



April 2, 2010: Vol. 52, No. 9

Produced by: Ian L. Bost, P.E.  
Chapter Newsletter Editor/ Chairman

*The Therm*, is a monthly Newsletter for chapter members and HVAC&R professionals alike, that provides information about the Fort Worth Chapter of ASHRAE.

## President's Message

A lot has happened since last I wrote:

The March meeting marked the last time we gather in the Petroleum Club until next October due to the major renovation that they have planned for the space. Sam Steele briefed us on the city of Fort Worth's historical and ongoing sustainability efforts with a special emphasis on how the city plans to use the money from federal stimulus grants. It was good to learn that our city will benefit from this program.

Our next luncheon will be on April 15 (a Thursday!) at Los Vaqueros in the Stockyards. Paul Pieper, an ASHRAE Distinguished Lecturer, will be speaking about energy and indoor environmental quality for high-performing schools.

We will be hosting a Society-furnished webinar on Commissioning for High Performing Buildings on April 21 (during our normal 3<sup>rd</sup> Wednesday meeting slot) on the 26<sup>th</sup> floor of Carter Burgess Plaza. We will charge \$15 and will provide a box lunch and parking validation along with the 3 PDH course. **You must RSVP to get a lunch**, there will not be extra lunches ordered for this event.

The Chapter's Regional Conference (CRC) in Monterrey was recently cancelled due to security concerns. It will now take place on May 5, 6, 7 in Houston. Please take a look at the details on the flyer attached to this newsletter. The folks down in Houston have stepped up and are doing their best to produce a quality event on short notice. They have already negotiated the hotel and are actively working toward providing all the features (quality technical sessions, fellowship outings, spouse events) that we have grown accustomed to over the years.

We have momentarily slipped to second place in the Region in points tallied towards the President's Award of Excellence (PAOE), but have moved up to 9<sup>th</sup> place in Society and 3<sup>rd</sup> place Nationally. It looks like the guys from NE Oklahoma have stepped their efforts up a notch to pass us recently, but we will certainly overcome them before this year is over.

Ian Bost of Baird Hampton & Brown was awarded our Chapter's technology award in the category of New Institutional Buildings for his work on the new TCU Admissions Center. This new highly-efficient building will

Next Chapter Meeting

Characteristics of High Performance Schools: Energy and Indoor Environmental Quality

April 15, 2010  
11:30 A.M.

[Los Vaqueros](#)  
(StockYards)  
2629 North Main  
Fort Worth, TX

[Click here for map.](#)

## President's Message – Cont.

incorporate ground-source heat pumps, energy recovery ventilators, water conserving plumbing fixtures, and high-performance lighting (among other features) to produce a LEED Gold building design.

Our research promotion drive is going strong, but we have a way to go to get to our goal and beyond. This is the last major segment of our drive towards the PAOE award and we will be able to raise more than our \$29,000 goal if everyone pitches in by asking their employer to make a tax-deductible donation to ASHRAE research. Every little bit helps – no donation is too small. It is very easy to donate by credit card online – look for the link on our website right below the R/P fundraising gauge. If your organization wants to know how they will be recognized, please direct them to our R/P honor roll:

<http://www.ashrae-ftw.org/research-promotion/2008-2009-honor-roll/>

Our golf tournament will be April 12 (see the flyer attached to this newsletter). This is a great opportunity to take your clients out for a fun day to raise money for a good cause. Our business is all about relationships, so take the time to really get to know those clients of yours!

And finally... we will be holding a joint seminar with the Dallas Chapter on the new Standard 189.1 on June 2 at UTA. This will be a 3 PDH seminar taught by a member of the sub-committee which wrote the standard. Please be on the lookout for a flyer soon which will contain more details about the event.

Jay Martin  
Chapter President

## April Program/Speaker Bio.

### Topic of Discussion:

Characteristics of High Performance Schools: Energy and Indoor Environmental Quality

### Speaker:

Paul L. Pieper



Paul Pieper, Eng., is the Marketing Manager for Venmar CES Inc., an innovative manufacturer of cost effective, energy efficient, energy recovery solutions for the commercial ventilation market.

Mr. Pieper has over 15 years of Sales and Product Management experience in designing high performance HVAC systems and equipment for commercial and industrial applications. He holds a degree in Pure and Applied Science from Marianopolis College, a Bachelor of Engineering degree from the Department of Building, Civil and Environmental Engineering and a certificate in Software Development from Concordia University in Montreal.

Mr. Pieper is a member of the Quebec Order of Professional Engineers as well as the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) and the U.S. Green Building Council (USGBC). He currently represents Venmar CES Inc. with the Air-Conditioning, Heating and Refrigeration Institute (AHRI) on the Air-to-Air Energy Recovery Ventilation Equipment Section.

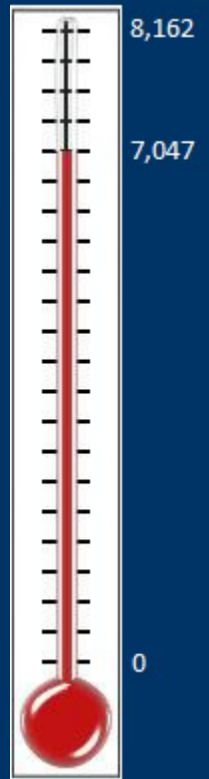
Mr. Pieper is the Chair of ASHRAE TC 8.12 Desiccant Dehumidification Equipment and Components and is an active member of ASHRAE TC 5.5 Air-to-Air Energy Recovery.

### LECTURE TOPICS:

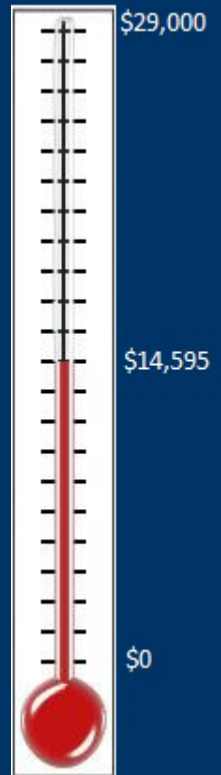
Characteristics of High Performance Schools: Energy and Indoor Environmental Quality

Green building in education provides numerous benefits: operational cost savings, reduced energy use, greater

PAOE Points



RP Dollars



## April Program/Speaker Bio. – Cont.

health and well-being and improved student performance. There are many resources available to the mechanical designer however few resources focus exclusively on HVAC systems and how to optimize space heating and cooling requirements while providing a superior indoor environment. This program examines the most common guidelines and best practices in the industry for the successful implementation of high performance HVAC systems in education with particular emphasis on K-12 Applications.

### Meeting and Exceeding High Performance Standards, Codes and Guidelines with Air-to-Air Energy Recovery Systems and Equipment

As we move towards net zero energy buildings and a sustainable future for the built environment, many designers struggle with the seemingly conflicting requirements of the latest standards, codes and guidelines when trying to provide high performance HVAC systems that are energy efficient and capable of delivering superior IEQ. Fortunately, air-to-air energy recovery systems and equipment provide one of the most cost-effective and efficient ways to recycle waste energy while creating quiet and comfortable indoor environments. An overview of current and proposed standards and guidelines will be presented to identify areas where energy recovery is mandated and where energy recovery can be employed to meet and exceed performance requirements for efficiency, thermal comfort and ventilation air.

### Understanding and Evaluating Air-to-Air Energy Recovery Technologies

Industry emphasis on the advancement of sustainable building design and operations has created a rapidly growing market for energy recovery systems and equipment. However, for many the fundamentals of air-to-air energy recovery remain poorly understood. The basic concepts of energy recovery will be reviewed and an overview of the primary standards and guidelines relating to energy recovery devices will be presented. In addition, the most popular technologies will be explored in detail to understand the advantages, performance benefits and key specifiable differences with a view towards practical application and successful integration.



American Society of  
Heating, Refrigeration &  
Air Conditioning Engineers

## ASHRAE & ASPE Dallas/Fort Worth Chapters Combined Sporting Clay Tournament Friday, March 12<sup>th</sup> 2010



American Society of  
Plumbing Engineers

The American Society of Plumbing Engineers (ASPE) DFW Chapter and the American Society of Heating, Refrigeration & Air Conditioning Engineers (ASHRAE) Dallas & Fort Worth Chapters got together for the 2010 Combined Sporting Clay Shoot. The event was held at Elm Fork Shotgun Sports at 11:30 AM on a windy and sunny day. Shooters enjoyed a BBQ lunch and loaded up into golf carts to head out to the clay pigeon killing fields. The course this year consisted of the Meadows Course due to the recent flooding that put most of the Woods Course underwater. The wind gusts of 30 MPH made the clay pigeons seem to take evasive maneuvers, but the shooters prevailed. The event had a larger crowd in attendance with 87 shooters. The three top teams and individual shooters are listed below. A special thanks goes out to Doug Jones with Lochinvar for supplying the trophies and chilled bottled water, Brett Klein with Lochinvar for being our event photographer, and to Sam Toub with Sam Toub & Associates for co-organizing the event. We enjoyed everyone's company and are thankful to have a fun and safe event this year. See you all again next year.

Charles Crawford, Vicatolic  
Combined Sporting Clay Shoot Organizer  
[ccrawford@victaulic.com](mailto:ccrawford@victaulic.com)

### First Place Team (Average Team Score 74)

- Sam Toub, Sam Toub & Associates
- Stan Perry, Texas Air Systems
- Steve Bauldauf, Bauldauf Herrin Structural Engineers
- John Oliver, Bauldauf Herrin Structural Engineers

### Second Place Team (Average Team Score 73.25)

- Nick Hanson, Trane
- Don Raspante, Basharkhah Engineering Inc.
- Ed Ramsey, TD Industries
- Orland Hilliard, TD Industries

### Third Place Team (Average Team Score 73)

- Robert Gamble, Park USA
- Vernon Ward, Park USA
- Toppo Cohen, C&W Manufacturing
- Brent Wilhauer, Rodman

### Top Individual Shooter (Score 88)

- Charles Crawford, Victaulic





**FORT WORTH ASHRAE SPRING GOLF CLASSIC**

**Monday, April 12<sup>th</sup>, 2010**

Riverside Golf Club  
3000 Riverside Pkwy  
Grand Prairie, Texas 75050  
(817) 640-7801

*Come on out and enjoy the fellowship, golf, and excitement and help the  
Fort Worth Chapter of ASHRAE  
Raise Money for ASHRAE Research Promotion!*

**FORMAT:** 4-Person Scramble, Shotgun Start at 1:00 P.M.  
**COST:** \$100.00 per Player, Includes Golf, Dinner, and Awards  
**CONTESTS:** Longest Drive, Closest to Pin  
**HOLE-IN-ONE:** \$10,000 (\$5,000 to Player and \$5,000 to ASHRAE Research)

Team Captain: \_\_\_\_\_

Team Captain Email: \_\_\_\_\_

Team Captain Phone: \_\_\_\_\_

Player : \_\_\_\_\_

Player : \_\_\_\_\_

Player : \_\_\_\_\_

Number of Players \_\_\_\_\_ x \$100.00 \$ \_\_\_\_\_

Mulligans @\$5.00 ea. (Max. 10 per Team): \$ \_\_\_\_\_

Hole Sponsor @ \$150.00 per Hole: \$ \_\_\_\_\_

TOTAL ENCLOSED: \$ \_\_\_\_\_

*(please make your check payable to Fort Worth Chapter of ASHRAE)*

Mail or Fax Entries to:

**Jay Sullivan**  
Trane  
4200 Sylvania Ave  
Fort Worth, TX 76137  
Cell: (817) 805-0020  
Fax: (817) 831-8135  
Jay.sullivan@trane.com

## ASHRAE Learning Institute Spring 2010 Online Course Series

### 2 WAYS TO REGISTER

Internet: [www.ashrae.org/onlinecourses](http://www.ashrae.org/onlinecourses)

Phone: Call toll-free at 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)

Note: You may register up to 24 hours prior to an online seminar. Courses are in US Eastern Standard Time.



**Introduction to Thermal Energy Storage Systems for A/C**  
Wednesday, April 7, 2010 – 1:00 p.m. to 4:00 p.m. EDT

**Using Standard 90.1 to Meet LEED Requirements**  
Monday, April 26, 2010 – 1:00 p.m. to 4:00 p.m. EDT

**Complying with Standard 90.1-2007: HVAC/Mechanical**  
Monday, April 12, 2010 – 1:00 p.m. to 4:00 p.m. EDT

**Introduction to Cleanroom Design**  
Wednesday, April 28, 2010 – 1:00 p.m. to 4:00 p.m. EDT

**Energy Management in New & Existing Buildings: A Sustainable Activity**  
Wednesday, April 14, 2010 – 1:00 p.m. to 4:00 p.m. EDT

**District Cooling & Heating Systems: Central Plants**  
Monday, May 3, 2010 – 1:00 p.m. to 4:00 p.m. EDT

**Complying with Standard 90.1-2007: Envelope/Lighting**  
Monday, April 19, 2010 – 1:00 p.m. to 4:00 p.m. EDT

**Complying with Requirements of ASHRAE Standard 62.1-2007**  
Wednesday, May 5, 2010 – 1:00 p.m. to 4:00 p.m. EDT



**Understanding & Designing Dedicated Outside Air Systems (DOAS)**  
Monday, May 10, 2010 – 1:00 p.m. to 4:00 p.m. EDT

## Hot Products from ASHRAE

A leader in HVAC&R technology, ASHRAE publications cover topics that impact every facet of the environment, both indoors and out.

### Latest Publications from ASHRAE!

- Standard 189.1-2009, Standard for the Design of High-Performance Green Buildings* (A Jurisdictional Compliance Option of the IGCC)
- ASHRAE Handbook Online* – Web-Based access to all 4 volumes
- ASHRAE Pocket Guide* – Useful information that fits in a shirt pocket
- IAQ Guide: Best Practices for Design, Construction and Commissioning*
- Load Calculation Applications Manual*

### Other Products from ASHRAE!

- Energy Efficiency Guide for Existing Commercial Buildings*
- Dampers and Airflow Control*
- Building Information Modeling Guide*
- Advanced Energy Design Guide for Small Hospitals and Healthcare Facilities*
- Principles of Heating, Ventilating, and Air Conditioning* – Textbook based on the 2009 ASHRAE Handbook - Fundamentals

Visit [www.ashrae.org/bookstore](http://www.ashrae.org/bookstore) to learn more about these and other outstanding ASHRAE publications!

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or visit: [www.ashrae.org/bookstore](http://www.ashrae.org/bookstore)



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and  
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Membership**



## How to Maintain a VFD by Daniel C. Merkel

### **Background:**

Yes, VFD's NEED maintenance! VFD's require Time, Love, and Care to ensure longevity. Common enemies all VFD's share are dust, debris, water, precipitation, short circuits and above all: HEAT! VFD losses are approximately linearly proportional to horsepower, and are estimated at 33.3 watts or 113 BTU's per horsepower<sup>1</sup>! Although, short circuits cause more catastrophic failures, they are less common, and typically occur at start-up. Excess heat shortens the life expectancy dramatically.

### **Cleanliness**

All drives dissipate heat; however, enclosure types change how. For instance: a NEMA 1 enclosure has side vents for airflow, which lends well for the internal components to attract dust and other contamination. Other enclosures have cooling fans and are still susceptible to dust contamination. Dust on electrical hardware causes a lack of airflow around components, including heat sinks. As airflow decreases, heat dissipation decreases, and soon, the magical smoke comes out of the drive.

Previously, spraying compressed air through drives was thought to remove dust and debris. Unfortunately, 'normal' plant compressed air contains oils, and other contaminants which when used, actually can create an electrostatic discharge (ESD). Using a specialized ESD Vacuum is ideal; however, a more common answer is to use a can of 'non-static generating' compressed air.

### **Look out for:**

*Dryness* – Dripping condensate lines, dehumidifiers, or other unintended water sources.

*Fans Running* – Internal fan(s) typically need to run when a drive is started AND enabled.

*Disfigurement* – Bulging capacitors, leakages, disfigurement, and discoloring around the drive may indicate imminent or past failure.

*Tightness* – When not powered, check tightness of power connections, but not by re-torquing. *\*Re-torquing risks striping screws*

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1) Estimate was based off a 96% efficient VFD with a 90% efficient motor.

## Grassroots Committee Reports

### **Membership Promotion**

We have 9 delinquents, and 5 new members since the beginning of the year. Our wonderful president sent out an e-mail campaign this past month to encourage our visitors to register

Thanks, [Brodie Heflin](#)

## Board of Governors Meeting Minutes – March 17, 2010

### **Attendees:**

10 Members: Jay Martin, Richard Watters, Dan Merkel, Patty Parish, David James, Matt Carter, W.O. Kelly, Larry Akers, Jay Sullivan, and Tony Finch.

Meeting Called to order at 10:38am by Jay Martin, Chapter President.

Jay updated us on PAOE status: we currently have 6760 points.

We need to improve the roster this month. We have lost 13 members.

Research Promotion is in need to donations. Everyone please ask your respective companies for donations.

### **Reports:**

President-Elect (Ian Bost): NIA

## Board of Governors Meeting Minutes – March 17, 2010 – Cont.

Secretary (Richard Watters):

- Expect to have a version of the roster on the website before the CRC.
- Will produce a list of guests that regularly attend ASHRAE meetings so we can reach out to them to join.

Treasurer (Dan Merkel):

- Updated budget for this year.
- Current balance in account is \$3,457.35, with a pending deposit of \$1,440.00

Board of Governors (David James): no report

Board of Governors (W.O. Kelly): no report

Board of Governors (Cody Pace): NIA

ByLaws Revision (John Rhodes): NIA

- Jay Martin presented ByLaws
- Next month, we need an attendance of at least 46 members (15% of voting members), and we will need a 2/3 vote to pass the proposed changes.
- RW to distribute the proposed ByLaws changes to the membership at least seven days in advance of the next meeting.
- BOG reviewed the proposed changes to the ByLaws. DM motioned to accept the changes as presented. RW seconded, and all were in favor.

CTTC (Tony Finch):

- Technology Award – we have one entry from Ian Bost. All other submittals must be received today to be accepted.

Historian (Patty Parish):

- Met with Dan yesterday to work on our Chapter presentation to CRC
- When done with presentation, will send to BOG

Honors & Awards (Larry Akers):

- Over the last two years, we have received 15 Chapter Service Awards, and we are promoting two more this year for Les Brown and David James.
- We have one Distinguished Service Award nominee, John Rhodes.
- Working on Fellow application.
- Working on electronic entries.

Membership Promotion (Brodie Heflin): NIA

- Info presented by Jay Martin:
  - Delinquencies are down to 12
  - Currently have 307 members, where we had 290 at the beginning of the year. This also includes 30 new student members, so we need 13 additional members to maintain our membership for reporting to CRC.

Research Promotion (David James):

- Work on your companies to make a donation.
- Donations can be made online, but we really prefer checks so we can get them entered properly
- We need \$14,000 to reach our goal before CRC.

Special Events (Jay Sullivan):



## Board of Governors Meeting Minutes – March 17, 2010 – Cont.

- 40 people have signed up for the Spring Golf Tournament
- Hole sponsorships are down, so we need more
- Want to email membership next week with a reminder about signing up, and want another email the week after for any final teams.
- Spring Social is planned for May. Working on entertainment plans.

### Student Activities (Matt Carter):

- We have 6 student members. Original budget allowed \$500 in scholarships. Would like to consider 4 scholarships of \$100 for those students that applied, and 2 scholarships of \$50 for those students that did not.
- WO Kelly motioned to fund scholarships as presented. David James seconded the motion, all were in favor except Dan Merkel, who abstained.

Webmaster (Cody Pace): NIA

### Old Business:

- Seminar for ASHRAE Standard 189.1 on June 2<sup>nd</sup>. Organizing it to be a joint seminar with the Dallas Chapter, to be held at UTA. A member of the 189.1 Committee will fly in to present at the seminar.
- April meeting to be held elsewhere. It will be the second Thursday of the month. Tony is researching locations.
- May meeting to be held on the 26<sup>th</sup> Floor of the Carter-Burgess Building.

### New Business:

- Sponsor Nick Schroeder (incomming SACC) to go to CRC. Cost will be \$376 (registration @ \$270, 2 nights hotel @ \$106 ea). Society will pay for the flight (~\$400).
  - DM motioned to have Fort Worth Chapter pay these expenses. DJ seconded, and all were in favor.
- Everyone push for donations and look for new members where you can.
- Discussed State Department warning regarding travel to Mexico.
- Patty informed of possible upcoming softball game at TCU. Dan is looking into this.

President Jay Martin adjourned the meeting at 11:25am.

## General Chapter Business Meeting Minutes – March 17, 2010

### Business Meeting Minutes:

Meeting Called to order at 12:00pm by Jay Martin, Chapter President.

Robert Jackson is in the hospital.

Proceeded with self-introductions and the introduction of our guests by Dan Merkel.

Dr. Bittle, Faculty Advisor at TCU for Student Chapter of ASHRAE, was recognized. Student members also recognized:

- Phillip Short (branch President)
- Nabiha Yousuf (branch VP)
- Ryan Dalrymple (branch Treasurer)

### New Member Introductions:

- Mathew Thornton
- Glenn Gordon
- Robert Howell
- Joe Arledge
- Daniel McKenzie

## General Chapter Business Meeting Minutes – March 17, 2010

- AB Blalock

### Old Business:

- Approve minutes: Gary Fields motioned, seconded, and all voted in approval.
- Meeting in April moved to Thursday, April 15<sup>th</sup>. Location is unknown.
- ASHRAE webinar on Wednesday, April 21, from 12pm – 3pm, on Commissioning for High Performance Buildings. Cost will be \$15 per person and will include lunch. You must RSVP to have lunch. This will be a joint meeting with Dallas, held at UTA.
- CRC to be held April 22 – 24.
  - Get passports
  - Chapter to help support fees – new committee chairs to attend for sure
  - Committee to solicit input from membership regarding policies, standards, etc.
- May meeting will be held on the 26<sup>th</sup> floor of 777 Main St.

### New Business:

- CTTC – Technology Transfer Award competition is active and applications are due today.
- April meeting will be “Characteristics of High Performance Schools: Energy and Indoor Environmental Quality” by Paul Pieper, an ASHRAE Distinguished Lecturer.
- Research Promotion – Major push for research funding will begin this month, please consider asking your company to donate or making a contribution on your own. These are tax deductible.
- Student Activities
  - TCU Branch is nearing official recognition by Society
  - Today we awarded 6 scholarships to student members of our Chapter
- Special Events – Golf Tournament is coming April 12<sup>th</sup>, please start making plans to put together a team
- In the next few weeks, you will be receiving proposed changes to the Chapter ByLaws, which were approved by your Board of Governors to be presented to the membership for a general vote of approval. We will formally vote on those changes at the next meeting and the vote will require a 2/3 majority. Once the membership approves them, they will be sent to Society to get formal approval prior to our adopting them. We must have at least 47 members present to hold the vote.

### Technical Session Minutes:

Tony Finch introduced our speaker:

#### SPEAKER:

Samuel Steele, C.E.M., LEED AP

#### TOPIC OF DISCUSSION:

From Conservation Toward Sustainability

Mr. Steele is currently the Conservation Specialist for the City of Fort Worth, working within the Facilities Management Group of the Transportation & Public Works Department. In this role he manages the City's Conservation Program through the development, construction, and measurement & verification of resource conservation projects that improve City facility operations & maintenance and better manage resource demands, usage and costs.

As part of this discussion, Mr. Steele will be discussing Fort Worth's ARRA Stimulus grant (EECBG – Energy Efficiency & Conservation Block Grant), the Village Creek WWTP project, and ESPC Phase V.

Also discussed:

- City structure from City Manager and down
- Historical Review of Oil prices vs. World Events
- Review of what is being done with stimulus money

## General Chapter Business Meeting Minutes – March 17, 2010

- City progression of environmental management and sustainable programs (energy – air – money), which led to Sustainable Development Task Force

### Closing:

Joint meeting/seminar with Dallas at UTA

Jay Martin adjourned the meeting at 12:50pm.

## Chapter Financial Report

|                       |          |
|-----------------------|----------|
| STARTING BALANCE DATE | 3/1/2010 |
| NEW BALANCE DATE      | 4/1/2010 |

### Treasurer's Report

*Dan Merkel*

#### Meeting Information:

|                  |           |
|------------------|-----------|
| Date of Meeting: | 3/17/2010 |
| Members          | 58        |
| Guests           | 18        |
| <b>Total:</b>    | <b>76</b> |

#### Financial Data:

|   |                    |
|---|--------------------|
| Starting Balance (3/1/10):              | <b>\$ 4,295.90</b> |
| Deposits:                               |                    |
| March Luncheon Payments at door         | \$925.00           |
| Feb 17 Eventbrite payments              | \$20.00            |
| February dues dated 3-15-10             | \$385.00           |
| ASHRAE Research - Sporting clay         | \$347.81           |
| March Eventbrite Payments dated 3-22-10 | \$60.00            |
| <b>Subtotal:</b>                        | <b>\$1,737.81</b>  |

#### Payments:

|                                  |                   |
|----------------------------------|-------------------|
| Luncheon Meeting Payment         | \$1,372.50        |
| February Parking                 | \$80.00           |
| ASHRAE Region VIII Dues Paid out | \$870.00          |
| April Lunch deposit              | \$250.00          |
| April Lunch Microphone           | \$15.00           |
| ASHRAE Research - Sporting clay  | \$347.81          |
| Scholarship - Jaclyn Grainger    | \$100.00          |
| Scholarship - Phi Nguyen         | \$100.00          |
| Scholarship - Phillip Short      | \$100.00          |
| Scholarship - Ryan Dalrymple     | \$100.00          |
| Scholarship - Thomas Wallace     | \$50.00           |
| Scholarship - Jody Elmore        | \$50.00           |
| <b>Subtotal:</b>                 | <b>\$3,435.31</b> |

|                                  |                    |
|----------------------------------|--------------------|
| <b>New Balance as of 4/1/10:</b> | <b>\$ 2,598.40</b> |
|----------------------------------|--------------------|

## Job Listings

### ENERGY ENGINEER (2010-1326)

#### *Fort Worth, Texas*

Freese and Nichols' Fort Worth office is looking for a high-energy, client-focused Energy Engineer to help build out our energy advisory services practice. This candidate will work with our current staff to lead the planning, development, and execution of complex engineering projects, as well as electrical measurement, verification, and tracking for the purpose of auditing and validating permanent energy reductions. Additionally, the candidate will be expected to collect and analyze field data, analyze energy usage, make energy efficiency recommendations according to industry best practices, and prepare audit reports containing recommended scopes of work and life-cycle cost analyses.

#### **Primary Responsibilities**

1. Detailed engineering analyses including electric and carbon baseline profiles, end-use analysis and retrofit analysis for building systems with particular focus on lighting, HVAC, pumping systems, building automation and controls, chillers, boilers, refrigeration, and other commercial and industrial equipment and systems.
2. Prepare cost proposals for utility, state or federal-sponsored energy efficiency programs, and execute all grant- and incentive-related documentation, including project technical documentation, detailed project costing, and Measurement, Verification, and Tracking (MV&T) plans to meet all state and federally mandated requirements. MV&T may include mathematical modeling to support the implementation of evaluation protocols.
3. Coordinate with staff, contractors, and client stakeholders to prepare reports for internal management of programs and assure that completed projects meet pre-determined financial and system performance goals.

#### **Minimum Qualifications**

1. BS in Mechanical Engineering, Industrial Engineering, Electrical Engineering or related engineering degree, and current Texas Professional Engineer (PE) registration (or the ability to become licensed in Texas within the first year).
2. At least two of the following: Certified Energy Manager (CEM), Certified Energy Auditor (CEA), Certified Lighting Efficiency Professional (CLEP) and/or LEED AP certification.
3. 3-5 years experience in energy efficiency programs or measurement, verification and evaluation. Must have the ability to recognize, identify, assess and produce detailed calculations for energy conservation projects (ECPs).
4. Experience navigating utility, state and federal energy efficiency programs.
5. Experience with energy simulation software applications such as DOE-2, Visual DOE, eQUEST, Power DOE and Trane Trace 700
6. Strong building energy auditing experience and solid knowledge of the LEED rating system. Have participated in ASHRAE level 2 and level 3 audits and retro-commissioning (RCx) studies.
7. Excellent verbal and written communication skills and proficiency with Microsoft Office.
8. Excellent client relationship skills.
9. Experience in the analysis, layout, design and installation of mechanical, electrical, and control systems for military, institutional, educational, municipal, higher education and industrial clients.
10. Experience in preparation of construction documents.

**Qualified candidates are invited to submit their resumes *online* in confidence to [www.freese.com/careers](http://www.freese.com/careers). Jobs can be identified by requisition number or title.**

*Equal Opportunity Employer*

## Job Listings – Cont.

### MECHANICAL HVAC ENGINEER (2010-1322)

*Fort Worth, Texas*

Freese and Nichols' Fort Worth office is looking for an experienced HVAC design engineer to provide HVAC design analyses and construction document layouts and designs for military, institutional, educational, municipal, higher education and industrial clients. Candidate should have a Bachelor's degree in Mechanical Engineering; 4+ years related experience working in the consulting field, either for a full-service A&E or MEP firm; and a Texas professional engineer registration (or the ability to become licensed in Texas within the first year). Experience using AutoCAD or Microstation is preferred. Ability to perform energy modeling is a plus. Experience using Revit or Bentley BIM is a plus. LEED® accreditation or experience with sustainable design is a plus.

**Qualified candidates are invited to submit their resumes *online* in confidence to [www.freese.com/careers](http://www.freese.com/careers). Jobs can be identified by requisition number or title.**

*Equal Opportunity Employer*

## Kenneth Fulk Bio.



**Kenneth Fulk**

**Reed, Wells & Benson & Co.**

**Ashrae Member since 1980**

Ken has been married to Susan for 29 years and has 3 beautiful children, John 25; Steven, 23; and Erin, 20. Ken graduated from Texas A&M University in 1979 with a B.S. in Mechanical Engineering. Ken works for the engineering firm of Reed, Wells & Benson & Co. and has been a Principal there since 1989. He has worked there since 1986. Before arriving in Dallas back in 1984, he served in the United States Air Force as a Base Civil Engineer in North Carolina and as a Training Branch Chief in Wichita Falls, Texas. He attained the rank of Captain. He served as President of the Dallas Chapter of ASHRAE from 1997-1998 and is currently the Region VIII Director and Regional Chair.

He enjoys working on sustainable design projects and their impact on our market. He loves sharing the knowledge and talent of our many members within our local ASHRAE chapters. He believes Young Engineers in ASHRAE (YEA) has provided a great tool in getting the young members involved with ASHRAE. The Dallas chapter is currently working a Student Chapter from the University of North Texas (UNT) in Denton.

He found being Chapter President to be extremely rewarding and encourages others to get involved at the chapter level.



## Fort Worth ASHRAE Nominating Committee Report

*March 2010, for the 2010-2011 Chapter Year*

The nominating committee was composed of the following individuals in good standing: Buddy Pace (Chairman), Ian Bost, Larry Akers, Tony Finch, and Matt Carter.

The following officers were elected in accordance with our Bylaws at our General Business Meeting in February:

President-Elect: Richard Watters  
Secretary: Dan Merkel  
Treasurer: Tony Finch  
Governor: Jay Sullivan  
Governor: John Rhodes

Ian Bost, current President-Elect, shall be elevated to President. Jay Martin will be the third Governor in his role as most recent available past president.

Our mandatory standing committee chairman will be (as assigned by Ian Bost, President-Elect):

Chapter Nominating: Buddy Pace  
CRC Action: Jay Martin  
Student Activities: Nick Schroeder  
Membership Promotion: Brandon Jarrett  
Research Promotion: Jay Martin  
Chapter Technology Transfer: Clif Upham  
Historical: Patty Parrish

Our optional standing committee chairman will be (as assigned by Ian Bost, President-Elect):

Auditing: (selected by the members)  
Honors & Awards: Larry Akers  
Attendance: Aaron Bartek  
Newsletter: Richard Watters  
Special Events: Matt Carter  
Webmaster: Cody Pace

Sincerely

Buddy Pace,  
Chairman, Nominating Committee  
Fort Worth Chapter of ASHRAE

1

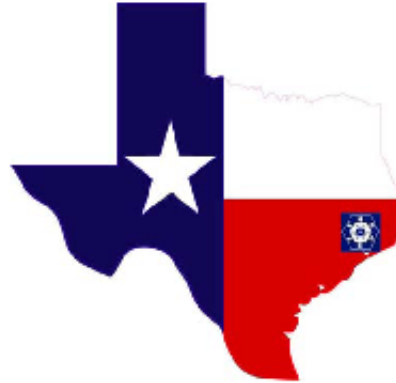
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AN INTERNATIONAL ORGANIZATION

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE)  
Fort Worth Chapter | 777 Main Street | Fort Worth, Texas 76102

**ASHRAE REGION VIII**

**2010 CRC**



**MAY 6-8**

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**ASHRAE room rate is \$129.**

**CRC registration information to follow.**

***(Closest airport is Bush Intercontinental)***

## Chapter Officers and Committee Chairs

### Officers

|                 |  |                |  |
|-----------------|--|----------------|--|
| President       | <a href="#">Jay Martin, P.E.</a>         | (817) 735-6756 | <a href="mailto:jay.martin@mail.ashrae.org">jay.martin@mail.ashrae.org</a>           |
| President-Elect | <a href="#">Ian L. Bost, P.E.</a>        | (817) 338-1277 | <a href="mailto:ian.bost@mail.ashrae.org">ian.bost@mail.ashrae.org</a>               |
| Secretary       | <a href="#">Richard J. Watters, P.E.</a> | (817) 338-1277 | <a href="mailto:richard.watters@mail.ashrae.org">richard.watters@mail.ashrae.org</a> |
| Treasurer       | <a href="#">Dan Merkel, E.I.T.</a>       | (414) 807-0204 | <a href="mailto:daniel.merkel@mail.ashrae.org">daniel.merkel@mail.ashrae.org</a>     |
| Governor        | <a href="#">David James</a>              | (817) 921-5434 | <a href="mailto:djames@haroldjames.com">djames@haroldjames.com</a>                   |
| Governor        | <a href="#">W.O. Kelly, III</a>          | (817) 714-0504 | <a href="mailto:wok59ag@aol.com">wok59ag@aol.com</a>                                 |
| Governor        | <a href="#">Cody W. Pace, P.E.</a>       | (817) 338-1277 | <a href="mailto:cody.pace@mail.ashrae.org">cody.pace@mail.ashrae.org</a>             |

### Committee Chairpersons

|                             |                   |                |  |
|-----------------------------|-------------------|----------------|--|
| Bylaws                      | John Rhodes       | (972) 386-5629 | <a href="mailto:johnrhodes@mail.ashrae.org">johnrhodes@mail.ashrae.org</a>       |
| Audit                       | Phil Farco        | (817) 267-8651 | <a href="mailto:phil_farco@mason-dallas.com">phil_farco@mason-dallas.com</a>     |
| Chapter Technology Transfer | Tony Finch        | (817) 656-6076 | <a href="mailto:tonyfinch@mail.ashrae.org">tonyfinch@mail.ashrae.org</a>         |
| Historian                   | Patty Parrish     | (817) 791-3227 | <a href="mailto:patty.parrish@us.belimo.com">patty.parrish@us.belimo.com</a>     |
| Honors and Awards           | Larry Akers       | (817) 336-0543 | <a href="mailto:lakers@fribergassociates.com">lakers@fribergassociates.com</a>   |
| Membership                  | Brodie Heflin     | (817) 735-6251 | <a href="mailto:brodie.heflin@mail.ashrae.org">brodie.heflin@mail.ashrae.org</a> |
| Newsletter                  | Ian L. Bost, P.E. | (817) 338-1277 | <a href="mailto:ian.bost@mail.ashrae.org">ian.bost@mail.ashrae.org</a>           |
| Refrigeration               | Richard Long      | (817) 354-2898 | <a href="mailto:rjdklong@juno.com">rjdklong@juno.com</a>                         |
| Research Promotion          | David James       | (817) 921-5434 | <a href="mailto:djames@haroldjames.com">djames@haroldjames.com</a>               |
| Student Activities          | Matt Carter       | (817) 838-1379 | <a href="mailto:matt.carter@mail.ashrae.org">matt.carter@mail.ashrae.org</a>     |
| Special Events              | Jay Sullivan      | (817) 805-0020 | <a href="mailto:jay.sullivan@mail.ashrae.org">jay.sullivan@mail.ashrae.org</a>   |

## Upcoming Events

- ASHRAE FTW
  - ASHRAE Webcast, “**Right From the Start – Commissioning for High Performing Buildings** (April 21, 2010
  - CRC – Houston Texas (May 6-8)

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