

1979

Saskatoon.

TWENTY SECOND ANNUAL CONFERENCE



MAY 23 - 26, 1979



Sheraton-Cavalier

6112 Spadina Cres. E. Saskatoon

HOST
SASKATOON CANADA CHAPTER
OF ASHRAE
(CHARTERED IN 1966)

SOCIETY OFFICERS IN ATTEN- DANCE

Hugh D. McMillan, Jr.	President-Elect
Charles F. Sepsy	Treasurer
Joseph Cuba	Director of Research
Richard Perry	Treasurer-Elect
George Menzies	Region II Chairman
Al Oakes	Incoming Region II Chairman
Martin McDougall	Incoming Region XI Chairman
John Ross	Presidential Rep. for Canada

YOUR HOST COMMITTEE

Jerry Boulanger	Chairman
Bob Kowalishin	Hotel & Registration
Bernard Kaminski	Transportation
Greg Eyolfson	Treasurer - Tennis
Grant Jones	Entertainment
Krishna Sareen	Hospitality Room
Stan Nakrayko	Printing & Mailing
Brian Crowhurst	Chapter Meeting
Ron McKay	Golf

DELEGATES and ALTERNATES

Delegates	Alternates
Halifax	
Gary Brown ✓	Rod Hartlin ✓
Hamilton	
Jack Keon ✓	Jerry Kowalshyn ✓
London, Canada	
Bill Mitchell ✓	Chuck Sharp ✓
Manitoba	
David Cross ✓	Leslie Howard ✓
Les Howard ✓	Thomas Pattieson ✓
Montreal	
Gilles Rheault ✓	Dennis Banning ✓
New Brunswick	
Gary Headley ✓	Mike Mann ✓
Mike Mann ✓	
Northern Alberta	
Bob Thorpe ✓	Bob Wright ✓
Ontario	
Phil Landray ✓	Don McCurdy ✓
Ottawa Valley	
Mike Acton ✓	Ray Young ✓
Quebec	
Jean-Luc Roy ✓	Roland Guillemette ✓
Regina	
Allan Thompson ✓	Peter Hughes ✓
Saskatoon	
Wendell Dent ✓	Grant Jones ✓
Southern Alberta	
Al Smith ✓	Henry Chorney ✓

PROGRAM

Wednesday, May 23

Arrival and registration

- 1:00 p.m. * TENNIS - assemble in lobby for ride to courts
- 3:00 p.m. * GOLF - assemble in lobby for ride to golf course

No host dinner

- 8:00 * WELCOME SOCIAL - Starlightp. m. Room

9:00 p.m.

C.R.C. INDOCTRINATION SESSION (optional) followed by a Delegates and Alternates caucus, EASTERN Chapters only - Canadian Room.

Thursday, May 24

8:30 a.m. - 9:45

FIRST BUSINESS SESSION,

Sheraton East. Call to Order
-George Menzies, Director & Region II Chairman
Welcome Address - Brian Crowhurst, President, Saskatoon Chapter

Introduction and Remarks - Hugh

McMillan, President-Elect, ASHRAE

9:45 a.m. - 10:20 CHAPTER REPORTS

10:20 a.m. - 10:30 COFFEE

10:30 a.m. - 12:00 Chapter reports continue. Regional Vice-Chairmen Reports - Messrs. Turaga, Bavis, Buckler, Conrad. Presidential Representative Report -John Ross.

12:30 p.m. - 2:30*CHAPTER LUNCHEON - Top of the Inn. Chapter Meeting to be chaired by Brian Crowhurst, President of the Saskatoon Chapter. Alderman Owen Mann will welcome delegates and guests on behalf of the City of Saskatoon. Guest speaker will be Mr. Hugh McMillan, who will deliver the Presidential Address.

2:30 p.m. - 3:30

ANNUAL MEETING - A.S.H.R.A.E. Research Canada, conducted by John Ross, President

3:30 p.m. - 4:00

EXECUTIVE SESSION, EASTERN CHAPTERS ONLY, delegates and alternates only. Cliff Morrison supervising, assisted by Mort Slone.

4:00 p.m. - 5:00

SECOND BUSINESS SESSION
Written resolutions and other items of old business

Thursday evening open - tour available at 7:30 p.m. of Central Control and Monitoring System at the University - assemble in lobby at 7:20 for ride to campus.

Friday, May 25

8:30 a.m. - 12:00

WORKSHOPS - Energy Management and Research Promotion to run concurrently - Starlight and Canadian Rooms

* 12:15 p.m. - 1:30

LUNCH - Sheraton Centre - Guest Speaker Dr. George Green, ASHRAE Fellow, of the College of Engineering, University of Saskatchewan.

* 1:30 p.m. - 3:00

TOUR - To proceed directly from lunch to Dr. Green's facility at the Queen Elizabeth Powerplant, where produce is grown using the waste heat from a natural gas compressor turbine.

3:00 p.m. - 5:00

WORKSHOPS - Membership and Education to run concurrently - Starlight and Canadian Rooms

* 6:00 p.m. - 8:00

Local members will entertain guests in their homes for cocktails. Local members will pick up guests in their hotel rooms and return them to hotel for banquet and dance.

* 8:00 p.m.

BANQUET AND DANCE
-Sheraton West. Provincial Government will be in financing of banquet. Banquet will be represented by the Hon. John Brockelbank, Speaker at the Legislative Assembly.

Saturday, May 26

9:00 a.m.

THIRD BUSINESS SESSION
Resolutions and Closing Remarks by Hugh McMillan

11:00 a.m.

Check out of Sheraton Cavalier. Have a safe journey home.

* Indicates ladies are included.

Ladies' Program

All events indicated with an asterisk of the main program schedule are for Ladies to attend along with their husbands. The following schedule is in addition to those events and are for ladies only.

Thursday, May 24

Free morning by the pool at the Sheraton Cavalier Oasis Recreation Complex, which opens at 10:00 a.m.

Lunch - see main program

2:30 p.m.

assemble in lobby for tour to the Riverview Hutterite Colony.

Thursday evening free.

Friday, May 25

10:00 a.m.

tour by riverboat on the South Saskatchewan River. Please assemble in the Hospitality Room (Room 621) at approx. 9:45.

Lunch - see main program

Tour - see main program

Evening - see main program

G. Menzies
77E 45th
Hamilton Ont
L8T 3J9

CHAPTERS REGIONAL COMMITTEE MEETING
REGION II
May 23 - 26, 1979
Sheraton-Cavalier, Saskatoon, Saskatchewan

Members present: George E. Menzies - Director and Regional Chairman

<u>Chapter</u>	<u>Delegate</u>	<u>Alternate</u>
Halifax	Rod Hartlin	Gary Brown
New Brunswick	Mike Mann	
Quebec	Jean-Luc Roy	Roland Guillemette
Montreal	Gilles Rheault	Dennis Banning
Ottawa Valley	Mike Acton	Ray Young
Ontario	Phil Landray	Don McCurdy
Hamilton	Jack Keon	Gerald Kowalshyn
London, Canada	Bill Mitchell	Chuck Sharp
Winnipeg	Les Howard	Tom Patteson
Regina	Peter Hughes	Marv Hounjet
Saskatoon	Wendall Dent	Grant Jones
S. Alberta	Allan Smith	Henry Chorney
N. Alberta	Bob Thorpe	Bob Wright

Visitors and Participants:

Hugh D. McMillan, Houston, Texas (President-Elect of ASHRAE)
Kirk Bavis, New Brunswick (Energy Management Vice-Chairman)
Mal Turaga, Montreal (Education Vice-Chairman)
Paul Conrad, Halifax (Research Promotion Vice-Chairman)
George Buckler, Hamilton (Membership Vice-Chairman)
Charles Sepsy, Columbus, Ohio (Treasurer)
James Park, British Columbia (Research Promotion Chairman)
Martin McDougall, Puget Sound (Chairman Region XI)
Richard P. Perry, British Columbia (ASHRAE Res. Can. Director)
John H. Ross, Ontario (President Rep. Can.)
Joseph F. Cuba, New York (ASHRAE DOR)
Morton Slone, Montreal (Nominating Committee)
Cliff Morrison, London (Nominating Committee)
John Lunde, Ottawa (Board of Governors)
Cliff Marteinson, Southern Alberta (President)
Ken Trodd, Southern Alberta (Chapter Membership Chairman)
Wendell Wolfe, Southern Alberta (Vice-Chairman Region XI)
Al Oakes, Ottawa (Research Promotion)
Brian Crowhurst, Saskatoon (Chapter President)
Bob Kowalishin, Saskatoon (Host)
Charles Hedlin, Saskatoon

Meeting called to order by George Menzies at 8:30 a.m. Thursday, May 24, with the welcome address given by Brian Crowhurst the president of the Saskatoon chapter. Hugh McMillan, president-elect for ASHRAE made an introductory speech to the members. George Menzies asked for changes in last year's minutes; there were no changes. He then gave talk covering general points of interest to all members present.

CHAPTER REPORTS

Halifax-Rod Hartlan

Generally average year in relation to last year. New members more involved, but there is some problem in getting the more experienced members to the meetings. There are 15 new members. Chapter is financially stable. Question raised about meetings with no guest speaker, and if this would affect attendance. There was a panel discussion at one meeting, while at another the planned speaker cancelled suddenly and could not be replaced.

New Brunswick-Mike Mamm

Delegate absent from meeting. Alternate gave report. Chapter had good year, possibly one of the best years. Highlights of the chapter included a product display and education night (attendance high) where speakers showed their products and students were given an introduction to what was ahead of them in this area. Membership in the chapter is up by 10 percent to 103 members; attendance at meetings of the members is a problem with not as many attending as there should be.

Quebec-Jean-Luc Roy

Chapter reports average year in all areas although there are some money problems. A technical session in April was attended by 88 people. Fifty percent of the research promotion goal has been reached, but the chapter sees some financial problems again next year.

Montreal-Gilles Rheault

Although in the red financially earlier, chapter has been able to move the finances to the black this year. Their prepaid plan rate was increased from \$35 to \$50. There is a declining number of members attending meetings. The chapter is now working with the minister of energy in the government in Quebec on an energy conservation program.

Ottawa Valley-Mike Acton

The year was considered a success by the chapter. They are trying to strive for a more professional chapter. Membership has increased significantly this year. Financially the chapter has managed a deposit. The chapter has been considering another plan other than the education award system as they think this is not the best program to follow. Students are being brought to meetings by older members so that they may get acquainted with the group.

Ontario-Phil Landray

The group has changed the location of their meetings to another hotel and have found that this has not affected attendance at these meetings. There has been a fall off in membership. An awards contest was introduced this year and some bursaries were also presented. The chapter roster was changed this year to a loose-leaf binder. Advertising is to be considered for the roster to help cut down on the cost. The prepaid plan is \$55, but with 330 members only 162 are turning out. The prepaid plan is going to be dropped and a fee of \$40 is going to be charged while the meals will be paid for on the night of the meeting.

CHAPTER REPORTS (con't)

The high cost of secretaries for the Ontario and Montreal groups has resulted in the chapters looking at alternatives. There is some problem in getting members to work on committees.

Hamilton-Jack Keon

The chapter had an excellent year. Membership is up to 201 from 161 last year. Students membership has increased from 60 to 75. Attendance is up over last year. Finances are stable--fees are \$20 for membership and \$8 for individual meals with student meals at \$4. The chapter tried the table-top display and found that it worked very well. More emphasis is going to be placed on their energy conservation program--at present it is a bit weak. Student chapter is working very well. A phone committee is used to contact members to get them out for the meetings. An open night was held where the speaker was not technical; attendance was good.

London, Canada-Bill Mitchell

The chapter had an excellent year. Meeting attendance increased. A past-president's committee was established to assist the Board of Governors. Older members are dropping off and getting membership up is a problem. Letters and more personal contact is being used to help bring the membership back up. The Board of Governors is having problem getting members to show up for meetings. They are trying an evening meeting between the regular meetings to see if this will improve the situation.

Manitoba-Les Howard

The chapter has a relatively successful year. They have a chapter historian now. Problems in getting older past-presidents out to meetings. Two members of chapter are on a local committee to help revise the Manitoba building code. The membership is \$0 and includes meals. Finances are good.

Regina-Peter Hughes

Many of their executive officers have been leaving area and they are having difficulty filling the gaps. A past-president's night was held last month. It helped the chapter historian in obtained photos and other needed information. Local chapter dues are \$45 including meals. The chapter is not experiencing any financial problems.

Saskatoon-Wendell Dent

Dues in Saskatoon are \$50, including meals. The dues will have to be raised to \$60 in the fall due to rising cost of meals. A student night that was held was very successful, and the chapter has 20 student members. Attendance is good; about the same as before.

Southern Alberta-Allan Smith

Their education group is active. Finances are in good order, and the membership committee is also active. Membership has increased by 55 (26 percent increase).

CHAPTER REPORTS (con't)

Northern Alberta-Bob Wright

The chapter has a good solid year and made a little money. The dues are the same as last year. The special events such as the barbeque were the year's highlight. The attendance was down over last year and membership was also slightly down.

Al Oakes spoke on the Golden Gavel Award and how it increases competition between all chapters.

Meeting adjourned at 12:30 p.m. for lunch. Second General Business Meeting to start at 4:00 p.m. immediately following separate East and West Executive sessions.

REGIONAL VICE-CHAIRMEN REPORTS

Meeting reconvened at 4 p.m.

The four regional vice-chairmen gave their reports.

KIRK BAVIS-ENERGY MANAGEMENT

The energy award program has not been successful; only one chapter has a total of 500 points in this competition. This information was covered more extensively in the workshop on Friday, May 25. Kirk Bavis was congratulated on a job well done under difficult conditions.

GEORGE BUCKLER-MEMBERSHIP

It is hoped that the society can increase membership by women by at least 100 percent so as to destroy image of it being only a "men's club". International involvement with society should also be improved. Region II paid memberships as of April were 2,829. The goal is for 32 women in membership. Delinquency should be reduced to only 2 percent. The increase in membership constitutes an increase of 4.8 percent in 1977. Student membership is up 33 percent. Steve Singleton should be contacted about incorrect statistics re: delinquencies.

PAUL CONRAD-RESEARCH PROMOTION

There is some difficulty in getting the research promotion figures from all chapters. It is hoped that in future collecting the research promotion money can be done quickly by several people--there should be more participation. So far, \$22,000 has been collected. The totals should be complete by the end of June, although the sooner they are known, the better.

MAL TURAGA-EDUCATION

Improvement is needed in the university-based committees to help improve the student chapters.

Further details are in the minutes from Education Workshop.

When vice-chairman reports completed meeting chairman George Menzies asked that all information questionnaires be turned in by Saturday. Eight of the questionnaires were already received.

RESOLUTIONS

1. "CHANGE THE TIME OF THE CRC IN REGION II TO THE FALL SO THAT CHAPTERS WILL BENEFIT FROM INFORMATION GAINED AT A CRC AT THE BEGINNING OF THE FISCAL YEAR."

Submitted by Gilles Rheault-Montreal.
Seconded by Bill Mitchell-Winnipeg.
Motion defeated.

*It was noted that the dates and locations for the next five years of CRC's in Region II should be decided. Suggested dates and locations to be presented at Saturday's Third General Business Meeting.

2. "THAT HEADQUARTERS MAIL DIRECTLY TO EACH CHAPTER CHAIRMAN SUCH AS EDUCATION, MEMBERSHIP, RESEARCH PROMOTION, ENERGY MANAGEMENT, HISTORICAL, PERTINENT CORRESPONDENCE RATHER THAN TO THE CHAPTER SECRETARY. THE EXCEPTION WOULD BE WHEN THE CHAPTER INFORMATION QUESTIONNAIRE HAS NO NAME OR ADDRESS LISTED FOR A PARTICULAR CHAIRMAN; THEN THE INFORMATION WOULD BE SENT TO THE CHAPTER SECRETARY."

Submitted by Jack Keon-Hamilton.
Seconded by Phil Landray-Ontario.
Motion defeated.

3. "THAT SOCIETY AMEND THE PORTION OF THE RULE OF THE BOARD (ROB) 452-010-001 WHICH STATES THAT CURRENT ISSUES OF THE ASHRAE HANDBOOK BE MADE AVAILABLE TO CHAPTERS OF THE SOCIETY FOR GIFT PURPOSES AS AWARDS TO SPEAKERS AND STUDENTS AT THE CURRENT EDUCATIONAL DISCOUNT RATE (WHICH IS 40 PERCENT OF LIST ROB 450-002-004) BY REMOVING THE LAST PHRASE 'AT THE CURRENT EDUCATIONAL DISCOUNT RATE' AND REPLACING IT WITH, 'AT THE CURRENT RATE FOR EDUCATIONAL VOLUMES' (WHICH IS CURRENTLY \$10) PLUS POSTAGE AND EXCHANGE."

Submitted by
Seconded by Gilles Rheault-Montreal.
Motion passed.

4. "THAT FOR EACH OF THE REGIONAL OFFICES OF VICE-CHAIRMAN--RESEARCH PROMOTION, MEMBERSHIP, ENERGY MANAGEMENT, EDUCATION--THAT AN ASSISTANT BE DESIGNATED BY THE CRC."

Submitted by Mike Acton-Ottawa Valley.
Seconded by Jack Keon-Hamilton.

Discussion carried over until Saturday Business Meeting.

Meeting adjourned until Saturday, May 26 at 8:30 a.m.

THIRD SESSION BUSINESS MEETING

Meeting convened at 8:40 a.m. in the Canadian Room at the Cavalier Hotel.

The locations and dates (tentative) of the CRCs for the next five years were decided. They are as follows:

1980	Moncton, New Brunswick	May 21 - 24	Montreal Alternate
1981	Montreal, Quebec	May 27 - 30	Halifax Alternate
1982	Halifax, Nova Scotia	May 19 - 22	Quebec City Alter.
1983	Quebec City, Quebec	May 18 - 21	Ontario Alternate
1984	Ontario	May 23 - 26	

The locations and dates were submitted by Phil Landray.

Seconded by Ray Young.

1979 (~~Motion passed.~~ The problem of the Victoria Day holiday week-ends conflicting with the CRCs has to be considered when fixed dates are decided.
 CRC

NOMINATING REPORT BY MORT SLOAN

At next year's CRC the names of people to succeed three of the regional vice-chairmen who are retiring in June, 1981, must be given to the nominating committee. The three vice-chairmen retiring are education, membership, and research. Also needed are names for possible regional and society awards, names for nominating committee, and names of anyone interested in serving on any of the society committees. Up-to-date biographies must accompany these names. A member must have been a full member for three years to be eligible for regional vice-chairman or a place on the nominating committee.

To assure the smooth transfer of responsibility from the out-going vice-chairman to the incoming, the appointment can be made a full year before they are to officially begin. Al Oakes has said that these people will be used as assistants to the vice-chairman during that year. This assures that the vice-chairman is experienced enough in his first year in that post to enable him to deal competently with all situations. It will also be of benefit to the new vice-chairman if he can attend the CRC immediately prior to his taking over the position during his "assistant" period.

It is hoped that in future delegates will be better prepared for the CRCs. It must be impressed that the chapter CRC Action Committee must start early in the year. Finally, the one category of names which the nominating committee has been responsible for producing at the winter meeting is the names of those members who would be qualified to serve on the board of directors or executive of the society. Remember, it is your society and your elected members run it. Hopefully, in the future as in the past there will be many people from Region II on the executive.

Motions:

It was requested that the fourth motion discussed in part at Thursday's meeting be withdrawn from discussion. Everyone was agreed.

THIRD BUSINESS SESSION (con't)

FRIDAY WORKSHOPS

The chairman of the meeting asked if there were any further resolutions to be put forward in regard to anything discussed at the four workshops held on Friday. The vice-chairmen stated that they had no further resolutions.

5. "MORE SPACE SHOULD BE ALLOCATED IN ASHRAE JOURNAL TO EXPAND ^{the} EXSISTING FORMAT FOR CHAPTER NEWS."

Motion seconded by Peter Hughes-Regina.

Passed.

It was mentioned that rather than have space allocated for each chapter, each chapter should try to get information and photographs out to the journal. This information should be sent directly to the editor of the journal. The information must be sent in if it is to appear in the journal.

The chairman stated that all questionnaires were now in. It was also mentioned that each chapter should be sure to get the news letters for members to read. The news letters contain much important information.

George Menzies, chairman of the meeting, said thank you for the rewarding experiences he has had as regional chairman for the past three years.

Saskatoon chapter was complimented for the outstanding job done for this CRC.

Hugh McMillan gave the closing statement saying that the spirit in Region II is great and will be even better next year when it becomes two regions. The chapters must do some work on the Presidential Excellence Award. Several chapters received the award this year and several more have the opportunity to receive the award. Ontario was complimented on the outstanding attendance record they have maintained.

Wendall Dent of Saskatoon chapter said it was a pleasure to have everyone in Saskatoon for the meeting and that this year was a very successful one for the CRC.

Meeting adjourned at 9:30 a.m.

George Menzies, Reg. II., Chairman
6/1/79

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.



ASHRAE - SASKATOON C R C EDUCATION WORKSHOP - 25th MAY, 1979

IN ATTENDANCE

Mal Turaga	Montreal	Vice Chairman - Education
Rod Hartlin	Halifax	Alternate
Mike Mann	New Brunswick	Alternate
Jean Luc Roy	Quebec	Delegate
Ray Young	Ottawa Valley	Alternate
Don McGurdy	Ontario	Alternate
Jack Keon	Hamilton	Delegate
Chuck Sharp	London	Alternate
Tom Patteson	Winnipeg	Alternate
Peter Hughes	Regina	Delegate
Grant Jones	Saskatoon	Alternate
Henry Chorney	So. Alberta	Alternate
Bob Thorpe	N. Alberta	Delegate
Hugh D. MacMillan	Houston	President Elect
G. E. Menzies	Hamilton	Reg. II Chairman
Martin McDougall	Puget Sound	Reg. XI Chairman Elect
John Ross	Ontario	ASHRAE Research Canada
Joe Cuba		ASHRAE Research
Charles Sepsy	Columbus, Ohio	Vice President
Al Oakes	Ottawa Valley	Research Promotion
Bob Cowan	Saskatoon	Education Comm (Sktn)

- 1.1 The meeting was called to order at 8:45 A. M.
- 1.2 A motion to approve the agenda was moved by Jack Keon and seconded by Henry Chorney.
- 2.1 Mal Turaga reported briefly on the Philadelphia semi-annual meeting.
- 3.1 Delegates reported not being aware of the Education Work^{book}. Mal Turaga stated he would send workbooks to the president or each Chapter.
- 4.1 Mal Turaga stated that in restructuring the A.O.E. points, a new item had been added. A.O.E. points would be awarded for Chapter liaison with High Schools, Community Colleges, Universities and other learning institutions. This liaison could take the form of career nights, or the setting up of the ASHRAE display booth. Chapters reported that they were not currently pursuing this sort of programme.
- 4.2 Hugh MacMillan said this programme would not be officially announced until the Detroit semi-annual meeting. Mal Turaga said he would send a copy of minutes to any interested Chapter.
- 5.1 Reporting of on going educational activity:

Reports are still required from London, Ottawa Valley, Manitoba, Regina and Saskatoon. Mal Turaga stated the 140 points shown for Educational activity are the minimum.

- 5.2 Bursaries and Scholarships - Mal Turaga requested that Chapters report:

- a) How much is donated.
- b) The name of each recipient.

- 5.3 Student Nights - Chapters are to report how their student nights are set up. Mal Turaga said extra points would not be awarded unless this information was reported to him. Discussion followed with Ottawa Valley, New Brunswick and Hamilton Chapters reporting on the structure of their student nights.

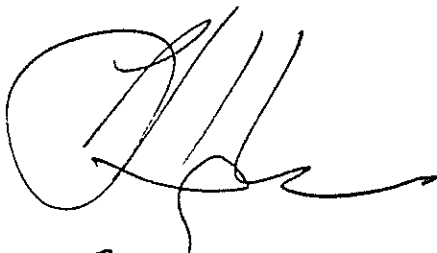
- 5.4 Discussion followed from Regina, Southern Alberta, London and Ontario regarding bursaries and how funding was achieved. London reported on having run a design competition, "Solar Heated shower for a Boy Scout Camp".

ASHRAE RESEARCH

- 6.1 Joe Cuba was introduced to delegates and gave a brief report on the distinction between the roles of the Research Committee and the Education Committee.
- 6.2 Joe Cuba spoke on the global objectives of ASHRAE research and how projects are originated and funded.

- 6.3 Joe Cuba stated that all research funds raised in Canada were used to fund Canadian projects, and kept in Canadian banks. It was stated that 90% of all funds raised in any year must be spent in that year to avoid taxation under Canadian tax laws.
- 6.4 Joe Cuba stated that regular procedures have not generated enough interest from Canadian Universities and other research organizations to distribute funds rapidly enough to avoid tax. Of 52 requests for proposals sent out by ASHRAE Research, only 8 responses were received. In addition, 5 unsolicited proposals were received, two of which were funded, the other 3 being still under review. Joe Cuba then listed each Canadian University in turn along with the number of requests for proposals set out and the number of responses received. Joe Cuba then explained the nature of Grants in Aid and gave a brief review of the requirements for these grants.
- 6.5 In view of the poor response to ASHRAE requests for proposals it was suggested that contact people at universities be reviewed along with their further intentions.
- 6.6 Joe Cuba stated that when requests for proposals were sent out to Research Institutions, local chapter presidents also received copies with a request to contact the university and follow-up the request. No responses from local chapters had been received.
- 6.7 It was reported that following the Philadelphia meeting copies of RFP'S were also being sent to John Ross for follow-up.
- 6.8 Mal Turaga reported receiving work statements so that he can investigate likely recipients of grants.
- 6.9 Al Oakes suggested more effort be made to educate Canadian universities and research institutions on the activities of ASHRAE so that more response can be generated to RFP'S.
- 6.10 George Menzies suggested all chapters should work harder to make contact with their local universities.
- 6.11 John Ross asked how the National Research Council and Ontario Research Foundation should be approached. Turaga said he would identify contacts in these organizations.
- 6.12 Al Oakes suggested local executive are not necessarily the right people to liaise with research academics.
- 6.13 Al Oakes suggested more effort should be made in the direction of joint-funded projects with Government or other organizations. He said the amount of monies ASHRAE Research Canada could contribute to projects by itself does not generate enough interest in research institutions.
- 7.1 John Ross was called to speak on the activities of Research Canada. He reported on the background, scope and mode of operation of the Canadian organization, augmenting the information given by Joe Cuba.

- 8.1 Education Committee Handbook: Delegates were asked to find out from the Education Committee or Chapter presidents if their chapter had received the Handbooks. Mal Turaga said the Handbooks had been distributed at Benmillar. If chapters required new copies, they could be obtained from H. Q.
- 9.1 Proposed Student Paper Competition: Mal Turaga introduced the concept of a student paper competition suggesting it be a National Competition on 2 levels.
- a) Universities - a design concept.
 - b) Community Colleges - a practical systems design.
- Much discussion followed on how such a competition could be organized, whether it was feasible, and how it could be achieved. Much interest was expressed by the delegates in organizing student paper competitions.
- 9.2 Competitions at the local level: George Menzies suggested chapters should be encouraged to set up local competitions and the national competition be allowed to evolve from local, through regional to a National level. This view was shared by the majority of chapters.
- 9.3 No chapters rejected the National Competition idea but many thought it too ambitious before local competition was organized. All chapters expressed interest in organizing local competitions, and were urged to set up competitions as soon as possible.
- 9.4 Funding of local chapter competition was to be undertaken at a local level. A suggestion that funding should come through ASHRAE Research was rejected. George Menzies stated there was no current under distribution of Research funds.
- 10.1 ASHRAE Chapter Information Centres: Delegates were reminded that Concordia University had set up an information centre with ASHRAE standards, all publications and transactions. Mal Turaga stated that such a facility was an excellent tool for promoting ASHRAE at the University or Community College level.
- 10.2 Mal Turaga stated he would mail each chapter the Budget and Facility layout.
- 11.1 Mal Turaga thanked all delegates for their contributions to the workshop. The meeting was adjourned at 11:30 A.M.



PETER HUGHES

ORC Region II ASHRAE

Saskatoon, Saskatchewan -- Cavalier Hotel

Workshop - Research Promotion

Date - May 25, 1979

Time - 3:15 p.m.

Chairman: Paul Conrad

Attendance:

Paul Conrad	Vice-Chairman Region II Research Promotion
Carl H. Ljungberg	Hamilton Chapter R.P. Chairman
Don McCurdy	Ontario Chapter Alternate
Bob Wright	Northern Alberta Chapter Alternate
John Lunde	Ottawa Valley R.P. Com.
Gary R. Brown	Halifax Chapter Delegate
Brian Crowhurst	Saskatoon Chapter R.P. Chairman
Bill Mitchell	London Chapter Alternate
Dave Potter	New Brunswick R.P. Com.
Roland Guillemette	Quebec Chapter Alternate
Ray Young	Ottawa Valley Alternate
Jack Scott	Regina R.P. Chairman
Joseph F. Cuba	ASHRAE N.Y. D.O.R.
John H. Ross	A.R.C. President
Wendell Wolfe	Southern Alberta R.P. Com.
Jack Keon	Hamilton Chapter Delegate
Hugh D. McMillan	Houston ASHRAE Pres.-Elect
Richard Perry	B.C. R.P. Com.
Martin McDougall	Puget Sound Chapter
Al Oakes	Region II R.P. Vice-Chairman Society
Chuch Sepsy	ASHRAE Vice-President
James T. Park	B.C. Chapter R.P. Chairman
George Menzies	Hamilton Chapter Vice-Chairman R.P.
Henry Chorney	Southern Alberta Chapter Delegate
Cliff Martinsen	S.A. President, R.P. Chairman-Elect
Dennis Banning	Montreal Chapter R.P. Com.
Les Howard	Winnipeg Delegate

The workshop opened at 3:15 p.m. with welcome remarks from Paul Conrad. He then proceeded with outlining the proposed changes to when the next workshop should be held, the qualifications of Research Promotion Chairman in each chapter, who should be the R.P. Committeemen, support material and where it is available and finished with showing the slide presentation on Research Promotion available to each Chapter.

Some of the highlights of Paul Conrad's remarks were:

-- Research Promotion is the investment in the future of our industry and is the main reason for ASHRAE

-- Research Promotion Chairmen should be appointed in June of each year and should preferably hold this position for two or more years. He should appoint an assistant that will take over as chairman hopefully after already having had considerable experience on the R.P. Committee.

-- R.P. Chairman should be an experienced ASHRAE worker, who knows what ASHRAE Society involves, with a mature, positive and enthusiastic attitude. He should be able to plan and to lead.

-- Next Region II workshop will be held in October 1979 at which time each chapter should have formed a R.P. Committee.

-- Hustler Award will be given to the best R.P. Chapter Chairman every year as decided by the Region II R.P. Chairman.

-- It is imperative R.P. Chairman has the full support of the Chapter.

-- As R.P. committeemen, use the "heavy weights" such as past-Presidents, Board of Governors, Fellows in ASHRAE, etc.

-- This year's quota is \$47,400.00

-- Only a few chapters have exceeded or are very close to their quota, as of May 25, 1979, although the deadline for all contributions is April 30, 1979.

-- The majority of R.P. work should be completed by April 1 and only some follow-ups required in the last few weeks.

-- Incoming Regional 11 Chairman Martin McDougall indicated the chapter he belongs to has standing committees with R.P. Committee consisting of teams competing amongst each other. They have found this approach very successful.

-- Incoming Region 2 Chairman Al Oakes had the following comments:

There are very few companies in our industry who do research in their own industry. "Ask them to put it back into their own industry by investing in ASHRAE"

Meeting was closed at 3:45 p.m.

Carl Ljungberg.

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.



UNITED ENGINEERING CENTER, 345 EAST 47th STREET
New York, N. Y. 10017 (212) 644-7953

C. R. C. Saskatoon, Sask.
Sheraton - Cavalier Hotel,
May 25, 1979.

Minutes of Membership Workshop conducted by Geo. Buckler, Rheem Canada Limited, Hamilton, Ontario

Meeting was opened by Chairman with discussion re function of the Membership Committee.

A total of 12 Chapters represented. Geo. Buckler reviewed last term - outlined importance of Membership Committee to Society - suggested membership be active in Chapter. Aim of Vice Chairman of Membership basically is to communicate to the Chapters the aims and objectives of Society. Steve Singleton in charge of Membership in New York.

Delinquent list discussed and all Chapters agreed this list should not take three months to reach the Chapters as sometimes occurs.

Morton Slone, Mominating Committee, emphasized importance of up-grading to membership.

Chapter Membership growth discussed by G. Buckler and Blue Ribbon Award - Presidential Award of Excellence, qualifications outlined.

The Society organizational structure and points of How to Sell Membership outlined by projector.

Discussion on delays in processing applications at New York - Charles Sepsy President - Elect, explained reasons for up to 90 day requirements.

Importance of new and student member acknowledgment at Chapter Meetings and presidential letter to special potential members stressed.

G. Buckler suggested 5% growth and a 2% (max.) for delinquents as targets for coming year.

An applicant for Society Membership should immediately be put on Chapter mailing list and be considered a member until otherwise notified to the contrary.

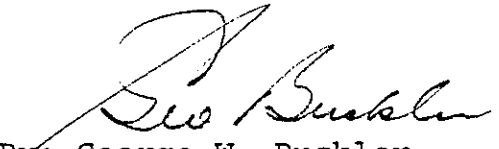
G. Buckler passed out prepared handbooks re Chapter Membership - a good functional guide for the Chapter.

G. Buckler gave a Shaeffer pen to everyone in attendance.

Meeting adjourned at 5.00 P.M.

In addition to delegates and alternate in attendance, the following were present:

George Menzies Regional Director
Al Oakes Incoming Regional Director
Charles Sepsy President Elect
Morton Slone Nominating Committee
Richard Perry Member Region X
Ken Trod Chapter Member Chairman, Calgary
Bruce Menlovie Winnipeg Member
Martin McDougall Puget Sound Member


By: George W. Buckler,
Vice Chairman Membership
Region 11

E N E R G Y M A N A G E M E N T W O R K S H O P

CRC - REGION II

SASKATOON, SASKATCHEWAN

Friday, May 25, 1979

1. Meeting was called to order at 8:40 a.m., in the Maple Leaf Room of Sheraton Hotel with the following in attendance:

Bob Wright	Northern Alberta	Chapter Vice-President
Cliff Marteinson	Southern Alberta	Chapter President
Allan Smith	Southern Alberta	Delegate
Marv Hounjet	Regina	Alternate
Wendell Dent	Saskatoon	Chapter Vice-President
Krishna Sareen	Saskatoon	Chapter Secretary
Les Howard	Manitoba	Delegate
Bill Mitchell	London	Chapter President
Phil Landray	Ontario	Delegate
Gerry Kowalyshyn	Hamilton	Chapter President Elect
Mike Acton	Ottawa Valley	Delegate
John Lunde	Ottawa Valley	-
Gilles Rheault	Montreal	Chapter President Elect
Roland Guillemette	Quebec	Alternate
Dave Potter	New Brunswick	Alternate
Garry Brown	Halifax	Delegate
George Menzies	Hamilton	Regional Chairman
Dick Perry	Vancouver	Society Treasurer
Al Oakes	Ottawa Valley	-
Paul Conrad	Halifax	Research Vice-Chairman
Prof. Sepsy		Society Vice-President
Kirk Bavis	New Brunswick	Energy Vice-Chairman

2. Each chapter reported briefly on its activities in the Energy Management field. The following items are of some significance:

- (a) Slide presentations, "Managing Your Energy" and "Home Energy Savings", have been reviewed by nine chapters and have met with mixed reaction.
- (b) Manitoba Chapter has been quite active and has had input on the revision of the Manitoba Building Code.
- (c) Montreal Chapter attempted an Energy Awards Program with no success. Ontario Chapter successfully completed an awards program for their chapter.
- (d) Most successful meetings appear to be "Panel Discussions" on an energy related topic.

3. ENERGY MANAGEMENT AWARDS PROGRAM

It was decided that Region II will pursue an awards program on the regional level during the upcoming year with the Regional Vice-Chairman acting as Chairman. Guidelines are to be submitted (copy attached) and a winner selected by a panel of judges. Winner to be selected and presented with an appropriate award at the CRC meeting. Most chapters were in agreement and support this program.

4. PRESIDENTIAL AWARD OF EXCELLENCE

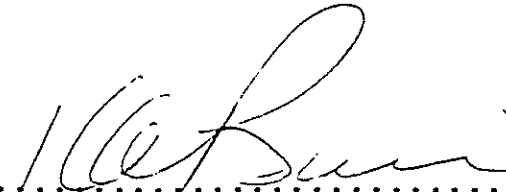
The current method of allocating points and reporting chapter activities was discussed in detail and it was generally agreed that the point system requires refinement. It was generally agreed that points for energy management activities are needed and help to stimulate committee activity on the chapter level; however, these are not properly weighted at present.

5. ENERGY CODES

The present status of 90-75 R and 100 P series was assessed by Prof. Sepsy and a lively discussion concerning performance standards followed. It was the general consensus that Section 10 of 90-75 must be completed as quickly as possible and presented to the industry.

The method of presenting the 100 P series was discussed and it was generally agreed that an approach similar to that used for 90-75 would be acceptable.

Meeting adjourned at 11:20 a.m.


.....
Kirk A. Bavis, P. Eng.
Regional Vice-Chairman
Energy Management

1979-05-28

Revised - Final copy

Calc for '78-79 PAOE PHS.

G. E. M.

JUNE 15, 1979

Attendance at CRC (Saskatoon May 23-26/79)

HALIFAX	²⁵ P. CONRAD	²⁵ BROWN	²⁵ HARTLIN	75			
HAMILTON	⁵⁰ C. LUNGBERG (RPCLW)	²⁵ KEON	²⁵ MENZIES	²⁵ KOWALSHYN	²⁵ BUCKLER	150	
LONDON	²⁵ MITCHELL	²⁵ SHARP	⁵⁰ MORRISON	100			
MANITOBA	²⁵ HOWARD	⁵⁰ MENLOVE	²⁵ PATTERSON	100			
MONTREAL	²⁵ BANNING	²⁵ SLONE	²⁵ TORAGA	²⁵ RHEAULT	100		
N. BRUNSWICK	⁵⁰ POTTER (RP)	²⁵ MANN	²⁵ KAUVIS	100			
N. ALBERTA	²⁵ WRIGHT	²⁵ THORPE + ?	100				
ONTARIO	²⁵ J. ROSS	²⁵ MCCURDY	²⁵ LANDRAK	75			
Ottawa Valley	⁵⁰ J. LUNDE	²⁵ R. YOUNG	²⁵ OAKES	²⁵ ACTON	125		
QUEBEC	²⁵ GUILLEMETTE	²⁵ LUCROT	50				
REGINA	⁵⁰ LOWHURST (PRES)	²⁵ HUGHES	²⁵ M. JENNETT +	100			
SASKATOON	⁵⁰ J. SCOTT (PRES)	⁵⁰ G. JONES	⁵⁰ B. COWAN	⁵⁰ C. HEDLIN	²⁵ V. LENT	⁵⁰ SARKEN	250
S. ALBERTA	⁵⁰ MARTINSON (PRES)	⁵⁰ W. WOLFE	²⁵ C. HORNBY	⁵⁰ K. TROTT	²⁵ A. SMITH	200	

- called in to SC. Singleton May 31/79 9:07 AM.

- send this analysis to A. Oakes - AL - You do calc. for PAOE on attendance, advising N's of figures (hopefully for their May 31 status report (which you see at Annual Meeting))

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.



UNITED ENGINEERING CENTER, 345 EAST 47th STREET
New York, N. Y. 10017 (212) 644-7953

CONTEST RULES:

- Each entry shall be submitted in four (4) copies;
- Written description of the project shall be limited to a maximum of five (5) 8 1/2" X 11" pages, typewritten, double-spaced, one side only. The text shall indicate unique or unusual design features and solutions towards excellence in energy conservation;
- The project shall have reached the construction phase, or be completed;
- The entrants role in the project shall be described;
- The text of the entry shall describe the system(s), and procedures used to solve the problems or design of the project, how well the project meets the need of the owner, estimated energy savings resulting from the project, and actual savings if available;
- A maximum of five (5) displays are permitted, each 8 1/2" X 11", including photographs, sketches, renderings, graphs, etc;
- Each entry shall be accompanied by a written consent of the Owner that the project may be publicized;
- Each given project shall be entered no more than once.

JUDGING:

At both the Chapter and Regional levels, a panel of peers will be selected to judge entries.

A point weighting system will be employed:

Cost Effectiveness.....	40	points	maximum.
Innovativeness.....	40	"	"
Breadth of applicability elsewhere.....	15	"	"
Quality of entry presentation.....	5	"	"
TOTAL POSSIBLE POINTS.....100			

/jw

LET'S HEAR FROM YOU!!!!!!!!!!!!!!!!!!!!

BUDGET - ASHRAE Region II C.R.C. - 1979

INCOME

ASHRAE allotment	<u>600.00</u>	
Chapter assessment	<u>2700.00</u>	
Registration	<u>1360.00</u>	(34 x 40.00)
		<u>4660.00</u>

EXPENSES

Meals and hotel	<u>2600.00</u>	
Printing & mailing	<u>450.00</u>	
Gifts and trophies	<u>50.00</u>	
Entertainment	<u>500.00</u>	
Mailing	<u>-</u>	
Freight	<u>60.00</u>	
Secretary	<u>100.00</u>	
Refreshments, snacks	<u>400.00</u>	
Transportation	<u>100.00</u>	
		<u>4260.00</u>
Balance		<u>400.00</u>

Pat McDonald.

Saskatoon

49 Lefferickson

S7L 2T6.

AGENDA

CRC REGION II - May 23-26, 1979 Saskatoon Saskatchewan

WEDNESDAY, MAY 23, 1979

- 9:00 pm: CRC Indoctrination Session: For the Alternates and those members unfamiliar with the purpose and structure of a CRC
- 10:00 pm: Caucus - For 8 eastern ASHRAE Chapters - Delegates and Alternates plus Cliff Morrison and Mort Slone - Region II's representatives from the Society Nominating Committee. Candidates for Vice-Chairman Energy Management (to replace Kirk Bavis who retires) and back ups for other Vice-Chairmen, plus names for Canadian Directors-at-Large and Committeemen for the many Society Committees will be discussed (in preparation for Executive Session)

THURSDAY, MAY 24, 1979

- 8:38 8:30 am: - Opening of 1st Business Session
(Sharp!) - Call to Order - George Menzies, Director and Regional Chairman
- Welcome by Host Chapter: Brian Crowhurst - President
- Appointment of Recording Secretary
- Introduction of Head Table
- Introduction of Delegates and Alternates (Roll Call)
- Introduction of visiting dignitaries, Regional Vice-Chairmen etc.
- Approval of the Minutes from the 21st Annual Region II CRC @ Bensmiller, April 1978
- Report by Regional Chairman and Update on resolutions from the previous CRC as well as the recent Society Meeting pertaining to Region II
- 9:32 - Remarks by Hugh McMillan, Society President - Elect
9:42 - Remarks by Prof. Charles Sepsy, incoming Society President - Elect
- Remarks by J. F. Cuba, ASHRAE's Director of Research
- 10:01 - Remarks by John Ross, Canadian Presidential Representative and President of ASHRAE Research Canada
- 9:45 am: - Chapter Reports - starting with Halifax (Oral overviews of the highlights of the Chapter activities and problem areas) Delegates encouraged to question statements.

- 10:20 am: - Coffee

Mail to Chapters V.C. + Reg Chair

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THURSDAY, MAY 24, 1979

- 10:30 am: - Chapters Reports Continue, followed by
- Regional Vice Chairmen reports (oral overview only)
- 4:03
4:06
4:09
- Kirk Bavis: Energy Management
- George Buckler: Membership
- Paul Conrad: Research Promotion
- Mal Turaga: Education
- 12:00 - Golden Gavel Award - Concept to be introduced by Al Oakes incoming Region II Chairman
- 12:30 pm: - Chapter Luncheon - Top of the Inn. This luncheon will be attended by delegates, alternates, wives, local members and any and all interested guests. Chapter meeting will be chaired by Brian Crowhurst, Saskatoon Chapter President. Guest speaker will be Mr. Hugh McMillan, President of Ashrae, who will deliver the Presidentail Address entitled "The Future of ASHRAE - A Function of Committment of Its Members"
- 2:30 pm: - Annual Meeting - ASHRAE Research Canada - conducted by John Ross, President, George Menzies Recording Secretary--each Chapter Delegate (class "B" shareholder) and class "A" members to be present
- 3:00 pm: - Executive Session, EASTERN CHAPTERS ONLY, delegates and alternates only. Cliff Morrison supervising, assisted by Mort Slone.
- 3:30 pm: - Second Business Session
Written resolutions and other items of old business.
- As of May 4, written resolution include:
- (1) Change the time of the CRC in Region II to the fall so that Chapters will benefit from information gained at a CRC at the beginning of the fiscal year
Montreal Chapter - G. Rheault
 - (2) That headquarters mail directly to each Chapter Chairman such as Education, Membership, Research Promotion, Energy Management, Historical, pertinent correspondence rather than to the Chapter Secretary. The exception would be when the Chapter Information Questionnaire has no name or address listed for a particular Chairman, then the information would be sent to the Chapter Secretary
(Hamilton Chapter: J. Keon)
 - (3) That Society amend a portion of the Rule of the Board (ROB) 452-010-001 which states "that current issues of the ASHRAE Handbook be made available to Chapters of the Society

THURSDAY, MAY 24, 1979

for gift purposes as awards to speakers and students at the current educational discount rate (which is 40% of list - ROB 450-002-004) by removing the last phrase "at the current educational discount rate" and replacing it with "at the current student rate for additional volumes" (stated in ROB 452-002-002) (which is currently \$10.00) plus postage and exchange

✓ That each of the Reg V-C (4) has an asst be designated by the CRC.

5:00 pm: - Adjourn

Thursday evening open - please take this free time to enjoy our beautiful city. Your hotel is within walking distance of the University, the downtown area (stores open until 9:00 pm), the Mendel Art Gallery, and many fine restaurants. For those who wish, a tour is available of the Central Control and Monitoring System (CCMS) at the University of Saskatchewan, at 7:30 pm.

FRIDAY, MAY 25, 1979

8:30 am: - Concurrent Workshops - Please note if your Chapter Chairman is not representing your Chapter in Saskatoon, then the Chapter Delegate must attend on his behalf at one workshop while the Chapter Alternate must attend the other workshop. Visitors to any Workshop welcomed. It is essential we practice this procedure as the Regional Vice-Chairman has material essential to his area of interest which a chapter requires for the upcoming year's operation.

- Energy Management - Kirk Bavis (plus officials from Federal Government)

- Research Promotion - Paul Conrad - assisted by Joe Cuba, ASHRAE Director of Research, John Ross, ARC President, Al Oakes, R.P. Vice Chairman for the Society

12:15 pm: - Lunch - Sheraton Centre - Guest Speaker Dr. George Green, Ashrae Fellow, of the College of Engineering U of S.

1:30 pm: - Tour of New HVAC facility

3:00 pm: - Concurrent Workshops:
Membership: George Buckler
Education: Mal Turaga

5:00 pm: - Adjourn

6:00 pm to 8:00 pm: - Local members will entertain guests in their homes for cocktails.

8:00 pm: - Banquet and Dance - Sheraton Complex

①

Phil Landry - future confirmation of dates

80 Moncton May 21-24 Montreal
81 Montreal May 20-27 Halifax
27-30/91
82 Halifax May 19-22 Quebec City
83 Quebec City May 18-21 Ontario
84 Ontario May 23-26

② Mort Slove

- ③ M. Acton withdrawn motion

- V-C Workshops-resolutions Nil

Resolution

*④ more space be allocated in ASHRAE Journal to individual chapter news
(eg 3 expanded entries/season.)

Society Newsletter OK

Hugh McMillan - comments - PAOE (Xerox Apr 30th)

SATURDAY, MAY 26, 1979

- 8:30 am: - Third Business Session
- Discuss future dates for Region II CRCs and their locations (including alternate locations)
 - Report by Cliff Morrison from the Executive Session:
- (1) Society Officers Regional Recommendations. Confidential - not to be announced. Nominating Committee Member and Alternate to verify that selections have been made.
 - (2) Region II Nominating Committee Member and Alternate selections for 1979-1980 to be announced and recorded in Meeting minutes.
 - (3) Honours and Awards - Statement required to the effect that Honours and Awards recommendation have been considered and/or made. Specific recommendations and are not be announced.
 - (4) Region II Vice-Chairmen Recommendations - These to be conveyed to Regional Chairman on a Confidential basis.
 - (5) Other Society Committee Members Recommendations - To be conveyed to Regional Chairman on a confidential basis.
- New Business Resolutions which result from the previous day's workshop which require approval by the CRC for the Regional Chairman to take to the Regions Central Meeting in Detroit in June 1979
 - New Business - resolutions from the floor
- 11:00 am: - Adjournment of 22nd Annual Region II CRC

/cm



✓ - confirmed by Jan 16/79 request

REGION II - 1978-1979

Halifax

es: John Ronald Roberts, 20 Candlewood Lane, Lr. Sackville, Nova Scotia B4C 1A5
Secy: Gary R. Brown, 240 Kay St., Lr. Sackville, Nova Scotia BON 1S0
Del: Gary R. Brown (See above)
Alt: Rod H. Hartlin, C/O Construction Assoc. of N.S., P.O. Box 2047, Halifax, Nova Scotia B3J 2Z

Hamilton

Pres: Frank Spina, C/O SKM Sales, 70 Ferguson Ave. N., Hamilton, Ontario
Secy: John Tuck, 40 Karen Cr., Hamilton, Ontario L9C 5M6
Del: Jack Keon, RR #2, St. Catharines, Ontario L2R 6P7
Alt: Gerald W. Kowalyshyn, 35 Karen Cr., Hamilton, Ontario L8R 1C2

London Canada

Pres: W. W. Mitchell, C/O London Board of Education, 951 Leathorne St., London, Ontario N5Z 3M7
Secy: W. A. Rutherford, C/O Vanderwesten & Rutherford, Ltd., Hyde Park, Ontario NOM 1Z0
✓ Del: W. W. Mitchell (see above)
✓ Alt: G. L. Sharp, C/O American Air Filter of Canada, 76 Hamilton Rd, London, Ontario N6B 1N1

Manitoba

Pres: D. E. Cross, 295 Broadway, Winnipeg, Manitoba R3C 0S4
Secy: A. McKenzie, 359 Pandora West, Winnipeg, Manitoba R2C 1M6
✓ Del: D. E. Cross (see above)
✓ Alt: L. Howard, 1129 Empress St., Winnipeg, Manitoba R3E 3H1
✓ Alt: T. L. Patterson

Montreal

Pres: Angelo Bozzer, Carrier Eastern Distributor, 391 Ste-Croix, Montreal, Quebec H4N 2L3
Secy: Jean-Guy Lahaie, Master Refrigeration Supplies, 2555, Place Chasse, Montreal, Quebec H1Y 2C
Del: Gilles Rheault, Hydro-Quebec, 201 Jarry W., Montreal, Quebec H2P 1S7
✓ Alt: Dennis Banning, Canadian Chromalox Co., 285 Hymus Blvd, Pointe-Claire, Quebec H9R 1G7

New Brunswick

Pres: Terry R. Steeves, C/O Key Mechanical Ltd., P.O. Box 1131, Moncton, New Brunswick
Secy: David A. Potter, C/O East Can Consultants Ltd., 80 Driscoll Cres., Moncton, New Brunswick
Del: Gary Hoadly, P.O. Box 36, Moncton, New Brunswick
Alt: Mike J. Mann, C/O Honeywell Controls Ltd., 270 Baig Blvd, Moncton, New Brunswick

Northern Alberta

Pres: Gordon J. Purvis, 9027-143 St., Edmonton, Alberta T5ROP3
Secy: Robert D. Wright, W. R. Cheriton & Assoc., 10509 81st Ave., Edmonton, Alberta T6E 1X7
Del: R. L. Thorpe, C/O 14956- 121 A Ave., Edmonton, Alberta T5V 1A3
Alt: R. D. Wright (see above)

Ontario

Pres: Edward A. Stumborg, Canadian Blower and Forge, 1560 Bayview Ave., Toronto, Ontario
Secy: Norman W. Johnson, Johnson Patterson, Ltd, 455 McNicoll Ave., Willowdale, Ontario M2H 2C9
Del: P. B. Landray, Carrier Air Cond. Canada Ltd., 8100 Dixie Rd, Bramalea, Ontario L6T 2J8
Alt: D. H. McCurdy, Ontario Hydro, Energy Conservation, 700 University Ave., Toronto, Ontario M5G 1X6

Ottawa Valley

Pres: Robert J. McKee, McKee, Lockhart & Assoc., Ltd., 307-1300 Carling Ave., Ottawa K1Z 7L2
Secy: Ray G. Young, Arthur Leitch Co. Ltd, 38 Cramer Dr., Ottawa, Ontario K2H 5X5
Del: Maurice H. Acton, Public Works, Canada, Sir Chas. Tupper Bldg, Confederation Hts, Riversid
Alt: Ray G. Young (see above) Drive, Ontario

Continued.....

Quebec

Pres: Jean-Guy Roy, C/O Honeywell Ltée, 2366, Galvani, Sainte-Foy, Quebec G1N 4G4
Secy: Roland Guillemette, 1671, 16^e Ave., E., Charny, Quebec G6W 3W3
Del: Jean-Luc Roy, Trane Co. of Canada, 2525, Watt, Sainte-Foy, Quebec G1P 3T2
Alt: Roland Guillemette (see above)

Regina

Pres: John D. Scott, 2120 1st Avenue, Regina, Sask. S4P 2Z4
Secy: Larry Schmidt, 766 Angus St., Regina, Sask. S4T 1X8
Del: A. Thomson, 1905 7th Ave., Regina, Sask. S4R 1C1
Alt: P. Hughes, P.O. Box 1008-205 McDonald St. N., Regina, Sask. S4P 3B2

Saskatoon

Pres: Brian Crowhurst, 407A-44th St. E., Saskatoon, Sask. S7K 1S3
Secy: Baldav K. Sareen, 119 Laurentian Dr., Saskatoon, Sask. S7H 4R7
Del: Jerry Boulanger, 437-34th St., E., Saskatoon, Sask. S7K 0H7
Alt: Roy Clark (see above)

Southern Alberta

Pres: Clifford A. Martenson, University of Calgary, Physical Plant Dept., 158 Cornwallis Dr.,
Calgary, Alberta T2K 1V1
Secy: M. Verbisky, C/O Trane Co. of Canada Ltd., 1023-11th Ave., S.W., Calgary, Alberta T2R 0G1
Del: Allan Smith, P.O. Box 5600 Postal Station A, Calgary, Alberta
Alt: Henry Chorney, Nelco Engineering Ltd., #1-2925 10th Ave., N.E. Calgary, Alberta T2A 5L9

REGIONAL REPRESENTATIVES

Education Committee

Mal Turaga
Centre for Bldg Studies
Concordia University
1455 Maisonneuve Blvd
Montreal, P.Q., Canada H3G 1M8

Energy Management Committee

Kirk A. Bavis
W. H. Crandall Associates
P.O. Box 36
Moncton, New Brunswick, Canada E1C 5W1

Membership Committee

George W. Buckler
8 Tanager Court
Hamilton, Ontario, Canada L9A 2M1

Nominating Committee

Member

Morton R. Slone
5573 Glencrest
Montreal, P.Q., Canada H4V 2L8

Alternate

Clifton R. Morrison
Johnson Controls, Ltd.
1025 Hargreave Road
London, Ontario, Canada N6E 1P7

Research Promotion Committee

Paul R. Conrad
Trane Co. of Canada, Ltd.
2745 Dutch Village Road
Halifax, Nova Scotia, Canada B3L 4G1