



THE CHAMP

monthly newsletter

of the Champlain Valley Chapter of ASHRAE

PRESIDENT'S MESSAGE



Welcome to your June newsletter! It is hard to believe but this is my last President's Message. A year has passed and I will be stepping down at the end of June. Rob Ward will be your new President beginning

on July 1, 2015. I believe it is safe to say that we had a good year and that included a series of good meetings, good technical presentations, and enjoyable dinner meetings. By way of a brief summary, we had our ASHRAE Distinguished Lecturer here in December; our Past Presidents Dinner in January that also included a visit from Tom Phoenix (Society President), Joe Furman (Region I Chair), 23 past presidents and over 70 attendees. We also had presentations on the new CBES-2015, Net Zero buildings, and our traditional brewery tour.

Happy 45th year! There are many more good years ahead of us!

We also had some significant successes this year. Tom Zoller's excellent work with RP led the successful drive to reach our challenge goal and together with a series of complimentary Engineering Associations around the country, we were able to see the "Raise the Bar – Masters or

...continued on page 3

ASHRAE CVC UPCOMING EVENTS

June 5, 2015 – Volleyball Tournament
August 5, 2015 – Golf Outing (date TBD)

June BOG Meeting Agenda:
The June Board meeting is scheduled for June 12th and will be at the offices of DuBois & King, Inc. If you want to attend, please contact Rob Favali for the meeting time.

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ASHRAE CVC MEETING CALENDAR

MONTH	MONTHLY MEETINGS		MONTHLY MEETING LOCATION
	BOG	DINNER	
2015			
January	15-Jan	15-Jan	Visit from ASHRAE President Thomas Phoenix
February	12-Feb	12-Feb	Lunch Meeting at Holiday Inn, So. Burlington
March	4-Mar	4-Mar	Brewery Tour at Queen City Brewery
April	1-Apr	1-Apr	CBES-2015 Review
May	6-May	6-May	"The Cost of Net Zero" Holiday Inn, Burlington
June	5-Jun	5-Jun	Annual Volleyball Tournament

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Equivalent” legal initiative fail to pass. All real good stuff.

Inside you will find a significant article by our Chapter historian, Mike Cook, a summary of our Governmental efforts by Dick Wilcox, a copy of the draft memo from the Vermont Professional Engineering Board regarding the “MOE” issue, and Peter’s Treasurer Report that reflects a healthy Chapter as we enter our summer break. This issue is worth a good read.

Reminder – Mark Your Calendar #1! The June Volleyball Tournament has been scheduled for Friday, June 5th from Noon to 7:00PM at the Airport Park & Pavilion in Colchester. Please plan to join us – whether you play or simply join me to eat and watch. See the flyer inside.

Reminder – Mark Your Calendar #2! Our annual Golf Outing is scheduled for August 5th at the Williston Country Club. More information is coming your way.

How do I end? I have much to say but will keep it to “Thank you!” I am genuinely grateful to our Officers and Board Members who continue, month after month, to donate their time to keep the Chapter moving. The President’s job is much easier when you have such an excellent Board as I had this past year. I am especially grateful to Cara Gorman who quietly but consistently takes our various articles and edits and arranges them into our monthly Newsletters. Thank you, Cara!

I am also grateful to you, the membership, who joins us each month and keep our meetings alive with good talk, good questions, your financial

donations, and a pleasurable interaction that reflects a commitment to our industry and ASHRAE at large. Bravo!

Thank you for supporting my efforts to be your President this past year. I look forward to seeing you at the June and August outings and into our 2015-16 year.

Until then, peace....
Rob Favali

TECHNOLOGY TRANSFER

Our June 5th meeting will be our semi-annual Volleyball Tournament and end of year gathering. We will be at a new venue this year (Airport Park - Colchester). If you have not been here before the address is 488 Colchester Point Road, Colchester. I hope to see you all there.

We have already heard from a few teams that plan on being there. The team captain from Alliance Mechanical has contacted me and indicated that they will be there to defend their title. If you haven’t already please shoot me an email with your team name. Keep an eye out for the meeting announcements throughout the month.

Thanks and we hope to see you on June 5th. My email is robw@vhv.com or I can be reached by phone at 802-861-6194.

- Rob Ward

GRASSROOTS GOVERNMENT AFFAIRS COMMITTEE

On May 7th 2015, the Vermont Board of Professional Engineering voted on the “Raise the Bar/Masters of Equivalent” initiative that has been the buzz for a long time. The amended motion in front of the board for vote was the following:

“The Vermont Board of Professional Engineering, after hearing testimony and researching the topic, does not support amending Chapter 20 of Title 26 of the Vermont Statutes Annotated to increase the minimum level of education required for licensure as a Professional Engineer to a master’s degree or equivalent.”

The board passed the motion 4 to 1!

For further information on the Board of Professional Engineering May 7th meeting, the unapproved meeting minutes can be viewed at the following web address:

<https://www.sec.state.vt.us/professional-regulation/profession/engineering/board-minutes-agendas.aspx>

A press release notification related to this vote is also included on our ASHRAE CVC website. See the following link for this information: <http://www.ashraevt.org/>

In other news, the long awaited 2015 Vermont State Commercial Building Energy Standards code book is now hot off the press. This new code took effect on March 1, 2015, and up until now, only a draft version of this could be viewed

on the State of Vermont Department of Public Service website. You can contact the Energy Code Assistance Center (1-855-887-0673) to receive a free hard copy of this code, but hurry.....limited hard copies are available.

Copies are also available for purchase through the International Code Council (ICC) website: <http://shop.iccsafe.org/2015-vermont-commercial-building-energy-standards-43426.html>

The latest news development on Vermont bill H.40 that we reported on last month is that the State Senate on May, 15, 2015 voted in favor of the bill 22-6. This bill – which is a renewable energy standard that requires utilities to buy and sell more renewable electricity beginning in 2017 – should now go to Governor Shumlin’s desk for action.

- Dick Wilcox
GGAC Chair

TREASURE’S REPORT

As of May 18, 2015 our TD Bank account is \$12,584.09 with all bills paid up to date and our ASHRAE CVC account was reconciled on 5/6/15.

If at any time, anyone has any questions regarding our chapters financial status please don’t hesitate to contact me.

- Peter Bailey
ASHRAE CVC Treasurer 2014 - 2015

RESOURCE PROMOTION



WE DID IT!!!



With a couple donations in May plus our May raffle and counting matching donations that come in June, we made our Challenge goal of \$7,716. We are currently 2nd in the region with 1835 PAOE points. Thank you to everyone that donated this year, especially our Honor Roll Donors at the \$100 level, and everyone that bought 50/50 raffle tickets throughout the year.

Watch your email for some information on the upcoming June Volley Ball tournament on June 5. A portion of the money raised from the tournament will go to ASHRAE RP. We will use some of this money to get a head start on next year's RP campaign.

There is still time to donate to the 2014-15 campaign. Please join the honor roll donors below and make a donation of \$100 to ASHRAE RP. If you can't swing \$100, any amount will help and is appreciated.

You can donate online at www.ashraerp.com. Click on the upper right "donate" icon and you will be taken to the donation page. All donations are 100% tax deductible and 100% of the donation goes to research.

As always, if you have any questions about ASHRAE Resource Promotion, contact me at tzoller@trane.com, or 383-6444.

2014-15 Honor Roll Donors

Peter Tousley	Rob Favali
Blain Connor	Peter Bailey
Shawn Labelle	Tom Zoller, PE
Cody Lezak, PE	Jeremiah Trombly, PE
Dick Wilcox	Nathan Mascolino, PE
Mike Cook	Rachael Mascolino
Rob Ward	Josh Chiappone
John Grout	Martha Soule-Holden
Ray Spears	Greg Liebert
Emily Cross	Jim Moore
The VLPA	Scott Morgan
Tom Dacres	





STUDENT ACTIVITIES

VTC Chapter

Committee Chair: Shawn LaBelle

Student Chapter Advisor: Chris Reilly

Student Chapter President: Courtney Hart

We want to thank Scott Sabol, P.E, and Mark Vincello, P.E. for aiding the students in their 2015 ASHRAE Student Design Submission. The following students of Vermont Technical College have submitted their HVAC Design Calculations to the ASHRAE Student Design competition:

Mr. David Hamilton Jr., Graduating May 2015
BS Architectural Engineering Technology

Ms. Courtney Hart, Graduating May 2015
BS Architectural Engineering Technology

The submissions will be evaluated by the Region 1 Student Activities Vice Chair by the deadline date of June 1st. If they pass regional judging, their entry will be submitted to the national judging committee for final judging. National level competition, under the direction of the Student Activities Student Project Competition Subcommittee, will complete the evaluations of national level entries, and will select 1st, 2nd and 3rd place winners in each category.

Thanks!

- Shawn LaBelle, P.E.

MEMBERSHIP PROMOTION

Hello Everyone,

I hope this newsletter finds you gearing up for summer which is right around the corner. This year has been a very productive year for our chapter. We currently have 9 new members, 8 new student members and 1 member that advanced their membership status. We have also worked to get our delinquent payments down to 0, which has been difficult throughout the past years. Thank you everyone for your help and support this year! The following is a snapshot of the Region 1 Membership categories provided by our Region 1 MP Chair, Steve Sill.

On another note, in case you did not know, I will be stepping away as your Membership Promotion chair at the end of this year. Over the past 3 years, it has been a great pleasure to serve the chapter to help grow the society. ASHRAE is solely built upon its members and the knowledge that they hold. Without you, our industry would not be able to continue to strive and improve. Martha Soule will be the incoming Membership Promotion chair and will take off where I left off. I look forward to future meetings and continuing my support for the Champlain Valley Chapter.

- Josh Chiappone
Membership Promotion Chair

ASHRAE REGION 1 MEMBERSHIP

Chapter #	Chapter	Area Assigned Members	% Delq.	Delinquent > 90 Days	% Delq. Rank	Total New Member	% New Member	Cancel	% Net Growth	% Growth Rank	Transfers	Total PAOE Points
146	Bi-State	207	6.60	14	6.60	19	8.96	18	0.47	6	-7	175
1	Boston	1037	3.44	35	3.44	94	9.24	86	0.79	5	10	845
10	Central New York	241	2.81	7	2.81	25	10.04	27	-0.80	10	-7	175
111	Champlain Valley	132	0.00	0	0.00	9	6.98	10	-0.78	9	4	175
4	Connecticut	497	1.01	5	1.01	42	8.50	37	1.01	4	2	1165
152	Granite State	166	3.68	6	3.68	11	6.75	15	-2.45	12	6	175
6	Long Island	279	3.55	10	3.55	21	7.45	28	-2.48	13	4	655
118	Maine	177	4.17	7	4.17	17	10.12	8	5.36	2	2	0
7	New Jersey	636	4.80	31	4.80	46	7.12	67	-3.25	15	6	185
8	New York	910	4.86	43	4.86	115	12.99	97	2.03	3	16	805
12	Niagara /Frontier	172	2.23	4	2.23	11	6.15	17	-3.35	16	-2	475
9	Northeast	274	4.49	12	4.49	23	8.61	25	-0.75	8	7	930
3	Rhode Island	104	0.93	1	0.93	10	9.26	13	-2.78	14	-1	275
11	Rochester	243	3.78	9	3.78	18	7.56	18	0.00	7	5	275
129	Twin Tiers	109	4.63	5	4.63	6	5.56	7	-0.93	11	3	585
	total	5184	50.98601	189	50.98601	467	125.2908	473	-7.90865	0	48	



BOG MEETING MINUTES

May 2015 BOG Meeting Minutes

Date: 05/06/2015

Location: Holiday Inn, South Burlington, VT

Called to Order: 4:06

Called to Order By: Rob Favali

Minutes Recorded By: Blaine Conner

ATTENDANTS

NAME | TITLE | ORGANIZATION

Rob Favali | President | Dubois & King

Rob Ward | President-Elect | VHV Company

Cody Lezak | Vice President | VEIC

Blaine Conner | Secretary | VMI

Peter Bailey | Treasurer | DEI

Nathan Mascolino | BOG Member | VHV Company

Dick Wilcox | BOG Member | VHV Company

Mike Cook | BOG Member | ARC Mechanical

Rachel Mascolino | BOG Member | VEIC

Shawn Labelle | BOG Member | VHV Company

Josh Chiappone | Member | JCI

Jeremiah Trombly | Member | MAS

Tom Zoller | Membe | Trane Inc.

Tom Dacres | Member | VHV Company

OFFICER REPORTS

1. Secretary - Blaine Conner

- a. Rob W. motioned to approve April meeting minutes as written
- b. Jeremiah T. Seconded. The motion carried.

2. Treasurer's Report - Peter Bailey

- a. Current Status – \$11,679.18 accounts reconciled
 - i. Scholarship monies have been dispersed
- b. Two more companies have not paid up in full for the advertisement.
 - i. JCI & RL
- c. Jeremy T. & Pete B. to meet by July 1 to go over how to transfer the books

3. Resource Promotion - Tom Zoller

- a. Member was not present; Resource Promotion was not discussed.

4. Chapter Programs - Rob Ward

- a. The May meeting agenda was reviewed
- b. Rob W. to send out a flyer announcing the volleyball tournament
- c. Rob W. reported a good centralized training session

5. Membership - Josh Chiappone

- a. Nine new members for the year and eight new students
- b. The May meeting Membership Promotion agenda was reviewed

6. Grassroots Government - Dick Wilcox (in absentia)

MAY MEETING NOTES



- a. Update on MOE
 - i. VT PE Board to vote on the issue 05/07/15
- b. Discussion on CRC tabled until June

7. General Chapter Business - Rob Favali

- a. One more newsletter will be published for this year
- b. Rob F. to forward proposed dates for next year's meeting to the Hotel

8. New Business

- 1. New Officers to be voted in at May meeting
- 2. August CRC training was discussed
 - a. Mike C., Dick W., Rob F., & Rob W., confirmed attendants. Pete B., Blaine C., are tentative
 - b. Discussion on CRC appropriations was tabled until meeting in June
 - c. RP Training was reviewed
 - d. Golf Outing was reviewed. Location this year will be the Williston Golf Club.

9. Motion to Adjourn:

- 1. A motion was made by Dick W. to adjourn the meeting. It was seconded by Mike C. and the motion was carried. The meeting adjourned at 5:12 pm.
- 2. Next meeting to be set for June 12th at Dubois & King, 6 Green Tree Drive South Burlington, VT 05403

These minutes are the writers understanding of the discussions involved. If there are any exceptions taken, or omissions, please notify the writer immediately.

May Meeting Attendee List

Tom Anderson	Anderson Consulting LLC
James Ashley	Green Mountain Geothermal, LLC
Peter Bailey	DEI
Laura Bailey	Maclay Architects
Marcel Beaudin	Beaudin and Associates, Inc.
Joseph Brochu	Control Technologies Inc.
Greg Cadieux	Salem Engineering
Josh Chiappone	Johnson Controls
Blaine Conner	Vermont Mechanical Inc.
Michael Cook	ARC Mechanical
Steve Dumas	DuBois & King Inc.
Rob Favali	DuBois & King Inc.
Rich Fredette	Urell
John Grout	Victaulic
Ray Hickey	Advanced Comfort Systems
Tim Houle	Advanced Comfort Systems
John Lincoln	BED retired
Bill Maclay	Maclay Architects
William Moore	T-Corp
Tiffany Peet	Vermont Heating & Ventilating
Jay Pilliod	Efficiency Vermont
Jeremy Rathbun	DuBois & King Inc.
Craig Simmons	VEIC
Mike Spasyk	DuBois & King
Ray Spears	Trane
Richard Travers	MV3 llc.™
Jeremiah Trombly	Mountain Air Systems
Michael VanHorn	Control Technologies

Our May meeting was a great presentation by Bill Maclay and Laura Bailey of Maclay Architects and Craig Simmons from Efficiency Vermont on their approach to Net Zero design and building. This collaborative study was supported by Efficiency Vermont and performed by Maclay Architects.

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The feasibility study resulted in two reports: a 21 page summary and a 90 page full report for use by designers, developers, contractors, consultants, and building owners. The report provides a detailed look at the financial benefit of building beyond code requirements to net zero energy standards. The analysis and compelling results include both residential and commercial building types.



We also held our Chapter voting for the 2015-16 slate of Officers and Board members. The following were voting in by unanimous voice vote:

ASHRAE-CVC Officers 2015-2016

1	President	Rob Ward
2	President-Elect	Blaine Connor
3	Vice President	Charlie Carpenter
4	Secretary	Martha Soule
5	Treasurer	Jeremiah Trombly

Board of Governors 2015-2016

1	Member	Rob Favali
2	Member	Nathan Mascolino
3	Member	Dick Wilcox
4	Member	Mike Cook
5	Member	Rachael Mascolino
6	Member	Shawn Labelle

-Rob Favali

Do You Know Your ASHRAE REGION I Chapters?

ASHRAE has 14 Regions that reach virtually into the entire world. Vermont is in Region I which has 15 chapters from Maine to New Jersey.

Boston	Boston, MA
Rhode Island	Providence, RI
Connecticut	Hartford, CT
Long Island	Garden City, NY
New Jersey	Newark, NJ
New York	New York, NY
Northeast	Albany, NY
Central New York	Syracuse, NY
Rochester	Rochester, NY
Niagara Frontier	Buffalo, NY
Champlain Valley	Burlington, VT
Maine	Lewiston, ME
Twin Tiers	Owego, NY
Bi-State	White Plains, NY
Granite State	Manchester, NH

MEMBERSHIP RENEWAL REMINDER

When You Fill Out Your Membership Renewal, Please Remember Your Chapter Dues!



Membership Renewal

Chapter Membership

Chapter Membership Options

Why should I pay Chapter dues?

Your ASHRAE Chapter is a platform for members to collaborate and advance the standards of practice to improve the built environment. Chapters create a local networking environment, provide educational & leadership opportunities, and are the foundation of the Society. ASHRAE strongly encourages members to participate and invest in their local chapter.

Your current assigned chapter is: CHAMPLAIN VALLEY

I would like to change chapter to:

Pay Options:

I would like to remit an additional \$25.00 for my chapter dues for the duration of my Society dues period.

Your chapter renewal dues are equivalent to the number of years you opted to renew your Society Membership.

I do not want to pay for my chapter dues at this time.

If you elect to not pay dues during this process, your chapter may contact you regarding chapter dues payment.

CANCEL **Prev** **Next**

Your \$25.00 dues payment is used to help offset the cost to operate your Chapter. Please remember to check the box and make sure you confirm that it is for the Champlain Valley.

Thank you!

Excerpt from “People, Passion and Performance”

“Thanks to our more than 50,000 members around the globe, ASHRAE is building a worldwide best practices network of innovative people and successful technologies to serve the built environment community. Our membership also has great passion – I see that in how much time and dedication our people give to helping write standards, develop research, guide in policy and procedure, etc. Together, our people plus their passion ensure performance – whether that’s improving the performance of our great Society or improving the performance of building stock around the world. Our people, our passion and our performance will take ASHRAE to the next level.”

Tom Phoenix, P.E. President, ASHRAE

MAY 7TH, 2015 VERMONT PROFESSIONAL ENGINEERING BOARD VOTE

This is the summary of recent action by the State of Vermont Professional Engineering board on a request to revise the statutory requirements to require a minimum of a Master’s degree for Civil, Environmental, and Structural Engineers as the minimum education standard for licensure.

On May 7, 2015, The Vermont Professional Engineering Board voted by a 4 to 1 margin to approve the following motion:

“The Vermont Board of Professional Engineering, after receiving testimony and researching the topic, does not support amending Chapter 20 of Title 26 of the Vermont Statutes Annotated to increase the minimum level of education required for licensure as a Professional Engineer to a master’s degree or equivalent.”

This motion was the culmination of approximately 2 years of discussion by the board, and is an issue that at least three board members have been actively aware of for over a decade. There was significant outreach on this issue, and throughout the process the board worked hard to provide an open and fair process in which individuals and groups could provide comments, questions, and presentations. Public and licensee comment was sought and evaluated to help the board come to the determination that there is not sufficient reason or evidence to support any proposed legislation to increase the minimum education required for licensure to a

Master’s degree or equivalent.

This is a summary of the board actions and the public and licensee interactions on this issue.

Public commentary received during regularly scheduled board meetings

During the process of reviewing this the board received presentations from the following groups and individuals during our regularly scheduled meetings:

- Vermont State Representative Robert Krebs P.E. L.L.S. Past president of NCEES and Brad Aldrich P.E. Board member, and past president of NSPE presented on the raise the bar initiative at one meeting. The board was asked to consider “raising the bar to a master’s degree or equivalent” for all disciplines.
- The Licensing That Works committee presented to the board via teleconference at one meeting
- Representative Robert Krebs P.E. L.L.S presented to the board at a total of four meetings and provided draft language for a statute change that he would introduce in the Vermont Legislature if the board supported it. The language included Civil, Environmental, and Structural Engineers only and read as:

Amend the current statute for the minimum education to read:

1182b.1 (F) to read: Individuals seeking

licensure, environmental or structural disciplines, who obtain their bachelor's degree after January 1, 2020 shall complete a master's degree curriculum in engineering accredited by ABET or an acceptable amount of additional coursework as defined by board rule, to meet the educational requirements for licensure.

1182b.3 (F) individuals seeking licensure in civil, environmental or structural disciplines, who obtain their bachelor's degree after January 1, 2020 shall complete a master's degree curriculum in engineering accredited by ABET or an acceptable amount of additional coursework as defined by board rule, to meet the educational requirements for licensure.

- The Vermont chapter of ASCE's/Raise the bar committee presented in support of the proposal at one meeting
- The Vermont chapter of NSPE presented in support of the proposal at one meeting
- Two individuals from ASCE presented to the board on the inner workings of the ABET committees at one meeting.
- The Vermont chapter of ASHRAE presented its board position statement in opposition of the proposal at one meeting

Public commentary received at a specially designated meeting for the board to hear discussion and debate on this issue. (Local societies and engineers were notified of the public comment session directly and indirectly

by the board as part of the open meetings law.)

The board hosted a meeting to gather information and had approximately 35 individuals attend for a full day discussion on this initiative. Commentary started at approximately 9:00 AM and continued with minor breaks until about 4:30 PM. All interested parties were given the opportunity to speak without any time limits or subject constraints. The speakers were given the option to take and accept questions from the audience if they chose. Board members each had the opportunity to ask questions of every speaker.

Testimony was received from twenty four individuals with multiple other individuals adding commentary from the floor throughout the day. Of those that spoke this was the summary:

- Thirteen spoke out against the initiative (Seven were Civil or Environmental Engineers, One was a board member, Five were from other disciplines)
- Eight spoke out in support of the initiative (Seven were Civil or Environmental Engineers, One was retired.)
- One spoke out and offered information only on ABET no opinion on the issue
- One spoke out and offered information only on the history of the structural engineering bachelors but offered no specific opinion on the issue.

Written Public comments

The following written comments were received as part of our review process:

From Representative Robert Krebs P.E. L.L.S.

- Four Letters providing information and requesting the board consider action on his initiative and proposed language.

From Vermont Chapters of Professional Societies:

- Four Letters in support of the initiative from the Vermont Chapter of ASCE Board
- Two Letters in support of the initiative from the Vermont Chapter on NSPE Board
- One Joint letter in support of the initiative from the Vermont Chapter of ASCE and NSPE
- One Letter in opposition from the Structural Engineers Board president stating that 81 percent of members who responded to a survey were in opposition. (Not intended to be a statement of opposition from the board, just a report on their member survey.)
- One Letter in opposition of the initiative from the Vermont ASHRAE Chapter Board

From National Professional Societies

- One Joint Letter in opposition from twelve national societies: ASME, ASHRAE, American Institute of Chemical Engineers,

American Society of Agricultural and Biological Engineers, American Society of Engineering Education, American Society of Plumbing Engineers, International Society of Automation, Society of Mining, Metallurgy, and Exploration, Society of Naval Architects and Marine Engineers, Engineering Deans Council, Institute of Industrial Engineers.

From individuals in support of the initiative we received:

- Ten letters from individuals. (One individual sent in two letters.). Eight individuals were in public/private engineering practice, one was a professor, and all were civil, or structural disciplines.

From individuals in opposition of the initiative we received:

- Twenty Six letters from individuals (Fourteen letters from individuals, two letters represented were signed by twelve individuals.) Twenty-two individuals were in public/private Civil/Structural Engineering practice, four were mechanical.

From individuals providing information rather than opinions we received:

- One Letter. (The individual was a structural engineering professor.)

Board Discussion

At the May 7th meeting the board members were

each given the opportunity to speak on the issue prior to a motion being made. The discussion was continued after the motion was on the floor. In summary the general issues that were debated were:

- Public Health, Safety, and Welfare and whether there is any evidence of a current problem that it is affected by the current minimum standard.
- Review of current and historical enforcement actions in Vermont and Surrounding states
- Current Bachelors programs vs. Historical Bachelors programs.
- Credit hour comparisons vs. Coursework comparisons
- Current exams and how they fit into entry into the profession
- The Structural Engineers choice on changing the examination
- The importance of Accreditation ABET's transition from credit hour assessment to outcome based assessment
- The Professional Engineering standards vs. other professions
- Board implementation issues if it were decided that the Master's or equivalent should move forward
- Potential legislative issues if it were to

come before the legislature. (Cost, barring entry into the profession, lack of engineers, designer licensing.)

Board Action and Decision

An initial motion was filed with the entire board working on substitute language which was originally agreed upon by a unanimous vote. (The motion was on the substitute language only.)

“The Vermont Board of Professional Engineering, after receiving testimony and researching the topic, does not support amending Chapter 20 of Title 26 of the Vermont Statutes Annotated to increase the minimum level of education required for licensure as a Professional Engineer to a master’s degree or equivalent.”

The motion was then put to the question, as written above, and was passed by a vote of 4-1. The board is currently a 6 member board, the public member has not been appointed by the governor so was not in attendance.

Can You Believe It?

It is finally published...CBES-2015. I actually had to purchase a copy since access through the State of Vermont remains both late and defective. Get your copy here.....

<http://shop.iccsafe.org/2015-vermont-commercial-building-energy-standards-43426.html>

CHAMPLAIN VALLEY CHAPTER OF ASHRAE AWARDS 2015 SCHOLARSHIPS TO TWO VTC STUDENTS

JUNE 2015

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Courtney Hart & Mike Cook



John Kubacz & Mike Cook

On April 19th, 2015 Vermont Technical College held its annual VTC Honors Convocation inducting new members of the student body into the college's honor societies. Included in this ceremony were several awards were presented by professional societies associated with

specific majors. The Champlain Valley Chapter of ASHRAE presented two scholarship awards this year. A \$500 scholarship, the Champlain Valley Chapter VTC Scholarship which is voted on by VTC faculty was awarded to Courtney Hart. Courtney is a graduating senior in the Architectural Engineering Technology program. A \$3,000 scholarship voted on by the CVC Board of Governors' was awarded to John Kubacz a junior in the Architectural Engineering Technology program. Presenting the two scholarships that evening on behalf of the Champlain Valley Chapter Board of Governors' and the CVC chapter was Michael Cook.

ADVANCED ROOFTOP UNIT CAMPAIGN AWARDS ORGANIZATIONS FOR EXCELLENCE IN RTU EFFICIENCY

May 27, 2015

Contact: Jodi Scott, Public Relations
678-539-1140 | jscott@ashrae.org

ATLANTA – Today, the organizing partners of the Advanced Rooftop Unit (RTU) Campaign (ARC) announced the award winners for excellence in RTU efficiency. ASHRAE, RILA and the U.S. Department of Energy's Better Buildings Alliance and Federal Energy Management Program launched the campaign in 2013, and since then over 190 partners have driven reduction in heating and cooling costs of commercial buildings by upgrading over 40,000 RTUs. As a result, this has saved 4 trillion BTUs of energy and \$37 million annually. The following organizations were recognized

for leadership and excellence in commercial building RTU efficiency. Combined, their estimated energy savings total over 100,000,000 kWh and \$10 million per year from efficient RTU replacements, retrofits and quality management.

- **U.S. Citizenship and Immigration Services, U.S. General Services Administration, Pizzagalli Properties, and Elman Investors:** Highest number of high-efficiency RTU installations by a government organization, 66 RTUs, with an estimated savings of 289,300 kWh/year worth \$41,200 annually
- **Walmart Stores Inc:** Highest number of high-efficiency RTU installations by a commercial company, 10,032 RTUs, with an estimated 89,000,000 kWh/year worth \$8.9 million annually
- **U.S. Navy Joint Base Pearl Harbor-Hickam:** Highest number of advanced RTU control retrofits by a government organization, 30 advanced controls retrofits, with an estimated savings 272,000 kWh/year worth \$116,000 annually
- **Whole Foods Market:** Highest number of advanced RTU control retrofits by a commercial organization , 107 advanced controls retrofits, with an estimated savings of 836,000 kWh/year worth \$85,000 annually
- **U.S. Citizenship and Immigration Services, U.S. General Services Administration, Pizzagalli Properties, and Elman Investors:** Highest number of

RTU installations that meet/exceed RTU challenge specification, 66 RTUs, with an estimated savings of 289,300 kWh/year worth \$41,200 annually

- **Target:** Largest efficiency gain for a single building RTU replacement project, 60 percent installed efficiency gain with 41 percent (108 tons) capacity reduction
- **Target:** Largest efficiency gain for a multi-building RTU replacement project, average of 50 percent installed efficiency gain at 40 stores with a range of capacity reduction of 8 to 41 percent, with an estimated savings of 12,729,000 kWh/year worth \$1.3 million annually
- **adidas:** Most innovative RTU management approach by a participating partner; changed equipment replacement strategy from “replace upon failure” to “proactive replacement” for over 300 stores, starting off with an estimated 25 RTU replacements on 10 stores saving 131,000 kWh/year worth \$13,143 annually.

ARC is a national initiative to promote market adoption of high-efficiency rooftop unit (RTU) air conditioners. By replacing RTUs more than 10 years old with high-efficiency units and retrofitting other eligible RTUs to high-efficiency units with advanced controls, buildings can reduce annual cooling and ventilating energy consumption 20 to 50 percent and energy costs by up to \$3,700 per RTU. Using national averages, this equates to a national savings potential of \$6.7 billion dollars and 670 trillion Btu annually.



CRC Thursday Night Welcome Dinner

Aug 20, 2015

5:00 pm till Midnight

246 West Willow St.
Syracuse, NY 13202

A MUST ATTEND EVENT!!!
 FUN, ENTERTAINING AND A GREAT TIME TO
 SOCIALIZE WITH YOUR FRIENDS.

- BEST BBQ IN TOWN!
- ORIGINAL DINOSAUR BBQ SITE.
- DINOSAUR BBQ OPENED IN 1988.

Happy Hour
 Appetizers and
 1 Hour Open Bar!!!
 5:00 – 6:00 pm



Live band music till midnight!!!



**YEA and all, are
invited to the Fun!!!**



REFLECTIONS ON 45 YEARS OF ASHRAE CVC

On January 15, 2015 our chapter invited all past presidents of the Champlain Valley Chapter of ASHRAE to recognize our 45th year as an ASHRAE chapter. Of the 45 past presidents, 22 were able to attend this event along with 51 people including wives, friends, and members to reflect on this milestone and reacquaint with old friends and current members of the chapter.



“Twenty-two past CVC Presidents pose with ASHRAE President Tom Phoenix and Region 1 DRC Joe Furman, on January 15, 2015, in recognition of the 45th anniversary of the Champlain Valley Chapter.”

We learned from William “Bill” Lotz that the Champlain Valley Chapter (CVC) was born from a group discussion of individuals who as ASHRAE members discussed alternative means to participate in ASHRAE without making the 3-1/2 drive to Boston, our designated chapter at the time. Why not start our own local chapter?

Bill Lotz was the first president of ASHRAE CVC for the 1969-1970 calendar year, when much of the organizational planning was accomplished. On October 2, 1970 the Champlain Valley Chapter of ASHRAE was chartered with ASHRAE National President W. Hole, Montreal Chapter President P. Gaudette and over 150 people in attendance. Forty-five years later it remains an active and relevant group committed to serving Vermont’s ASHRAE membership.

We were delighted and privileged to be joined by current Society President Tom Phoenix, PE and Region 1 Director and Chair, Joe Thurman to celebrate this milestone event.

ASHRAE CVC: Membership and Volunteerism Strength

Tom graciously volunteered (don’t we all) to be our featured speaker for the evening presenting his presidential theme for the year. Tom’s presidential theme focused on three areas of ensuring ASHRAE’s success: People, Passion and Performance, which was well suited for this occasion.

People – Key Factor #1: ASHRAE’s greatest assets are the volunteers who have the biggest impact. Of the 54,000 members worldwide, those

who invest their time, energy, and talent make ASHRAE a premier engineering organization. Volunteers will continue to build the Society into a more viable and innovative organization into the future. As it pertains to the success of ASHRAE, both nationally and internationally, the success of local chapters like Champlain Valley will be determined by the continued engagement and growth of the engineers, design professionals, facility personnel, contractors, manufacturers and vendor representatives that make up our membership (currently 130 strong) and serve the Vermont community. Most importantly the volunteers who actively contribute and serve as officers, board members and chairs determine the continued existence of the chapter planning the monthly educational and technical programs of speakers, presenters and social events contributing to future success and accomplishments for CVC. We are grateful to have a committed group of employers and vendor companies that actively support their employees who participate in the operation of the Champlain Valley Chapter of ASHRAE in terms of time commitment and willingness to provide financial support for the chapter and its fund-raising activities.

Passion – Key Factor #2: Individuals throughout society commit their time and energy to causes and organizations they perceive to be valuable and worthwhile. It is this belief to actively contribute and participate we call ‘passion’, a motivating factor to persevere through issues which initially may seem daunting or unsolvable yet some inner energy of purpose keeps small groups of people working together to accomplish a goal or mission. Borrowing a statement from businessman, motivational speaker and

president of High Point University, Dr. Nido Qubein, “Passion ignites energy. Energy ignites a purpose. Having a purpose leads to success. But nothing happens unless there is passion.” (ASHRAE Journal August 2014)

I would venture to say there was not a past CVC president who did not experience this “passion” of group purpose and energy at some point during their tenure. Whether planning a roster of topics and presenters to engage membership to attend our monthly meetings or an educational seminar, soliciting funds for chapter events, planning a CRC, funding our two scholarship funds or ASHRAE Research Promotion, passion was evident. My experience shows this passion is built from a comradery developed among our volunteers where everyone is willing to help each other because as volunteers we recognize our time is limited. I suspect our membership has experienced this “passion” in their professional, family or community life whether as a member of a building design team working through the process of sorting through the many options and alternatives for selecting an HVAC system, maintaining a budget and time constraints that a construction team muddles through towards providing a client with the most energy efficient, aesthetic, healthy and quality building. In the end a well-deserved feeling of accomplishment and satisfaction is felt from all our efforts.

Performance – Key Factor #3: Measurement either quantified or qualified, or extent of achievement towards accomplishing a goal, mission or outcome. Per Tom’s discussion ASHRAE performance has many meanings: the performance of our volunteers and staff to meet members’ expectations; the performance of

the buildings we design, construct and operate to meet our clients' expectations; and the performance of our Society. Tom indicated the Society had recently adopted a new strategic plan defining what we want and hope to accomplish going forward. Building performance will remain as one of the top driving forces in the HVAC industry and has been and will continue to be one of ASHRAE's priorities for many years. Our existing standards and guidelines are regularly updated as research and new information is provided and acted upon as well as the development of new standards for the industry as new challenges and needs surface or are identified.

Given that the Champlain Valley Chapter has remained relevant is an indication that the performance of our past presidents and volunteers over the past 45 years is a testament to outstanding performance.

A Historical Backdrop of the Energy Challenge Through the Chapter's Existence

So let's take a look back over the previous 45 years as we initiate our third generation of local ASHRAE leaders of the Champlain Valley Chapter. Following is a reflection of what has been established and accomplished by the chapter and where we have been and where we are going. When CVC was chartered in March 1970, Richard M. Nixon was President of the United States, and the nation was deeply involved in the Vietnam War, the country was experiencing political tensions and stress at home through racial issues, an anti-war movement and a point of national pride, the NASA space program landed the first humans on the moon.

A 45 Year Timeline (1969-2014) History of Alternative Energy and Fossil Fuels

Jan. 1969	Santa Barbara Oil Spill Draws National Attention
1970s	Solar Cells Begin to Lower in Price & Become Cost Effective for Use on Land (\$100/W to \$20/w)
1970	Oil Production Peaks in Lower 48 states (9.4 million bbl/day)
1973	OPEC Oil Embargo Against the US Causes Gas Shortages and Rationing
Nov. 1973	Trans-Alaska Pipeline Authorization Act of 1973 Passed to Increase Domestic Oil Supplies in Wake of Oil Embargo
1975	Corporate Average Fuel Economy (CAFÉ) Standards Set by the Energy Policy Conservation Act
Dec. 1975	Formation of the Strategic Petroleum Reserve; President Ford Signs into Law the Energy Policy & Conservation Act
1977	Formation of the Solar Energy Research Institute (SERI)
Apr. 1977	President Carter Delivers Famous Energy Speech Arguing for Conservation and Alternative Fuels
Aug. 1977	Department of Energy Organization Act is Signed, creating the US Department of Energy
1978	World's First Solar-Powered Village; Tohono O'odham Reservation, Arizona
Nov. 1978	Solar Photovoltaic Energy Research, Development, and Demonstration Act of 1978
Mar. 1979	Three Mile Island Nuclear Accident in Pennsylvania Creates Widespread Public Opposition to Nuclear Power
Dec. 1980	World's First Wind Farm Built in New Hampshire; 20 Turbines Rated 30KW each at Crotched Mountain (It Failed)
1981	Solar One: First Large Scale Solar -Thermal Power Plant Begins Operation in Dagett, California (produced 10 MW of Electricity from 1982-1986)
1981	Construction Begins on the World's Largest Wind Farm in California's Altamont Pass; Bird Deaths from Wind Turbines (~4,700 Bird Deaths/Yr.); 4800 Small Turbines w/Capacity of 576MW, Generating About 1.1 Terawatt-hrs of Electricity;
1982	First Complete Decontamination and Decommissioning of a Nuclear Reactor in the US (Shippingport)
Apr. 1986	Largest Nuclear Accident Ever Takes Place at Chernobyl in the Former Soviet Union
Mar. 1989	Exxon Valdez Disaster in Alaska Becomes the Largest Oil Spill in US Waters (11 million Gallons Released into Environment)
Jan. 1990	Congress Passes Act to Stimulate Development of Hydrogen Power
1994	US Begins Importing More Petroleum Than It Produces
Apr. 1996	Solar Two Plant (10MW) Demonstrates Low Cost Method of Storing Solar Energy - Built On Site of Its Predecessor Solar One
1997	EV1 Electric Car is Made Available to the Public For Lease; Lease Program EV1 Later Dismantled by GM; About 1000 Produced Before Plug Pulled Due to Insufficient Demand
Feb. 2003	President Bush Unveils the Hydrogen Fuel Initiative to Promote Hydrogen Fuel Cell Development

The one dominating and persistent theme since the inception of our chapter and the following 45 years as well as ASHRAE as a whole could be termed the “Era of Energy Consciousness” and the challenge to address this dominant issue. To the left is a timeline of energy-related events which have occurred since CVC became an ASHRAE chapter. It illustrates a story of progress, setbacks, disasters and optimism highlighting that the journey is never a straight forward experience and the great challenges nations undertake should have tempered expectations of the speed which accomplishment can be achieved.

In 1973, the Organization of the Petroleum Exporting Countries (OPEC) implemented an oil embargo in retaliation for a US decision to re-supply the Israeli military during the 1973 Arab-Israeli War to gain leverage to the post war peace negotiations. Our re-supply actions were in response to Soviet Union sending arms to Egypt and Syria. The embargo banned petroleum exports to targeted nations including the US and cut oil production. The United States post WWII economy and its prosperity had thrived on cheap energy (mainly oil) at that time oil prices were declining as world oil production was increasing. However our consumption was out pacing national production so we were becoming more reliant on foreign oil. The 1973 embargo severely strained the US economy. Due to the increased dependence on foreign supplies of oil began a rapid trajectory increase in oil prices leading to a national oil shortage. The 1973 oil embargo brought attention to America’s energy demand and vulnerability to supply disruptions. This shortage was illustrated in Photographs of the time of motorists lined up at gas stations to

Timeline Continued

Feb. 2003	Plans Announced to Build FutureGen, the World's First Zero Emissions Coal Power Plant
Nov. 2005	US House Prevents Drilling for Oil in the Arctic National Wildlife Refuge
Nov. 2007	IPCC Report Concludes Climate Change is Happening and is Mostly Human Caused
Feb. 2008	First Commercial Cellulosic Ethanol Plant Goes into Production in Wyoming
Oct. 2008	National Biofuel Action Plan Unveiled; Goal to Cut US Gasoline Consumption by 20% Over the Next 10 Years
Feb. 2009	American Recovery and Reinvestment Act of 2009 Contains Billions of Dollars for Renewable Energy and Energy Efficiency Developments
Apr. 2009	First Framework for Wind Energy Development on the US Outer Continental Shelf Announced
May 2009	US Announces \$467 Million in Recovery Act Funding for Solar Energy and Geothermal Energy Development
Oct. 2009	US Invests \$3.4 Billion to Modernize Energy Grid (to be Matched by Industry for a Total Public-Private Investment Over \$8 Billion)
Oct. 2010	BP Oil Rig Explodes & Causes Largest Oil Spill in US History (Estimates of 30 Million Gallons Released; Surpasses Exxon Valdez by 3 Times)
Mar. 2011	Earthquake Off Coast of Japan Damages Six Power Plants at Fukushima Dai-ichi: Nuclear Crisis Eventually Reaches Level 7, the Highest Level Possible
Sept. 2011	Solar Power Company Solyndra Declares Bankruptcy After Receiving \$528 Million in Federal Loan Guarantees (also \$1 Billion in Private Capital)
Feb. 2012	US Nuclear Regulatory Commission (NRC) Approves New Nuclear Power Plants for First Time Since 1978; Two Reactors to be Built in Georgia
Mar. 2012	EPA Announces First Clean Air Act Standard for Carbon Pollution from New Power Plants (New Rule Proposes all New Fossil Fuel Plants Meet Output-Based Standard of 1,000 lbs of CO2 Per Megawatt Hr.)
Apr. 2012	EPA Issues First Ever Clean Air Rules for Natural Gas Produced by Fracking
June 2013	President Obama Releases His Climate Change Action Plan Including Increased Use of Renewable Energy and Carbon Pollution Restrictions for Power Plants
Sept. 2013	EPA Issues New Proposed Rules to Cut Greenhouse Emissions from Power Plants
Feb. 2014	Ivanpah, the World's Largest Concentrated Solar Power Generation Plant, Goes Online; Mojave Desert, CA., 392MW
June 2014	EPA Proposes First Ever Rules to Reduce Carbon Emissions from Existing Power Plants (Goal to Cut CO2 Emissions by 30% by 2030, Compared to 2005)
Sept. 2014	Rockefellers and Over 800 Global Investors Announce Fossil Fuel Divestment (Investors Have Pledged to Withdraw a Total of \$50 Billion from Fossil Fuel Investments Over the Next Five Years)

ProCon.org (2013, June 13). Historical Timeline. Annotated from <http://alternativeenergy.procon.org/view.timeline.php?timelineID=000015>

buy gasoline. The average car mileage in 1970 was only 13.5 mpg and one gallon of gas at the pump was less than a quarter.

This began new US policy measures towards energy conservation and efficiency in concert with development of domestic energy sources. Early responses were focused on boosting production and voluntary measures to promote energy conservation. Faced with price hikes increasing from \$3 to \$12 per barrel practically overnight; national leaders called for measures to conserve energy by imposing gas rationing and closing gas stations on Sunday. Lasting impacts of these policy measures include price controls (regulation), national speed limits, creation of strategic petroleum reserve, Energy Policy and Conservation Act of 1975, creation of the Department of Energy (1977) and many government funded projects and research in alternative fuel development, alternative sources of power like wind, solar and nuclear in addition to energy conservation.

Historical trends converged in the 1970's can be seen as a turning point towards an ongoing transition from fossil fuels. We have made gains in some areas but have experienced no gains in other areas. Today, roughly 50% of electrical generation is still dominated by coal, oil still drives transportation and both coal and oil remain lower in price compared to alternatives. An ongoing battle in policy decision making of competing interests between public ownership of resources and the regulated commerce of these resources by private interests which were given the right to extract, process into products and services for profit. Our mix of energy resources changes over time slowly as we have to wait

for technological breakthroughs, innovation, entrepreneurial vision and consumer demand to change the marketplace. However this political clash in determining the level of private/public control over energy resources results in a political gridlock in sound decision making at a time when it is needed most.

In his book, *Collapse, How Societies Choose to Fail or Succeed*, Jared Diamond claims a society's response to its problems depends on its political, economic and social institutions and cultural values and are significant factors affecting whether that society solves (or attempts to solve) its problems. We have to ask ourselves: Are we ready to acknowledge the seriousness of the environmental problems facing us? If the answer is "yes" it will require the courage to practice long term thinking and make courageous and anticipatory decisions to address the problems before they reach crisis proportions.

An unanticipated benefit of the energy crisis and ensuing energy conservation movement was the birth of environmental awareness as US citizens and the world began to think about energy differently including energy conservation, carbon footprint and public health (pollution, smog, CO2 build-up) that are still be related and forthright in our thinking today. The energy crisis has allowed the developed countries the benefit of getting a head start addressing climate change by decreasing carbon emissions as a result of energy conservation and efficiency measures undertaken. Prior to 1973 US carbon emissions were growing at 4.5% annually, since then only at 0.4% annually, a significant reduction. It goes without saying that current emissions are still

unsustainably high and need drastic reductions to avoid the long term serious effects of climate change.

Reflecting back on the last 45 years should provide us optimism that technological solutions to global environmental problems can be a factor in addressing climate change, that government research support can yield payoffs, bipartisan action on national/global environmental problems can be achieved when directed at people's economic decision making.

Over the last 45 years, accounting for over 400 CVC sponsored presentations, workshops, seminars and building tours, topics other than energy conservation and efficiency measures included indoor air quality concerns due to tighter buildings, the phase-out of CFC based refrigerants towards more environmental friendly and natural refrigerants to address the depletion of the ozone layer as examples. Our Engineers and designers have had to become familiar with, adopt, comply with and utilize energy codes and standards which were developed for the industry by ASHRAE and others in response to the challenges of energy awareness. Many programs presented topics introducing new technologies like air and water source heat pumps, air to air heat exchangers, heat recovery equipment, condensing boilers, economizers, evolution of ATC controls from pneumatics to DDC and energy management systems. We have recently seen an emphasis on higher insulated building envelopes and high efficiency windows in response to high performance and net zero building trends. We have experienced the emergence of variable speed drives for pumps and fans, the application of systems like VAV, DOAS, radiant heating and cooling, and

VRF as common practice. The introduction and application of the next generation of renewable energy systems such as solar, wind and biomass is becoming accepted and applied within the industry. The implementation of building and HVAC and lighting systems commissioning to align design intent with ensuring operational performance and maintainability during and upon completion of construction is becoming standard practice for most of the larger commercial and institutional buildings. Recently building labeling, benchmarking of energy performance and energy utilization has become a focus of ASHRAE. Again this illustrates over the entire spectrum of monthly topics the primary focus of ASHRAE CVC has been in response to the energy challenge and accompanying environmental awareness evolving from the 1973 oil embargo.

A Non-Inclusive List of Topics That We Can Look Forward To Keep Our Attention

- Buildings account for 40% of the nation's CO2 emissions per the US Department of Energy. To reduce the building sector's impact on climate will require bringing current building practices up to the level of best practices for significant energy and cost savings in particular applying to the nations' existing building stock. Best practices should be applied to existing buildings when significant upgrades, additions and renovations are planned. Specific focus should be on space heating, ventilation, air conditioning, lighting and domestic water heating as well as building envelope and windows as opportunities arise. Bringing the existing building stock

up to best practices will be a challenging and long term process as our economic system does not account or plan for obsolescence very well but represents a significant market to address reducing CO2 emissions and impact of climate change. It has been reported that new building construction will only account for about 10% of the nation's building stock between now and 2050 showing that 90% of the nation's building stock is already in place and operating inefficiently in terms of energy use.

- An integrated and holistic design approach between engineering and architecture taking into account of building operations, green building concepts, durable, sustainable, efficient and recyclable materials and equipment manufactured locally when available. To introduce and apply alternative energy systems. This process involves all building professionals, and interested parties to share their experience and bringing their knowledge to the table in the development of a building design and to justify the multiple choices of equipment, systems and product selections. Decisions need to be sound in principle and appropriate to the application under consideration utilizing modern software tools like energy modeling and energy savings analysis programs.
- Increased application of on-site power generation using renewable energy sources interfaced with the electric grid preferably using local, sustainable and obtainable energy sources.
- Alternative urban design, land use planning and utilization (compactness and mixed use) to accomplish the following: (1) reduce vehicle miles traveled (2) reduced space conditioning thru the use of integrated design approaches and district heating and cooling systems (3) reduce municipal infrastructure requirements.
- Increased awareness on the efficient use of natural resources, waste reduction, energy supplies, energy efficient appliances Indoor air quality (IAQ), water conservation, occupant health and productivity.
- Development and usage of energy labeling and rating programs as well as building energy use metrics will continue to evolve and be refined to provide a necessary performance data collection and documentation procedure to create a usable database for benchmarking purposes (like ASHRAE BeQ).
- Continue the trend to incorporate smart self- learning ATC and the measurement of performance relative to building type/ classification, occupancy and weather conditions with the goal of minimizing energy consumption and wear and tear on equipment. Other features emerging from DDC based controllers are self- diagnostic programs, fault conditions, remote access for diagnosis and control functionality checkouts and wireless technology.
- Sustainability has been recently introduced and will continue to dominate

the conversation which requires an understanding and awareness of the availability of our natural resources such as water, air, energy, minerals, forests, fisheries etc. so as to provide for the needs of the present without compromising the ability of future generations to fulfill their needs.

- The LEED process has allowed us to explore optimum solutions in terms of cost of energy and materials, functionality, and which technologies are considered and appropriate for specific applications (building types and occupancy). Recently constructed LEED high performance and emerging net zero buildings are giving us an abundance of examples to showcase the benefits and features of sustainable design to the public while reinforcing and rewarding the creativity of the design professional.

ASHRAE as a professional society will continue to share its knowledge, contributing to the knowledge base and literature of the HVAC field, be active in supporting and conducting HVAC research, writing new and updating existing industry standards, and encouraging and supporting students to pursue engineering.

Professional development and education on timely subjects and the sharing of knowledge amongst ourselves and the monthly social comradery will remain the main objective of chapter activities. ASHRAE will continue to be the foremost technical resource and purveyor of educational information for the professional growth of its members to assist in their daily



ACHIEVEMENTS 1969 - 2015

Chartered as an ASHRAE Chapter on October 2, 1970

Champlain Valley Chapter hosted four Chapter Regional Conferences (CRC's):

- Stowe – September 20 – 21, 1973
- Burlington – August 14 – 16, 1986
- Burlington – August 10 – 12, 2000
- Burlington – August 15 – 17, 2013

Individual ASHRAE Recognitions of Note

- Joe Canavan became the first CVC Chapter member to become an ASHRAE Life Member, November 1973
- Gordon W. Root, Sr., PE awarded ASHRAE grade of Fellow at 1994 Winter Meeting in New Orleans
- Gus Mastro was elected and serves as Region 1 Director and Chair (DRC) from 1996-2000
- Region 1 Golden Gavel Award Winners
- Edward E. Pearson, PE, CVC President 1990-1991
- Michael Rose, CVC President 1997-1998
- Tom Zoller, PE, CVC President 2004-2005
- Bill Atkinson, PE, CVC President 2005-2006
- Thomas F. Dacres, Jr., CVC President 2012-2013

Accomplishments of Note

More women work in HVAC engineering and affiliated professions and three women have served as CVC Chapter President.

- Lois Root , CVC President 1986-1987
- Amy (Cota) Patenaude, PE, CVC President 2002-2003
- Heather (Condon) Smith, CVC President 2008-2009

Vermont Technical College Student Chapter formed 1995-1996

It should be noted that several VTC Student Chapter members later joined the CVC and served as Presidents. These are:

- Russ Pratt , CVC President 2001-2002
- Amy (Cota) Patenaude, PE, CVC President 2002-2003
- David Anderson, CVC President 2003-2004

VTC students have regularly participated in the annual ASHRAE Student Design Competition against other US colleges and universities. VTC has been awarded Region 1 Best Student Design several times.

CVC Newsletter “The Champ” was first published September 1988 to keep members informed of news and events. Coincidentally the newsletter won its first Region 1 Black Ink award its first year thanks to the efforts of the Roots’. The newsletter has been published electronically for the last decade and continues to be recognized and awarded Black Ink awards.

PAOE Accomplishments

Individuals throughout the years have been recognized and awarded for their PAOE accomplishments while serving as Chapter Chairs of various functions of operations.

professional activities. The Champlain Valley Chapter is committed to offer programs that are relevant, timely and educational to keep our membership engaged, informed and involved.

If the last 45 years was the era of energy consciousness and addressing the challenge through energy conservation measures; hopefully the next 40 to 50 years of continued ASHRAE leadership and involvement will not only continue a transition from fossil fuels to renewables but aspire us to transform how we design, construct and operate (maintain) our built environment especially as applied to building energy systems. If the past is any indication I believe that ASHRAE and the Champlain Valley Chapter will be enthusiastic, engaged and informed participants.

The Champlain Valley Chapter will continue to support the *“ASHRAE mission is to advance the arts and sciences of heating, ventilation, air conditioning, and refrigeration to serve humanity and promote a sustainable world.”*

The foundation of this article is a compilation of material gathered from Champlain Valley Chapter, end of year summaries and ASHRAE Society publications including the ASHRAE Journal and other sources where necessary for historical perspective and the personal observations of the author of this article.

Submitted by
 Michael R. Cook
 CVC Historian, 2015

CENTRAL NEW YORK CHAPTER CRC

Please mark your calendars for August 20 to 22 because the Central New York Chapter CRC is fast approaching. We have many things planned for you and your family to enjoy in the Central New York area. Among the events planned are the welcome party at the “Original” Dinosaur BBQ and replacing the traditional Presidential Dinner with a fun filled evening with a clambake at Hinderwadel’s Clam Grove. You can make reservations plus check out other things to do in the area on our website at www.ashrae2015crc.com

Hope to see you in Syracuse !

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Champlain Valley Chapter

The CHAMP

SEMI-ANNUAL

VOLLEYBALL TOURNAMENT



June 5th

Airport Park Colchester

Registration

12-12:30pm

Tournament

12:30-4pm

Dinner

3-4pm

Its that time of year again where you gather your 6+ best players and join your local ASHRAE chapter for some food and fun. And the chance to dethrone Alliance (the winner of the 2013 tournament).

To register please call or email Rob Ward

robw@vhv.com : 802.861.6194

Make checks out to ASHRAE-CVC

\$300 PER TEAM

INCLUDES:

- FOOD
- BEVERAGES
- FUN
- FRIENDLY COMPETITION
- ENGRAVED PLAQUE AND BRAGGING RIGHTS FOR THE WINNING TEAM



A PORTION OF THE PROCEEDS WILL BENEFIT ASHRAE RP





Here Today, Here Tomorrow

What is an endowment and why is it important to ASHRAE?

Don't think of an endowment as merely an investment account. Think of an endowment as a "Gift to the Future." ASHRAE Foundation's endowment insures that its donor's gifts will support the long-term continuity and sustainability of ASHRAE and the multiple initiatives supported by the Foundation. These gifts in the form of the endowments provide a permanent source of income to support the education, research, and public service missions of ASHRAE. These endowed gifts are managed for the long-term to strike a balance between the competing demands of funding current initiatives and preserving purchasing power to fund future operations.

The source of nearly all the Foundation's endowment has come from gifts from generous ASHRAE members with an eye on the future. Many of these donors restrict their gifts to a specific purpose such as scholarships for training engineers or other restrictions that reflect the donor's priorities. Some donors provide unrestricted gifts that enable the ASHRAE Foundation to provide support for future needs that may not be obvious today.

In the past, gifts placed in endowment were limited to distributing only their net income for charitable purposes. The law governing these gifts has been updated to allow investment managers to invest for total return instead of just income. That means the spending power of your gifts are strong and the principal can grow to meet future needs. Since its founding 20 years ago, the ASHRAE Foundation has annually authorized a 5% distribution to support the purposes of the various funds.

Why do endowments matter to the average ASHRAE member?

Creating your Gift to the Future allows you to continue to give far into the future. Let's say you give an annual gift or \$1,000 to the RP campaign. If you establish an endowed fund, either now or from your estate, of \$20,000 your fund will continue to make a \$1,000 gift to support RP in perpetuity. Also, when your endowment fund grows in excess of its annual distribution, your principal increases and future distributions can grow as well

How can I make a Gift to the Future?

Endowed funds can be established now so that you can create a fund to support an ASHRAE initiative of interest to you. All it takes is a simple agreement describing your intentions. The minimum amount for an endowed scholarship is \$100,000. The minimum for an RP endowment is \$3,000. You can also create an endowment as part of your estate plans or add to an existing endowed fund from part of the generosity of your estate.

If you would like more information on how you can leave a legacy for the ASHRAE Foundation, please contact Margaret Smith at msmith@ashrae.org, tel: 678-539-1201.

ASHRAE CHAMPLAIN VALLEY CHAPTER PAST PRESIDENTS RECOGNITION PAGE

JUNE 2015

Vol. 29 No. 9

Order	Society Year Served	Name	Order	Society Year Served	Name
1	1969-70	William Lotz, PE	24	1992-93	Richard J. Wilcox
2	1970-71	Robert Miller	25	1993-94	Jon A. Soter, PE
3	1971-72	Richard Bowler Jr., PE	26	1994-95	Leo Ioannou
4	1972-73	Robert Coughlin	27	1995-96	Michael A. Gallo, PE
5	1973-74	Don Johnson	28	1996-97	Steve Poole
6	1974-75	Gordon W. Root, Sr., PE	29	1997-98	Michael Rose
7	1975-76	Jack Couture, PE	30	1998-99	Leo Ioannou
8	1976-77	Giustino N. Mastro, PE	31	1999-2000	Ken Couture
9	1977-78	Neil Vallencourt, PE	32	2000-01	Peter Tousley
10	1978-79	William Moore, PE	33	2001-02	Russ Pratt, PE
11	1979-80	Oscar Blatchly, PE	34	2002-03	Amy (Cota) Patenaude, PE
12	1980-81	Stuart N. King	35	2003-04	David Anderson
13	1981-82	Andrew Rudin, PE	36	2004-05	Tom Zoller, PE
14	1982-83	Ted Meade, PE	37	2005-06	Bill Atkinson, PE
15	1983-84	William A. Fyfe, PE	38	2006-07	Jay Pilliod
16	1984-85	Edward Seraydarin	39	2007-08	Jerry Chabot, PE
17	1985-86	Roger M. Kerr	40	2008-09	Heather Condon
18	1986-87	Lois Root	41	2009-10	Peter F. Bailey
19	1987-88	Mike Poirer	42	2010-11	Shawn LaBelle, PE
20	1988-89	Thomas Wolfstitch	43	2011-12	Michael R. Cook
21	1989-90	Bernard J. Young	44	2012-13	Thomas F. Dacres, Jr.
22	1990-91	Edward E. Pearson, PE	45	2013-14	Nathan Mascolino, PE
23	1991-92	Gordon W. Root, Jr., PE	46	(Present)	Robert J. Favali



Chapter Past Presidents with Tom Phoenix & Joe Furman

GENERAL MEETING

Mission Statement

ASHRAE will advance the arts and sciences of heating, ventilation, air conditioning, refrigeration and related human factors to serve the evolving needs of the public and ASHRAE members.

Vision Statement

ASHRAE

- ~ Will be the global leader in the arts and sciences of heading, ventilation, air conditioning & refrigeration.
- ~ Will be the foremost, authoritative, timely and responsive source of technical and educational information, standards and guidelines.
- ~ Will be the primary provider of opportunity for professional growth, recognizing and adapting to changing demographics, and embracing diversity.

PRESIDENTIAL AWARD OF EXCELLENCE TOTALS

Presidential Award of Excellence (PAOE) is the point system ASHRAE Region and Society use to help track the Chapter's activities. The chapter gets points in the below categories for activities that we do throughout the year. The awards banner that you see at the meetings represents CVC's accomplishments over the years. Below are definitions of what some of those awards are. If you want to know more about PAOE check out the www.ashrae.org website and do a search for the PAOE newsletter.

End of Year Awards Available to the Chapter:

PAOE: Minimum in five of the six categories

Special Citation: Minimum in 5 of the 6 categories with a minimum total of 4600 points

STAR: PAR in all categories

Honor Roll: PAOE for at least 4 consecutive years

High Honor Roll: STAR for at least 4 consecutive years

Premier: PAOE every year since the chapter's inception or since 1970; minimum of 4 years; chapter's first year is excluded

Sustainability Activities Award: A Chapter Sustainability Award in the form of a certificate is available for each chapter that obtains a total of at least 200 points from the items listed under Sustainability

Activities in the Chapter Operations category of PAOE. The Chapter with the highest PAOE Sustainability point total will receive a Regional award in the form of a glass plaque and a certificate. Level 1 = less than 100 members; Level 2 = 100-249, Level 3 = 250-449, Level 4 = 500 or more.

Category	PAR	2014 - 2015
Membership Promotion	800	110
Student Activities	500	936
Technology Transfer	1050	275
Research & Promotion	1050	1825
History	300	150
Grassroots Government Activities	650	350
Chapter Operations	1050	845
Chapter TOTAL	5400	4491

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