workshop will start Sat at 7:30AM.

Expenses (registration) to include hotel charges and are estimated to be \$39,300 with revenues of \$39,870 Full Registration will be \$450 for 2 nights and meals; partial \$350 for one night and meals. Companion \$125.

Gerry asked for clarification about the \$6.00 per chapter member – is it revenue for the CRC. Answer was yes

Gerry noted that several rooms are reserved for the night prior to and immediately following the CRC at \$145.00/nite.

Motion by NB/PEI, seconded by Halifax Steven Ramsay

To adopt the proposed CRC budget and agenda for the CRC in Moncton.

For 9 – vote unanimous

PRIVACY ISSUES RE EMAIL ADDRESSES

Just prior to adjournment, Chair Laman asked all present if they had any privacy issues with email addresses being available on the Regional Website. No one offered any objections

FINAL COMMENTS

Chair Laman asked if any one at the Head Table had any comments.

Kent Peterson stated that he felt Region 2 was alive and well. He urged the attendees to take back the excitement and enthusiasm felt here. He advised the members to work together and communicate.

Bill Harrison seconded Kent’s remarks. He said he felt the passion of the attendees and acknowledged it was great to see so many young people involved.

Chair Laman thanked David Rasmussen, General CRC Chair for a well planned meeting.

Jean Bundock said he was pleased to have worked with Region 2. It was a great experience. Region 2 is well organized and over the next years it will be exciting for all.

Chair Laman invited the group to make comments and suggestions to him via email regarding the first paperless meeting. He said he would also remind them of this request by email next week.

The 2006 CRC was adjourned at 10:10 am.

A CRC review meeting with the Society Officers and the General Chair both for this CRC and next plus the DRC was held immediately following the meeting adjournment.



2006 CRC MOTION SUMMARY

The following motions are numbered as they were presented at the business sessions. Of the motions passed at the 20065 Region 2 CRC in Niagara Falls Ontario, Canada, **Three are Society motions to go the Member Council** and **2 are Regional motions** (to be added to Regional summary on last page –still be to added to minutes/Gail-Secretary).

The Regional motions have NOT been numbered to fit in with the existing list of **prior regional motions** as that set of motions is subject to a review in the next month.

Motion #	Status	Society Motion	Regional Motion and Assigned #	Topic
S-1	Withdrawn	yes	no	Remove age restriction for student members – already in place
S-2	Withdrawn	yes	no	Sort assigned members by postal code – Liz Baker agreed to address problem with Toronto Chapter to determine where problem lies.
S-3	Passed	yes	no	RP training be regional .
S-4	Passed	yes	no	That Regional Award of Merit score include ½ point for Regional Treasurer
S-5	Passed	yes	no	That ASHRAE endorse the Kyoto protocol.
S-6	withdrawn	yes	no	That the objective of the protocol is the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.- similar to motion S-5

S-7	withdrawn	yes	no	That the Society Executive Officers review the honors and awards format at Chapter Region Conferences Action item- Kent Peterson to assess.
R-1	Passed	no	yes	That ASHRAE Region 2 establish a Regional Scholarship Program consisting of two \$500.00 scholarships to be awarded each year at CRC –funding from Regional Fund
R-2	Postponed	no	yes	That the report of G. Menzies on the regional motions be adopted - the purpose of this report was to review existing Regional Motions and to recommend the continuation of all the motions that still apply, eliminating the motions that have been superseded, and clarifying the wording in some motions to ensure compliance. –DRC to email all Delegates a copy of the report detailing proposed changes – was done Sept 9, 2006

Appendix S-6

CLIMATE CHANGE POSITION STATEMENT

Worldwide concern for the global climate has emerged with the recognition of increasing concentrations of greenhouse gases (GHGs) in the atmosphere and with reports of increased average global temperatures. The adoption of the Kyoto Protocol in 1997 and the ongoing international efforts to address this issue are indicators of the heightened level of concern. While some uncertainty remains as to the influence of human activities on climate, significant scientific opinion supports the view that some effect already is discernible.

Chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs) and hydro-fluorocarbons (HFCs) are three GHGs that have important applications as refrigerants, heat transfer fluids, and blowing agents for insulating foams.

Relevance to the Building Technologies

Buildings should be evaluated based on their projected energy requirements and emission of refrigerants. HVAC&R systems contribute GHG releases directly and indirectly through energy-related effects and directly through the effect of refrigerant losses.

The release-related contributions to climate change are addressed by minimizing emissions of refrigerants that have global warming characteristics from systems or processes into the atmosphere. The lowest release-related impacts can be achieved by incorporating rigorous refrigerant conservation measures during design, manufacture, installation, operation, service, recovery and ultimate disposal.

Energy related impacts (contribution to carbon dioxide releases) are addressed by reducing the energy consumption of equipment, systems, and buildings and by modifying user behavior.

Both release-related and energy related effects must be considered in a life-cycle environmental approach. Primary are those factors that affect the energy consumed in the operation of the building during its useful lifetime in addition to the selection of energy-efficient equipment. Contributing factors as part of the design process are choices in building envelope alternatives, types of insulating materials, lighting and daylighting, glazing and fenestration, natural ventilation and energy recovery opportunities, and operational issues such as temperature control, environmental quality. All of these considerations have an impact on the HVAC&R requirements.

Considerations and Recommendations

Current climate change concerns stem from the potential for human activities to enhance the greenhouse effect. This enhancement could result in a climate shift beyond any rate experienced in recorded human history.

ASHRAE will take a lead role in addressing the sources of building-related emissions. Doing so, requires that ASHRAE undertake identification, research, development, and dissemination of the technologies, related standards, methods and data to control emissions. The focus must address the entire building including the heating, ventilation, and cooling loads and the systems that provide comfort/control.

ASHRAE will take a leadership role in promoting the use of life-cycle, environmental and economic impact assessments in building design and operation. The scientific evidence clearly suggests that responsible, cost-effective measures should be adopted in the building industry. Care must be taken to ensure that near term economic concerns do not discount long-term environmental impacts.

ASHRAE will continue to emphasize improving energy efficiency/utilization in HVAC&R technology to minimize emission of CO₂ from energy use. CO₂ dominates the considerably smaller effects of releases of refrigerants that are GHGs. In addition, ASHRAE will continue to encourage the proper handling of all refrigerants to minimize losses to the atmosphere.

ASHRAE recommends that decision-makers consider all environmental impacts prior to taking actions in response to climate change; e.g., it would be counterproductive to require that refrigerant substitutes have low global warming potentials (GWPs), which at the same time may result in higher energy requirements or compromised safety. Integrated assessments and balances are needed in addressing environmental issues to avoid solutions that remedy one problem at the expense of another.

ASHRAE will provide information and technology to support voluntary actions and the development of public policies.

CLIMATE CHANGE POSITION PAPER

Worldwide concern for the global climate has emerged with the recognition of increasing concentrations of green house gases (GHGs) in the atmosphere (including radiatively and chemically active trace gases) and with reports of increased average global temperatures. The adoption of the Kyoto Protocol in 1997 and the ongoing international efforts to address this issue, are indicators of the heightened level of concern.

This position paper summarizes the current understanding of climate change, the history and status of the Kyoto Protocol and the potential impacts on building technologies. It also provides an indication of ASHRAE's role in reducing GHG emissions and ASHRAE's recommendations for possible actions. The document is written from an international perspective.

1.0 CURRENT UNDERSTANDING OF CLIMATE CHANGE SCIENCE

Global climate is controlled by the energy equilibrium between incoming and outgoing energy of the earth, which is largely regulated by the interaction of the composition of the atmosphere and the atmosphere. Approximately one-third of the solar radiation (sunlight) reaching the earth is reflected back into space by clouds, small particles in the atmosphere, and the earth's surface. The remaining energy is absorbed by the surface and by gases in the atmosphere. Greenhouse gases, such as carbon dioxide (CO_2) and water vapor, as well as small particles trap heat at, and near, the surface—maintaining the average temperature of the earth's surface about 33°C (60°F) warmer than would be the case if these gases and particles were not present.

When GHG releases to the atmosphere increase, the environment may be altered. Carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF_6) are contributing GHGs. Chlorofluorocarbons, HCFCs, and HFCs have important applications as refrigerants, heat transfer fluids, and blowing agents for insulating foams. They also are used in many other applications, such as solvents, propellants, and fire suppressants.

These gases absorb and re-emit infrared radiation emitted by the earth's surface. Greater concentration levels in the atmosphere increase the "energy trapping" capabilities of the lower tropospheric region of the atmosphere.

Climate change and variability occur naturally. Over thousands of years, periodic changes in the Earth's orbit, and variations in the concentrations of GHGs have caused climate to change between ice ages and interglacial periods such as the current warm period. Over shorter periods, climate variability may be driven by factors such as volcanic eruptions and variability in solar output as well as such oscillations as El Niño.

The current concern stems from the potential for human activities (referred to as anthropogenic) to enhance the greenhouse effect. This effect could result in a climate shift beyond any experienced in recorded human history. Continuation of the current trends in the use of fossil fuels and other human activities will lead to increased concentrations of GHGs equivalent to a doubling—or more—of CO_2 levels from pre-industrial values during the twenty-first century. While some uncertainty remains as to the influence of human activities on climate, significant scientific opinion supports the view that some effect already is discernible.

Summary of IPCC (Climate Change) Findings

The Intergovernmental Panel on Climate Change (IPCC) was established to assess information on climate change, to provide reliable, relevant (and unbiased) information on all aspects of the climate change issue. The IPCC is an independent international body, co-sponsored by the United Nations Environment Programme, the World Meteorological Organization and the United Nations Framework Convention on Climate Change. The most recent full assessment report issued by the IPCC in 1996 was prepared and reviewed by more than 2300 experts.

According to the IPCC, the atmospheric concentration of carbon dioxide has increased by about 30% over the past 200 years, primarily from burning fossil fuels and deforestation; the atmospheric concentration of CO_2 is increasing at about 0.4% per year. The concentration of CH_4 has increased by about 1.4% and the current rate of increase is about 0.6% per year. The concentration of N_2O has increased by about 15% and the current rate of increase is about 0.25% per year. The atmospheric concentration of CO_2 would be more than double from the level of 200 years ago by the end of the next century if current trends in the use of fossil fuel continue. Increases in fuel use in developed countries and rapidly growing usage rates in developing countries are both concerns.

The concentrations of fluorocarbons, including fluorocarbon gases and sulfur hexafluoride, also are contributing to the enhanced greenhouse effect.

Carbon dioxide and some of the other GHGs will remain in the atmosphere for many decades or even centuries. Therefore, if actions are taken at some future time in response to observations of a human-caused global climate change, the warming effects would continue to become more severe for decades and could persist for more than a century. The magnitude, timing and regional characteristics of climate change are very uncertain. Considering the possible range of future GHG emissions and the uncertainty in the climate response to these emissions, global average surface temperatures could increase by the year 2100 by 1.3-5 °C (1.8-6.3 °F). Correspondingly, sea levels could rise by 15-95 cm (6-37") by the end of the next century. Impact estimates range from minor to very significant and even catastrophic.

Although many uncertainties limit the ability to determine the extent to which climate changes have been influenced by humans, a signal of a human-induced change is emerging from the noise of climate variability. Detection of a human influence involves a comparison of patterns of observed changes in climate with what is expected, based on the current understanding of the climate system. The uncertainties result from a limited understanding of natural variability, the influence of human activity on the increasing concentrations of GHGs and small particles in the atmosphere, and the climate response to these increases. Although progress is expected in understanding the climate system, resolution of the major policy-relevant issues is likely to take well over a decade. The buildup of GHGs in that period could have severe consequences.

2.0 INTERNATIONAL POLICY ACTIONS

In 1990, the United Nations General Assembly established an Intergovernmental Negotiating Committee to work towards the formation of a Framework Convention on Climate Change. A Convention agreement was adopted in May 1992, which was signed by countries at the June 1992 Earth Summit in Rio de Janeiro, and 176 countries (including the U.S.) have ratified it. The Convention's mission is to "protect the climate system for present and future generations."

The agreement established a continuing process, working through the periodic convening of diplomatic-level representatives of countries. Each

such meeting is referred to as a Conference of the Parties (COP). The first one (COP-1) was held in 1995, at which the "Berlin Mandate" was adopted to strengthen the original Convention's declaration by agreeing to work toward an international legal instrument (Protocol) by or at the third meeting (COP-3).

In 1997 in Kyoto, Japan, a Protocol was agreed (The Kyoto Protocol). It commits developed countries to specific reduction of emissions of global warming gases during the period 2008-2012. The Protocol enters into force when at least 55 countries, representing at least 55% of the developed countries 1990 CO₂ equivalent emissions, have ratified it. The overall international CO₂-equivalent reduction to be met during 2008-2012 is 5.2% from the 1990 level comprised of varying individual country reductions. Six greenhouse gases (CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆) are specifically covered by the Protocol. Chlorofluorocarbons and HCFCs were not included in the Kyoto Protocol but are addressed in the Montreal Protocol. Countries have the option of allowing calculations for HFCs, PFCs and SF₆ to be based on 1995 emission levels.

The Kyoto Protocol does not mandate specific policies or measures for individual countries to accomplish the reductions. Instead, each country is given flexibility to institute policies and measures that best suit its unique situation. Future COP meetings are scheduled to negotiate further details and implementation of the Protocol.

3.0 RELEVANCE TO THE BUILDING TECHNOLOGIES

Climate change is the second global atmospheric issue to impact buildings and the heating, refrigerating, and air-conditioning practices in recent years. The first was stratospheric ozone depletion, which resulted in adoption of the Montreal Protocol. To address the ozone issue, the industry developed replacements for CFC dependence. It redesigned equipment to use alternative refrigerants, designed products that greatly reduce refrigerant emissions, and implemented recovery and recycling procedures to significantly reduce refrigerant releases.

Buildings should be evaluated based on their projected energy requirements and emission of refrigerants. HVAC&R systems contribute GHG releases directly and indirectly through energy-related effects and directly through the effect of refrigerant losses.

The release-related contributions to climate change are addressed by minimizing emissions

of refrigerants (that have global warming characteristics) from systems or processes into the atmosphere. The lowest release-related impacts can be achieved by incorporating rigorous refrigerant conservation measures during design, manufacture, installation, operation, service, recovery and ultimate disposal.

Energy-related impacts (contribution to CO₂ releases) are addressed by reducing the energy consumption of equipment, systems, and buildings and by modifying user behavior. HVAC&R technologies provide the tools for the design and application of comprehensive energy-savings techniques in buildings and for the selection and proper use of energy efficient equipment and system integration.

Both release-related and energy-related effects must be considered in a life-cycle environmental approach. Primary are those factors that affect the energy consumed in the operation of the building during its useful lifetime in addition to the selection of energy-efficient equipment. Contributing factors as part of the design process are choices in building envelope alternatives, types of insulating materials, lighting and daylighting, glazing and fenestration, natural ventilation and energy-recovery opportunities and operational issues such as temperature control, environmental quality. All of these considerations have an impact on the HVAC&R requirements.

Additional considerations in the choices (or options) in building design and operation are any excessive environmental consequences associated with the production or manufacture of building components.

4.0 ASHRAE'S ROLE AND ACTIVITIES

A significant portion of energy consumed is utilized in buildings, resulting in substantial contributions to CO₂ emissions. In the U.S., buildings account for approximately one-third of annual energy usage totals. Although many refrigerants are more potent GHGs than CO₂ (on a per molecule basis), the GHG contributions resulting from the emission of HFCs are a few percent.

However, ASHRAE's energy efficiency activities have a significant bearing on GHG emissions. ASHRAE and its 50,000 members have the opportunity to make a marked contribution to reducing GHG emissions.

4.1 Standards and Guidelines

As a standards-writing organization (accredited by the American National Standards Institute),

ASHRAE currently has more than 90 published standards and guidelines, and another 30 under development. Many address the testing of HVAC&R equipment and/or systems; others are directed to design and operation. In the latter group, the energy characteristics of buildings are addressed as well as emission control practices for refrigerants.

For twenty-five years, the Society has promulgated design and test standards for reducing energy consumption in buildings. Standard 90 "Energy Efficient Design in New Buildings" was initially published in 1975. In subsequent editions, the standard was separated into a standard for a broad class of commercial buildings (90.1) and a standard for simpler residential structures (90.2). Standard 100 "Energy Conservation in Existing Buildings" provides criteria to conserve non-renewable energy in existing buildings, with an emphasis on programs for efficient operation, maintenance and monitoring of energy systems. Through the years, the standards have served as resources for code-writing organizations and have been used by the U.S. government for Federal buildings and as a basis of mandated national levels of building energy efficiency.

ASHRAE Guideline 8 "Guideline for Reducing Emission of Fully Halogenated ChloroFluoroCarbon Refrigerants" addresses refrigerant emission reduction practices in the design, installation and servicing of equipment. ASHRAE's Standard 15 "Safety Code for Mechanical Refrigeration" includes information on the safe use and handling of refrigerant in buildings. New refrigerants, developed as replacements for CFCs, are included in recent editions of the standard.

4.2 Research

Employing funds raised in the private sector, ASHRAE's research program currently has over \$9-million U.S. dollars in projects underway. The research is conducted at universities and independent research organizations. The funded projects are identified as priority (non-proprietary) needs by those in the broad HVAC&R industry.

4.3 Technology Transfer

Providing a variety of vehicles for the broad dissemination of new and emerging technologies in a timely manner is an important mission of ASHRAE. These vehicles include technical presentations at Society meetings (at the international, regional and local levels), the printed word, electronic communications and opportunities for continuing education.

The *ASHRAE Handbooks*, published in four volumes, are updated on a four-year cycle, with one newly updated volume produced each year. The *ASHRAE Transactions* document the technical and symposia papers of semi-annual Society-level meetings. The Society produces a quarterly *International Journal of HVAC&R Research* and the monthly *ASHRAE Journal*. Special publications include such items as design manuals, guidance documents, user manuals for understanding complex standards.

Issues, such as stratospheric ozone depletion, have accelerated the normal evolution processes of new technology and the need to transfer new technology in a timely manner. The climate change issue is similarly expected to impact the HVAC&R technical base over an extended period.

5.0 CONSIDERATIONS AND RECOMMENDATIONS

ASHRAE will take a lead role in addressing the sources of building-related emissions. Doing so, requires that ASHRAE undertake identification, research, development, and dissemination of the technologies, related standards, methods and data to control emissions. The focus must address the entire building including the heating, ventilating, and cooling loads and the systems that provide comfort control. Moreover, the approach must be independent of proprietary interests in specific solutions, and instead, must be guided by the public welfare.

ASHRAE, as an international organization, will lead in providing information on related building technologies throughout the world. ASHRAE will take a leadership role in promoting the use of life-cycle, environmental and economic impact assessments in building design and operation. The scientific evidence clearly suggests that responsible, cost-effective measures should be adopted in the building industry. Care must be taken to ensure that near-term economic concerns do not discount long term environmental impacts.

ASHRAE will continue to emphasize improving energy efficiency/utilization in HVAC&R technology to minimize emission of CO₂ from energy use; CO₂ dominates the considerably smaller effects of releases of refrigerants that are GHGs. In addition, ASHRAE will continue to encourage the proper handling of all refrigerants to minimize losses to the atmosphere.

ASHRAE recommends that decision-makers carefully consider all environmental impacts prior to taking actions in response to climate change, e.g., it would be counterproductive to require that refrigerant substitutes have low global warming potentials (GWPs), which at the same time may result in higher energy requirements or compromised safety. Integrated assessments and balances are needed in addressing environmental issues to avoid solutions that remedy one problem at the expense of another.

ASHRAE will provide information and technology to support voluntary actions and the development of public policies.

¹Climate Change 1995: IPCC Second Assessment Report; Summary for Policymakers: The Science of Climate Change - IPCC Working Group I, Cambridge University Press (reports are available through the following web sites: www.ipcc.ch; www.usgcrp.gov/ipcc)