

# THE LONG ISLAND SOUNDER

April 2005



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

www.ashraeli.org

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

## Inside this issue:

President's Message	1,3
Meeting Information	1
LI Chapter Officers & Committees	2
President's Message	3
Meeting Schedule	3
April Program	4
BOG Minutes	5
Technology Transfer	5
Satellite Broadcast	6
LI Distinguished Lect.	6
LI Past Presidents	7
Student Activities	7
PAOE	7
History	8
ASHRAE NYC Chapter	8
CTTC	9,10
Resource Promotion	10
Learning Institute	11
Annual Golf Outing	12,13
Advertisements	14,15

## President's Message

**MARCH FIELD TRIP** - Our field trip this year was a visit to Islandaire, manufacturer of air conditioning equipment in Long Island. Regrettably, due to an unforeseen snow storm that day, the event was cancelled.

Our most sincere thanks to Robert Hansen Jr. – President, Richards Nuss – VP of Sales & Mktg., and James Davis – Dir. of Eng. for all the preparations made to receive our ASHRAE members, and for staying put to welcome stranded visitors.



Islandaire manufactures a complete line of packaged air conditioners and heat pump equipment. Fedders recently purchased Islandaire and its new name is Fedders Islandaire. If you would like to visit their manufacturing facility in Ronkonkoma or learn more about their products, you may contact Richard directly at 1-800-886-2759.

**APRIL MEETING** - Our next meeting features a distinguished guest and speaker, William J. Coad, P.E., CEO of McClure Engineering Associates, and 2001-02 ASHRAE President. During his prestigious engineering career, Mr. Coad has received numerous awards during his prestigious engineering career. He has performed as a practitioner, researcher, professor, and also authored many books and articles in the HVAC field. Mr. Coad will offer a presentation entitled "VAV System Design - Problems and Opportunities", which discusses the evolution of the VAV system, its application, and its economic impact on HVAC projects. We are pleased to welcome Mr. Coad to our Chapter.

More details about Mr. Coad's presentation can be found in this newsletter.

## CHAPTER MONTHLY MEETING

<b>DATE:</b>	<b>Tuesday, April 12, 2005</b>
<b>TIME:</b>	6:00 PM - Cocktails/Dinner 6:30 PM - Changeover Presentation 7:00 PM - Dinner Presentation 8:45 PM - Conclusion
<b>LOCATION:</b>	Westbury Manor South Side of Jericho Tpke. 25 Westbury, NY 11590
<b>FEES:</b>	
Members -	\$30.00
Guest -	\$35.00
Student -	\$15.00

Reservations requested, but not required.  
Call (516) 333-7117

**ANNOUNCEMENTS** - It is my privilege to announce that selected members from our Chapter have received special recognition and promotion from ASHRAE due to their continuous support of our Society. The names of these members are:

Joseph R. Jenal – Life Member  
Patrick J. Lama - Life Member  
Leslie J. Schweitzer - Life Member  
Lee Hilton – Fifty Year Member

On behalf of the ASHRAE Long Island Chapter I want to thank to each one of them for their continuous support of our Chapter and their contributions to our Society. We are in the process of contacting each member to present the ASHRAE certificate.

Cont'd. on Page 3

## Long Island Chapter Officers & Committees

### ASHRAE 2004/2005 OFFICERS

POSITION	NAME	PHONE	FAX	E-MAIL
President	Claudio Darras, P.E.	(212) 354-5656	(212) 354-5668	cdarras@akf-eng.com
President-Elect	Craig D. Marshall P.E.	(203) 261-8100	(203) 261-1981	cmarshall@accuspecinc.com
Vice President	John Nally	(631) 331-0215	(631) 928-4625	jn@atiofny.com
Financial Secretary	Peter Gerazounis, P.E.	(212) 643-9055	(212) 643-0503	pgerazounis@mgjassociates.com
Treasurer	Steven Friedman	(212) 253-7303	(212) 253-6512	sfriedman@tsfengineers.com
Secretary	Steven Giammona, P.E.	(212) 643-9055	(212) 643-0503	sgiammona@mgjassociates.com
Board of Governors	Richard E. Gerbe	(516) 484-1020	(516) 484-0926	reg@leapc.com
Board of Governors	James Hayes	(201) 247-7286	(718) 228-6721	jhayes@geru-usa.com
Board of Governors	Andrew S. Braum, P.E.	(516) 785-4200	(516) 785-9148	asb@asbengineering.com

### ASHRAE 2004/2005 COMMITTEES

COMMITTEE	NAME	PHONE	FAX	E-MAIL
Programs and Special Events	<b>Craig D. Marshall, P.E.</b>	(203) 261-8100	(203) 261-1981	cmarshall@accuspecinc.com
Membership	<b>Steven Giammona, P.E.</b>	(212) 643-9055	(212) 643-0503	sgiammona@mgjassociates.com
Chapter Technology Transfer	<b>Richard E. Gerbe</b>	(516) 484-1020	(516) 484-0926	reg@leapc.com
Newsletter Editor	<b>Steven Friedman</b> <b>Liset Pena</b>	(212) 253-7303 (212) 643-9055	(212) 253-6512 (212) 643-0503	sfriedman@tsfengineers.com lpena@mgjassociates.com
Resource Promotion	<b>Peter Gerazounis, P.E.</b>	(212) 643-9055	(212) 643-0503	pgerazounis@mgjassociates.com
Historian	<b>John Nally</b>	(631) 331-0215	(631) 928-4625	jn@atiofny.com
Student Activities	<b>John Nally</b>	(631) 331-0215	(631) 928-4625	jn@atiofny.com
Webmaster	<b>James Hayes</b>	(201) 247-7286		jhayes5598@aol.com
Honors, Awards & Publicity	<b>Ray Schmitt</b>	(631) 585-6800	(631) 471-4950	therevrgs@aol.com
Nominating	<b>Michael Gerazounis, P.E.</b>	(516) 482-3207	(516) 482-3790	mgerazounis@mgjassociates.com
CRC General Chair	<b>Alan Goerke, P.E.</b> <b>Frank Morgigno</b>	(631) 331-0215 (631) 331-0215	(631) 928-4625 (631) 928-4625	ag@atiofny.com fm@atiofny.com
Reception and Attendance	<b>Nancy Roman</b> <b>Carolyn Arote</b>	(516) 556-4800 (516) 556-4800	(516) 256-3299 (516) 256-3299	nroman@airdist.com carote@airdist.com
Public Relations & Engineering Joint Council of LI	<b>Richard E. Gerbe</b>	(516) 484-1020	(516) 484-0926	reg@leapc.com
Golf Outing	<b>Alan Goerke, P.E.</b> <b>Craig D. Marshall, P.E.</b>	(631) 331-0215 (203) 261-8100	(631) 928-4625 (203) 261-1981	ag@atiofny.com cmarshall@accuspecinc.com

**Editor's Note:** The appearance of any technical data, editorial material, or advertisement in this set of publications does not constitute endorsement, warranty or guaranty by ASHRAE of any product, service, procedure, design, or the like. ASHRAE does not warrant that information is free from errors, and ASHRAE does not necessarily agree with any statement or opinion in this set of publications. The entire risk of the use of any information in this set of publications is assumed by the user. Statements made in this publication are not expressions of the Society or of the Chapter and may not be reproduced without special permission.

## President's Message (Cont'd. From Page 1)

**LOOKING AHEAD - APRIL 13, 2005:** ASHRAE's webcast of "Mold in Our Building Environment". The broadcast will discuss information on how to properly control moisture and humidity conditions to minimize mold. This broadcast will be beneficial to all design team members by describing how each should perform his or her tasks properly. Speakers include biological, chemical, investigative and health experts, design architects, engineers and contractors who specialize in mitigation. A site available to ASHRAE members is at AKF Engineers LLP, 1501 Broadway Suite 700, New York. A second site at LEAPC, 200 Old Country Rd, Mineola is being explored, and it will be confirmed shortly. Pre-registration only.










**MAY 12, 2005:** Thanks to the efforts of its organizer - Rich Gerbe, our chapter will have an all-day-seminar named "Economic Analysis of Engineering Projects: Life-Cycle Costing". It will take place in Mineola, LI. The event will be conducted by the ASHRAE Learning Institute, and each attendee will receive 7 PDUs. Pre-registration will be required. Please look for additional information in this newsletter.

**MAY 16, 2005:** 6<sup>th</sup> Annual LI/NYC ASHRAE Golf Outing, Cherry Valley Club, Garden City. Check our website for more information. Pre-registration only.

We hope to see you at our next meeting.

**Claudio Darras, P.E.**  
**President - Long Island Chapter**

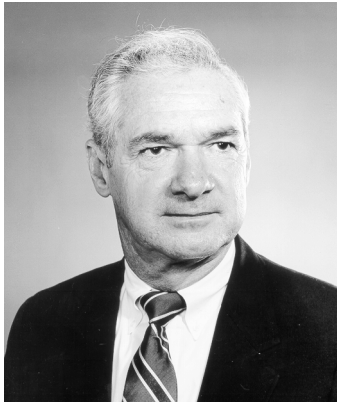
## Chapter Monthly Meeting - Program for 2004/2005

<b>September 14, 2004</b> * At Westbury Manor  Dinner Presentation - The Mechanical Engineer's Role in Sustainable Design & The LEED Rating Sys	<b>March 8, 2005</b>  <b>FIELD TRIP - Cancelled due to Weather</b> Island Aire Facility Ronkonkoma, NY PTAC Units & Water Source Heat Pumps
<b>October 12, 2004</b> * At Westbury Manor  <b>ASHRAE DISTINGUISHED LECTURER</b> Dinner Presentation - Buying or Selling, The Nuts & Bolts of Commissioning	<b>April 12, 2005</b> * At Westbury Manor <b>MENTOR NIGHT</b> Dinner Presentation - VAV System Design
<b>November 9, 2004</b> * At Westbury Manor  <b>JOINT MEETING WITH SMACNA-LI</b> Dinner Presentation - HVAC Essentials	<b>April 13, 2004</b> * AKF Engineers, NYC ASHRAE Satellite Broadcast - Mold in our Building Environment
<b>December 2004</b>  Holiday Cocktail Party @ Westbury Manor	<b>May 10, 2005</b> * At Westbury Manor <b>REFRIGERANT NIGHT</b> Dinner Presentation - Trade-Offs in Refrigerant Selections
<b>January 11, 2005</b>  <b>JOINT MEETING WITH ACCA-LI</b> Dinner Presentation - ASHRAE 62 Most Recent Updates	<b>May 12, 2005</b> * 200 Old Country Road, Mineola, NY <b>ALL DAY SEMINAR- Economic Analysis of Engineering Projects</b>
<b>February 5-9, 2005</b>  ASHRAE Winter Meeting and Trade Show, Orlando, FL <a href="http://www.ashrae.org">www.ashrae.org</a> / <a href="http://www.ahrexpo.com">www.ahrexpo.com</a>	<b>May 16, 2005</b> * Cherry Valley Club, Garden City, NY <b>ANNUAL GOLF OUTING</b>
<b>February 16, 2005, UN International Plaza, NYC</b>  <b>Joint Meeting with NYC, Bi-State &amp; NJ Chapters</b> (ASHRAE President Elect 2004-2005)	<b>June 14, 2005</b> * At Westbury Manor <b>PAST PRESIDENTS &amp; OFFICER INSTALLATION</b> Dinner Presentation - ASHP - Compounding Facilities Requirements for Hospitals
<b>February 23, 2005 - NATIONAL ENGINEERS WEEK Dinner</b> 	<b>June 25-29, 2005</b> * Denver, CO ASHRAE Annual Meeting

**August 2005 - Chapter Regional Conference Region I - New Jersey**

## April Chapter Meeting - Program

*You are cordially invited to our April 2005 Meeting*



### Dinner Presentation

*“VAV System Design: Problems & Opportunities”*

*Presented by William J. Coad, P.E.,*

***ASHRAE Distinguished Lecturer,***

***2001-2002 ASHRAE President,***

***CEO of McClure Engineering Associates***

<b>DATE:</b>	<b>TUESDAY, April 12, 2005</b>		
<b>Time:</b>	6:00 PM – Cocktails and Hors D'oeuvres 7:00 PM – Dinner Presentation 8:45 PM – Conclusion	<b>Fee:</b>	\$ 30.00 Member \$ 35.00 Guest \$ 15.00 Student
<b>Location:</b>	<b>WESTBURY MANOR</b> (516) 333-7117 Jericho Tpke (South Side), 3/10 of mile east from Glen Cove Rd., Nassau County, NY. <b>Please Contact Craig Marshall at <a href="mailto:cmarshall@accuspecinc.com">cmarshall@accuspecinc.com</a> for directions.</b> <b>- Reservations requested but not required. Business attire suggested</b>		
<b>Presentation:</b>	This month's presentation will cover the history and the physical principals of VAV systems. After exploring the genesis of the concept, the evaluation of state-of-the-art systems is presented from a critical perspective. Through an analysis of the deficiencies in the performance and economic parameters, concepts of systems based upon elementary thermodynamics and fluid theory coupled with decreased complexity will be presented.		
<b>About our Speaker:</b>	<p><b>William J. Coad, P.E., ASHRAE Distinguished Lecturer</b> is a principal and immediate past Chairman and CEO of McClure Engineering Associates, a mechanical and electrical consulting engineering firm. He has been with the company for forty years engaged in the design and analysis of all aspects of building systems and as a principal of the company. He is also on the Board of Directors of Mestek Corporation of Pittsburgh and of Exergen Corporation of Boston. He was an affiliate professor of mechanical engineering at Washington University teaching graduate level courses in HVAC systems for 29 years. He was the 2001-02 President of the American Society of Heating, Refrigerating and Air-Conditioning Engineers.</p> <p>Mr. Coad has authored two books and over one hundred articles and papers on various aspects of building systems and energy engineering. He and his firm have been pioneers in the development of computer programs for building energy analysis, cogeneration systems, well water source heat pumps, one-pipe chilled water systems, and variable flow chilled water systems. He has been active in technical, professional, and civic organizations and has received numerous awards for his technical contributions, including ASHRAE's highest award for technical achievement, the F. Paul Anderson Award.</p>		

**CHAPTER MAY NOT ACT FOR SOCIETY**

An International Organization

## Board of Governor's Meeting Minutes

Meeting Minutes : Tuesday March 22<sup>nd</sup> 2005 6PM

Held at Lizardos Engineering Board Room

**Attendees:** Claudio Darras, Craig Marshall, Steve Friedman, John Nally, Richard Gerbe, Michael Gerazounis, Peter Gerazounis, James Hayes, Nancy Roman & Carolyn Arote.

**General:** The northern Snow Monster hits again. Unfortunately nobody was able to attend our last meeting due to the snow storm. The brave 2 or 3 who were able to get there did have a private tour of the Islandaire plant and said it was really worth seeing.

**Programs:** Still working on getting more program nights accredited. Rich Gerbe to go ahead with training on how to accomplish this task. We are working on developing an EDH committee to better handle the chapter's needs in this area.

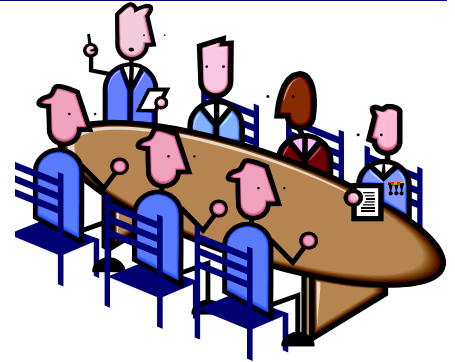
**Reception:** We are going to make a better plan for making sure all attendees are accounted for at each meeting. We are also devising a system to make the meetings more welcoming for newcomers. In the past this is where we have not done a great job.

**Membership:** Although we have a solid base of attendees to the regular meetings, we need to grow our regular membership. BOG have been making personal phone calls to each person who is a member of ASHRAE to try and raise interest in attendance at meetings.

**Nominations:** Michael Gerazounis is working on having the ballots sent out next week. One new person shall be elected to the Board of Governors this year. We will also be needing more participation in the committee level of help.

**Resource Promotion:** Peter Gerazounis is still confident LI chapter will meet its goals. Peter is going to e-mail the BOG his list of contributors and we will add to it people we feel will want to contribute. Remember no amount of donation is too large or too small.

**Student Activities:** John Nally has told us that approx 15 students of Suffolk Community College "HVAC" course will be attending next month's meeting. Rich Gerbe has also invited several students from Hofstra's Engineering course.



### ASHRAE Technology Transfer Library

The ASHRAE Technology Library is now available to all ASHRAE Long Island Members.

Now all members have local access to ASHRAE publications:

- **Handbooks**
- **Standards**
- **Technical Papers**
- **Software**
- **Guidelines**
- **Information on ASHRAE**
- **Bookstore Order Forms**

To borrow see our monthly display or contact:

**Rich Gerbe at Lizardos Engineering**

**Tel: 516-484-1020**

**Email: [reg@leapc.com](mailto:reg@leapc.com)**

***Contributions to the library are welcomed.***

## ASHRAE to Host Satellite Broadcast on Mold

**ATLANTA** – Concerns about mold in the building environment are no longer limited to just humid environments or North America. Mold is now a global concern for designers, contractors, building owners/operators and building occupants.

Information on how to properly control moisture and humidity conditions in order to minimize mold will be presented in an April 13, 2005, satellite broadcast and Webcast, Mold in Our Building Environment, offered by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). The program is sponsored by ASHRAE's Chapter Technology Transfer Committee (CTTC).

The broadcast will be similar to the 2004 ASHRAE broadcast on homeland security, which as viewed by more than 20,000 viewers at more than 1,500 locations earlier this year. Program and site registration details will be announced soon. Questions and requests for site registration materials may be emailed to [CTTC-SatelliteBroadcast@ashrae.org](mailto:CTTC-SatelliteBroadcast@ashrae.org). More information about ASHRAE's work on mold and moisture can be found on ASHRAE.org at [www.ashrae.org](http://www.ashrae.org).



**Date:** Wednesday, April 13, 2005 ( 12:30pm to 4:00 pm)

**Location:** AKF Engineers, LLP  
1501 Broadway, Suite 700, New York, NY

**Fee:** \$15.00 (Lunch & Refreshments shall be served)

**RSVP:** Robert Jibson, AKF Engineers **(212) 354.5656** or via email @ [rjibson@akf-eng.com](mailto:rjibson@akf-eng.com)

**Seating is limited. Attendees will earn 2.0 PDH by attending this Webcast.**

## Long Island's Own Honored as ASHRAE Distinguished Lecturer

Since 1996, the ASHRAE Chapter Programs Committee has sponsored the Distinguished Lecturer Program as a resource for chapters seeking speakers who are well respected in their field of expertise and who can provide high quality presentations. Each year the committee reviews a list of nominees who should be willing to participate in the program for a minimum of two years. Candidates are not required to be ASHRAE members, but should be excellent public representatives of the ethical and professional practice principles for which ASHRAE stands.

The Long Island Chapter of ASHRAE is privileged to have a recognized Distinguished Lecturer from our engineering community. Evans Lizardos, President of Lizardos Engineering Associates, PC in Mineola, has been a long time supporter of the Long Island chapter as well as for ASHRAE on a society level. If you are amongst the chapter members who have been fortunate enough to attend one of his seminars, you fully understand why he has been chosen to such an honor.

Evans, whose self-started engineering company is celebrating its 40<sup>th</sup> anniversary, has been fully devoted to the advancement of the engineering community. He served as chapter President in 1978 and as recently as August 2004, made a presentation for the Long Island Chapter at the Region 1 CRC. Evans has been a lecturer for ASHRAE, IEEE, AEE, ASME, DASNY, BOMA and ACEC sponsored courses and was instructor of a Process, HVAC and Industrial Controls course at Hofstra University.

Lizardos received the grade of Fellow of ASHRAE in 1988. He was the Vice Chairman of the 1998 ASHRAE Handbook and was Chairman of the Handbook Committee. Currently, he is chairman of 18 chapters of the ASHRAE Refrigeration Handbook. Evans was a contributing author for the 1996 edition of the Complete Building Equipment Maintenance Desk Book. The preceding is just a short list of Evans' accomplishments and contributions; a full discussion of all his accomplishments would surely fill up a whole newsletter by itself.



## Long Island Chapter - Past Presidents

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



## Student Activities - Student Night

Attention all student members. For those of you already planning to attend our April 12<sup>th</sup> dinner meeting, don't forget the date. If you haven't heard or don't know what this is about let me tell you. The Long Island Chapter of ASHRAE has several dinner meetings during the year that we call "student and mentoring" night.

We welcome and encourage all HVAC technical and engineering students to attend as our guests and get a chance to hook up with our members. You will find principals from our local engineering firms, mechanical contractors, manufacturing and sales support people who represent a wide cross section of our HVAC community. It's a great chance to chat and maybe hook up with an internship or future employment.

To date we have made tentative arrangements with representatives from Hofstra and Suffolk County Community College and we are expecting a good student turn out. Come on down or give us a call for more information.

Now that the students are coming, we need to show strong support from our membership. These kids are our future and we all need to be there and participate. Plan on being proactive and let's make this meeting a good opportunity for all.

I know we can count on you.

**John Nally**  
**Student Activities Committee**

## RUNNING PAOE POINTS FOR 2004/2005

Chapter Members	Membership Promotion	Student Activities	Resource Promotion	History	Chapter Operations	CTTC	Chapter PAOE Totals
353	0	290	113	275	0	550	1228

## History - "It's Quiz Time"

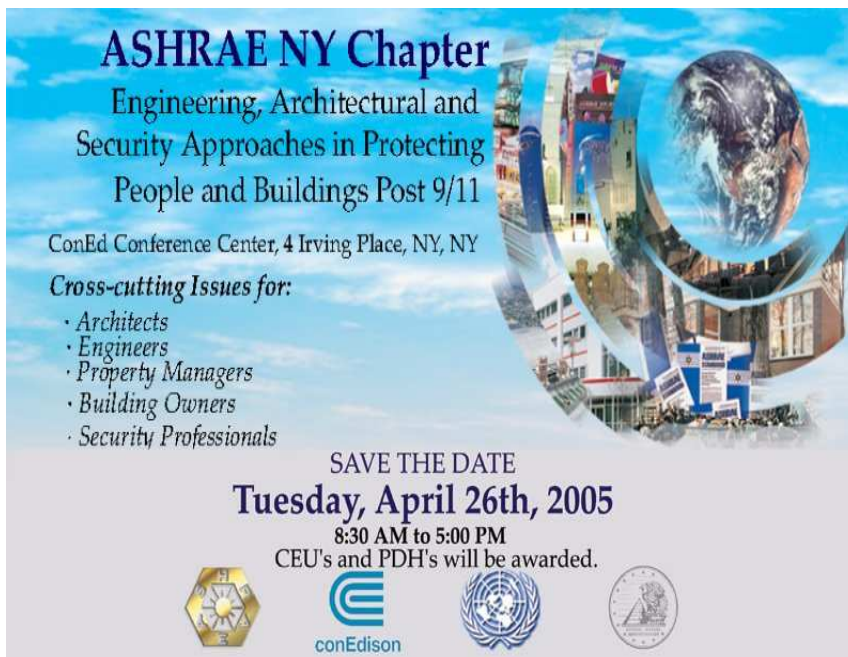
My youngest is getting ready to take the SAT test for the first time. Having gone through this exercise not too long ago with his brother I thought I had a good handle on giving him some guidance for the test material. Just when you think you got this, along comes a curve ball. The test has changed a little and now he will also have to do an essay. If his writing ability is on par with the clutter in his room, this could be a problem. Anyway I thought this would be a good time to spring a quiz on our members. Listed below are ten questions relating to a specific year and event of our chapter. See how many of them you know. The answers are listed in the rear of the newsletter. Good luck.

### Questions

1. What was the year our chapter was officially organized and our charter was issued.
2. Ken Graff was President and Evans Lizardos was Vice President of our chapter beginning this year.
3. In this year the Hub House in Hempstead was the site of this dinner meeting featuring Mr. Neil Funnell of the Trane Corporation speaking on fan performance.
4. The Silver Anniversary Celebration of our chapter was held at the Garden City Hotel in this year.
5. The Chapters Region 1 Conference hosted by our chapter was held at the Harrison House in Glen Cove in this year.
6. Leon Taub headed our chapter as President beginning this year.
7. ASHRAE celebrated its centennial at the CRC meetings of this year.
8. Evans Lizardos wrote a letter to Louis Bloom thanking him for his efforts serving as the historian and with the awards committee in this year.
9. The cogeneration plant at the Grumman Bethpage facility was on the cover of the ASHRAE Journal in this year.
10. What year did the chapter have its holiday celebration watching the NY Islanders play hockey?

(Answers on Page 14)

**John Nally**  
Chapter Historian



**ASHRAE NY Chapter**  
Engineering, Architectural and  
Security Approaches in Protecting  
People and Buildings Post 9/11

ConEd Conference Center, 4 Irving Place, NY, NY

**Cross-cutting Issues for:**

- Architects
- Engineers
- Property Managers
- Building Owners
- Security Professionals

**SAVE THE DATE**  
**Tuesday, April 26th, 2005**  
8:30 AM to 5:00 PM  
CEU's and PDH's will be awarded.

Logos: ConEdison, United Nations, and others.

Please register online at:  
<http://ashraeny.org/rsvp>

Early Registration on or before  
4/11/2005 **Cost \$200.00**

Late Registration Cost: \$225.00

For Pay Pal payment  
add \$6.00 for handling

For more information please contact:

Michel Rimpel (212) 584-3109

**Mrimpel@unis.org**

For more details please logon to:

**[www.ashraeny.org](http://www.ashraeny.org)**

# CTTC

## OUTDOOR AIR VENTILATION STANDARD ASHRAE 62.1-2004

ASHRAE credits lessons learned in 30 years of ventilation, input from design engineers and recent developments in research for the latest changes made to ANSI/ASHRAE Standard 62.1-2004, *Ventilation for Acceptable Indoor Air Quality*. in the procedure for calculation ventilation rates for commercial and institutional building. ASHRAE's updated ventilation standard boasts a more accurate ventilation determination procedure, which often leads to reduced outdoor air quantities. With outdoor air loads often accounting for 25% of the total cooling load, this is a welcomed change. The only draw back, it's complicated! The simple days of designing a system for 15 cfm per person are over. ANSI/ASHRAE Standard 62.1-2004, *Ventilation for Acceptable Indoor Air Quality*, has outlined a procedure that shall be followed to determine the outdoor air rates for a system.

The new standard explicitly recognizes buildings a source of indoor air pollutants and explicitly accounts for ventilation efficiency. The calculation can be divided into six steps. Follow each step in order, all tables referenced herein are found in Ashrae Standard 62.1-2004.

### STEP ONE

Zone Calculations:

The design outdoor airflow required in the breathing zone of the occupied space or spaces in a zone shall be referred to as *Breathing Zone Outdoor Airflow* ( $V_{bz}$ ) and shall be calculated based the following formula.

$$V_{bz} = R_p P_z + R_a A_z$$

Where:

$A_z$  = occupiable floor area (ft<sup>2</sup>)

$P_z$  = zone population Table 6-1

$R_p$  = outdoor airflow per person Table 6-1

$R_a$  = outdoor airflow rate per unit Table 6-1

The breathing zone is defined as the region within an occupied space between planes 3 and 72 inches above the finished floor and more than 2 ft from walls or fixed air conditioning equipment.

### STEP TWO

Based on the air distribution system the effectiveness of the outdoor air to mix into the room is affected. Step 2 adjusts the zone air requirements based on a *zone air distribution effectiveness* value. This value is referred to as  $E_z$  and is located in Table 6-2

Once the  $E_z$  is calculated, the *breathing zone outdoor airflow* ( $V_{bz}$ ) is adjusted and the *zone outdoor airflow* is calculated using the formula:

$$V_{oz} = V_{bz}/E_z$$

### STEP THREE

By using Table 6-3 to determine the system ventilation efficiency, the *zone primary outdoor airflow fraction* ( $Z_p$ ) shall be determined.

$$Z_p = V_{oz}/V_{pz}$$

Where

$V_{oz}$  = zone outdoor airflow

$V_{pz}$  = zone primary airflow to the zone from the AH including O.A. & R.A.

Note: VAV system  $V_{pz}$  is the minimum expected primary airflow for design purposes.

Cont'd. on Page 10

## CTTC (Cont'd. from Page 9)

### STEP FOUR

The *zone primary outdoor air fraction* is then used to look up the *System ventilation efficiency* ( $E_v$ ) found on table 6-3. The *zone primary outdoor air fraction* shall be determined for each individual space. Only the largest *zone primary outdoor air fraction*  $Z_p$  shall be considered when determining the *System ventilation efficiency*.

### STEP FIVE

The design *uncorrected outdoor air intake* ( $V_{ou}$ ) shall be determined in accordance with the equation below.

$$V_{ou} = D \sum_{\text{all zones}} R_p P_z + \sum_{\text{all zones}} R_a A_z$$

The *occupant diversity* ( $D$ ) shall be used to account for variations in occupancy within the zones served by the system.

$$D = P_s / \sum_{\text{all zones}} P_z$$

$P_s$  = system population = total population in the area served by the system.

### STEP SIX

The *System ventilation efficiency* calculated in Step 4 is now used to correct the *outdoor air intake*. This is the final step and shall yield the *outdoor air intake flow*. This is the outdoor air volume that shall be introduced into the system at the air handler. *Outdoor air intake flow* ( $V_{ot}$ ) is calculated as follows

$$V_{ot} = V_{ou} / E_v$$

For your convenience an Ashrae 62.1 spreadsheet can be found on the chapter website located at [www.ashraeli.org](http://www.ashraeli.org). This spreadsheet is a tremendous reference and will aid in designing ventilation systems. Further information on this and other standards, including addendums and interpretations, can be found on the Ashrae website. Visit [www.ashrae.org](http://www.ashrae.org) for details.

**Richard E. Gerbe**  
Chapter Technology Transfer Committee Chair

## Resource Promotion Chart

As you can see on the chart, we've been consistently behind on reaching our goal all year. But I know most of you are saving up to write some really big checks! So I will be calling you just to make sure you keep us in mind. Please make note of my new address:

MGJ Associates  
116 West 32<sup>nd</sup> Street  
New York, N.Y. 10001

Make the check payable to "ASHRAE Resource Promotion"

Thanks to David Freutel of the Trane Company who made a personal donation this month of \$1,000. Not only does that donation go a long way, but it goes twice as far as the Trane Company matches the donations of their employees!

The research for technology solely depends on your donations.

Thank you in advance.

**Peter Gerazounis, P.E.**  
Resource Promotion Chair



## ASHRAE Learning Institute - May 12, 2005



# ASHRAE Long Island Chapter

## Presents:

## ASHRAE Learning Institute: - Economic Analysis of Engineering Projects - Life Cycle Costing

**Thursday, May 12, 2005**

<b>Date/Time:</b>	<b>THURSDAY, MAY 12, 2005</b> 8:30 AM – 4:30 PM EST	<b>Fee:</b>	<b>\$250.00 (\$35.00 / PDH)</b> - Includes Seminar, Materials, Breakfast,
<b>Location:</b>	Lizardos Engineering, 200 Old Country Road, Mineola, NY 11501 (Lower Level Conference Room)		
<b>About the Pres-  *7 PDH's</b>	<p>Beginning with a review of basic economic definitions, this seminar will focus on the “nuts and bolts” of how to perform a proper life cycle cost analysis. Multiple techniques for further evaluation are covered, with special treatment of uncertainty and how it can be minimized. Students will complete a series of exercises and class problems that demonstrate the methods presented. Also included is a demonstration of the NIST Building Life Cycle Cost software program.</p> <p>This is an excellent opportunity to view a high quality education program presented by a nationally recognized instructor. All technical information is free of commercialism and peer reviewed for accuracy.</p>		
<b>Presentation Schedule:</b>	<u>8:30 am to 8:45 am</u> • <i>Registration, Breakfast</i>	<u>12:30 pm to 1:30 pm</u> • <i>Lunch @ Slaters Restaurant</i>	
<b>PRE-REGISTRATION REQUIRED:</b>	<b>Seating is limited to first 20 Registrants. Send a \$100 deposit to secure your registration (address below). Register by May 1, 2005.</b>		
<b>Contact Info.:</b>	<b>Richard Gerbe c/o Lizardos Engineering:</b> <b>200 Old Country Road, Mineola, NY 11501</b>		

**Directions:** Lizardos Engineering is located at the NE corner of Mineola Blvd. & Old Country Road (200 Old Country Rd).

Take the LIE to exit 37 to Northern Parkway to Exit 28 (Willis Avenue). Follow Willis Ave South to the end. Turn right on Old Country Rd. Make 1<sup>st</sup> right on Main Street. Make 1<sup>st</sup> left onto Third Street. Parking garage entrance on right. Visitor's parking is on Level 2 of the parking garage. There is a pedestrian crossover bridge from the parking garage to the building at Level 4 of the

**SEATING IS LIMITED. Reserve Your Seat Today!**

# ASHRAE Golf Outing - May 16, 2005



## 6<sup>th</sup> Annual LI/NYC ASHRAE GOLF OUTING Monday- May 16<sup>th</sup>, 2005



Place: Cherry Valley  
Garden City, NY

Brunch: 11:00 am

Shotgun Start: 12:30 pm

Reception: 5:30 pm

Dinner: 6:30 pm



**This Event fills up fast, to guarantee a spot RSVP**

*Proper golf attire and shoes are required.  
Locker room and shower privileges are included.*

**CHECKS MUST BE IN BY APRIL 22, 2005**

*Fax entire sheet or cut this half and return*

Name: \_\_\_\_\_ Company: \_\_\_\_\_

Address: \_\_\_\_\_ Phone: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_ Fax: \_\_\_\_\_

Guest: \_\_\_\_\_ Company: \_\_\_\_\_

Guest: \_\_\_\_\_ Company: \_\_\_\_\_

Guest: \_\_\_\_\_ Company: \_\_\_\_\_



Please make check payable  
**ASHRAE**

Mail checks  
Accuspec,  
Attn: Craig Marshall  
856 Main Stree  
Monroe, CT  
Fax: (203) 261-1981

Golf & Meals: \$275pp x \_\_\_\_\_ = \$ \_\_\_\_\_

Reception and Dinner: \$130pp x \_\_\_\_\_ = \$ \_\_\_\_\_

Sponsor Dinner: \$1,000 ☐ YES = \$ \_\_\_\_\_

Sponsor Lunch: \$ 500 ☐ YES = \$ \_\_\_\_\_

Sponsor Reception: \$ 500 ☐ YES = \$ \_\_\_\_\_

Sponsor Prizes: \$ 500 ☐ YES = \$ \_\_\_\_\_

Sponsor Beverage Cart: \$ 500 ☐ YES = \$ \_\_\_\_\_

Sponsor Hole: \$ 200 ☐ YES = \$ \_\_\_\_\_

## ASHRAE Golf Outing - May 16, 2005

### Cherry Valley Club

28 Rockaway Avenue at Third Street, Garden City, NY

Telephone: (516)746-4420 Fax: (516)746-4421

### PROGRAM:

**11 a.m. Brunch in the Clubroom & Lounge** – including Omelet station, deluxe deli board with rolls, chicken scarpiello, danish, croissants, bagels & cream cheese, sliced nova, fresh fruit and cheeses, Good Humor ice cream cart.

**12:30 p.m. Shotgun Start Golf** – Playing individual scores. Prizes for long drive, closest to the pins, low gross and callaway. Refreshments at the halfway house will include packaged snacks and whole fresh fruit, hot dogs, beer & soda. A snack cart will also be on the course. Carts, forecaddies, driving range, locker room and showers are all included in the price.

**5:30 p.m. Following Golf - Open Bar with hot and cold hors d'ouvres in the Main Lounge** - Fresh mozzarella with sundried tomatoes, cajun chicken, spring rolls, baby lamb chops, sesame chicken, turkey canapés, fried oysters, cheeses, fresh fruit, lobster halves, fresh clams & oysters, shrimp and crab claws.

**6:30 p.m. Reception Dinner – Awards and raffle in the Main Dining Room** - Carving stations of beef tenderloin & turkey breast. Chafing dishes of chicken & salmon featuring the chef's specialty, pasta station with marinara or vodka sauce, and choice of tossed or Caesar salad. Viennese dessert table following the dinner featuring pastries, fruit, cookies, assorted cakes and pies. Full beverage service throughout is included.

Women are also invited to attend and participate. There are locker room facilities available. The Cocktail hour and Dinner will also be available for those who cannot attend during the day for the golf.

**Note:** We are limited to 128 golfers. Openings will be filled on a first come-first serve basis. Corporate sponsorships will be available and raffle items will be welcome. Proper golf attire is a requirement for the golf course. Soft spikes are required. Please wear a jacket for the dinner.

### DRESS CODE:

1. Jeans, designer or otherwise, are not acceptable on club property. This not only includes pants, but skirts and cut-offs.
2. T-shirts and tank tops are not in keeping with the atmosphere of the club and as such are not acceptable. The definition of T-shirt includes those with psychedelic coloring or suggestive printing.
3. If the Main Dining Room is going to be utilized for any golf outing, jackets are required. Smoking is permitted in the Main Lounge and Member's Grill areas only.
4. Short shorts are not permitted on the golf course, practice tee or putting green by either male or female. Bermuda shorts of acceptable length are permitted. Jogging attire and denim pants are not considered proper attire for the golf course.
5. **Soft spikes** are mandatory at all times on our fine golf course. If your shoes need soft spikes, arrive early so we can change them. There is a nominal fee. There is **no** exception to this rule.

## CLASSIFIEDS

*As a Courtesy to all Long Island Chapter Members,  
All Classifieds Ads Submitted to the Newsletter will be Free of Charge.*

*If you would like to place an ad advertising job opportunities or if you would like to advertise that you are*

### HISTORY QUIZ ANSWERS:

1. 1957    2. 1977    3. 1966    4. 1983    5. 1975    6. 1983    7. 1994    8. 1979    9. 1991    10. 2003

## ADVERTISEMENTS



DOUGLAS G. VALERIO

**MASON EAST, Inc.**

Manufacturer's Representatives for  
Mason Industries, Inc.  
The Metreflex Company • Weiss Instruments, Inc.

631/254-2240  
Fax 631/254-2199  
215/633-8355  
Fax 215/633-8356

307 B Suburban Avenue  
Deer Park, NY 11729  
Two Neshaminy Interplex, Ste 205  
Trevose, PA 19053



STEVE BERGMAN

**TWINCO SUPPLY CORP.**

TEMPERATURE CONTROLS  
MOTOR STARTERS  
PANEL DESIGN & FABRICATION  
HVAC SUPPLIES

55 CRAVEN STREET HUNTINGTON STATION, NEW YORK 11748-2143  
(631) 547-1100 NYS (800) 794-3188 FAX (800) 926-TWIN  
[www.twincosupply.com](http://www.twincosupply.com)

**RICK GASKA**

152 41st Street  
Brooklyn, NY 11232  
718-832-7900  
Fax: 718-965-9675

**GILMOUR SUPPLY CO., INC.**  
An Affiliate of DAVIDSON PIPE SUPPLY CO., INC.

180 Marine Street  
Farmingdale, NY 11735  
516-694-2800  
Fax: 516-694-7740

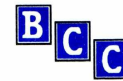


• HEATING & AIR CONDITIONING  
• SHEET METAL • SERVICE

440 WYANDANCH AVENUE, N. BABYLON, N.Y. 11704-1590  
(631) 643-3433 Ext. 310 FAX (631) 491-6983

**PLACE  
YOUR  
AD**

TEL (631) 218-8022  
FAX (631) 218-8023



**BEST  
CLIMATE CONTROL CORP.**  
75 ORVILLE DRIVE  
BOHEMIA, NY 11716

AIR CONDITIONING  
SYSTEMS

MICHAEL O'ROURKE



JAMES CASE

**GIL-BAR INDUSTRIES**

(718) 965-6600  
FAX (718) 965-6634

141 FORTY-SEVENTH STREET  
BROOKLYN, NY 11232

Frank D. Morgigno - CEO/COO [fm@atofny.com](mailto:fm@atofny.com)

415 Oser Avenue • Hauppauge, NY 11788  
Tel: 631-331-0215 • Fax: 631-928-4625  
[www.atofny.com](http://www.atofny.com)

**BUSH WHOLESALERS**

MANUFACTURERS REPRESENTATIVE &amp; DISTRIBUTOR

**Air Diffusion Products  
Fire & Smoke Control Devices  
Variable Volume Terminal Units  
Louvers & Dampers**

PHONE 718.624.5900 FAX 718.624.2505

Harold C. Smith, Jr., P.E.  
Consulting Mechanical Engineer



[hsmith@keyspanse.com](mailto:hsmith@keyspanse.com)

KeySpan Engineering Associates, Inc.  
1025 Old Country Road, Suite 420  
Westbury, NY 11590  
Tel: 516 512-7302  
Fax 516 512-7320

Wallace Eannace Associates, Inc.  
[www.wallaceeannace.com](http://www.wallaceeannace.com)

Manufacturers Representatives  
50 Newtown Road  
Plainville, New York 11803  
516-454-9300  
Fax: 516-454-9307  
Cell Phone: 516-429-7185  
Home/Fax: 631-277-4737  
e-mail: [jthuman@wallaceeannace.com](mailto:jthuman@wallaceeannace.com)

Joseph A. Thuman  
Special Projects-Engineered Products



**PLACE  
YOUR  
AD**

## ADVERTISEMENTS



John Knowles      Ray Schmitt  
David Van Wicler



2910 Express Drive South  
Islandia, New York 11749  
(631) 585-6800 (718) 895-0410  
(212) 912-1902  
Commercial FAX: (631) 471-4950

Visit our website: [www.walesdarby.com](http://www.walesdarby.com)  
e-mail us at: [info@walesdarby.com](mailto:info@walesdarby.com)



**Eric M. Berkowitz**  
Managing Partner

989 Avenue of the Americas, New York, N.Y. 10018  
Tel: 212-947-4000 Fax: 947-5003 e-mail: [emberkowitz@mcquayny.com](mailto:emberkowitz@mcquayny.com)



631-491-1300  
FAX 631-491-8551

**Ultimate Power Inc.**  
INDUSTRIAL BURNERS • BOILERS  
GAS • OIL • BURNER SERVICE • A/C & INSTALLATION  
ELECTRONIC CONTROLS  
ENERGY CONSERVATION SYSTEMS  
MECHANICAL CONTRACTORS FOR OVER 33 YEARS

45 NANCY STREET  
RONALD MILANO      WEST BABYLON, NY 11704-1498  
EMAIL: [RMILANO@ULTIMATE-POWER.COM](mailto:RMILANO@ULTIMATE-POWER.COM)

**PLACE  
YOUR  
AD**

**FRIGIDYNE**  
Air Conditioning Co., Inc.

[www.frigidyne.com](http://www.frigidyne.com)

AIR CONDITIONING, HEATING  
DUST, FUME, AND MIST COLLECTION  
TEMPERATURE AND LIGHTING CONTROL

ANDREW S. BRAUM, P.E.  
[asb@frigidyne.com](mailto:asb@frigidyne.com)

(516) 785-9000  
FAX: (516) 785-9148  
1924 BELLMORE AVE.  
BELLMORE, NY 11710

**BERNE & BOB LEVENTHAL, INC.**  
BOB LEVENTHAL

GOVERNOR CORP.      KING CO.  
ABB - VFD'S      CLIMATE CRAFT  
CHICAGO BLOWER      COIL MASTER

Two Terry Lane      PH 516 826-5270  
Wantagh, NY 11793      FX 516 826-5277

**chimney  
DESIGN  
solutions**

VOICE: 212-685-7077 FAX: 212-685-4777  
[chimneydesignsolutions.com](http://chimneydesignsolutions.com)



288 Middle Island Road, Medford, NY 11763



**Walter Stark**  
President

Nautica Dehumidifiers, Inc.  
200-19 East Second Street, Huntington Station, NY 11746  
Phone: (631) 424-8330 • Fax: (631) 251-4241  
[www.nautica-dehumid.com](http://www.nautica-dehumid.com) • [www.nautica-dehumid.com](http://www.nautica-dehumid.com)

**SIEMENS**

Siemens Building Technologies, Inc.  
Landis Division

50 Orville Drive  
Bohemia, NY 11716

**Mel Deimel**  
Sr. Sales Engineer

Tel: (516) 218-1000  
Fax: (516) 218-1009  
[melvin.deimel@us.landisstaefa.com](mailto:melvin.deimel@us.landisstaefa.com)

**PLACE  
YOUR  
AD**

e-mail: [pschiavone@savmor.net](mailto:pschiavone@savmor.net)  
[www.savmor-mechanical.com](http://www.savmor-mechanical.com)

TEL: (631) 467-8585x125  
FAX: (631) 467-8884



SALES • SERVICE • CONTRACTS

Energy Management Specialists

GANDOLFO J. SCHIAVONE      30 B HOWARD PLACE  
VICE PRESIDENT      RONKONKOMA, NY 11779



**PENN VENTILATION**

**BARRY BLOWER**

**NAILOR INDUSTRIES**

(Tel) 718.624.5900

(Fax) 718.624.2505



Established 1959

**County Fair Air Conditioning Corporation**

233 GRAND BLVD • WESTBURY, NY 11590-3599  
(516) 997-5656 • (718) 347-7808 • FAX (516) 997-5741  
[choigerson@countyfair.com](mailto:choigerson@countyfair.com) • [mathan@countyfair.com](mailto:mathan@countyfair.com)

**CARL HOLGERSON**      **RONALD J. NATHAN**  
Owner      Owner

MECHANICAL CONTRACTORS • SALES • SERVICE • ENGINEERING

***If you would like to place an advertisement in The Long Island Sounder  
please contact our Chapter Treasurer, Mr. Steve Friedman  
@ (212) 253-7303 for further details. Thank you.***