



# The Texas Norther

Monthly Newsletter of the Dallas Chapter, Region VIII

[www.dallas-ashrae.org](http://www.dallas-ashrae.org)

Volume 57, No. 1

September 2007

## Chapter Meeting

**See You In September at the next meeting.**

11:30 a.m. - Luncheon

**Where:**

Royal Oaks Country Club  
7915 Greenville Ave.  
Dallas, TX

**Lunch Session Topic:**

*Changes in Data Center Cooling: "Green Is Good"*

**Presenter:**

Brad Binning

**Reservations:**

By Phone - 972/780-6019  
On the web - <http://www.dallas-ashrae.org/reservations1.php>

PLEASE REFER TO THE RESERVATION POLICY ON THE BACK PAGE OF THIS NEWSLETTER

Letters to the Editor should be sent via e-mail to [stuartdevaney@yahoo.com](mailto:stuartdevaney@yahoo.com)

ASHRAE National Customer Service:  
800/5ASHRAE

## Message From the President

Welcome back to ASHRAE for the 2007-2008 year. As your president, I look forward to getting the year rolling and will work hard to lead our chapter as effectively as my predecessors. The following will give you a sense of the chapter goals that your Officers and Board of Governors plan to accomplish this year;

- Be a valuable organization to our members and community
- Provide interesting and informative programs
- Provide timely technical information to our membership from society
- Provide social and networking opportunities for our members
- Promote sustainability in our meetings and programs
- Promote Young Engineers in ASHRAE (YEA) membership; supporting young members and student chapters with educational opportunities
- Outreach to parallel organizations in our industry including government and other societies
- Maintain a valuable website with tools to communicate with the chapter and officers efficiently.
- Efficient chapter operations using committees to accomplish chapter goals.
- Exceed Society requirements for Chapter Operations including Technology Transfer, Membership Promotion, Research Promotion, and Student Activities.



Your Board of Governors have been planning a great year of programs, technical sessions, seminars, student activities and social events. We had a "Committee Kick-off Party" at Dave & Busters at the Board of Governors meeting in August to welcome a great crew of committee members to support these efforts.

**First meeting on September 12<sup>th</sup> at Royal Oaks CC. Please read further for complete program information.**

*Mark Meyer  
Dallas Chapter of ASHRAE  
President 2007-2008*



CALENDAR 07-08							
		Chapter		Society		Other	
September	9/5/07	BOG Meeting - Double Tree Hotel					
	9/12/07	Chapter Meeting - Royal Oaks CC <i>'High Density Data Center Design'</i>	9/26/07	AHRAE Learning Institute(ALI) Complying with Standard 90.1			
October	10/3/07	BOG Meeting - Double Tree Hotel		10/14/07	IAQ 2007: Healthy & Sustainable Baltimore, MD	10/21/07	SMACNA Annual Convention Las Vegas, NV
	10/10/07	Chapter Meeting - Royal Oaks CC <i>'Controls for Sustainable Buildings'</i>		10/15/07	ALI-Humidity Control I		
				10/17/07	ALI-Humidity Control II		
				10/22/07	ALI-Complying with Standard 90.1		
				10/24/07	ALI-Complying with Standard 62.1		
				10/31/07	ALI-Dedicated Outdoor Air Systems		
November	11/7/07	BOG Meeting - Double Tree Hotel		TBD	ASHRAE Satellite Broadcast	11/6/07	NEBB Annual Meeting-Orlando, FL
	11/14/07	Chapter Meeting - Royal Oaks CC <i>'Selecting VAV for Acceptable IAQ'</i>		11/7/07	ALI-Intro to Bacnet	11/7/07	Greenbuild 2007-Chicago, IL
				11/4/07	ALI-Natural Ventilation	11/10/07	ARI Annual Meeting-Key Largo, FL
				11/14/07	ALI-Intro to Green Buildings and Sustainable Construction		
				11/19/07	ALI-Complying with Standard 62.1		
December	12/5/07	BOG Meeting - Double Tree Hotel					
	12/12/07	Chapter Meeting - Royal Oaks CC <i>'Standard 90.1 Future Requirements'</i>					
January	1/2/08	BOG Meeting - Double Tree Hotel		1/19/08	ASHRAE Winter Meeting - New York	1/22/08	AHR Expo - New York
	1/9/08	Chapter Meeting - Royal Oaks CC <i>'ASHRAE Healthcare Certification'</i>					
February	2/6/08	BOG Meeting - Double Tree Hotel		TBD	Region VIII Strategic Planning Meeting -	2/5/08	ACCA Annual Conv. Colorado Sprgs, CO
	2/13/08	Chapter Meeting - Royal Oaks CC <i>'Building Commissioning'</i>				2/17/08	MCAA Annual Conv.-San diego, CA
March	3/5/08	BOG Meeting - Double Tree Hotel				3/16/08	IIAR Ammonia Refrigeration Conference and Exhibition
	3/12/08	Chapter Meeting - Royal Oaks CC <i>'Ethics for the Professional Engineer'</i>					
April	4/2/08	BOG Meeting - Double Tree Hotel		TBD	ASHRAE Satellite Broadcast		
	4/9/08	Chapter Meeting - Royal Oaks CC <i>'ASHRAE Standard for High Performance Buildings'</i>		4/24/08	Region VIII CRC-Shreveport, LA		
May	5/7/08	BOG Meeting - Double Tree Hotel					
	5/14/08	Chapter Meeting - Royal Oaks CC Keynote Speaker - TBD					
June	6/4/08	BOG Meeting - Double Tree Hotel		6/12/08	ASHRAE Annual Meeting Salt Lake City, UT		



Date: Wednesday, 09/12/06

Time: 11:30 am Luncheon

Location: Royal Oaks Country Club

Reservation Line: (972) 780-6019  
Or online at [www.dallas-ashrae.org](http://www.dallas-ashrae.org)

**SEPTEMBER CHAPTER LUNCHEON**



## ASHRAE DALLAS CHAPTER

# CHANGES IN DATA CENTER COOLING “GREEN IS GOOD”

**Brad Binning,  
APC, Inc.**

Our next chapter program will focus on the unique environment of data centers. Data centers are a unique environment with dedicated and specialized power and cooling requirements. Computer rooms have some of the highest power (and heat) density of any commercial environment. The cooling solutions, such as raised floors and computer-room air-conditioners (CRAC), which have done the job for decades, are rapidly becoming obsolete. Energy cost for cooling data centers are increasing dramatically. This presentation briefly covers the evolution to today's situation. Several new technologies are explained, with implications for operation and energy consumption of a data center.

Brad Binning is Manager of the cooling business development team for APC.

His 25 years experience in the HVAC industry began with the Trane Company and include 16 years with two different custom HVAC companies.

Brad received a BSCE from Southern Methodist University in 1980, was Oklahoma City ASHRAE chapter president from 2000-2001, and is a member of ASHRAE Technical Committees TC 9.2 and TC 9.7.

1 PDH will be available.

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Reservations can also be made  
online at [Dallas-ASHRAE.org](http://Dallas-ASHRAE.org)

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Luncheon Price is \$20 for reservations or \$25 without.





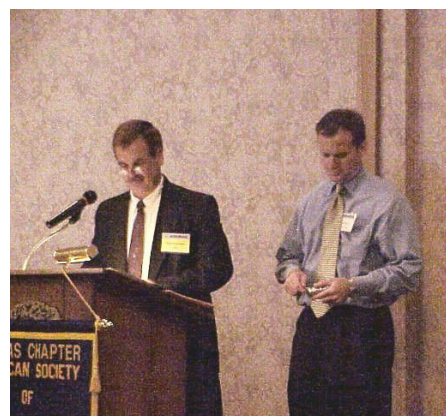
## CHAPTER NEWS

### **“BIG D” BACK THEN**



#### Help Wanted: Dallas Chapter Historian.

This is a great opportunity for an established member of our chapter to continue the legacy of maintaining chapter records dating back to 1939. This is also an opportunity to shape and grow the historical record of our chapter moving forward. Please contact me or one of the chapter officers if you have an interest in being considered for this important chapter position.





**BOG Meeting Date:** 8/8/07

**Start Time:** 5:30 PM

**End Time:** 6:30 PM

Attendees: see email list

Topic: Start off to the 2007 ASHRAE year.

**Mark Meyer** (President):

- Formation of committees encouraged to facilitate ASHRAE activities and PAOE points
- Introductions of BOG members
- CRC, PAOE explanations to visitors new to ASHRAE
- Roster to be distributed by CD; possibility of putting roster online and have a security code access (sustainability)
- Webpage “specialist” needed for online credit card lunch/tech session payments and security for online roster information

**Walter Horn** (President Elect):

- Chapter technology (programs): requested ideas for presentations; committee meeting in 2-weeks
- Suggested putting luncheon handouts online for those who wish to have a hard copy (sustainability)

**Ben Bain** (Membership):

- Creation of a 5-person committee to promote membership.
- YEA focus

**Doug Bronson** (TEGA):

- ASHRAE committee formation for government affairs

**Tim McNutty** (Student Activities):

- Provided a general overview of student activities
- ASHRAE involvement includes scholarship, shadow program, assisting college seniors with senior projects and Future Cities Competition
- UNT: active student organization
- SMU: need to strengthen our relationship
- Baylor: need to strengthen our relationship

**Leo Stambaugh** (Publicity):

- Covered the history of the P.N. Vinther fund



## **SOCIETY NEWS**

### **ASHRAE Learning Institute(ALI) Fall 2007 Courses – Earn PDH, CEU and AIA LU Credit Online**

#### **What Does the ASHRAE Learning Institute Provide?**

With each course, ASHRAE Learning Institute (ALI) provides its authoritative and credible technical resources through course materials. All course content is developed through ALI's peer-review procedures. In addition, ALI provides live, online instruction and a certificate of attendance for each attendee.

#### **What Equipment Do You Need?**

You will need both an internet and a telephone connection. All courses have interactive audio, and they are provided in real time by an expert in the field. For the presentation, you will need an internet connection with a speed of at least 56k, and for the audio you will need a clear, solid telephone connection.

#### **Course Time**

All courses are presented from 1:00 p.m. to 4:00 p.m., EDT. That is GMT-4, and attendees in other time zones should compute the start time for their own zones in order to be available at the start of the course. Note that the course is not recorded and will not be available at any other time. It is advised that attendees begin logging on 15 minutes prior to the start of each course to ensure proper connectivity.

#### **What You Need to Know**

After completing each ASHRAE Learning Institute (ALI) course and corresponding course evaluation, you will earn the corresponding number of continuing education credits which can be applied toward maintaining P.E. registration. ALI courses offer Professional Development hours (PDHs) or Continuing Education Units (CEUs) for engineers and AIA Learning Units (LUs) for architects.

<http://www.ashrae.org/education/page/1437>

### **ASHRAE Certification Programs**

ASHRAE has launched its first ever certification program, the Healthcare Facility Design Professional (HFDP). The HFDP program has been designed by industry practitioners to encourage understanding and knowledge of the impact of medical issues and facility operations on HVAC&R design in healthcare facilities. To earn the HFDP certification, applicants must complete an application form and submit it and the application fee to ASHRAE. After a candidate's application is approved, the candidate will receive instructions on how to register for the computer-based examination. The candidate will then have 90 days to register for the exam, after which period of time the candidate must forfeit the application and payment. Computer-based testing for the HFDP certification exam is now available at testing centers across the United States and Canada.

Future certification programs with include: Sustainability, commissioning and Building Operations and Management.

Look online at [www.ashrae.org/education/page/1140](http://www.ashrae.org/education/page/1140) or contact or email [certification@ashrae.org](mailto:certification@ashrae.org) for more information.

### **DOE to Invest \$60 Million for Solar Energy Research**

DOE announced that it will provide up to \$60 million for solar energy research. Up to \$2.5 million will go to 13 selected cities to promote the use of solar technologies in each city, under DOE's Solar America Cities cooperative agreements. The cities are Ann Arbor, Michigan; Austin, Texas; Berkeley, California; Boston, Massachusetts; Madison, Wisconsin; New Orleans, Louisiana; New York, New York; Pittsburgh, Pennsylvania; Portland, Oregon; Salt Lake City, Utah; San Diego, California; San Francisco, California; and Tucson, Arizona. In addition, DOE released a funding opportunity announcement as part of its Solar America Initiative, offering universities up to \$30 million to research near-term improvements in solar cell technologies. DOE will also award up to \$27 million to ten competitively selected, cost-shared Photovoltaic Module Incubator projects at businesses located in California, Colorado, Illinois, Maryland, and Pennsylvania. These ten businesses will address the challenges related to reducing cost, improving performance, and expanding manufacturing capacity of innovative solar photovoltaic technologies to move from small-scale to pilot production.

See the (<http://www.energy.gov/news/5137.htm>) for more information.





**IAQ 2007: Healthy & Sustainable Buildings.  
Baltimore's Inner Harbor, Maryland, Oct 14-17**

IAQ 2007 will take place in the scenic and historic Baltimore Inner Harbor. The purpose of IAQ 2007 is to advance the state of knowledge about buildings that are both healthy and sustainable; those that create high quality indoor environments with acceptable and proportional impact on the outdoor environment. IAQ 2007 will

emphasize observable characteristics of such buildings and practical methods for their design, construction, operation and maintenance.

Conference Themes:

- What IAQ factors and conditions contribute to making a building healthy and sustainable?
- How can we create healthy and sustainable buildings through design, construction, commissioning, operation and maintenance?
- What metrics and tools can be used to quantify the degree to which a building is healthy and sustainable?
- How do building systems, especially mechanical systems, contribute to healthy and sustainable buildings?
- How should building IAQ be 'certified' as healthy and sustainable?
- How well do buildings designed to be healthy and sustainable actually perform?
- What are the costs and benefits of good IAQ in healthy and sustainable buildings?
- What government and private sector programs and initiatives exist or are proposed for healthy and sustainable buildings?
- How well are the existing programs working?

With Baltimore's shipping industry relocated to the outer harbor, the inner harbor has been remade into a continuous downtown festival. A short drive from BWI airport, the Inner Harbor is a fun and accessible destination for all to enjoy!

Go to [www.ashrae.org/publications/detail/15187](http://www.ashrae.org/publications/detail/15187) for more details and registration information.

**EPA: Significant Energy Efficiency Opportunities for Servers and Data Centers**

A new EPA report shows that data centers in the United States have the potential to save up to \$4 billion in annual electricity costs through more energy efficient equipment and operations, and the broad implementation of best management practices. The "Report to Congress on Server and Data Center Energy Efficiency" recommends priority efficiency opportunities and policies that can also lead to additional savings using state-of-the-art technologies and operations.

Findings from the report include:

- Data centers consumed about 60 billion kilowatt-hours (kWh) in 2006, roughly 1.5 percent of total U.S. electricity consumption.
- The energy consumption of servers and data centers has doubled in the past five years and is expected to almost double again in the next five years to more than 100 billion kWh, costing about \$7.4 billion annually.
- Federal servers and data centers alone account for approximately 6 billion kWh (10 percent) of this electricity use, at a total electricity cost of about \$450 million per year.
- Existing technologies and strategies could reduce typical server energy use by an estimated 25 percent, with even greater energy savings possible with advanced technologies.

Over the last five years the increase in use of these systems, and the power and cooling infrastructure that supports them, have doubled energy use, increased greenhouse gas emissions and raised concerns about power grid reliability.

In December 2006, Congress requested that EPA develop the report to examine market trends in the growth and energy use of servers and data centers. The report complements EPA's ongoing efforts to develop new energy efficient specifications for data center equipment as well as explorations into a new Energy Star building benchmark for data centers that reflects whole building operations.

More information and a copy of the report: <http://www.energystar.gov/datacenters>



# Dallas Chapter - ASHRAE

## Income/Expense Statement

Sep-07	Budget	Actual	Percentage
	for '07-'08	YTD	of Budget
<b>Income</b>			
Chapter dues (1)	15,000.00		
Money Market interest (2a)	800.00		
Regular Share Interest (2b)	5.00		
CD Maturation	3,000.00		
Meeting - meals, bar (3a)	20,000.00		
Seminar - Fall (3b)	3,500.00		
Seminar - Spring (3b)	3,500.00		
Roster sponsors (4)	850.00		
Golf tournament - Spring	15,000.00		
RP Event (raffle - proceeds fwd to Society)	500.00		
Miscellaneous	500.00		
<b>Total Income</b>	<b>62,655.00</b>		
<b>Expense</b>			
CRC representation (5)	1,600.00		
Student Activities (6)	1,000.00		
YEA	200.00		
Income tax preparation	250.00		
Meetings-meals,bar,room (7a)	22,000.00		
Meetings - audio/visual (7b)	2,700.00		
Printing - Roster	670.00		
Regional Dues/Award	1,600.00		
Research Promotion - matching funds (8)	15,000.00		
RP Events - Raffle Prizes (9)	600.00		
Membership promotion	500.00		
Seminar - Fall (10a)	1,500.00		
Seminar - Spring (10b)	2,000.00		
Golf tournament - Spring	10,000.00		
Winter Meeting	2,000.00		
Bank service charges/check printing	50.00		
Awards	400.00		
Scholarships	2,500.00		
Website Charges (11)	500.00		
P.N. Vinther Scholarship Fund	1,000.00		
Miscellaneous (12)	1,000.00		
<b>Total Expense</b>	<b>67,070.00</b>		





**RESERVATION POLICY:** To encourage members to make early reservations, the CHAPTER offers meals at the reduced rate of \$20.00. The regular rate of \$25.00 per meal is charged for all meals for which there is no prior reservation. A non-diners' table is provided for the convenience of those who do not want to eat a meal, but do want to attend the CHAPTER meeting. Reservations must be made by 12 NOON of the Monday prior to a CHAPTER meeting. If necessary, a previously made reservation may be cancelled no later than 8 AM of the day before a CHAPTER meeting. Those who have made reservations for a meal are responsible for payment to the CHAPTER, even if they cannot attend the meeting.

## 2007-2008 Dallas Chapter Officers and Board of Governors

The Officers, Board of Governors and Committee Chairs may be contacted via the following phone numbers or at the Chapter address; P.O. Box 802426, Dallas, 75380-2426

		Phone	E-mail
President	Mark Meyer	972-570-4700	markm@texasairsystems.com
President-Elect /Programs	Walter Horn	214-739-8880	walter.horn@jjainc.com
Research Promotion	Jeanine Bounds	214-872-0200	bounds@schmist-stacy.com
Secretary	Jeff Vestal	469-568-6300	Jvestal@adwcorp.com
Treasurer	Peter Sudbeck	972-868-3658	peter.j.sudbeck@jci.com
Immediate Past President	Jeanine Bounds	214-872-0200	bounds@schmist-stacy.com
Governor Membership Promotion	Ben Bain	972-570-4700	benb@texasairsystems.com
Governor TEGA	Doug Bronson	214-522-3900	dbronson@pspaec.com
Chapter Technology Transfer	Walter Horn	214-739-8880	walter.horn@jjainc.com
Governor Student Activities	Tim McNulty	214-766-4977	timothy.mcnulty@exhausto.com

## 2007-2008 Dallas Chapter Committee Chairs

Historian	Vacant		
Webmaster	Justin Bowker	972-888-9369	justin.bowker@tdindustries.com
Roster	Bob Dawson	214-765-8703	RDawson@lan-inc.com
Newsletter Editor	Stuart DeVaney	214-483-5000	stuartdevaney@yahoo.com
Photographer	Paul W. LeMaire	972-620-3600	plemaire@frymire.com
Honors & Awards	Nathan Hart	972-788-4222	nhart@rwb.com
Golf	Rusty Vaughn	972-570-4700	rustyv@texasairsystems.com
Publicity	Leo Stambaugh	214-369-3500	leostambaugh@cs.com
Refrigeration	Tony F. Zemanek	972-620-3600	tzemanek@frymire.com