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December 2007

Quaker City CLIMATE

JOURNAL OF THE PHILADELPHIA CHAPTER OF THE AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING ENGINEERS, INC.

PHILADELPHIA CHAPTER

Breakfast Presentation

Thermal Storage Experience

An Owner's Perspective

presented by

Ted Borer, PE
Energy Plant Manager
Princeton University

Breakfast Meeting

Thursday, December 13

7:00 am to 7:30 am
Registration

7:30 am to 8:00 am
Breakfast

8:00 am to 9:00 am
Presentation

Please refer to the Union League Dress Code on page 3. Directions and parking information are also on page 3.

Reservations not cancelled by 12:00 noon two days prior to the meeting will be billed the full amount. The Chapter will no longer bear the cost of "no-show" meals.

STRENGTHEN OUR MEMBERSHIP!

****

Ask for a Membership Application at our Events' Reception Table - Pass it along to a Friend or Colleague!

LOCATION

Union League
Grant Room
140 South Broad Street
Philadelphia, PA 19102
215-563-6500

Go to www.unionleague.org for info on parking and directions or see page 3.

FOR RESERVATIONS

Call (610) 971-2169
or Email
philachapter@mail.ashrae.org

RESERVATION NOTICE

Reservations must be made no later than 12:00 Noon **on Monday, December 10, 2007**

COST

$25 for all attendees
(Members and Non-Members)

Season's Greetings from the Philadelphia Chapter Board of Governors

From Our President

We have a great meeting planned this month.

ASHRAE of Philadelphia welcomes Ted Borer, PE, from Princeton University to our December 13th Breakfast Meeting. Mr. Borer is the Princeton University Energy Plant Manager and is joining us to discuss *"Thermal Storage Experience: An Owner's Perspective"*.

The TAB training has been set for December 1st. The class was filled quickly due to a very strong response. My apologies to those whom we were unable to accommodate during the first session. We are in the process of setting up the next class just after the first of the year for those who were unable to attend due to the capacity limit.

I wish to thank all of those who came out and supported us for our November Meeting with Dr. Persily. The topic was very interesting and we had a great turn-out. Come and join us for our *once a year* Breakfast Program on the 13th.

Andrew O'Pella

07-08 Directories Now Available

The 2007-2008 Directory of Associations, Consulting Firms, and Manufacturers' Representatives in the Philadelphia Area is now available! The cost is $23 per copy, no tax or shipping. To order, send your check payable to "Philadelphia Chapter ASHRAE" to:

Philadelphia Chapter ASHRAE
994 Old Eagle School Road, Suite 1019
Wayne, PA 19087-1866

Be sure to include information on where and to whom to send the book(s).

Future Meeting Preview

For our January meeting, we have invited Terry Townsend, Past President of ASHRAE, to speak on Sustainability. Watch our newsletter for further details when they are available.

December Breakfast Meeting Presentation

Thermal Storage Experience
An Owner's Perspective

Why would an Owner choose Thermal Storage? The rationale for adding a chilled water storage system at Princeton University will be presented.

What are the potential savings resulting from Thermal Storage? The projected and actual economics of the project will be reviewed.

How difficult was the plant to build and what has been the operating experience? The Owner's experience of both the installation and maintenance of the plant will be examined, and "lessons learned" will be summarized.

December Breakfast Meeting Speaker

Ted Borer, PE, CEM, LEED AP
Princeton University
Energy Plant Manager

As Princeton University Energy Plant Manager, Ted is responsible for the plant that provides all heating, cooling, and power for the 500 acre campus. His duties include oversight of plant operations, plant engineering and maintenance, long-term planning for campus thermal distribution systems and construction oversight for utility plant projects. Ted has been at Princeton since 1994 and was originally hired to oversee the construction and start-up of the cogeneration plant. He recently managed a plant expansion including the addition of a 40,000 ton-hour thermal storage system and 5000 tons of cooling capacity. Prior to Princeton, Ted worked as a Mechanical Engineer at PECO Energy (now Exelon) with assignments in both the central engineering office and various power plants. Ted has earned Bachelors and Masters degrees in Mechanical Engineering, he is a licensed Professional Engineer, and a member of ASHRAE, ASME, IDEA, and various other industry organizations.

Directions & Parking at the Union League

From North of Philadelphia in Pennsylvania - Follow I-95 South to Exit 22. Take 676 West/Central Philadelphia Exit. Follow 676 West to the first exit, which is Broad Street/Central Philadelphia. This exit will bring you onto 15th Street. Continue on 15th Street until you see City Hall on your left. Bear left around City Hall. Make a right at the first light, which is Broad Street. Take Broad Street two blocks to Sansom Street. Make a right onto Sansom. The Midtown Parking Garage is on the right. The entrance to the Union League is directly across the street on the left. Look for the awning. This entrance should be used for The Inn at the League.

From South of Philadelphia (Philadelphia International Airport) in Pennsylvania - Follow I-95 North to Exit 22. Follow signs for 676 West/Central Philadelphia Exit. Exit to the left. Follow 676 West to the first exit which is Broad Street/Central Philadelphia. This exit will bring you onto 15th Street. Continue on 15th Street until you see City Hall on your left. Bear left around City Hall. Make a right at the first light, which is Broad Street. Take Broad Street two blocks to Sansom Street. Make a right onto Sansom. The Midtown Parking Garage is on the right. The entrance to the Union League is directly across the street on the left. Look for the awning. This entrance should be used for The Inn at the League.

From East of Philadelphia in New Jersey - Benjamin Franklin Bridge to 676 West/Central Philadelphia Exit. Get on 676 West, then take the first exit, which is Broad Street/ Central Philadelphia. This exit will bring you onto 15th Street. Continue on 15th Street until you see City Hall on your left. Bear left around City Hall. Make a right at the first light, which is Broad Street. Take Broad Street two blocks to Sansom Street. Make a right onto Sansom. The Midtown Parking Garage is on the right. The entrance to the Union League is directly across the street on the left. Look for the awning. This entrance should be used for The Inn at the League.

From West of Philadelphia in Pennsylvania - Take the PA Turnpike to Exit 326, which is the Valley Forge Exit. When you exit, take 76 East to Exit 344, which is 676 East/ Central Philadelphia Exit. Take the second exit, which is Broad Street/Central Philadelphia. Stay in the right hand lane as you exit. Make a right at the light, which is 15th Street. Continue on 15th Street until you see City Hall on your left. Bear left around City Hall. Make a right at the first light, which is Broad Street. Take Broad Street two blocks to Sansom Street. Make a right onto Sansom. The Midtown Parking Garage is on the right. The entrance to the Union League is directly across the street on the left. Look for the awning. This entrance should be used for The Inn at the League.

From New Jersey Turnpike - Take Turnpike to Exit 4. Take NJ Route 73 North, follow onto NJ-90 West which becomes Betsy Ross Bridge. Exit bridge onto I-95 South to I-676 West to Central Philadelphia, and follow directions from East of Philadelphia in Pennsylvania.

Union League Parking at the Midtown Garage
1415 Sansom Street

Parking Rates for Guests

Up to 20 minutes	$4.00
Up to 40 minutes	$8.00
Up to 1 hour	$12.00
Up to 1 hour and 20 minutes	$16.00

Maximum: Up to 24 hours
$24.00

Union League Dress Code

Business casual attire for ladies and gentlemen. Gentlemen are required to wear a collared shirt and slacks; turtleneck and mock-turtleneck shirts may be worn when accompanied by a suit jacket or sport coat. The Union League reserves the right to refuse admittance to anyone not adhering to the dress code.

Donor Recognition

At our December Breakfast Meeting, the following donors from the Philadelphia Chapter that contributed $100 or more during the 2006-2007 Research Promotion Campaign will be recognized. Those present will receive a certificate of appreciation.

2006-2007 Donors

Charles Argue
Lawrence J Boersig
Donovan L Denlinger
Daniel J Driscoll
Geza Fozo
Jeffrey J Gilbeaux
Jay Halsey
George W Hart
David H Hersh
John Jarvis
John E Kampmeyer
Stanley L Leitsch
Francis J McFadden
Andrew M O'Pella, PE
Stephen A Piccolo
David W Reid
Steven M Ridenour, PhD
Todd M Rohn, PE
Robert L Seeler
Christine Stearns
Ernesto M Tolentino

Arkema Inc
Air Tectonics Inc
Alfred D Wolf Associates
Associated Steam Specialty Company
Bala Consulting Engrs
B J Terroni Company Inc
Bruce E Brooks & Associates
Burns Engineering Inc
Bush Sales Associates Inc
Chase & Associates
Clapp Associates Inc
CM3 Building Solutions
Coward Environmental Systems Incorporated
David J Brill , PE Consulting Engineer
Delval Equipment Corp
Diversified Thermal Equipment Inc
E F Siegfried Co Inc
Elite Air Systems Incorporated
Energy Products Company
Ernest D Menold Inc
Ewing Cole
Genesis Engineers
Indoor Air Solutions
IPS - Integrated Project Services Inc
John F Scanlan Inc
Johnson Controls
M P Hershman PE Inc
Paul H Yeomans Inc
R D Bitzer Co Inc
Robert M Hilberts Incorporated
Roy Larry Schlein & Associates
Sass Moore & Associates Inc
Schiller & Hersh Associates Inc
SMCA
The Tri-M Group LLC
Vinokur-Pace Engineering Services Inc
Weil-McLain
Wick Fisher & White

PLEASE NOTE:
THE GREATER PHILADELPHIA BUILDING PROFESSIONALS ASSOCIATION HAS A NEW WEB SITE

Go to: WWW.GPBPA.COM
(previously .org)

This free web site lists all major future events for the intra- communication of the building industry technical associations in the Philadelphia area.

Check

www.ashrae-phila.org

for further information
on the Philadelphia Chapter!

PHILADELPHIA CHAPTER ASHRAE
2007 - 2008 PROGRAMS

For reservations and updates, check www.ashrae-phila.org.

Date	Location	Pre-Dinner Topic	Dinner Topic	Theme
Thursday December 13	Union League BREAKFAST		Thermal Storage Experience An Owner's Perspective	Refrigeration & Donor Recognition
Thursday January 10	Colleen's		Sustainability	Joint Meeting with DVGBC
Jan 22-24	New York City Jacob Javits Ctr	AHR Expo (ASHRAE Winter Meeting, January 19-23)		
Wednesday February 13	TBD	HVAC design for Critical Environments	Panel Discussion: Design, Construct, Commission, Balance	Student Night Joint Meeting with SMCA
Thursday March 13	Cescaphe	Table Top Vendor Show	LEED M&V	Membership
Thursday April 10	Colleen's	Renewable Energy	HVAC for High Density Data Storage	Scholarship Night
Thursday May 8	Urban Outfitters	Tour of Physical Plant	History of ASHRAE	Past Presidents Night
Thursday June12	Temple University	2008-2009 Planning Meeting		
June	Golf Outing			

PLEASE COPY AND POST ON YOUR BULLETIN BOARD AT WORK.

Internship and Fellowship Opportunities

We are pleased to make you aware of two excellent opportunities for ASHRAE members (one for students and one for professional members):

Washington Internship for Students of Engineering (WISE): Each year, outstanding engineering students are selected to spend nine weeks in a special summer program in Washington, D.C. to learn how government officials make decisions on complex technological issues and how engineers can contribute to legislative and regulatory public policy decisions. The WISE Program is ranked as one of the best Internship opportunities in the U.S. by the Princeton Review. The students work under the guidance of a prominent engineering professor who serves as Faculty-Member-in-Residence. Students also interact with and are mentored by representatives of their sponsoring societies. A stipend of $2,100.00 is provided to cover the Intern's living and travel expenses. Lodging is provided; participants are housed in a dormitory on the campus of George Washington University in the heart of Washington, DC. Applications are due by December 31, 2007. More details on the program are available at http://www.wise-intern.org/ and http://www.ashrae.org/advocacy/page/1226.

ASHRAE Washington Fellowship: ASHRAE is sponsoring a one year Federal Fellowship Program known as the ASHRAE Washington Fellowship. This program will enable a selected ASHRAE member to devote a year working within the federal government providing engineering and technical advice to policy makers in either Congress, a Federal Agency (e.g., DOE, DHS, GSA), or the White House Office of Science and Technology Policy. This Fellowship is geared to establish and nurture critical links between federal decision-makers and engineering professionals to support public policy that benefits the well-being of the nation and the planet. Federal Government Fellowships provide a valuable public service to the nation while at the same time providing engineers with a unique opportunity to participate directly in the policy making process. This is an exciting, rewarding, and educational period in their professional careers. This enriching experience enables Fellows to bring back to their employers an insider's perspective on government decision making that can contribute significantly to the mission and vision of the organization. Fellowship candidates should possess a PhD or other terminal degree in an engineering or scientific discipline. Fellowships are a one-year opportunity (September to August). An orientation will be provided through the American Association for the Advancement of Science (AAAS). A stipend of $45,000 will be provided. Deadline for applications is May 1, 2008. More details on the program are available at http://www.ashrae.org/advocacy/page/1227.

Please share these excellent opportunities with your colleagues and students. If you have any questions, please contact the ASHRAE Washington Office at (202) 833-1830.

Member Services

Members who would like stay on top of the **latest news from ASHRAE** may join the News Release List Serve at http://www.ashrae.org/template/AboutLinkLanding/category/1584.

If you or your company are hiring, please take a moment to **review the resumés of chapter members** and students which have been posted on the chapter website at www.ashrae-phila.org/resumes.html.

Any member who wishes to **have their resumé posted on our website**, or who would like to update it, can email our webmaster, Seth Weiss, at sweiss@comcast.net. The file must be in pdf format and will be posted for 3 months.

Adjunct Faculty Positions at Temple University

The Department of Mechanical Engineering at Temple University has openings for adjunct faculty in all areas of mechanical engineering starting Spring 2008. Applicants with MS or Ph.D. in mechanical engineering or in a closely related field are encouraged to apply; industrial experience and/or professional engineering registration are highly desirable. We offer a flexible schedule and a competitive compensation package to our adjunct faculty. Information about the Department could be obtained at: http://www.temple.edu/engineering/mechanical.htm

Interested candidates should submit a resume to: Mohammad F. Kiani, Ph.D., Chair, Department of Mechanical Engineering, Temple University, 1947 N. 12th St., Philadelphia, PA 19122, or mkiani@temple.edu. Temple University is an EOE.

November Meeting Photos



(left to right) Andrew Persily receives a Liberty Bell from Andrew O'Pella, Philadelphia Chapter President, and Jeff Gilbeaux, Chapter President-Elect.



Andrew Persily, ASHRAE Vice President, speaks on Standard 62.1.



Dan Pettway, Region III Director, speaks to the attendees.



Steve Piccolo, Philadelphia Chapter Senior Governor, receives an award for CRC 2007.



Pre-dinner speakers Shawn Farrell and Kevin Watson of Cohen Seglias Pallas Greenhall & Furman PC, each receive Liberty Bells for their pre-dinner presentation from Andrew O'Pella and Jeff Gilbeaux.

Past President Plaques Awarded

Dr. Andrew Persily, ASHRAE Vice President, awarded Chapter President plaques to several past Presidents of the Philadelphia Chapter at the November meeting.



Jay Halsey
President, 2004



Steve Piccolo
President, 2007



Steven Ridenour, PhD, PE
President, 2005



Ken Strup
President, 2006

Please help the ASHRAE Research 2007-2008 Fund Drive by filling out this Donor Form and sending it to national headquarters in Atlanta this week. Have you asked your company if they have a matching gift program? Remember every dollar you donate to this worthy cause is doubled by ASHRAE Society! If you have any questions, please contact Steve Piccolo, Research Promotion Chairman, at spiccolo@airtectonics.com.

ASHRAE RESEARCH - Donor Form
Philadelphia Chapter 21 - Region 3

1) Type of Contribution;

O Individual
O Corporate
O Memorial To: _____
Please attach the details for the acknowledgment to, relationship to, and addresses.

2) Level of Contribution;

O Golden Circle ($10,000 and greater)
O Research Partner ($5,000-$9,999)
O Research Associate ($2,500-$4,999)
O Research Major Donor ($250-$2,499)
O Research Honor Roll Donor - Individual ($100-$249)
O Research Honor Roll Donor – Corporate ($150-$249)
O Research General Donor (Less then $100 Individual/$150 Corp.)

3) Method of Payment;

A) Attach Check (Payable to "ASHRAE Research")
Please note on check "Phila- Chapter 21"
B) Credit Card
O-Visa O-Master Card O-AMEX
Date:_____ Signature: _____
Card #: _____ Exp. Date: _____

Note: All contributions are fully deductible under section 170 of the IRS code.

4) Donor Information:

Name: _____
Member # (If ASHRAE member): _____
Corporation Name (If Corp. Donation): _____
Address: _____
_____
_____
_____
Phone : Home: _____ Business: _____
E-Mail: _____

5) Send this completed form to: ASHRAE RESEARCH, 1791 Tullie Circle, NE, Atlanta, GA 30329

AFFILIATE MEMBERSHIP GRADE

For an Annual Dues of $40, Applicants under Age 30 can Join ASHRAE at this introductory membership level. Membership tenure in this grade is limited to three (3) years.

Affiliate Members Benefits Affiliate Members receive monthly issues of the ASHRAE Journal and Insights Newsletter. The annual handbook is not a benefit of this grade.

Qualifications

An Affiliate Member shall have the same qualifications as an Associate Member. They are:

1. Experience in technical matters or in design, operation, or maintenance in heating, refrigerating, air conditioning, or ventilating fields.

2. An interest in the in the advancement of the Society's aims.

3. Possess sufficient qualifications to cooperate with heating, refrigerating, air conditioning, or ventilating engineers in the advancement of relating to heating, refrigerating, air conditioning, or ventilating engineering and its application.

Limitations

· You do not receive ASHRAE Handbook with membership. You do not receive *ASHRAE Insights*. You get a one-time discount (20% off) on all Handbook items.
· You can serve on Chapter committees, but cannot hold office or vote at Chapter, Regional or Society level.

Contact For Receiving Application

Go to www.ashrae.org and click on "Join" in the upper right corner. This will take you to a page describing each membership grade, its benefits and qualifications, and a link to membership application forms.

MEMBERSHIP ADVANCEMENT!

Any Associate Member meeting the following requirement can apply for Advancement to the more entitling Member grade. By ASHRAE society definition:

A *member* shall have the equivalent of *twelve society-approved years of experience* composed of an approved combination of: (a) completed education beyond high school, (b) work experience, and (c) professional engineering or related registration or license issued by a legally authorized body.

All technical and scientific education shall be based on curricula approved by the Board of Directors.

Approved engineering curricula shall be equivalent to the accredited by the Accreditation Board of Engineering and Technology in the United States of America or the Canadian Engineering Accreditation Board. Scientific education in fields other than engineering shall be from a college or university course of study that has been accredited by an organization charged with monitoring standards of performance. *Society approved years of experience shall be credited as follows*:

One and one-half years of credit for each year of completed education for graduates of approved technical curricula. One year of credit for each year of education for non-graduates who have completed a least two years of approved technical curricula. One year of credit for each year of completed education for graduates of colleges or universities which do not have accreditations. Those holding associated degrees from technical institutions shall also be credited for one year for each year of education.

One year for each year of qualifying work experiences in the performance of duties in work related to ASHRAE fields of interest and shall have included research, teaching, design, contracting, engineering sales or engineering management.

Three years of credit for professional registration of license issued by a legally authorized body in engineering or related fields, the requirements of which as to education, examination, and active practice are satisfactory to the Board of Directors.

More information is available on the ASHRAE website (www.ASHRAE.org) under menu items Membership Resources…Manage Your Membership, the above definition is extracted from such application information in PDF file format. The application can also be filled interactively online. ASHRAE sends members who upgrade a $20 gift certificate usable at the ASHRAE bookstore or towards ASHRAE membership renewal.

Job Opportunity

O'Brien & Gere is an employee-owned engineering and project delivery company with 800 scientists, engineers, construction, and operation personnel located in 26 offices across the U.S. With a 60-year history of applying technology and innovation, O'Brien & Gere is a leader in providing total environmental and water solutions, and capital & facilities solutions. We currently have an opening in our Blue Bell, PA office for a **Mechanical Project Engineer** to assist with design of industrial facilities.

Responsibilities:

- Project work involving HVAC, plumbing, fire protection, and utilities for industrial facilities
- Small scale projects to gain experience in project management
- Assume budgetary and scheduling responsibilities as so directed by those in supervision
- Assume an increased role in client relations in order to develop skills and establish contacts for the purpose of future business development
- Assist in the preparation of proposals/qualifications and other efforts to support business development activities
- Execute design computation, develop design criteria, designs sketches, preliminary plans, reports, time and expense estimates, and economic comparisons on projects
- Make major design recommendations
- Coordinate with surveyors, architects, contractors, and other consultants
- Supervise the review and processing of shop drawings during construction

Requirements:

- BSME
- 5-10+ years relevant work experience
- An EIT or ability to obtain a PE license is a plus, but not required
- Ability to self perform detailed engineering work and work within multiple design teams simultaneously
- Interest in participating in multiple markets and diverse projects a plus
- Experience with HVAC and process piping

At O'Brien & Gere, a variety of benefits have been established to provide a sense of security, support career goals, encourage health and wellness, and foster a feeling of camaraderie among employees. To apply and to learn more about our benefits, culture and challenging opportunities, please visit our website, www.obg.com and reference job code 1188-DC-59.

AA/EOE M/F/D/V

Inside This Issue

Page

Meeting Announcement 1
President's Message 2
Meeting Info .....2 & 3
Donor Recognition 4
Chapter Event Schedule 5
Internship & Fellowship Opportunities 6
Job Opportunities ..... 6 & 11
November Meeting Photos ..... 7 & 8
Donor Form 9
Membership Grade Announcements 10

This is your newsletter.
We welcome your input and comments.

The *Quaker City Climate*
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and Air Conditioning Engineers, Inc.
994 Old Eagle School Road, Suite 1019
Wayne, PA 19087-1866
610.971.2169
fax 610.971.4859
ashrae-phila.org

Republication of material contained herein
is expressly forbidden without official Chapter authorization.
The Chapter does not speak or act for the Society.
Any member with material to submit for inclusion
in the *Climate* can send the information to:

James Piscopo
AEC Inc.
485 Devon Park Drive, Suite 113
Wayne, PA 19087
(P) 610-688-3980
(F) 610-688-4566
jpiscopo@aeceng.net

Material can include letters to the editor,
member news, upcoming events,
comments on chapter programs or issues, etc.