



August 4, 2011: Vol. 54, No. 01

Produced by: Daniel C. Merkel
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



Welcome back for another great year of ASHRAE! We are off to a great start. We held our annual planning meeting last month. At that meeting, we talked about the focus this year, which revolves around the leadership of ASHRAE in our community and for our Chapter - in particular when it comes to motivating and working with our student chapters and local government. That will continue to be one of our focuses as we proceed through the year.

The 2010-2011 Chapter year was another very good year here in Fort Worth. Under the leadership of Ian Bost, we obtained the Golden Gavel for the second year in a row. This year, we have the Golden Gavel in our sights again for the first-ever three-peat. The Board of Governors (BOG) and I are looking to build on the success that Ian established and increase membership participation.

I am excited about this year and the opportunities that exist for ASHRAE to be leaders in our community when it comes to environmentally conscious designs and energy conservation. For me personally, ASHRAE helped fund the research I did at Texas A&M University, which was related to increasing the seasonal efficiency of heat pumps by enhancing fin design and improving the winter frost/defrost cycle. ASHRAE gave me the opportunity to take part in exciting research, travel to different Society Meetings to report on the research, and helped fund my time at A&M so I could get my Masters. This year is another chance for me to give back to ASHRAE through the leadership of our Chapter and establishment of programs to motivate our student chapters, government involvement, joint ventures with other similar groups in our area, and hopefully in finding ways to bring ASHRAE research to our partner Universities. I hope you will help me accomplish this and more!

If you have a story you would like to share about how ASHRAE has impacted your life or career, please email it to me or find me at a Chapter event. Also, if you have any suggestions for activities or technical sessions that you would like, please contact me or one of the other Chapter officers and let us know.

Thanks again for your involvement this year!
Sincerely,

Richard Watters
Chapter President

Next Chapter Meeting

**Hydronic Heating
And Cooling Systems
(Chilled Beams)**

August 17, 2011
11:30 A.M.

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

[Click here for map.](#)

August Program/Speaker Bio.

Speaker Info:

Samuel Frenette
Hydronic Products Application Specialist

Speaker Bio:

Samuel Frenette is a hydronic products application specialist with Price Industries in Winnipeg Manitoba. He has been in the Application Department with the company since 2010. Sam has extensive experience with Price in the selection and application of chilled beams as well as other green HVAC product such as radiant panels, under floor air distribution and displacement ventilation.

Sam graduated from Ecole Polytechnique in Montreal with a Bachelor degree in Mechanical Engineering with a specialization in Energy. He's currently an Engineer in Training with the Association of Professional Engineer and Geoscientist of Manitoba.

Presentation Outline:

Hydronic Heating and Cooling Systems (Chilled Beams) serves as a very Green friendly air distribution method which provides a comfortable indoor environment while supplying the fresh air ventilation and cooling requirements. This presentation concentrates on the following topics:

- 1) Background Information on types of overhead hydronic heating and cooling systems.
- 2) Overview of types of devices, theory and design parameters
 - a) Radiant Panels
 - b) Radiant Sails
 - c) Passive Beams
 - d) Active Beam
- 3) Architectural aspects of Hydronic Systems
- 4) Humidity Control
- 5) Acoustics
- 6) Air Quality

Board of Governors Meeting Minutes – July 2011

Minutes: 10:35am

Attendees: 8 Members: **Richard Watters, Clif Upham, Saul Martinez, Larry Akers, Dan Merkel, and Cody Pace.**

In this meeting, Richard presented to the board the overall agenda in order to obtain the Golden Gavel 3-peat. To help him do this, Sid has agreed to be the PAOE Czar in order to help make sure we are staying on task.

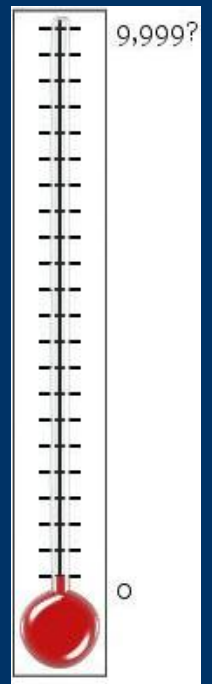
This year, the BOG will be more active and have specific MBO's.

We are currently still Looking for a Historian. If you are interested please contact your closest board member.

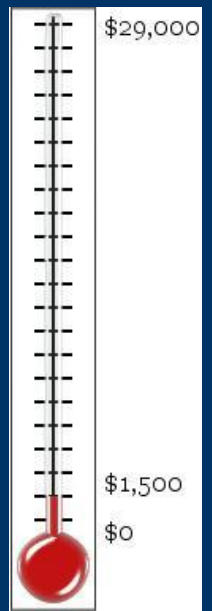
This year we are going to look for more student member involvement in our chapter. One idea is to have a student article in the Therm. We are also thinking about having a Welcome back to school event for the students as well.

Another area of focus for this year is to encompass ASHRAE Marketing. And more specifically, this means learning how to better market the ASHRAE brand.

PAOE Points



RP Dollars



Board of Governors Meeting Minutes – July 2011 (cont.)

This year it looks like our first Golf Tournament will be Nov. 2. This is going to be close to the Wed meeting in November because we are hosting a joint meeting Nov. 9

For those not on the web, we will need a picture – Business casual is preferred.
Research – our Goal is \$29k

Adjourned the meeting at 11:39am

Chapter Financial Report

STARTING BALANCE DATE	\$ 40,735.00
NEW BALANCE DATE	\$ 40,756.00

Treasurer's Report *Jay Sullivan*

Financial Data:

Starting Balance (7/11/11): **\$ 2,220.12**

Deposits:

6/2/2011 Online payment from Jacobs Engineering for May 2011 meeting	\$ 375.00
7/11/2011 May 30, 2011 Local Dues Paid By National	\$ 525.00
7/11/2011 May 18, 2011 Chapter Meeting Dues Paid by Eventbrite	\$ 125.00

Subtotal: \$ 1,025.00

Payments:

6/30/11 Check # 5279 Times Ten Cellars- June Meeting Past President Night	\$ 375.00
6/30/2011 Check # 5280 Matt Cater- June Meeting reimbursement for Times Ten	\$ 300.00

Subtotal: \$ 675.00

New Balance as of 8/1/11: \$ 2,570.12

Pending Deposits:

Local Dues Check from Society	\$ 950.00
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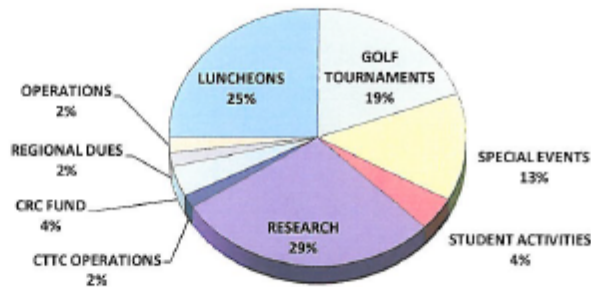
Chapter Financial Report (cont.)

'10-'11 CHAPTER BUDGET

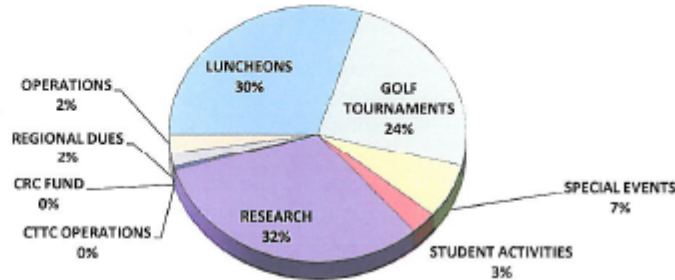
PRINTED ON: 07/26/1

INCOME				EXPENDITURES			
	PLANNED	TO-DATE	EAC		PLANNED	TO-DATE	EAC
DUES	\$5,500.00	\$6,915.00	\$5,500.00				
LUNCHEONS	\$13,500.00	\$16,895.00	\$13,500.00	LUNCHEONS	\$13,000.00	\$14,535.59	\$14,535.5
FALL GOLF TOURNAMENT	\$11,750.00	\$10,025.00	\$11,750.00	FALL GOLF TOURNAMENT	\$5,000.00	\$3,331.00	\$3,331.0
SPRING GOLF TOURNAMENT	\$11,750.00	\$14,610.00	\$11,750.00	SPRING GOLF TOURNAMENT	\$5,000.00	\$8,470.80	\$8,470.8
SPECIAL EVENTS				SPECIAL EVENTS			
WINTER PARTY	\$4,000.00	\$1,430.00	\$4,000.00	WINTER PARTY	\$5,500.00	\$3,333.73	\$3,333.7
PAST PRESIDENTS	\$1,500.00	\$0.00	\$1,500.00	PAST PRESIDENTS	\$1,500.00	\$0.00	\$0.0
SEMINAR	\$1,000.00	\$70.00	\$1,000.00	SEMINAR	\$0.00	\$0.00	\$0.0
SEMINAR	\$1,000.00	\$0.00	\$1,000.00	SEMINAR	\$0.00	\$0.00	\$0.0
WEBINAR	\$400.00	\$420.00	\$400.00	WEBINAR	\$0.00	\$0.00	\$0.0
WEBINAR	\$400.00	\$0.00	\$400.00	WEBINAR	\$0.00	\$0.00	\$0.0
SPORTING CLAYS	\$400.00	\$0.00	\$400.00	SPORTING CLAYS	\$0.00	\$0.00	\$0.0
ROSTER	\$775.00	\$900.00	\$775.00	STUDENT ACTIVITIES			
THERM ADVERTISING	\$900.00	\$390.00	\$500.00	MEMBERSHIPS	\$480.00	\$208.00	\$208.0
WEBSITE ADVERTISING	\$500.00	\$0.00	\$500.00	SCHOLARSHIPS	\$600.00	\$511.90	\$511.9
				PROMO MTGS	\$600.00	\$434.00	\$434.0
				ALLOWANCE	\$500.00	\$265.74	\$265.7
				RESEARCH			
				FALL GOLF TOURNY	\$6,750.00	\$6,629.00	\$6,629.0
				SPRING GOLF TOURNY	\$6,750.00	\$8,734.20	\$8,734.2
				SPORTING CLAYS	\$350.00	\$0.00	\$0.0
				CHPTR DONATION	\$1,000.00	\$0.00	\$0.0
				CTTC OPERATIONS			
				DL EXPENSE	\$600.00	\$242.30	\$242.3
				SEMINAR SETUPS	\$250.00	\$0.00	\$0.0
				CRC FUND	\$2,000.00	\$0.00	\$0.0
				REGIONAL DUES	\$870.00	\$870.00	\$870.0
				OPERATIONS	\$1,000.00	\$1,171.05	\$1,171.0
				RETURN BALANCE	\$1,200.00	\$0.00	\$0.0
OUTSTANDING '09-'10 DEP.	\$0.00	\$0.00	\$0.00	OUTSTANDING '09-'10 EXP.	\$0.00	\$0.00	\$0.0
TOTALS	\$52,975.00	\$51,655.00	\$52,975.00	TOTALS	\$52,950.00	\$48,737.31	\$48,737.3

'10-'11 PLANNED EXPENDITURES



'10-'11 ACTUAL EXPENDITURES



Committee Reports

Research Promotion

- We are off to a great start this year and have already collect \$1,500.
- Rhamy, the research promotion regional vice chair (RP RVC), was given our anticipated a RP goal of \$29,000. This equates to \$100 per area assigned chapter member. Our actual goal will not be established until the RP Centralized Training
- I will be attending the RP Centralized Training in August. The date is August 13 and the event will be at the Hyatt Rosemont in Rosemont Illinois.
- I have asked Matt Carter to help with the golf tournaments again this year.
- Matt and my goal is to get the first official notice of the tournaments out to the members two months prior to the event. The notice will include the date and location. The specifics on the tournament will be released one month prior to the tournaments (Costs, Time, Food, Prizes, etc.). We are also looking to have more corporate sponsors for the tournaments, product trailers, etc.

Sincerely,

Ian Bost
Fort Worth ASHRAE, Research Promotion Chair

Special Events

I met with the President Elect, Richard Watters, to discuss some of the goals for the upcoming year.

We will be selecting committee members to assist with special events prior to the August meeting.

Thanks,
Sean Rath

Student Activities

Summer vacation!

YEA Committee

No update.

What is Energy Use Intensity? ASHRAE Seeks to Define, Educate

ATLANTA – While the importance of building energy performance metrics to reduce energy use is accepted worldwide, there is no single generally accepted definition of that metric. Currently, proposed relative energy use reduction targets are subject to interpretation and difficult to verify.

Under a new initiative, ASHRAE is working to define one clear, logical metric to move the building industry toward producing net zero energy buildings by 2030. The U.S. Congress has mandated a series of relative fossil fuel energy use reductions in federal buildings ending in a 100 percent reduction of fossil fuel energy by 2030. Congress is considering applying similar relative energy use reductions in all buildings through the use of building energy codes adopted by state and local government.

“We must address buildings as entire living entities,” ASHRAE President Ron Jarnagin said. “As such, we need to establish energy targets for building design that provide a total building energy use goal to strive toward that can subsequently drive the development and application of any number of prescriptive solutions.”

A forum seeking input on the energy target initiative was held at ASHRAE’s 2011 Annual Conference in Montreal, June 25-29. Also, ASHRAE has developed a public policy brief asking Congress to foster collaboration among the U.S. Department of Energy, the National Institute of Standards and Technology and the U.S. Environmental Protection Agency and ASHRAE along with partner organizations to:

What is Energy Use Intensity? ASHRAE Seeks to Define, Educate (cont.)

- Establish a single objective definition of energy use intensity (EUI) for the design of commercial buildings
- Determine a single objective baseline EUI for design of commercial buildings from which to measure relative energy use reductions
- Create a performance environment that will support reduction in energy consumption associated with all loads in commercial buildings
- Identify a single objective set of commercial building types and simulation models for establishment of target design EUIs
- Produce one set of design target EUIs for the commercial building sector to guide the development of future energy codes and standards and building energy codes adopted by state and local government

“EUIs are very helpful for setting performance-based design goals,” Jarnagin said. “The current focus on reduction of energy use in building stock has made the use of EUIs popular by governmental organizations, non-government organizations and building industry groups, including ASHRAE. Given that there is no clear single definition for EUIs, comparing one organization’s EUI goals to another’s is confusing, particularly since everyone tends to use the same units, kBtu/ft²-yr. Our goal is to develop and promote technical tools to assist the commercial building design and construction industry in moving toward higher performing buildings. Defining design energy use targets is a large part of achieving that goal.”

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ASHRAE has certified more than 1,000 HVAC professionals (cont.)

ASHRAE selects experts to write its certification exams, which test understanding of the associated bodies of knowledge. Courses on related topics are offered by ASHRAE to bring you up to date, but are not required.

Names and firms of all certification earners are listed on the ASHRAE website and earners are permitted to use ASHRAE's certification credentials with their names and on company websites.

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ASHRAE Names New Distinguished Lecturers

ATLANTA – ASHRAE has named 12 new Distinguished Lecturers who provide Society chapters with noted authorities and speak on relevant topics that impact the HVAC&R industry.

This marks the 12th year of the Distinguished Lecturer Program, with over 1200 lectures given since the program began in 1999. The total 75 Lecturers for the 2011-12 Society year represent 13 countries, including Argentina, Malaysia, Colombia, Hong Kong, Egypt, India, Thailand, Canada, Singapore, Mexico, Taiwan, Sri Lanka and the United States. These lecturers are available to present on 324 topics and speak a combined nine languages.

ASHRAE Names New Distinguished Lecturers (cont.)

The new lecturers and their presentation topics are:

- Qingyan (Yan) Chen, Ph.D., Purdue University, West Lafayette, Ind.—“Computational Fluid Dynamics for Indoor Environment Modeling: Past, Present, and Future;” “Designing Healthy, Safe, and Energy-Efficient Buildings;” and “Low Carbon and Energy Efficient Green Buildings.”
- Arthur Hallstrom, P.E., ASHRAE Certified Building Energy Modeling Professional, AD Hall and Associates, Lexington, Ky.—“Where are we headed?”
- Sheila Hayter, P.E., National Renewable Energy Lab, Lakewood, Colo.—“Integrating Renewable Energy Systems into Buildings.”
- Kishor Khankari, Ph.D., Syska Hennessy, Ann Arbor, Mich.—“Design and Analysis of Natural Ventilation Systems;” “Stratified Air Ventilation Systems;” “Application of Computational Fluid Dynamics (CFD) for Built Environment;” and “Airflow Management Best Practices for Data Centers.”
- Peter Simmonds, Ph.D., IBE Consulting Engineers, Sherman Oaks, Calif.—“Designing Comfortable Buildings;” “Radiant Systems for Occupant Comfort;” “High Performance Buildings and Occupant Comfort.”
- Kuan-Hsiung “Jerry” Yang, Ph.D., National Sun Yat-Sen University, Kaohsiung, Taiwan—“The Green HVAC Concept – HVAC System Renovation in Existing Buildings;” “Energy Auditing and Diagnostics in Existing Commercial Buildings using BEMS, and Residential Buildings using HEMS;” “Design Analysis of Smoke Management and Egress Systems in Malls, Atria, and Large Spaces;” “Design Analysis on Tunnel Ventilation under Emergency Operation Modes.”
- Chandana Dalugoda, Chandana Dalugoda Consultants, Piliyandala, Sri Lanka—“Air Conditioning Systems for Tropical Humid Climates,” “Applied Psychometrics for Air Conditioning Systems,” “Cooling Load Calculations ASHRAE CLTC/SCL/CLF Method”
- Eckhard Groll, Ph.D., Purdue University, West Lafayette, Ind.—“Update on Refrigerants: Past, Present and Future,” “Review of Compression Concepts for Heat Pumping, Air Conditioning and Refrigeration Applications”
- José Frias Lavalley, Dhimec Sa Cv, Mexico City, Mexico—“Expansion, Pressurization and Control of the Air in Hydronic Systems,” “Hydraulic Principles,” “Hydronic Systems,” “Installation, Operation and Maintenance of Centrifugal Pumps,” “Potable Hot Water Supply Systems,” “Selection of Centrifugal Pumps,” “Thermodynamic Principles of Heat Exchange” and “Variable Speed Pumping Systems”
- Kirk Mescher, P.E., CM Engineering, Columbia, Mo.—“Geo-Exchange 101—Owners, Architects & Engineers—What They Need to Know,” “12 Steps to Improved Geo-Exchange System Design & Performance” and “Outside Air Systems for Geo-Exchange.”
- Ross Montgomery, P.E., ASHRAE Certified Building Energy Assessment Professional, Building Energy Modeling Professional and Commissioning Process Management Professional, QST, Palmetto, Fla.—“ASHRAE ‘BeQ’ Energy Labeling Program—Overview.”
- Raymond Patenaude, P.E. ASHRAE Certified Commissioning Process Management Professional, The Holmes Agency, Tierra Verde, Fla.—“Fundamentals of Building Envelopes in Hot and Humid Climates.”

For a complete listing of Distinguished Lecturers and detailed procedures on how to arrange a lecturer presentation, visit www.ashrae.org/distinguishedlecturers.

For additional information, contact Rosy Douglas, manager of chapter programs, at rdouglas@ashrae.org or 678-539-1128.

New ASHRAE Research Program Grant Fosters Development of Innovative Technology

ATLANTA – A new research grant from ASHRAE will provide seed funding for novel research deemed to have the potential to significantly advance the state-of-the-art in HVAC&R.

The ASHRAE Innovative Research Grant is designed to encourage out-of-the box research to complement the research proposed and guided by the Society's technical committees. The award carries a base grant of \$50,000 per year for two years, with an additional \$25,000 available in the third year if matched by an industrial contributor. Pre-proposals are due Sept. 1.

"ASHRAE wants to foster the development of new and innovative technology and/or analysis tools," James Braun, Ph.D., P.E., recent chair of ASHRAE's Research Administration Committee that oversees the grant, said. "Most current research related to HVAC&R is prescriptive and geared toward addressing specific issues or problems that are common within the field. Typically, the focus is on existing technologies or tools. However, new technologies and tools don't always build directly on existing approaches. Our hope with this grant is to encourage out-of-the box research that will result in successful projects, which lead to additional research and development down the road and ultimately to adoption of new technologies and tools that can make an impact within the field."

The program criteria are based on novelty of the research; importance of the problem; potential for success; student involvement; and cost sharing. Pre-proposals are due Sept. 1 and should be submitted to Michael Vaughn, ASHRAE's manager of research and technical services, at mvaughn@ashrae.org, and should include "ASHRAE Innovative Research Grant Submission" as the subject line in the message. For more information on the program, visit www.ashrae.org/research and click on the link for "ASHRAE Innovative Research Grant Program."

Chapter Officers and Committee Chairs

Officers

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Special Events	Sean Rath	(817)338-1277	srath@bhinc.com
Webmaster	Cody Pace	(817)338-1277	cody.pace@mail.ashrae.org

Editor's Notes

First there was Frank Gannett, Walter Burns, Perry White, and now Dan Merkel. As the newly ordained editor-in-chief of Fort Worth ASHRAE's monthly publication, The Therm, I will take great pride as I deliver up-to-date and riveting content to the masses.

There are some immediate additions to the pages below you will soon see including a section briefing the latest and greatest from the National ASHRAE (Society). Feel free to provide any feedback you have good, bad or indifferent as we aim to enhance your reading experience.

I look forward to helping the entire Therm staff to better serve the public through this wonderful publication.

-Dan
Editor-in-Chief The Therm

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