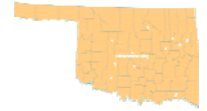




Official Newsletter of  
the  
Central Oklahoma  
Chapter of the  
ASHRAE, Inc.



Volume 69, Number 8

<http://ashraecok.org>

March 2009

**FEBRUARY MEETING:**

**Wednesday, March 11th  
Refrigeration Field Trip to  
Sandridge Tower**

Lunch Meeting:  
11:30 AM to 1:00 PM

Meet at: **Bricktown Brewery**  
1 North Oklahoma, OKC, 73104  
& trolley to Sandridge Headquarters

Additional Parking at Federal Corp.  
See next page.

Check out the New  
**Central Oklahoma Roster**  
<http://www.ashraecok.org/ashrae/chdir>  
Password: **ashraeOKC2008**

**Upcoming Events**

March Chapter Meeting.....	Mar 11
March Board of Governors Mtg ....	Mar 23
April Chapter Meeting.....	Apr 8
April Board of Governors Mtg .....	Apr 27
May Chapter Meeting.....	May 13
May Board of Governors Mtg .....	May 25

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**President's Message**  
By Grant Flurry

Let's go on a tour!! Our next Chapter meeting on March 11 will be on the "road less traveled". We've decided it was time for a change of scenery. I don't want our members getting too comfortable trekking to The Center every month so we're spicing it up a bit. Our lunch meeting will be held at the Bricktown Brewery. We'll have lunch & hear a brief presentation on the variable refrigerant system recently installed in the renovated Sandridge building. After lunch, we will ride the OKC Bricktown Trolley over to Sandridge for a short tour of the building. After the tour, we'll catch the Trolley back to the Brewery. ASHRAE is picking up the tab for the Trolley. There's parking behind the Brewery or you're welcomed to park in the lot North of Federal Corporation. This should be a fun meeting.....I hope you can attend!!!

CRC is coming up in April. The dates are April 23-25 in Lubbock. The Lubbock chapter has a website up with information regarding registration, hotel, travel, etc. The site is [www.crclubbock.com](http://www.crclubbock.com). Thursday is golf or sporting clays & the meeting kicks off Thursday evening with an opening dinner. Meetings run through Saturday. We'll have a good sized group from Central Oklahoma. Let me know if you have any questions.

Another upcoming event will take place at Benham's office on April 22. It's a 3 hour satellite broadcast entitled "Clean, Lean, & Green: IAQ for Sustainable Buildings". Pizza lunch will be served. More details on this to follow.

I look forward to seeing you all on March 11 at The Bricktown Brewery. Thanks for helping make Central Oklahoma great!!

**Next Meeting: Wednesday, March 11**



## **Come Join us At**



1 North Oklahoma, Oklahoma City, 73104

405-252-2739

### **March 11th, 2009**

**11:30 A.M. – 1:00 P.M.**  
(BUFFET LUNCH & TOUR)

**WE WILL BE TRAVELING BY TROLLEY TO:**

### **SANDRIDGE ENERGY**

LOCATED AT  
123 ROBERT S. KERR AVENUE

**FOR A TOUR OF THE  
NEW MECHANICAL VARIABLE REFRIGERANT  
FLOW SYSTEM**

**BE SURE TO LOOK FOR YOUR EVITE  
AND  
DON'T FORGET TO RSVP!**

**SPACE IS LIMITED**

Limited additional parking is available at Federal Corporation, at 120 East Main.

From Federal, walk West 1/2 block to Oklahoma Street. The Brewery is on the Northwest Corner of East Main and Sheridan.

Lunch is a buffet at the Bricktown Brewery. We will catch a trolley from the Brewery to Sandridge Headquarters in two groups.

## **ASHRAE Publishes Load Calculations Manual**

ATLANTA - Guidance to help designers improve the performance and efficiency of design as it relates to load calculations is contained in a new book from ASHRAE.

Load Calculation Applications Manual focuses on two methods for calculating cooling loads in non-residential buildings - the heat balance method and the radiant time series method (RTSM).

Author Jeffrey Spitler noted that understanding these methods is crucial when answering three primary design questions - what is the required equipment size; how do the heating/cooling requirements vary spatially within the building; and what are the relative sizes of the various contributors to the heating/cooling load?

"Cooling load calculations are performed primarily to answer the first and second questions, providing a basis for specifying the required airflow to individual spaces within the building," Spitler said. "Answers to the third question help designers make choices to improve the performance or efficiency of the design."

The new manual features in-depth examples, as well as bringing together the latest data for building materials, windows, weather and internal heat gains, according to Spitler. The accompanying CD contains spreadsheets that compute the factors needed by the RSTM and compute cooling loads with the RSTM.

The manual is the fourth in a series of load calculation manuals published by ASHRAE, including the first and second editions of Cooling and Heating Load Calculation Manual as well as Cooling and Heating Load Calculation Principles.

The cost of the Load Calculations Applications Manual is \$119 (\$97, ASHRAE members).

To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, or visit at [www.ashrae.org/bookstore](http://www.ashrae.org/bookstore).

ASHRAE, founded in 1894, is an international organization of some 50,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education

## **ASHRAE Publishes Updated Guidance for Buildings in Hot and Humid Climates**

ATLANTA – Expanded and revised guidance on keeping heat and humidity out of buildings in hot and humid climates is contained in a new book from ASHRAE.

The second edition of *The ASHRAE Guide for Buildings in Hot and Humid Climates*, is expanded from 124 to 316 pages and based on years of questions, comments and suggestions from practicing architects, engineers and building managers who work in hot and humid climates, according to author Lew Harriman.

The book includes four new chapters to guide architectural design toward reduced energy consumption, reduced mold risk and lower-cost mechanical systems. The HVAC&R design section has also been expanded. Six new chapters help system designers quantify and reduce cooling and dehumidification loads, design more economical ventilation systems and save more than 25 percent of annual HVAC&R energy through low-cost sealing of air distribution components. Suggestions for contractors are also provided to reduce mold risk and prevent scheduling problems through simple improvements to jobsite practices as well as through modern drying technology.

Chapter summaries allow building professionals to quickly understand the big picture issues and to understand the logic behind suggested best practices for hot and humid climates. The book also provides specific, actionable suggestions for implementing ASHRAE standards for comfort, ventilation and energy efficiency in parts of the world where high heat and humidity can occur at any time of the year.

The cost of *The ASHRAE Guide for Buildings in Hot and Humid Climates*, expanded second edition, is \$116, non-members (\$99, ASHRAE members).

To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, or visit at [www.ashrae.org/bookstore](http://www.ashrae.org/bookstore).

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# ASHRAE Member Helps Pioneer Open Heart Surgery

50 Years Ago – ASHRAE Central Oklahoma Chapter

By Alan Loeffler, Historian



William R. Johnson  
1958-1959

Chapter President,  
Bill Johnson

Although all AHSRAE members do their part in enriching society by helping provide pleasant and productive work and living environments, some occasionally go above and beyond. One example occurred 50 years ago through the life of one of our members. In a previous article we discussed the year 1958-59 and highlighted a few events. This article highlights the chapter president at the time, Bill Johnson. Like many good engineers Bill had a healthy curiosity, which led him into many interests and hobbies. One interest surfaced through contact with medical doctors in Oklahoma City doing pioneering work in open heart surgery. Bill ended up playing a small part in their success.

Bill's wife, Peggy Johnson, worked as a surgery nurse from December 1952 until 1960 for Dr. Allen Greer, the first board certified thoracic surgeon in Oklahoma. Dr. Greer had a passion to improve open heart surgery success, and Peggy helped him first do experimentations on dogs to develop procedures which would later be useful in surgery on humans. Peggy continued with Dr. Greer as a lab assistant and surgery



Nazih Zudhi, M.D. addresses Tech Session  
on "Sub-Cooling the Anatomy for Open-Heart Surgery"

Although this picture was taken in 1963 at a Central Oklahoma Chapter sponsored CRC, Bill Johnson (seated on the front row) had worked with research team in the late 1950's



Part of the medical exhibit at the Oklahoma History Center near the Capitol showing one early combination of equipment to handle blood and keep it at the proper temperature while an open heart procedure was tak-

nurse for many years. Dr. Greer first teamed with Dr. John Carey. Then later, he invited Dr. Nazih Zuhdi to join the team. Each of the three brilliant surgeons had his specialty, but Dr. Greer acted as the senior member of the partnership and kept the team together and focused.

Bill Johnson showed interest in what his wife was doing with the medial team, and developed a relationship with the three heart doctor pioneers. Along with non-medical inventor and businessman Garman Kimmell (founder of Kimray, an oil industry specialty company here in OKC), Bill offered his expertise in chemical pumping, plastic tubing, and temperature controls to help the team develop the equipment used in open heart surgery. Keeping the blood properly treated during surgery was their focus. The procedures and equipment developed in Oklahoma City were used all over the world. Although we see Dr. Nazih Zuhdi's name at Integris Baptist Medical Center associated with the Transplant Institute, Peggy has told me that a large team of dedicated professionals rightfully should be credited. This team helped put Oklahoma City on the map as a prime location along with locations in New York, Cleveland, and Minneapolis in heart re-

search. *And ASHRAE was there....50 years ago through one of our members!*

Recently, I asked Peggy Johnson, Bill's widow, to join my parents, sister and me at the Oklahoma History Center near the Capitol to see the medical exhibit which has some of Bill's "fingerprints" on it. We enjoyed hearing "the rest of the story" in addition to what is shown at the exhibit. Peggy enjoyed talking about some of her ASHRAE friends, and would enjoy hearing from other ASHRAE folk.

There are lessons for the rest of us ASHRAE members. Branch out. The engineering principles we use every day apply to other disciplines. We should not hesitate to be curious and offer our time and ideas to solve problems which we encounter outside our HVAC world. Many new ideas come from "cross pollination" with other disciplines. And... if you have stories from your life or other ASHRAE members which you would like to share, please let me know. We all need the encouragement with comes from real life examples.



Peggy Johnson (standing on right) discussing the early heart procedure research with Louis and Dorris Loeffler (seated) and daughter Patsy Driskill.

**Central Oklahoma Chapter  
Cash Flows 7/1/2008 thru 8/25/2008**

**Inflows**

Interest Income	62.04
Membership Dues	
From Society	640.00
<u>Total Membership Dues</u>	<u>640.00</u>
Receipts, Chapter Meals	
FEB '09	680.00
JAN '09	398.00
<u>Total Receipts, Chapter meals</u>	<u>1078.00</u>
Total Inflows	1780.04

**Outflows**

Chapter Meals/Meeting Exp	
FEB 09	928.85
JAN 09	1350.00
MAR 09	50.00
<u>Total Chapter Meals/Meeting Exp</u>	<u>2328.85</u>

Miscellaneous

Gifts	75.05
<u>Total Miscellaneous</u>	<u>75.05</u>

Research Contributions

2008-2009	5800.00
<u>Total Research Contributions</u>	<u>5800.00</u>

Scholarship

2008-2009	5800.00
<u>Total Scholarship</u>	<u>5800.00</u>

Web Fees	25.00
Total Outflows	14028.90

**Income less Expenses (12248.86)**

**Central Oklahoma Chapter  
ASHRAE Balance Sheet 2/22/2009**

**Account Assets**

**Total**

Bank & Cash Accounts	
Bank of the West CD01	0.00
Bank of the West CD02	0.00
Checking—BOK	4820.21
Petty Cash Meeting Meal Change	0.00
Undeposited Funds	0.00
Total Bank and Cash Accounts	4820.21

Other Assets

Accounts Receivable—old	0.00
Total Other Assets	0.00

Accounts Receivable

Accounts Receivable	0.00
Total Accounts Receivable	0.00

Investment Accounts

Bank of Oklahoma CD03	4207.31
Bank of Oklahoma CD03 (Cash)	0.00
Total Investment Accounts	4207.31

Total Assets 9027.52

Liabilities

Other Liabilities

Prepaid Meals	0.00
Total Other Liabilities	0.00

Tax Liabilities

Sales Tax	0.00
Total Tax Liabilities	0.00

Total Liabilities 0.00

Net Worth 9027.52



# ASHRAE

Technology for a Better Environment

## CENTRAL OKLAHOMA CHAPTER

### BOARD OF GOVERNORS MEETINGS 2008-2009

<u>Month</u>	<u>Year</u>	<u>Date</u>	<u>Time</u>	<u>Location</u>
June	2008	Monday June 23	Noon	Hometown Buffet
July	2008	Monday July 28	Noon	Hometown Buffet
August	2008	Monday Aug 25	Noon	Hometown Buffet
September	2008	Monday Sept 29	Noon	Hometown Buffet
October	2008	Monday Oct 27	Noon	Hometown Buffet
November	2008	Monday Nov 24	Noon	Hometown Buffet
December	2008	Monday Jan 5	Noon	Hometown Buffet
January	2009	Monday Jan 26	Noon	Hometown Buffet
February	2009	Monday Feb 23	Noon	Hometown Buffet
March	2009	Monday Mar 23	Noon	Hometown Buffet
April	2009	Monday Apr 27	Noon	Hometown Buffet
May	2009	Monday May 25	Noon	Hometown Buffet

### CHAPTER MEETINGS 2008-2009

<u>Month</u>	<u>Year</u>	<u>Date</u>	<u>Time</u>	<u>Location</u>
August	2008	Weds Aug 13	11 am-1 pm	The Center
September	2008	Mon, Sept 22	12 pm-6 pm	Rose Creek Golf Club
October	2008	Weds Oct 8	11 am-1 pm	The Center
November	2008	Weds Nov 12	11 am-1 pm	The Center
December	2008	Weds Dec 10	11 am-1 pm	The Center
January	2009	Weds Jan 14	11 am-1 pm	The Center
February	2009	Weds Feb 11	11 am-1 pm	The Center
March	2009	Weds Mar 11	11 am-1 pm	Sandridge Tower
April	2009	Weds Apr 8	11 am-1 pm	The Center
May	2009	Weds May 13	11 am-1 pm	The Center

## OFFICERS

<b>President</b>	<b>Grant Flurry</b>	<b>239-7320 (Ext. 253)</b>
<b>President Elect</b>	<b>Pete Ray</b>	<b>271-2121</b>
<b>Secretary</b>	<b>Alejandro Garcia</b>	<b>478-5353 (ext. 1384)</b>
<b>Treasurer</b>	<b>Shaun Sexton</b>	<b>236-2030</b>

## BOARD OF GOVERNORS

Tom Determan	947-6626
Mark Furgason	948-1794
Jason Keyes	787-4390
Jim Stengle	553-3680
Joe Sanders	947-6502
Trapper Wilson	525-7722

## COMMITTEE CHAIRS

Attendance	Jenny Haltom	528-7266
Government Affairs	<b>TBD</b>	
Historian	Alan Loeffler	239-7320 ext.234
Membership	Chris Filson	340.7890
Devotional	Alan Loeffler	239-7320 ext 234
Refrigeration	Pete Ray	271-2121
Research Promotion	Bob Vermillion	843-9788
Roster	Dusty Stoabs	842-9556 ext 214.
Student Activities	Aruna Abhayagoonawardhana	525-7722
Scholarship	Harry Rountree	528-7266
Publicity	<b>TBD</b>	
Sou'Wester	Art Murnan	664-3237
Special Events	Bob Carson	632-6664
Webmaster	Art Murnan	664-3237
Technology Transfer	Bruce Albertson	525-7722
Reception	Jim Wolfe	842-3373
CRC Delegate	Harry Rountree	823-5008
CRC Alternate	Aruna Abhayagoonawardhana	525-7722



Technology for a Better Environment

Central Oklahoma Chapter  
PO Box 18269  
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Are you on our email list?  
Comments?, Suggestions?  
Articles?  
[amurnan@acallp.com](mailto:amurnan@acallp.com)

Central Oklahoma  
**SOU'WESTER**