

# The Therm





October 3, 2012: Vol. 55, No. 03

Produced by: Tony Finch 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**

View the President's Message Here!

Well it is finally fall here in Texas, and as the air becomes crisper, and we try to put off holiday shopping as along as possible, we would like to invite you to some exciting events planned this year!

October 29th is our ASHRAE Golf Tournament and sign-up is now available for teams and sponsors! It will be at the Great Southwest Country Club in Grand Prairie. Come out and have a drink, a swing, and another drink. Again this year we are hosting a 4 person scramble format; however, unlike last year there are NO Mulligans. But before you finish your drink in fear, rest assured, there are no replacement rangers and there will be plenty of other enhancements throughout the round. We look forward to seeing everyone!

Our next meeting is October 17th. We welcome Dale Missey of Cooper Bussman to present on Short Circuit Current Rating for Equipment Assemblies. If you have never heard of this, yet you work with or specify any equipment which uses over 15 amps of current, you NEED to see this presentation. Personally, I have seen more and more code compliance issues arise from this topic. This presentation will include: defining what the Interrupting Rating is along with Short Circuit Current Rating, why it's important and how to comply with the NEC and UL.

We hope to see you any anyone else who would deal with this topic there!

Lastly, look to our website and the Therm for up to date information including scholarships, volunteer opportunities, and some current events from Society.

Sincerely,

Daniel C. Merkel Chapter President Next Chapter Meeting

Short Circuit Current Rating For Equipment Assemblies

Oct 17, 2012 11:30 A.M.

Carter::Burgess Plaza 777 Main St. 40th Floor Fort Worth, TX

Click here for map.

# October Program - October 17, 2012

**Date:** October 17, 2012 **Time:** 11:30 a.m. – 1:00 p.m.

**Location:** Carter Burgess Plaza Petroleum Club – 40<sup>th</sup> Floor **Topic:** Short Circuit Current Rating for Equipment Assemblies

#### Speaker Info

Dale P. Missey, P.E.

Manager - Field Application Engineers

Cooper Bussmann

#### dale.missey@cooperindustries.com

Dale Missey is a Professional Engineer in the state of Missouri and holds a BSEE from the Missouri University of Science and Technology. Dale currently resides just outside of St. Louis, MO, and has worked for Cooper Bussmann in various technical and sales roles for the past 13 years. In his current role as Manager of Field Application Engineers, he manages 11 Technical Sales individuals around the country, working to provide technical expertise and specification for Cooper Bussmann's entire product portfolio which contains Fuses, Fuseholders, Power Distribution Blocks, Disconnect Switches, Terminal Blocks, Assemblies, Surge Protection and Wireless Communications.

#### **Presentation Outline**

- o Interrupting Rating
- o Short Circuit Current Rating
- o SCCR in NEC and UL
- o Importance of SCCR
- o How to Comply

# September Meeting Minutes – Board of Governors

#### Call to Order at 10:42 am

Attendance: Jay Sullivan, Richard Watters, Clif Upham, William Lueg, David Muzzy, Richard Long, Cody Pace, Saul Martinez, Nick Schroeder, Keith Woodlee, Dan Merkel, Travis Brunkenhoefer, Patty Parrish

#### President - Dan Merkel

- Keith Woodlee has volunteered to be the Membership Promotion Chair
- PAOE Audits will begin in the next couple weeks, points need to be entered
- Erin Hearn from Uplift Education will speak at the meeting about student mentorship opportunities
- The Fort Worth Chapter will award scholarships to 4 students names in GB minutes
- Dan will send out an email allowing the BOG to vote to approve the operating budget for 2012-2013
- Richard Long and Dan will attend a government affairs meeting to see if the topic is applicable to our chapter
- Volunteers are needed for the January Annual Meeting registration fees are waived for volunteers.
- Dan will speak with IEEE to see if we can get someone to speak at a meeting about the new short circuit current ratings
- Full Circle checks are due by Oct 15<sup>th</sup>.

#### **Officer Reports**

#### President-Elect (Finch)

• The UTA student design competition has begun. The students will turn in a progress report by the end of the month

#### Secretary (Sullivan)

- Transfer of duties is complete
- The goal is to get the roster out by the October meeting. Will print 20-30 hard copies. Sponsorship letters need to be sent.
- Secretary will verify that taxes were filed appropriately for 2012

#### Treasurer (Upham)

Scholarship checks will be distributed at the meeting today

#### BOG At-Large (Watters, Maryak, Muzzy, Long)

Nothing to report

CLICK HERE TO CONTRIBUTE!

# September Meeting Minutes - Board of Governors (cont.)

#### **Committee Chairman Reports**

#### CTTC (Schroeder)

Nothing to report

#### Historian (Brunkenhoefer)

Nothing to report

#### **Honors & Awards (Akers)**

Nothing to report

#### Membership Promotion (Woodlee)

Nothing to report

#### Refrigeration (Lueg)

- We are looking into a distinguished speaker for the refrigeration presentation.
- Another committee member is needed.
- There will be a page on the website strictly for refrigeration.

#### **Research Promotion (Watters)**

- Richard attended RP centralized training in Chicago
- Society is starting a fund for the Lynn Bellinger Endowment that will pay \$5000/yr to an energy modeling related interest
- Jay Sullivan made a motion was made for a \$425 commitment to the endowment. Clif Upham seconded the motion and it was approved.
- The Fort Worth chapter will start a separate endowment for Tom Romine

#### Special Events (Rath)

The golf tournament will be held on Oct 29<sup>th</sup> at Great Southwest

#### **Student Activities (Bost)**

• A TCU student meeting was held in order for the Fort Worth officers to meet the TCU student chapter offices

#### Webmaster (Pace)

Nothing to report

#### Government Affairs (Merkel / Long)

Dan and Richard will attend a Sept 26<sup>th</sup> meeting

#### Outreach (Open)

Nothing to report

#### Sustainability (Open)

Nothing to report

#### Closing

• JS Motion to adjourn at 11:27

# September Meeting Minutes - General Business

#### Call to Order at 12:02

#### **New Business**

- Approve Meeting Minutes for last month
- No new members this past month.
- Reach out to your friends and neighbors and bring them with you!
- One new Student Member: Samuel Batista with Texas Tech
- Three TCU student members and their Faculty Advisor are here today
  - \$500 Scholarships were handed out to the following:
    - Nicola Eastaway
    - Stephen Thomas
    - Bobby Grainger
    - Philip Anderson
- Student Activities
  - o Volunteers needed
- Erin Up Lift
  - Volunteers are needed for a program that mentors DISD and FWISD students in their transition through school into college
  - Erin has information and anyone interested can leave a business card.

#### **Special Events**

• Golf Tournament - 10/29 Great Southwest,1:30 shotgun start

#### **Research Donor Recognition**

#### **Program**

• Introduce speaker – Noel Marcial, Water Management Specialist with Crown Solutions

#### Presentation

- Zero Liquid Blowdown Technology for Cooling tower system:
- 1. Water use in Cooling tower
- 2. Discharge reduction with chemicals that create a coating on the material
- 3. LEED
- 4. Cooling Water Blowdown
- 5. Scale and corrosion prevention

#### Closing

- Reminder Next month's meeting is in the same location.
- Please fill out those speaker evaluation forms.
- Motion to close by Tony Finch at 12:53

# Treasurer's Report - Clif Upham

STARTING BALANCE DATE NEW BALANCE DATE		9/1/2012 9/30/2012
Treasurer's Report	Cli	f Upham
Financial Data:		
Starting Balance (9/1/12):		\$ 8,313.03
Deposits:		
9/10/2012 - Refund for setup fee from Square	\$	0.49
9/20/2012 - Deposit from Square for September Luncheon payments		\$48.62
9/24/2012 - Deposit for September Luncheon Payments and August National Dues	\$	1,340.00
Subtotal:		\$ 1,389.11
Payments:		
9/10/2012 - Setup fee for Square	\$	0.49
9/19/2012 - Check #5283 to Marianna Vallejo for Student Membership Reimbursement		\$20.00
9/19/2012 - Check #5284 to Rick Eiland for Student Membership Reimbursement		\$20.00
9/19/2012 - Check #5285 to Nicola Eastway for Student Scholorship		\$500.00
9/19/2012 - Check #5286 to Philip Anderson for a Student Scholorship		\$500.00
9/19/2012 - Check #5287 to Stephen Thomas for a Student Scholorship		\$500.00
9/19/2012 - Check #5288 to Bobby Grainger for Student Scholorship		\$500.00
9/19/2012 - Check #5289 to Petroleum Club for Sep. Luncheon		\$1,391.57
9/19/2012 - Check #5290 to Petroleum Club for September Parking		\$55.00
9/19/2012 - Check #5291 to Saul Martinez for TCU Student Chapter Luncheon Food		\$92.12
9/21/2012 - Check #5292 to ASHRAE Headquarters for Student Memberships		\$60.00
Subtotal:		\$ 3,639.18
New Balance as of 9/30/12:		\$ 6,062.96

# Attend the ASHRAE Winter Conference – January 26-30, Dallas, Texas

### **CALLING ALL VOLUNTEERS!**

ASHRAE's winter meeting is coming to Dallas this January (26-30). If you are willing/able to serve as a monitor for the educational sessions you will receive complimentary registration for the conference (you would still have to pay for individual extras like the lunches). This is a serious commitment since you will be getting a \$300+ value, so we need for you to be prompt and diligent on your day of service.

- A monitor serves during the technical sessions to scan badges, take attendance, and to alert others is something is going wrong. We will provide training.
- The time commitment is from approximately 7:30 am to 12:30 pm on a single day (Sunday through Wednesday) or from 1 pm to 5 pm on Sunday or Monday.

Please contact me (jay.martin@mail.ashrae.org) if you are interested in serving. Monitor roles will be awarded on a first-come, first-serve basis – you will know for sure if you have been selected by early October.

Thank you for your interest and service to ASHRAE, Jay Martin Sessions Subcommittee Chairman 2013 Dallas Winter Meeting

# FORT WORTH ASHRAE FALL GOLF CLASSIC SPONSORED BY OSLIN NATION

MONDAY, OCTOBER 29, 2012

#### GREAT SOUTHWEST COUNTRY CLUB

612 EAST AVENUE J GRAND PRAIRIE, TX 75075 (972) 647-0114



FORMAT: COST: 4-Person Scramble, Shotgun Start at 1:30 P.M

\$125.00 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)

PART	ICIPANTS	<u>Sponsorship</u>		
CAPTAIN:		NUMBER OF PLAYERS	x \$125	5,00 = \$
CAPTAIN'S EMAIL:		Hole Sponsor Sign (\$150	0.00 PER HO	LE) = \$
Captain's Phone:		SPECIAL HOLE SPONSORSH \$250.00 - TABLE I		- \$
PLAYER #2:				
PLAYER #3:		NOTE: ALL SPECIAL SPONSORSHIPS COME WITH A		
PLAYER #4:				
	TOTALENCLOSED	D: \$		
(PI	LEASE MAKE YOUR CHECK PAYABLE T	O FORT WORTH CHAPTER OF A	SHRAE)	
E-MAIL, FAX OR MAIL E	NTRIES TO:			
	DAVID MUZZY			
	TCU			
	3589 BELLAIRE DRIVE NO	ORTH		
	TCU Box 297800			
	FORT WORTH, TX 76129	ì		
	Office: (817) 257-4928			
	FAX: (817) 257-7278			

THANKS FOR HELPING THE FORT WORTH CHAPTER OF ASHRAE RAISE MONEY FOR RESEARCH PROMOTION!

EMAIL: D.MUZZY@TCU.EDU

ALL SPONSOR ENTRIES DUE NO LATER THAN THURSDAY, OCT 18<sup>™</sup>.
ALL PLAYER ENTRIES DUE NO LATER THAN MONDAY, OCT 22<sup>™</sup>.

We will be contacting potential hole sponsors and preparing for the fall golf tournament this month.

Thanks, Sean

#### Research & Promotion – Richard Watters

I attended the Centralized Training for Research Promotion in September, and the fund raising campaign has started. Be ready to help Fort Worth continue to be a strong supporter of ASHRAE research! The Officers and Board of Governors have agreed to join the rest of Society in establishing the Lynn Bellenger Scholarship Endowment. Our Chapter will be donating \$425 to this fund, which will help fund scholarships every year for students interested in Energy Modeling.

Special Events, the Golf Tournament Chair, and I are meeting this week to outline our campaign for raising research dollars through the Fall Golf Tournament.

Thank you, Richard J. Watters, P.E.

# **New Guideline from ASHRAE Focuses on Smoke Control System Commissioning**

ASHRAE has added to its suite of commissioning guidance to ensure buildings and systems operate as intended with a new guideline on commissioning for smoke control systems.

Guideline 1.5-2012, The Commissioning Process for Smoke Control Systems, describes the technical requirements of the commissioning process described in ASHRAE's Guideline 0-2005, The Commissioning Process, to verify that the smoke control system achieves the owner's project requirements.

The guideline includes annexes that are based on actual project experience and current practice and illustrate application of the commissioning process for smoke control systems and components. It builds upon the concepts of Guideline 5, Commissioning Smoke Management System, and replaces it.

"Due to the integration and interdependency of systems, a performance problem in one system can result in less than optimal performance in others," Paul Turnbull, chair of the committee that wrote the guideline, said. "Although Guideline 1.5 focuses on smoke control systems, a successful building commissioning process validates the interoperability between all building systems. When smoke control is the primary focus of the commissioning process, coordination among disciplines is essential for success."

Other commissioning guidance from ASHRAE includes Guideline 0-2005, The Commissioning Process, which contains general requirements for the commissioning process of all building systems; and Guideline 1.1-2007, HVAC&R Technical Requirements for the Commissioning Process, which contains specific requirements for commissioning HVAC&R systems in Guideline 0-2005 that are unique to HVAC&R systems.

ASHRAE first began developing formal guidelines for commissioning in 1982, looking at documenting best practices to achieve facilities that perform according to an owner's needs and requirements. Its original guideline on commissioning was published in 1989.

ASHRAE also is working on several other guidelines and a standard related to commissioning: Guideline 0.2P, The Commissioning Process for Existing Systems and Assemblies; Guideline 1.2P, The Commissioning Process for Existing HVAC&R Systems; Guideline 1.3P, Building Operation and Maintenance Training for the HVAC&R Commissioning Process; Guideline 1.4P, Systems Manual Preparation for the Commissioning Process; and Standard 202P, Commissioning Process for Buildings and Systems.

The cost of Guideline 1.5-2012, The Commissioning Process for Smoke Control Systems, is \$54 (\$46, ASHRAE members). To order, contact ASHRAE Customer Contact Center at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, or visit www.ashrae.org/bookstore.

# Lighting Quality Requirements Proposed for Green Building Standard

Lighting requirements to enhance productivity and comfort of occupants have been proposed for a green building standard from ASHRAE, the U.S. Green Building Council (USGBC) and the Illuminating Engineering Society (IES).

ANSI/ASHRAE/USGBC/IES Standard 189.1-2011, Standard for the Design of High-Performance, Green Buildings Except Low-Rise Residential Buildings, provides a design standard for those who strive for high performance buildings. It covers key topical areas of site sustainability, water-use efficiency, energy ef-ficiency, indoor environmental quality and the building's impact on the atmosphere, materials and resources.

Proposed addendum m would add lighting quality requirements to the scope of the Indoor Environmental Quality section of the standard. The proposed addendum is one of nine proposed changes to Standard 189.1 open for public review from Sept. 14-Oct. 14, 2012. To comment on the proposed changes or for more information, visit www.ashrae.org/publicreviews.

"It has been clearly established that good lighting has a positive effect on the occupants of a building," Richard Heinisch, a member of the Standard 189.1 committee, said. "Or, looking at it from the opposite direction, when occupants are dissatisfied with their lighting, this can increase absenteeism and employee turnover which, in turn, decreases the sustainability of the enterprise. Any building, and particularly a high-performance building, should address issues of lighting quality (including visual acuity, task performance, visual comfort, health, safety and aesthetic judgment) so as to enhance the comfort and productivity of its occupants."

This particular addendum addresses a subset of the lighting quality issues with the expectation that future addenda will be developed to address remaining issues. Subsections 8.3.6.1 and 8.3.6.2 require that the occupants of certain space types be given some level of control over the light levels in that space. As pointed out in the foreword of the proposal, citing a research study on the effects of lighting on office workers: "Normally, the persistence and vigilance of office workers will decline over the course of a workday. However, the presence of personal control of their lighting increased subject motivation allowing workers to sustain their performance-they persisted longer on difficult tasks and were more accurate on a task requiring sustained attention."

A proposed third section, 8.3.6.2.1, ensures that certain media, such as whiteboards, are more likely to be properly illuminated by requiring separate lighting and lighting control for these surfaces, independent from the general lighting and control in the space.

The other addenda open for public review are:

- . Addendum h, which clarifies the requirements for a continuous air barrier in Section 7 (Energy Efficiency) as well as the requirements for airtightness commissioning in Section 10 (Construction Plans for Operation).
- . Addendum i, which modifies the climate zones to which the heat island section 5.3.2.3 (Roofs) applies.
- . Addendum j, which clarifies shading provided by vegetation for the site hardscape and walls for heat island mitigation (5.3.2.1 Heat Island and 5.3.2.2 Walls).
- . Addendum k, which updates the Section 7.4.3.7 (Variable-Speed Fan Control for Commercial Kitchen Hoods) to reference the language in ASHRAE/ANSI/IES Standard 90.1-2007, Energy Standard for Buildings Except Low-Rise Residential Buildings.
- . Addendum I, which adds Table C-17 to include the minimum transformer efficiencies for building designs following path B of Section 7.4.3.1 (Minimum Equipment Efficiencies).
- . Addendum o, which adds a new mandatory provision to Section 9 (The Building's Impact on the Atmosphere, Materials, and Resources), establishing maximum mercury content levels for certain types of electric lamps.
- . Addendum p, which removes the "Acceptance Testing" provision in Section 10.3.1.1 (Building Acceptance Testing) for small buildings.
- . Addendum q, which clarifies that system commissioning must include commissioning of the associated control systems.
- . Addendum s, which clarifies the requirements for outdoor airflow monitoring in Section 8 (Indoor Environmental Quality), along with operational requirements for such monitoring in Section 10 (Construction and Plans for Operation).

# **ASHRAE Announces Staffing Changes Related to Member Services**

Two senior management changes are being announced related to ASHRAE's Member Services Department.

Carolyn Kettering, who has served as ASHRAE's director of member services since 1986, is retiring. Joyce Abrams, who currently serves as group manager of education and certification, has been named to fill that position.

The director of member services supports volunteer leaders in the management of the Society's recruitment, promotion and retention program; the activities and programs of its 170-plus chapters and 14 regions; customer service; research promotion fundraising; and meetings and conferences.

# ASHRAE Announces Staffing Changes Related to Member Services (cont.)

Kettering was hired by ASHRAE in 1985 to serve as meetings manager. She was promoted to director of member services the following year. Her accomplishments during her tenure with ASHRAE include:

- Expansion of international members, chapters, regions, sections/groups/clubs and student branches
- Creation of Young Members in ASHRAE (YEA) membership program
- Expansion of Student Activities program to include Solar Decathlon, Engineers Week and Science, Technology, Engineering and Mathematics (STEM) activities
- Expansion of meetings and conferences to include Annual and Winter Conferences, specialty conferences and Chapter Regional Conferences support
- Expansion of Research Promotion activities with goal of \$2 million in contributions achieved

Prior to joining ASHRAE, Kettering served as the manager of meetings and conferences for the Atlanta-based Life Office Management Association (LOMA), an insurance and financial services association.

Abrams began work at ASHRAE in 2006, overseeing development and implementation of a certification program to help promote ASHRAE as a leader in industry education and professional development. She also serves as staff liaison to the Certification Committee and the Professional Development Committee.

Since that time, over 1,200 certifications have been issued through the Society's six certification programs: High-Performance Building Design Professional (HBDP); Building Energy Assessment Professional (BEAP); Building Energy Modeling Professional (BEMP); Commissioning Process Management Professional (CPMP); Operations & Performance Management Professional (OPMP); and Healthcare Facility Design Professional (HFDP).

Before joining ASHRAE, Abrams was an assistant vice president in the education and training division of LOMA where she oversaw the design and development of credentialing programs, courses and course materials and managed the development and/or production of up to 35 college-level textbooks or online courses a year.

A resident of Atlanta, Abrams has a master's of science degree in mass communications from Indiana University, and a juris doctorate and a bachelor's of arts degree in journalism from the University of Georgia.

# **ASHRAE Brings Technology, People Power in Support of Engineering for Change**

ASHRAE has joined forces with an international engineering program to encourage its members to use their knowledge and technology to meet humanitarian challenges across the globe.

ASHRAE is now a network supporter of Engineering for Change (E4C. E4C is a growing community of engineers, technology professionals, designers, scientists, non-governmental organizations (NGOs) and local community advocates who are working together to design, apply and share innovative and sustainable technical solutions to a broad range of humanitarian challenges in local communities around the world.

"By partnering with Engineering for Change, our members can contribute their knowledge and our technology to help improve the quality of life for people around the world," ASHRAE President Tom Watson said. "Our involvement allows us to match the technology to the need, to find affordable solutions that benefit communities and ourselves."

"We are delighted to welcome ASHRAE to the E4C coalition," Noha El-Ghobashy, president of Engineering for Change, said.
"ASHRAE's longstanding commitment to the promotion of engineering excellence in the service of sustainability and humanity makes it a natural ally for the work of the E4C coalition. We look forward to working together with ASHRAE and its distinguished membership for years to come."

The initiative is part of Watson's presidential theme Broadening ASHRAE's Horizons, which emphasizes the role of ASHRAE members as leaders in the application of sustainable design and practices in our communities worldwide.

Under E4C (<u>www.ashrae.org/e4c</u>), ASHRAE members can get involved with existing projects or start new ones. Watson noted that there is a wide range of projects - from refrigeration to hospitals to indoor air quality - to which members could contribute their technical expertise.

Watson also is encouraging ASHRAE members and chapters to examine ways to get more involved in their local communities. Another effort underway is ASHRAE's Community Sustainability Project program (<a href="www.ashrae.org/community">www.ashrae.org/community</a>), which is designed to encourage members to volunteer with local non-profits or other associations for activities such as engineering and installation of energy efficiency measures for their facilities.

# **Chapter Officers and Committee Chairs**

<u>OFFICERS</u>			
President	Daniel C. Merkel	414-807-0204	daniel.merkel@mail.ashrae.org
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TEGA/Grassroots	OPEN		
Public Relations	OPEN		
Sustainability	OPEN		
Outreach	OPEN		

# **THERM Subscription Management**

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Fort Worth Chapter of ASHRAE

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