VIEWPOINT

1985/86 WAS A VERY ACTIVE YEAR. STRONG MEMBERSHIP AND WELL ATTENDED ENERGY MANGEMENT AND TECHNICAL SEMINARS PROVIDED REVENUE TO COVER EXPENDITURES. TORONTO CHAPTER IS IN GOOD FINANCIAL SHAPE. THE FOLLOWING IS THE AUDIT REPORT.

Revenue		J	une 30/85- June 30/86	Forecast June 30/86	Actual June 30/86
MEMBERS	FEES		27530.00	26775.00	27245.0
VISITOR	MEALS		2200.00	4355.00	3902.0
MEMBERS	MEALS		3800.00	6223.00	6337.0
SPECIAL	EVENTS		0.00	619.22	
ENERGY	MGT FORUM				619.0
			0.00	1235.00	1235.0
TECH	SEMINAR		0.00	3507.50	3167.0
BANK	INTEREST		2500.00	2585.62	3010.0
TABLE	TOP		300.00	225.00	300.0
MISC			500.00	810.98	811.0
REFRIG	SEMINAR		0.00	1220.00	1220.0
TOTAL	REVENUE		36830.00	47556.32	47846.0
EXPENDIT	URES				
ADMINIST	RATION		7200.00	6357.00	6960.0
	SPECIAL		2200.00	53B.44	700.0
MAIL ING	41		2600.00	2897.77	3200.0
STATIONE	EV&PEINT			1062.50	745.0
ROSTER	1011112141		1000.00	977.61	978.0
GAZETTE			4500.00	5927.12	5950.0
VISITOR			2000.00	3324.00	3331.0
MEMBER M			3600.00		5472.0
MEMBER M	EALS A		10000.00	10688.00	10946.0
CHARGES	BANK		75.00	360.00	360.0
SUB TOTA	LS		33 175.0 0	37569.40	38642.0
BINDERS					
EDUCATIO	N		50.00	58.75	59.0
PROGRAMM			200.00	164.90	200.0
RECEPTIO			300.00	600.46	800.0
MEMBERSH			50.00	20.00	20.0
PUBLICIT			25.00	0.00	0.0
TECHNICA			25.00	1206.00	1515.0
HONOURS&			200.00	264.12	300.0
	ANAGEMENT		25.00	637.77	638. 0
	PROMOTION		200.00	200.00	200.0
CRC ASSE	SSMENT		1150.00	1200.00	1200.0
CRC DELE	GATES		2500.00	1250.00	1400.0
MISC			1000.00	B70.50	700.0
REFRIGER	ATION			1003.B7	1004.0
SUB TOTA	LS		5725.00	8252.52	B036.0
TOTAL EX	PENDITURES		38900.00	45821.92	44670.0
EXCESS O	F REVENUE				
OVER EXP	ENDITURES		-2070.00	1734.40	1168.0
MEMBERSH	1P	4	ACTUAL 86		
	ASHRAEZ2	•			Page 2
A	105.00	94.00			
	165.00	150.00	14100.00		
В	190.00	192.00			
	65.00	60.00	11520.00		
ε	35.00	33.00	11020.00		
_	35.00	35.00	1155.00		
CCEC			D/ 775 65	TOM	KILMER
FEES			26775.00	I OIVI	KILWER



50 YEAR MEMBER

Allan T. Jones (left) was honoured at the Decemberfest meeting with the presentation of his 50 year Life Member Award by Society President Fred Kohloss (right).

APEO PRESIDENT SAYS ENGINEERING LEADERSHIP KEY TO CANADA'S FUTURE

Canada must improve upon its present ninth ranking in technology among OECD nations if we are to maintain our current high standard of living. And engineers must assume more and higher profile leadership positions if this improvement is to occur.

These opinions were presented forcefully and enthusiastically at the Decemberfest meeting by Claudette MacKay-Lassonde, President of the APEO.

Noting that in the past Canada's prosperity derived primarily from the exploitation of its *large quantities* of natural resources, the speaker contended that *high quality* in goods and services will be the key to competitiveness in the future.

But how can we improve our technological ranking to prepare for this future? Ms MacKay-Lassonde offered a three-part prescription.

Firstly, Canadians must overcome their technological timidity. She argued that engineers must demystify technology for the public by talking about technology, at every opportunity, in everyday language. However, in order to get this message to the public, engineers must be willing to assume more leadership roles.

This led into Ms MacKay-Lassonde's second suggestion that engineers must enlarge the role they play in society. She remarked that in Japan half of the civil servants, half of the industrial directors, and more than 65 percent of all corporate board members are engineers or scientists. The speaker called for Canadian engineers to seek leadership positions that go beyond the purely technical, including political office. From these positions she suggested that engineers could champion government support of research and development.

Ms MacKay-Lassonde advised that practising engineers as well as students presently in engineering schools should extend their range of skills to include an increased emphasis on economics, communication skills, and a general background in humanities and social sciences.

The speaker's last point was that Canadians must learn to exploit their technological strengths and correct their technological weaknesses. Among these strengths, she listed tunnel, cold-climate, and telecommunications technologies, while weaknesses included our "antiquated assembly-parts manufacturing processes."

Ms MacKay-Lassonde called, predictably, for the increased use of robotics and CAD-CAM systems but then went further to stress the need to *market* our excellence more imaginatively and aggressively. "It's not enough just to have a good — or even the best — product anymore. People have to *know* it's the best!"

John Bachmann Publicity Committee



Chapter President Cliff Thompson (left) with our Decemberfest Evening Speaker Claudette MacKay-Lassonde, (right) President, Association of Professional Engineers of Ontario (APEO).

DECEMBERFEST

At this years Decemberfest we were especially honoured by the presence of ASHRAE Society President Fred Kohloss and his wife Peggy. The meeting was well attended by many guests and spouses, too numerous to list. We would like to extend our thanks to all.



Mrs. & Mrs. Norm Johnson



Mr. & Mrs. Ed Stumborg



Mr. & Mrs. Jules Olsen

CURLING IN REVIEW

The Curling Bonspiel was a great success. Altogether, there were 30 in attendance and 24 remained for dinner.

THIS YEARS WINNERS



Chapter President Cliff Thompson presented the first place trophy to the winning team. (Left to Right) Norm Morrison, Pres. Cliff Thompson, Joe Evanoff, Bob Mansfield, and Lloyd Geake.

Honourable mention is given to the runner up team: Howie French, Bob Bach, Herb Maybank and Byron Weckman

JOHN ALLINGHAM IN ACTION!



First Announcement

ENERGY FORUM



A Conference Promoting Energy Efficiency in Residential Buildings for Ontario

March 12-13, 1987

Toronto, Ontario, Canada

NOMINATED TO SERVE ON THE NOMINATING COMMITTEE

Elections will be held at the January meeting for the 1987 Nominating Committee. The nominees are: Don McCurdy, Jack Field, David Underwood, and Bill Hawkins. Ex-officio member: Jim Ovens.

PRICES QUOTED IN U.S. FUNDS

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC. 1791 Tullie Circle, N.E., Atlanta, Ga. 30329



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ASHRAE jewelry is available to memb only. Identify yourself as a member! bethis convenient form to place your order.

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☐ Kev

☐ Tie bar

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Items are illustrated full size.

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ADDRESS		
CITY	PROV. P/CODE .	



RECENT REPORTS

Optimization of the "Kool-Line" Heat Pump, prepared by Ontario Hydro Research Division for the Canadian Electrical Association (CEA No. 220-U-360) Finally a heating system both the Gas and Electric Utilities can back! It's a heat pump with gas-fired defrost most of the time and a condensing gas furnace during the coldest parts of the winter. Residential and commercial (roof-top) units are available.

YOUR 1986/87 BOARD OF GOVERNORS

The state of the s	
Bob Bach	Past President
Cliff Thompson	President
Jim Ovens	President-Elect
Howard Wheatley	Vice President
Tom Kilmer	Secretary
Dieter Heins	Treasurer
Dale Struthers	Member
Roy Chaffey	Member
Bill Bingham	Member
John Hodge	Member
Tom Tamblyn	Member
Ron Anderson	Member

Toronto ASHRAE Gazette is published monthly by the Toronto Chapter of the American Society of Heating, Refrigerating and Air-Conditioning Engineers in the interest of its members.

Toronto Chapter Executive offices are located at:

5468 Dundas Street West Suite 226 Islington, Ontario M9B 6E3

Telephone (416) 239-8193

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MEETING DATES 1986 - 87

Comparison of the Candu and Chernobyl Reactors Speaker: Dr. Tom Drolet

February 2 "R" In ASHRAE Seminar March 2

Technical Session HVAC in the Queen's Quay Terminal Building

Speaker: Lorne Mitchell

Inauguration of the 1987-88 **Toronto Chapter Executive**



SEASONS GREETINGS AND BEST WISHES FOR THE NEW YEAR

LISTED BELOW ARE YOUR 1986/87 SEASON COMMITTEE CHAIRMEN

Energy Management	Dean Jordan		592-3823	
Finance	Mike Premovic		245-1100	
Research Promotion	Herb Maybank		271-1362	
Special Events	Randy Chew		291-9648	
Membership	Joe English		851-3981	
Education	Ed Cassidy		251-4151	
Technical (R & T)	Ian Patterson		494-1575	
Program (Papers)	Doug Taylor		222-2571	
Publicity	Frank Lenarduzzi		231-4111	
Reception	Jack Field		592-2194	
Honours and Awards	Bob Bach		279-3440	
CRC Action	Cliff Thompson		293-8111	
"R" in ASHRAE	Jim Pyper	(519)	759-3010	
Attendance	Jim Ovens		479-0280	
Constitution & Bylaws	Howard Wheatley		744-3300	
Past Presidents				
Advisory	Howard Wheatley		744-3300	
Roster Committee	Tom Kilmer		251-4151	
Historical Committee	Herb Maybank		271-1362	



ASHRAE GAZETTE TORONTO





Toronto Chapter American Society of Heating, Refrigerating and Air-Conditioning Engineers

1922

SIXTY-FIFTH ANNIVERSARY YEAR

1987

VOL. 32, NO. 4

JANUARY, 1987

TORONTO

Notice of Meeting

MONDAY, JANUARY 5, 1987 PARK PLAZA HOTEL - TORONTO

HOSPITALITY: 5:30 P.M. DINNER MEETING: 6:30 P.M.



EVENING SPEAKER

DR. TOM DROLET **ONTARIO HYDRO**

'COMPARISON OF THE CANDU AND CHERNOBYL **REACTORS'**

Tom was born in Ottawa and educated at the Royal Military College of Canada (Chemical Engineering) and the University of London England (MSc and PhD in Nuclear Engineering), Tom flew with the 436 Transport squadron on Hercules aircraft for three years in most foreign theatres.

He has been with Ontario Hydro since 1969 and has worked in Research, Nuclear Operations at Douglas Point and Pickering, and in the Engineering function as Manager of Nuclear Materials Management Dept. In 1982, Tom formed the Canadian Fusion Fuels Technology Project which is one of Canada's two projects in the area of energy from fusion. In July, 1986, he moved to New Business Ventures Division to head up the Isotope Sales and Services Program.

Tom's wide experience with the CANDU Nuclear Program, and his recent visits to the Soviet Union in order to put proposals together on co-operative work between the Soviet Union and Canadian nuclear power programs, will form the basis of a wide ranging talk on the safety of nuclear power placed in a world context.

MESSAGES FROM THE EDUCATION COMMITTEE

- The Education Committee would like to remind all student branch members that the due date for this year's student paper competition is Friday, May 1st, 1987, We will be awarding the Lynn Dudley Bursary Award of \$1000.00 to the author of the best paper. Please contact your faculty advisor for more details.
- We would like to remind everyone that Seneca College is offering a six subject program designed to upgrade the skills of those in our industry. The Building Environmental Design certificate courses start January 12th, 1987. For further information, please contact Seneca College at 493-4144.
- The Toronto Chapter of ASHRAE now has available two videotapes of technical presentations which were made at the last two Society meetings. The tapes can be borrowed for use at a Chapter function. If you have a particular time that you wish to show one, please contact Ed Cassidy.

The available tapes cover the following topics:

- 1) a) "Optimal Control Strategies for HVAC System" by John W. Mitchell.
 - b) "VAV Duct Design" by Joseph D. Becker
- 2) a) "Cold Air Systems" by Calvin D. MacCracken.
 - "Ventilation Requirement in Hospital Operating Rooms - Control of Airborne Particles and Energy and Economic Implications" by Jones D. Woods, Ph.D.
 - c) "Specifying Commissioning for Building HVAC System" by Guy W. Gupton, Jr., P.E.

Please Note: The tapes are available on a first come basis.

Ed Cassidy, Chairman Education Committee

* * * * * * *ADVANCE NOTICE* * * * * *

NIGHT AT THE RACES MONDAY, MARCH 16, 1987



GREENWOOD RACEWAY 1669 QUEEN STREET EAST (between Coxwell & Woodbine)

FOR TICKETS, CONTACT: Dan Zalepa - 291-7186 Randy Chew = 291-9648

YOUR DECEMBERFEST HEAD TABLE



Left: President-Elect Jim Ovens Right: Mary Maybank



Left to Right: Joyce Ovens, Vice-President Howard Wheatley, and Mommessin Export.

PAST PRESIDENTS AND LIFE MEMBERS IN ATTENDANCE AT DECEMBERFEST '86

Earl D. Allen, (PP)

Donald L. Angus (PP & LM)

William W. Bartlett (LM)

Howard P. Bushnell (LM)

Robert B. Campbell (LM)

William H. Chadwick (PP) Lynn M. Dudley (LM)

W.T.E. (Dunc) Duncan (LM)

Stanley L.V. Fisher (LM)

John H. Fox (PP, LM & 50 Year Member)

Howard S. French (PP)

Hans Gold (LM)

George G. Hughson (PP)

Norman W. Johnson (PP)

Allan T. Jones (LM & 50 Year Member)

R.J. Wesley Martin (LM)

Herbert A.G. Maybank (PP & LM)

Donald H. McCurdy (PP)

Jules C. Olsen (PP)

Edward A. Stumborg (PP) Donald B. Thomas (LM)

Charles L. Torry (PP & LM)

(PP) - Past President

(LM) - Life Member



Left: Society President Fred Kohloss Right: Joan Thompson



Left: Herb Maybank, Chairman of both Historical and Research Promotion Committees, and Decemberfest recipient of his Life Member Award.

Right: Peggy Kohloss.



Left: Doug Taylor, Chairman of the Program Committee, Decemberfest Host Committee.

Right: Shirley Wheatley, who was later heard to say "sitting next to Doug was a tough job even for a woman,"

"R" IN ASHRAE SEMINAR MONDAY, FEBRUARY 2, 1987, 1:00 P.M. TO 5:00 P.M. GOLD ROOM, PARK PLAZA HOTEL OUR THEME — "THE APPLICATION OF NEW TECHNOLOGY TO REFRIGERATION" TOPICS & SPEAKERS (1) Control and Monitoring of Industrial Refrigeration Systems Speaker — Mr. Derek Lunn, Cimeo Division of Toromont Industries (2) The Altronics Solid State Expansion Valve Speaker — Mr. Bob Lewis, Altech Controls (3) Electronic Regulation of Industrial Refrigeration Controls Speaker — Mr. Art Strong, Refrigerating Specialities Division of Parker Corporation FEE: MEMBER: \$30.00 NON-MEMBER: \$35.00 STUDENT: \$10.00 PRE-REGISTRATION TEAR OFF AT DOTTED LINE AND MAIL WITH CHEQUE TO: ASHRAE TORONTO CHAPTER c/o CHIL-CON PRODUCTS LTD. P.O. BOX 1385 BRANTFORD, ONTARIO N3T 5T6 NAME MEMBER NON-MER COMPANY MEMBER NON-MER STUDEN'
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