

THE LONG ISLAND SOUNDER

September 2010



ASHRAE Long Island Chapter, Region 1...Founded in 1957

www.ashraeli.org

American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc.

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President's Message

Greetings! Welcome back to a new year of ASHRAE for the Long Island Chapter. I hope everyone had a fabulous summer. I'd like to take this opportunity to thank Steven Giammona, P.E., LEED AP, for his leadership and dedication and the excellent job he did as last year's president. I know we will have his continued support in the future.



We last left off at our June dinner meeting. It was a great night celebrated amongst many of our past presidents and our installation ceremony of chapter officers as well as the presentation of student scholarships. The evening concluded with the traditional ASHRAE trivia contest and a walk through of history and smiles.

Due to the rain, May's 11TH annual golf outing at The Cherry Valley Club had been cancelled and rescheduled for Monday, August 9TH and was well attended.

It has been a busy summer for the Chapter Board members. The committee and officer turnover meeting was on July 13TH in Melville, and we met to review responsibilities of each position and establish a game plan for this year. We also welcomed Charlie Lesniak, a mechanical engineer with Lizardos Engineering Associates, P.C., who was nominated and elected for the two year Board of Governors position and is our Chapter Historian. His first order of business was creating a display for the CRC awards Luncheon.

I would like to welcome all of our new ASHRAE board and committee chairpersons and thank them all for volunteering their time. Carolyn Arote is now our President Elect in charge of programs. Brian Simkins, LEED AP, is our new Vice President and continues his roles as CTTC Chairperson. Andy Manos, LEED AP BD+C, is our new Financial secretary and continues his role as Resource Promotion Chairperson. Janeth Costa advances to the position of Treasurer. Rich Rosner, P.E., advances to the position of secretary and is the Student Activities Chair person. Tom Fields, P.E., LEED AP, advances to one year Board of Governors and is our Membership Promotion Chairperson. Traditionally, Steve Giammona, being the immediate Past-President will continue to serve on the Chapter Board of Governors for one year to offer his insight and guidance to our chapter officers. Our Board of Governors is well diversified with consulting engineers, equipment sales engineers, application engineers and mechanical contractors.

CHAPTER MONTHLY MEETING

DATE:	Tuesday, September 14, 2010
TIME:	6:00 PM - Cocktails/Dinner 7:00 PM - Dinner Presentation 8:45 PM - Conclusion
LOCATION:	Westbury Manor South Side of Jericho Tpke. 25 Westbury, NY 11590
FEES:	
Members -	\$40.00 (New fee)
Guest -	\$45.00 (New fee)
Student -	\$15.00

Reservations requested, but not required.

Call (516) 333-7117

Continued on Pg. 4

Long Island Chapter Officers & Committees

ASHRAE 2010/2011 OFFICERS

POSITION	NAME	PHONE	FAX	EMAIL
President	Nancy Román	516.568.6509	516.568.6586	nroman@adehvac.com
President-Elect	Carolyn Arote	516.568.6550	516.568.6575	carote@adehvac.com
Vice President	Brian Simkins, LEED AP	203.261.8100	203.261.1981	bsimkins@accuspecinc.com
Financial Secretary	Andrew Manos, LEED AP	631.632.2791	631.632.1473	andym22@optonline.net
Treasurer	Janeth Costa	631.242.8787	631.242.7084	jcosta@apollohvac.com
Secretary	Richard Rosner, P.E.	631.737.9170	631.737.9171	rrosner@csfllc.com
Board of Governors	Thomas Fields, P.E., LEED AP	631.737.6200	631.737.2410	t.fields@fpm-group.com
Board of Governors	Charles Lesniak	516.484.1020	516.484.0926	charles.lesniak@leapc.com
Board of Governors	Steven Giammona, P.E., LEED AP	516.827.4900	516.827.4920	sgiammona@ cameronengineering.com

ASHRAE 2010/2011 COMMITTEES

COMMITTEE	NAME	PHONE	FAX	EMAIL
Programs & Special Events	Carolyn Arote	516.568.6550	516.568.6575	carote@adehvac.com
Membership	Thomas Fields, P.E., LEED AP	631.737.6200	631.737.2410	t.fields@fpm-group.com
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Historian	Charles Lesniak	516.484.1020	516.484.0926	charles.lesniak@leapc.com
Student Activities	Richard Rosner, P.E.	631.737.9170	631.737.9171	rrosner@csfllc.com
Webmaster	Andrew Dubel	516.484.1020	516.484.0926	Andrew.dubel@leapc.com
Nominating	Michael Gerazounis, P.E., LEED AP	212.643.9055	212.643.0503	michael.gerazounis@mgepc.net
Reception & Attendance	Don Kane, P.E. Nick Couture	631.737.9170 631.981.3990	631.737.9171 631.981.3971	dkane@csfllc.com ncouture@emtec-engineers.com
PR & Engineering Joint Council of LI	Peter Gerazounis, P.E. LEED AP	212.643.9055	212.643.0503	peter.gerazounis@mgepc.net
Golf Outing	Peter Gerazounis, P.E., LEED AP Steven Friedman, P.E., HFDP, LEED AP	212.643.9055 212.354.5656	212.643.0503 212.354.5668	peter.gerazounis@mgepc.net sfriedman@akfgroup.com

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Chapter Monthly Meeting - Program for 2010/2011

September 14, 2010 * At Westbury Manor Dinner Presentation - Variable Refrigerant Flow Systems	February 2011 NATIONAL ENGINEERS WEEK DINNER
October 19, 2010 * At Westbury Manor Dinner Presentation - TBD <i>* Meeting will be held on 3rd Tuesday of the month.</i>	March 8, 2010 * At Westbury Manor Dinner Presentation - TBD
November 16, 2010 * At Westbury Manor Dinner Presentation - Understanding SMACNA's New Duct Leakage Standard JOINT MEETING WITH SMACNA <i>* Meeting will be held on 3rd Tuesday of the month.</i>	April 12, 2011 ANNUAL FIELD TRIP - TBD
December 14, 2010 Holiday Party - Westbury Manor	May 2, 2011 * Cherry Valley Club, Garden City, NY ANNUAL GOLF OUTING
January 11, 2011 * At Westbury Manor Dinner Presentation - TBD	May 10, 2010 * At Westbury Manor Dinner Presentation - TBD REFRIGERATION NIGHT
February 9, 2011 * At Westbury Manor Dinner Presentation - Energy Audits & New ASHRAE Standards <i>* Meeting will be held on 2nd Wednesday of the month.</i>	June 14, 2010 * At Westbury Manor PAST PRESIDENTS & OFFICER INSTALLATION
February 2011 ASHRAE Winter Meeting	
August 2011 - Chapter Regional Conference Region I	

PAOE FINAL POINTS TOTALS FOR 2009/2010

Chapter Members	Membership Promotion	Student Activities	Research Promotion	History	Chapter Operations	CTTC	Chapter PAOE Totals
301	1,320	1,654	2,351	245	675	1,390	7,635

President Message (Cont'd. from Page 1)

There are also members who, while not on the board, service our chapter in important roles on various committees. Liset Cordero continues her instrumental role as the newsletter editor. Past-President Mike Gerazounis, P.E., LEED AP, serves as nominating committee chair. Past-President Peter Gerazounis, P.E., LEED AP is our Liaison with Engineering Joint Council of Long Island. Peter Gerazounis and Past-President Steve Friedman, P.E., HFDP, LEED AP, co-chair the golf outing committee. Don Kane, P.E. and Nick Couture, LEED AP serve as Reception and attendance chairs. Andrew Dubel has volunteered to help out the chapter as Webmaster. Anita Singh, LEED AP, Don Kane, Nick Couture and Ernst Minschke are all volunteering their time to help out on committees as well. This year we are fortunate to have more people than ever offer to volunteer their time.

Our Board of Governors and committee chairs have just returned from Region I Chapter regional conference (CRC). It was held in the lovely Watkins Glen Harbor Hotel in Watkins Glen, N.Y., August 19TH through 21ST.

At the awards Luncheon we were honored to have ASHRAE President, Lynn G. Bellenger, P.E., Fellow ASHRAE, ASHRAE-Certified High-Performance Building Design Professional of Pathfinder Engineers, Rochester, N.Y. as the speaker. Lynn G. Bellenger, is from our very own Region I and has made history as the first female president in the Society's 116 year span. As ASHRAE's president, Bellenger directs the Society's Board of Directors and oversees the Executive Committee. Her presidential theme, *Modeling a Sustainable World*, notes that in energy simulation, daylight analysis, CFD and BIM software, we have powerful modeling tools that enable us to create and refine our vision of a building and its appearance, systems, operation and performance. We are proud to announce that she will be a speaker at our February joint meeting with USGBC.

The Long Island chapter was recognized as having contributed to the advancement of ASHRAE over the past year and received awards and honors. Steve Giammona received the Presidential Award of Excellence High Honor Roll, Special Citation and star. Janeth Costa received the ASHRAE Region I Websitation of Excellence award. We invite you to take a moment to visit our new and improved website at www.ashraeli.org. A Hats off to Andrew Manos, who received a Resource Promotion Honorable Mention, a full circle chevron and a certificate of achievement in recognition for exceeding the financial goal and raising \$17,480. Let's extend a special thanks to Liset Cordero for her hard work in putting together our newsletter, The Long Island Sounder, as we received the Black Ink Award. Past-President, Steve Friedman, continues to serve the engineering community and ASHRAE as Region I Refrigeration Chair. He was recognized in receiving a certificate of appreciation for regional vice chair, refrigeration, region I chapter technology transfer committee 2009-2010 in grateful recognition for devoted service to the growth and progress of ASHRAE. In addition Carolyn Arote, Brian Simkins, Rich Rosner and Tom Fields continue to work hard and do an incredible job for the chapter.

The ASHRAE Mission Statement is to advance the arts and sciences of heating, ventilating, air conditioning and refrigerating to serve humanity and promote a sustainable world. Our meetings will continue to be a source of technical and educational information with Carolyn working diligently on this year's programs. A complete year schedule will be available to you shortly. We are happy to announce a joint meeting is scheduled with SMACNA and USGBC. We will also be reaching out to other engineering groups represented in Long Island to join us.

This year, we are forced to raise the cost of the monthly meetings to \$40 for members. While the chapter still subsidizes these meetings, maintaining the \$35 fee is no longer feasible. Inflation and the economy has hit our region along with the rest of the country. The chapter is unable to absorb this most recent cost increase.

I look forward to seeing everyone as we kick off the year on September 14th. Our first meeting of the season will feature a presentation about variable refrigerant flow systems presented by Past-President Ray Schmitt of Daikin. Additional information about this presentation can be found in the following pages of this newsletter. PDH credits will be offered to those who attend. Members are the lifeblood of any organization and we ask each of you to invite your co-workers, employees, employers, and clients to attend our meetings. I thank all of our volunteers and members in advance for your dedication and contributions to the Long Island Chapter. I am proud to lead this group of engineers that have made and will continue to make the Long Island Chapter one of the finest chapters in our society.

Nancy Román
President - Long Island Chapter

September Program

You are cordially invited to our September 2010 Meeting...



Dinner Presentation

“Variable Refrigerant Flow Systems”

Presented by

Ray Schmitt
Daikin AC

**Attendees
Will Earn
1.5 PDH!**

DATE:	TUESDAY, SEPTEMBER 14, 2010		
Time:	6:00 PM – Cocktails and Hors D'oeuvres 7:00 PM – Dinner Presentation 8:45 PM – Conclusion	Fee:	\$ 35.00 Member \$ 40.00 Guest \$ 15.00 Student
Location:	WESTBURY MANOR (516) 333-7117 Jericho Tpke (South Side), 3/10 of mile east from Glen Cove Rd., Nassau County, NY. Directions are posted at @ www.ashraeli.org.		
Presentation:	<p>This month's presentation will be on Variable Refrigerant Flow Systems.</p> <p>This Technology was introduced in 1982 in Japan, in 1987 in Europe, and 2002 in the USA. This Technology has gained World-Wide Acceptance as an HVAC system. The market growth in the USA is expanding rapidly.</p> <p>VRF/VRV Systems have many features and benefits that are making it a regular System Design choice. These Systems are modular in nature, offer flexible installation and are easily zoned for occupant comfort and zone control.</p> <p>This presentation reviews VRF/VRV System design parameters/ concerns and practical application information as well as the various types of equipment and accessories that are available.</p>		
About our Speaker:	<p>Ray Schmitt is an active ASHRAE LI Chapter member and served as Chapter President in 2001 - 2002. He graduated from State University at Farmingdale, New York with an Associates Degree in Air Conditioning Technology.</p> <p>Ray is enjoying a diversified career in the HVAC industry having worked for York in Engineering Research & Development, KSI Mechanical Contractors in Sales and Design, Energy Administration in Sales, Design and Project Management, Pyramid Air Conditioning as a Project Manager, Wales Darby Inc., as a Sales Engineer and Daikin AC (Americas) as a Sales Applications Engineer.</p>		

CHAPTER MAY NOT ACT FOR SOCIETY

An International Organization

Research Promotion

Last year's overall resource promotion goal was \$2,001,900 with over 75 research projects on board. Our chapter raised \$17,480 towards this goal and the overall goal was met. I am hoping I can count on the continued support of all of our past contributors who have generously supported us over the years.

I also look forward to gaining the support of new contributors this coming year. Please help support ASHRAE in any way you can.

I would like to say 'thank you' to all the contributors listed below whom have donated to ASHRAE last year:

INDIVIDUALS

Mr Andrew E Manos	Mr Joseph V Marino
Mr Andrew J Garda	Mr Kevin Beirne
Mr Arthur A Huebner	Mr Marcel A Bally
Mr Brian C Simkins	Mr Michael Gerazounis, PE, LEED AP
Mr. Carl E Graber, PE	Mr Michael O'Rourke
Ms Carolyn Arote	Ms Nancy Roman
Mr Christopher M Schwarz	Mr Patrick J Lama
Mr David G Kwalbrun	Mr Peter Gerazounis, PE, LEED AP
Mr David Robert Jendras	Mr Raymond O Combs
Dr. David Shaw	Mr Raymond G Schmitt
Mr Donald E Ross	Mr Richard L Rosner, PE
Mr Fred H Weber	Mr Ricky Gaska
Ms Janeth Costa	Mr Ronald J Kilcarr, PE
Mr Jerome T Norris	Mr Steven D Friedman, PE,HFDP,LEED AP
Mr Jerome A Silecchia	Mr Steven R Giammona, PE, LEED AP
Mr John Evans Lizardos	Mr Thomas Fields, PE
Mr John D Nally	Mr William L Mahon



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Research Promotion (Cont'd. from Page 6)

COMPANIES

Accuspec Inc	Clean Air Company	Mitsubishi Electric
A D E Systems Inc	Daikin US Corp.	MV Controls
Albert Weiss Air Conditioning Products	Dnt Enterprises Inc	PVI Industries- Ft. Worth
Anron Heating & Air Conditioning Inc	EMTEC Consultants Professional Eng	Rathe Associates
A O Smith Water Heaters	Environmental Air Quality	RPG Associates
Air Control Supply	GA Fleet	Siemens Building Technologies Inc
Applied Technologies of NY Inc	Gilbar	SRS Enterprises Inc
ASAP Sales	HTS NY	Taco Inc
Bladykas Engineering P C	INCLICO	Technical Air Systems Incorporated
Building Cooling Systems	J-Mar Controls	Tower Enterprises of NY & NJ
Bush Wholesalers	Leonard Powers Inc	Trane
Captive-Aire Systems Inc	Liebert-Emerson Network Power	Twinco Supply Corporation
Carrier Northeast	Lizardos Engineering Associates PC	Viessmann
Catan Equipment Sales	Mason East Incorporated	Wales Darby Incorporated
Centrex	Miller Proctor Nickolas Inc	Wallace Eannace Associates
Chimney Design Solutions Inc		

CONTRIBUTIONS CAN BE MADE IN THE FOLLOWING WAYS:

1) You can mail your checks, made out to ASHRAE Resource Promotion, to:

Andrew Manos
ASHRAE Research Promotion Chair
c/o Stony Brook University
Campus Planning, Design and Construction
Research and Support Services, Suite 160
Development Drive, Stony Brook, NY 11794-6010

2) You can bring your check to any of the meetings and give it to me. I will mail it into headquarters.

3) You can contribute via paypal from the ASHRAE LONG ISLAND web site just click on the donate button.

4) You can contribute directly on-line. www.ashrae.org
*** Please make sure your accreditation contribution to the LONG ISLAND CHAPTER 006 ***

Thank you again for all your support!

Andrew Manos, LEED AP
Resource Promotion Chair

Nicholas Couture, LEED AP
Vice Chair



CTTC

Designing VRF Systems - The main advantage of a variable refrigerant flow (VRF) system is its ability to respond to fluctuations in space load conditions. By comparison, conventional direct expansion (DX) systems offer limited or no modulation in response to changes in the space load conditions. The problem worsens when conventional DX units are oversized or during partload operation (because the compressors cycle frequently). A simple VRF system, comprised of an outdoor condensing unit and several indoor evaporators, which are inter-connected by refrigerant pipes and sophisticated oil and refrigerant management controls, allows each individual thermostat to modulate its corresponding electronic expansion valve to maintain its space temperature setpoint. VRF systems have been used in Asia and Europe for almost twenty-five years. With a higher efficiency and increased controllability, the VRF system can help achieve a sustainable design. Unfortunately, the design of VRF systems is more complicated and requires additional work compared to designing a conventional DX system. This article provides guidelines for determining the feasibility of a VRF system and discusses the factors that should be considered from initial planning through completion of a project. Although some manufacturers now offer water-cooled VRF systems, this article focuses on air-cooled, split-type VRF systems.

Choosing VRF - In deciding if a VRF system is feasible for a particular project, the designer should consider building characteristics; cooling and heating load requirements; peak occurrence; simultaneous heating and cooling requirements; fresh air needs; accessibility requirements; minimum and maximum outdoor temperatures; sustainability; and acoustic characteristics.

Building Characteristics - Although manufacturers routinely increase the maximum allowable refrigerant pipe run, the longer the lengths of refrigerant pipes, the more expensive the initial and operating costs. For most VRF units, the maximum allowable vertical distance between an outdoor unit and its farthest indoor unit is approximately 150 ft the maximum permissible vertical distance between two individual indoor units is approximately 45 ft and the maximum actual refrigerant piping lengths allowable between outdoor and farthest indoor units is up to 490 ft. Building geometry must be studied carefully. The system should not be considered if the expected pipe lengths or height difference exceed those listed in the manufacturer's catalog. In buildings where several outdoor locations are available for the installation of the outdoor units, such as roof, setback, and ground floor, each condensing section should be placed as close as possible to the indoor units it serves. The physical size of the outdoor section of a typical VRF is somewhat larger than that of a conventional DX condensing section, with a height up to 6 ft excluding supports. Indoor units are available in multiple configurations such as wall-mounted, ceiling-mounted cassette suspended, and concealed ducted types. It is possible to combine multiple types of indoor sections with a single outdoor section.

Building Load Profile - The combined cooling capacity of the indoor sections can match, exceed, or be lower than the capacity of the outdoor section connected to them. An engineer can specify an outdoor unit with a capacity that constitutes anywhere between 70% and 130% of the combined indoor units capacities. The design engineer must review the load profile for the building so that each outdoor section is sized based on the peak load of all the indoor sections at any given time. Adding up the peak load for each indoor unit and using that total number to size the outdoor unit likely will result in an unnecessarily oversized outdoor section. Although an oversized outdoor unit in a VRF system is capable of operating at lower capacity, avoid over sizing unless it is required for a particular project due to an anticipated future expansion or other criteria.

Sustainability - One attractive feature of the system is its higher efficiency in comparison to conventional heat pump units. Less power is consumed by the VRF system at part load compared to conventional systems, which is due to the variable speed driven compressors and fans at outdoor sections. The designer should consider other factors to increase the system efficiency and sustainability. For example, sizing should be carefully evaluated and over sizing should be avoided. Environment friendly refrigerants such as R-410a should be specified. Relying on the heat pump cycle for heating, in lieu of electric resistance heat, should be considered, depending on outdoor air conditions and building heating loads. This is because significant heating capacities are available at low ambient temperatures. (e.g., the heating capacity available at 5°F can be up to 70% of the heating capacity available at 60°F, depending on the particular design of the VRF system).

CTTC (Cont'd. from Page 8)

Fresh Air Requirements - One of the most challenging aspects of designing VRF systems is the need to provide a separate outside air supply to each unit to comply with ANSI/ASHRAE Standard 62.1, Ventilation for Acceptable Indoor Air Quality, and building codes. Most manufacturers offer an outside air kit, for connecting to outside air ductwork. A separate outside air fan and control system is generally required for larger buildings. In humid climates, providing pre-conditioned outside air to each indoor unit ensures good indoor air quality.

Simultaneous Heating and Cooling - Some manufacturers offer a VRF system capable of providing simultaneous heating and cooling. In those systems, although several indoor sections are connected to one outdoor section, some indoor sections can provide heating, while others provide cooling. The prices for those units and their installation are higher than that of cooling- or heating-only units. More economical design can sometimes be achieved by combining zones with similar heating or cooling requirements together. When zones with different cooling/heating requirements are connected to the same outdoor section, consider units that are capable of providing simultaneous heating and cooling. Examples of zones that may require simultaneous heating and cooling when combined are interior and exterior zones; exterior zones with different exposures; and zones requiring comfort cooling with rooms requiring close environmental control.

Minimum Outdoor Air Temperature - Using VRF heat pump units for heating and cooling can increase building energy efficiency, especially when the heating obtained from the heat pump mode replaces an electric resistance heating coil. Most VRF units provide higher heating capacities than conventional DX heat pumps at low ambient temperatures. The designer must evaluate the heat output for the units at the outdoor design temperature. Manufacturers indicate the heating capacities at catalog minimum outside temperature, after which point, a low ambient kit is sometimes offered as an option. When the outdoor temperature drops below the temperature indicated in the catalog, the heating output from the heat pump cycle decreases. Supplemental heating should be considered when the heating capacity of the VRF units is below the heating capacity required by the application. Sequence of operation and commissioning must specify and prevent premature activation of supplemental heating.

Power and Accessibility - Power and accessibility are required for all system components, including evaporators, outdoor condenser, branch selector, and condensate drain pumps (where applicable).

Unit Selection and System Layout - The complete specification of a VRF system requires careful planning. Each indoor section is selected based on the greater of the heating or cooling loads in the area it serves. In cold climates where the VRF system is used as the primary source for heating, some of the indoor sections will need to be sized based on heating requirements. Once all indoor sections are sized, the outdoor unit is selected based on the load profile of the facility. When indoor sections are greatly oversized, the modulation function of the expansion valve is reduced or entirely lost. Most manufacturers offer selection software to help simplify the optimization process for the system's components.

Installation - The installer must be familiar with the system components and the installation requirements. Refrigerant pipes must remain clean, dry, and leak free. When stored prior to installation, the edges of refrigerant pipes need to be sealed. Nitrogen gas must be used during welding to prevent oxidation of the interiors of refrigerant pipes. A detailed installation manual must be followed. The installer should be familiar with the control options available for VRF systems. For example, each individual indoor unit can be controlled by a programmable thermostat or a multiple indoor units serving the same zone can be controlled by the same thermostat. Most VRF manufacturers offer a centralized control option, which enables the user to monitor and control the entire system from a single location or via the Internet. Many manufacturers offer courses for installers regarding system installation. Unfortunately, differences in the installation requirements vary greatly between manufacturers, so installers must become familiar with each system.

CTTC (Cont'd. from Page 9)

Commissioning - Additional procedures must be added to the typical commissioning plan required for unitary air conditioning and heat pump systems. Examples of additional steps are:

- Verification of the proper operation of the electronic expansion valves
- Ensuring thermostats capability of fully modulating their indoor units
- Capability of an outdoor section to provide cooling and heating capacities at extreme outdoor air temperatures
- Self diagnostics features for the system should be checked at various conditions.
- When a single VRF system is installed in phases, the entire system should be commissioned upon the completion of the installation.

Operation and Maintenance Manuals - The O&M manuals should include information for all units including wiring diagrams, troubleshooting and preventive maintenance procedures, spare parts, etc. As-built drawings should indicate locations of all system components.

VRF Limitations - VRF systems are not suitable for all applications. Some limitations include:

- There is a limitation on the indoor coil maximum and minimum entering dry- and wet-bulb temperatures, which makes the units unsuitable for 100% outside air applications especially in hot and humid climates.
- The cooling capacity available to an indoor section is reduced at lower outdoor temperatures. This limits the use of the system in cold climates to serve rooms that require year-round cooling, such as telecom rooms.
- The external static pressure available for ducted indoor sections is limited. For ducted indoor sections, the permissible ductwork lengths and fittings must be kept to a minimum. Ducted indoor sections should be placed near the zones they serve.

Conclusion - VRF systems offer controls that match the space heating/cooling loads to that of the indoor coil over a range of operation. Variable speed compressors and fans in the outdoor units modulate their speed, saving energy at part-load conditions. Outdoor sections should be sized to match building peak loads, not the sum of the peak load for each zone, reducing the capacity of outdoor units when compared to a conventional unitary system. The system offers designers and occupants the ability to choose multiple individualized zones, which improves system controllability. The system capabilities and limitations should be evaluated carefully to determine the suitability of the VRF for a project and to optimize its design.

Brian Simkins
CTTC



Long Island Chapter - Past Presidents

1958	H. Campbell, Jr. PE	1984	Raymond Combs
1959	Clyde Alston, PE	1985	Edward W. Hoffmann
1960	Sidney Walzer, PE	1986	Jerome T. Norris, PE
1961	Sidney Gayle	1987	Abe Rubenstein, PE
1962	William Kane	1988	Michael O'Rourke
1963	Louis Bloom	1989	Mel Deimel
1964	Milton Maxwell	1990	Robert Rabell
1965	Will Reichenback	1991	Gerald Berman
1966	Joseph Minton, PE	1992	Donald Stahl
1967	Irwin Miller	1993	Ronald Kilcarr
1968	Walter Gilroy	1994	Jerald Griliches
1969	Charles Henry	1995	Walter Stark
1970	William Wright	1996	Joe Marino
1971	Louis Lenz	1997	Norm Maxwell, PE
1972	Ronald Levine	1998	Alan Goerke, PE
1973	Henry Schulman	1999	Frank Morgigno
1974	Myron Goldberg	2000	Michael Gerazounis, PE, LEED AP
1975	John N. Haarhaus	2001	Ray Schmitt
1976	Richard K. Ennis	2002	Steven M. Stein, PE
1977	Kenneth A. Graff	2003	Andrew Braum, PE
1978	Evans Lizardos, PE	2004	Claudio Darras, P.E.
1979	Albert Edelstein	2005	Craig D. Marshall, P.E.
1980	Ralph Butler	2006	John Nally
1981	Robert Rose, PE	2007	Peter Gerazounis, PE, LEED AP
1982	Timothy Murphy, PE	2008	Steven Friedman, PE, HFDP, LEED AP
1983	Leon Taub, PE	2009	Steven Giammona, P.E., LEED AP

History

As I was going through the binder's filled with our chapter's history, I found an interesting speech given to the chapter by Robert Moses. This speech was given to the chapter during a CRC on Saturday, September 20th, 1975. The speech given during dinner at the Harrison House (now Glen Cove Manor) was well attended due to the controversial speaker. I was intrigued that such a pivotal man in the history of New York spoke at our chapter, so I decided to read it.



During his speech Robert Moses makes note of how the highways had to avoid farms, and how his highways were stopped by the locals on the North Shore, because they didn't want to see a highway in their backyard. He also explained how the environmentalists were halting the construction of his highway network. He later goes on to talk about the importance of the Sound Crossing which would have run from Bayville to Rye, and its demise from politics, and environmentalists. He also predicted how federal construction projects will be handled in the future, with endless hearings and reviews, till the projects came to a standstill. His speech is definitely worth reading and I will put it up on the chapter's website soon.

Reading this speech got me thinking how much of the chapter's history has been lost through the years, and how what history we have should be shared with everyone. I would like to ask our chapter members if they have any old photographs, articles or speeches of people who have been through the Long Island chapter of ASHRAE to send me this information so I can place it on our chapters' website in the history section so this information can be shared with others and not lost in a dusty binder. Also, I would like to add to our website interesting and ground breaking projects that members of our chapter worked on.

Charlie Lesniak
Chapter Historian

Membership

With the start of our new season, it is a good time to review your membership status. If your membership is due, the easiest way to renew is at ashrae.org. Membership also grants you access to the benefits of ashrae.org, so please register on the website if you have not already done so. Please review your membership grade as well. Many of you may wish to upgrade your membership. Grades are as follows:

Member — The grade of Member is awarded to individuals who have twelve or more years of qualified industry-related experience. Credit for industry related experience can be earned from any combination of approved education, work experience and professional registration. **Yearly dues:** \$180

Associate Member — The Associate Member grade is awarded to individuals who have less than twelve years of ASHRAE-approved industry experience in the heating, refrigerating, air-conditioning, or ventilating fields. **Yearly dues:** \$180

Affiliate Member — ASHRAE's newest grade is an introductory grade for applicants with a general interest in the Society's programs and services. Assignment to this grade is limited to those who are under 30 years of age who are first-time new members. **Yearly dues:** Year 1: \$50, Year 2: \$70, Year 3: \$90

Student Member — To qualify as a student member you must be studying or have an interest in an HVAC&R industry-related field. Eligible students must be participating in an approved course of study in a university, college, junior college, or technical institute. **Yearly dues:** \$20

Please note that the yearly dues are Society level only; they do not include local chapter dues.

Our membership goals for this year include retaining our members, increasing YEA (Young Engineers in ASHRAE) and student membership, and increasing participation in our monthly meetings and events. If you know a prospective member, please invite them to our monthly meeting. If you have any questions regarding your membership, please do not hesitate to contact me.

Thomas Fields, PE, LEED AP
Membership Chairman

Student Activities

Students are heading back or are already started in their fall programs in school. For some it will be their senior year in high school or college but for all it will be time to make decisions on where they are headed and to determine what opportunities lay ahead. ASHRAE has been there year after year to help with those decisions by giving scholarships to a lucky few, landing them part or full time work, mentorship programs, and internships.



As a chapter we will strive this year to reach out to more students than ever by contacting as many local schools as possible. It has become apparent that over the years that gaining the interest of new, up and coming professionals in ASHRAE has been strong. We want to keep interest high by continuing to see these members as an active part of our organization. For many of us more seasoned professionals, looking back to earlier days in our careers is enough for us to simply know how important the early decisions in our careers are. At ASHRAE, combining new, up and coming professionals with seasoned professionals is the perfect opportunity to provide steady seasoned hands to encourage and guide newcomers in the industry. ASHRAE has created the Young Engineers in ASHRAE, "YEA" program for this purpose. This program is design for the young engineer 35 years old and younger.

The YEA program is designed to build a strong foundation for our younger members by implementing the following:

1. **Technology Acquisition** – providing the latest information about new products, practical applications and case by case studies presented at chapter, regional and Society levels.
2. **Professional Growth** – providing opportunities through communication to build management skills and technical excellence with learning available through seminars, courses, publications, standards, committees, meetings, chapter involvement and web-based forums.
3. **Networking & Career Advancement** – meeting your industry professionals at dinner meetings, lectures, golf outings, camping trips, leadership weekends, field trips, social events and at regional or Society level conventions.

For more information on YEA please visit on the web at www.ashrae.org/yea

There will be two Student Activities nights this year and at each we hope to have some giveaways for the students. Each year the Society provides us with a new standards handbook. Most of us have many of these past issues in our libraries. In the interest of educating our new members who have not yet collected a new complete set we ask that you bring down your old copies so they can be given as prizes to the students. Other materials are also welcomed and will be used for this same purpose.

If you find you have some spare time on your hands we will also be looking for volunteers to speak to students at various levels K-12 and would welcome your involvement. At our meetings, we are also looking for volunteers to participate as host to a student for the evening. Please see Rich Rosner at any chapter meeting.

Thank you for your time and I look forward to working with you as this year's Student Activities Committee Chair.

Richard L. Rosner, PE
Student Activities Committee Chair

Anita B. Singh, LEED AP
Assistant Student Activities Committee Chair



Donate your old Handbooks

Please bring your old handbooks to the meetings for donations to our student members who do not have complete sets at this time. Rich Rosner will be collecting them.

Upcoming Seminars



Engineers Joint Committee of Long Island

Andrew S. Haimes, P.E., F.NSPE

NETWORKING EVENING with DINNER and ETHICS SEMINAR

Wednesday, September 22, 2010

Place: Dave & Busters • 261 Airport Plaza Blvd., Farmingdale, NY (631) 249-0708
www.daveandbusters.com

Program: 6:00pm – 7:30pm Networking and Dinner
7:30pm – 8:30pm Seminar (1 PDH)
8:30pm – 10:00pm Cash Bar and Networking

Seminar Description: Incident at Morales video involves a variety of ethical issues faced by a company that wants to develop a new chemical product. In order to gain a competitive edge, they need to build a plant quickly. The video and discussion provide a number of opportunities for participants to consider the resolution of difficult ethical issues including international responsibilities, consequences of technical and financial decisions, and environmental concerns. **One PDH is provided for attending this seminar.**

To register, complete and submit this form and payment by September 17, 2010 to:
Andrew S. Haimes, PE, 172 Sherry St, East Islip, NY 11730. Phone: 631-859-5190.
Email questions to: ashaimes@optonline.net

Fee: \$25 (includes Dinner and Seminar)

Make check payable to: Engineers Joint Committee of LI (credit cards can not be accepted)

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Hofstra University
Instrument Society of America
American Society for Engineering Education
American Society for Quality

Event Thursday 9/23 in NYC. All attendees will receive 4 PDH credits.
Contact Kevin Beirne via email at kbeirne@victaulic.com for more information.

CRC 2010 Photos - Hosted by Twin Tiers Chapter



ASHRAE Long Island Chapter - BOG Members
Rear (Left to Right):
 Brian Simkins, Tom Fields, Andy Manos,
 Janeth Costa, Rich Rosner
Front (Left to Right):
 Carolyn Arote, Andrew Dubel, Steven Giammona,
 Nancy Roman, Steven Friedman, Charles Lesniak



Lynn Bellenger, P.E.
 ASHRAE President



2009-2010 Chapter President, Steven Giammona, P.E.,
 LEED AP receiving the Presidential Award of Excellence
 High Honor Roll, Special Citation and Star.



Andrew Manos, who received a Resource Promotion Honorable Mention, a full circle chevron and a certificate of achievement in recognition for exceeding the financial goal and raising \$17,480.

CRC 2010 Photos - Hosted by Twin Tiers Chapter



Charles Lesniak at the Long Island Chapter's History Board



Janeth Costa received the ASHRAE Region I Websitation of Excellence Award



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ASHRAE Golf Outing 2010 - August 9, 2010



ASHRAE Golf Outing 2010 - August 9, 2010



ASHRAE Golf Outing 2010 - August 9, 2010



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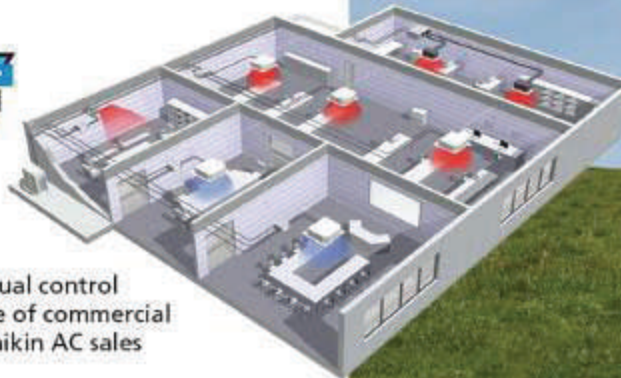
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Thank you.

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