



The Razorback Report

www.arkansasashrae.org

Volume XXI, Issue 4, December 2009

Arkansas Chapter Newsletter for the American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.

DECEMBER MEETING

Central Arkansas

Date: Wednesday, December 2
Location: UAMS West Central Energy Plant
Cost: \$15 / Each Person
Schedule:
11:30am Plant Tour

Northwest Arkansas

Date: Thursday, December 3
Location: AQ Chicken, Springdale
Cost: ~\$12 / Each Person
Schedule:
11:30am Lunch
12:00-1:00pm Program - Refrigeration

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THE PRESIDENT'S MESSAGE

By Chris Ahne



out by speaking at one of your kids' schools.

By the time you read this, we will have our 3rd YEA event. Mark Mizell is doing a great job and has enthusiasm for organizing these social events. Please help Mark keep this going by participating in a YEA event. I think engaging our younger members is the best way to sustain our future as a strong and viable chapter.

Lee Greeson is delivering a high-quality newsletter every month and is excelling at getting articles from committee members and still getting the newsletter out on time. This past editor understands how difficult that can be. Let Lee know that you appreciate the hard work that he puts into the newsletter.

How many people visit the chapter website? You can find it at www.arkansasashrae.org. I am thankful that our webmaster Haidara Agalheir (we call him A.D.) is keeping a well-maintained website. Did you know that there are a lot of links from our website that are shortcuts to ASHRAE's website for membership renewal and research promotion contributions? A.D. also keeps past newsletters, current meeting schedule, and speakers notes from past monthly programs.

I have a lot to be thankful for this year in my business and in my personal life. I also thankful for things going on in our ASHRAE Chapter. All of our committees are continuing the excellence that that you have come to expect.

Steve Keen is doing a great job with programs. Our average meeting attendance is up over 20% from last year. Our next meeting is a facility tour of a central plant that is the largest central plant constructed in many years and has a significant amount of innovation. Next year we are going to hear speakers on ACT 1494, and ASHRAE Std 170 for Healthcare Ventilation and ASHRAE Std 189 on sustainability.

I'm also thankful for our continued focus on Student Activities. Forrest Moseley indicated that our ATU student branch had a big meeting last month and UALR had a number of new student applications. Forrest is going to be planning some E-week activities in February, reaching out to K-12 students. Please let Forrest know if you are interested in helping

I would be remiss if I didn't mention the hard work that Landon Lay does in keeping the NW Section meetings going every month. His monthly meeting attendance has also increased and he attributes this to lunch meetings. Look for future announcements from

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MONTH	MEETING TOPIC	SPEAKER	SECTION	DATE	LOCATION	MEETING DESIGNATION
SEPT	Shared Savings/ Performance Contracting	Tim Staley Com- fort Systems USA Energy Services	Central	09/02/09	Camp Aldersgate	
			NWA	09/03/09	AQ Chicken	
OCT	Integrated Pro- ject Delivery	Mark Beach CDI Construction Co	Central	10/07/09	Camp Aldersgate	Joint Meeting with AIA
			NWA	10/08/09	AQ Chicken	
NOV	Laboratory Venti- lation	Tony Rossi Greenheck Fan Corporation	Central	11/04/09	Camp Aldersgate	
			NWA	11/05/09	AQ Chicken	
DEC	Tour UAMS West Central Energy Plant	N/A	Central	12/02/09	7th & Palm Streets	Refrigeration
	Refrigeration	Richard Royal Walmart	NWA	12/03/09	AQ Chicken	
JAN	ACT 1494	Ed Ellis AR Dept. of Energy	Central	01/06/10	Camp Aldersgate	Government Affairs
			NWA	01/07/10	AQ Chicken	
FEB	ASHREA Standard 170 Healthcare Ventilation	Tony Rousseau Newcomb & Boyd	Central	02/03/10	Camp Aldersgate	
			NWA	02/04/10	AQ Chicken	
MAR	ASHRAE Standard 189 High- Performance Buildings	Lynn Bellinger	Central	03/03/10	Camp Aldersgate	Sustainability
			NWA	03/04/10	AQ Chicken	
APR	TBD	TBD	Central	04/07/10	Camp Aldersgate	
			NWA	04/08/10	AQ Chicken	
MAY	N/A	N/A	Central	05/05/10	TBD	Past Presidents Recognition
			NWA	N/A	N/A	

ARKANSAS CHAPTER MEETING MINUTES

Board Meeting of November 4, 2009

Bill Simpson—Secretary

Officers and Board Members Present

Chris Ahne, President
 Steve Keen, President-elect/CTTC
 Marc White, Treasurer
 Bill Simpson, Secretary
 Kim Koch, BOG
 Marc Cathey, BOG

Committee Chairs Present

Steve Titus, Historian
 Forrest Moseley, Student Activities Chair
 Mark Mizell, Student Activities/YEA Sub-chair
 Lee Greeson, Newsletter Editor
 Joel Funkhouser, Membership Chair
 Micah Spahn, Membership Co-chair
 Terry Jacks, Reception Chair
 Tony DeMarco, Social Chair
 Tom Hanlon, Continuing Education Chair
 AD Agalheir, Webmaster

Distinguished Guests

Ken Fulk, ASHRAE Region VIII DRC

Board Meeting Minutes

Chris Ahne called the meeting to order at 10:35 a.m.

Terry Jacks requested new nametags for chapter meetings and explained that he had been working with Chris to get those ordered.

Chris praised the chapter leadership for updating PAOE points and reminded everyone of the importance of PAOE in motivating chapter leadership as well as earning recognition at CRC. Chris then asked if there was anyone that wanted to go to CRC but would need financial assistance from the chapter. He encouraged people to ask their respective employers to what extent they'd be willing to support each individual for the trip to Monterrey. Ken Fulk added that the region's leadership is considering having a reduced cost one day registration package for CRC. He also pointed out that the region reimburses travel for certain positions in the chapter leadership.

Steve Keen asked Ken about other chapters' experiences with using Survey Monkey for issuing PDH certificates as an incentive for members to complete surveys after chapter meetings. Ken recommended Steve contact

Kristen Schaffer from the East Texas chapter. Steve added that Survey Monkey had begun assessing a \$20/month fee for certain features that would be required. Chris suggested the chapter could reinstate meeting sponsorships to offset that fee.

Steven announced that he was working on developing a slate of continuing education seminars. Current potential topics include Intro to BACNET, Designing Dedicated Outdoor Air Systems, Doing Business as an Engineer in a Down Economy and Life Cycle Cost Analysis. In response to the topic of Doing Business as an Engineer in a Down Economy, Ken noted that ASHRAE was looking into developing more 'soft topic' presentations. He also noted that he had seen some presentations on Engineering Liability. Steve wrapped up the continuing education update by announcing that Powers would be hosting the ASHRAE webinar, Right From the Start—Commissioning for High Performance Buildings, on April 22.

On the honors and awards front, Steve encouraged everyone to be on the lookout for potential award submissions. He also noted that the programs schedule was complete now that he has Lynn Bellinger lined up to speak on ASHRAE 189 in March. Steve announced that the next meeting will be at the UAMS new physical plant and that reps from each company will stand by their respective products during the tours.

Marc White distributed the Treasurer's Report and explained that he had talked to Chris Call and Rick Sellers about the audit committee and that the tax return was due November 15. Bill Simpson moved that we write the \$10,000 Arkansas Chapter Research Promotion check pending a chapter vote. Kim Koch seconded the motion and it was approved by acclamation. Kim then moved that we approve the Treasurer's Report; Mark Mizell seconded; the motion passed by acclamation.

Bill Simpson announced that the October meeting minutes were published in the November newsletter. Kim Koch

moved that we accept the minutes as published; Mark Mizell seconded; and the motion was approved by acclamation.

Tony DeMarco explained that he is in the process of investigating other venues other than Country Club of Arkansas for the golf tournament.

Forrest Moseley reported that he had made a couple presentations to 30+ students at UALR and anticipates receiving several new student membership applications. The meeting attendees praised Forrest's efforts in starting a new student branch at UALR. Forrest went on to report that the ATU student chapter sponsored a tour of the ATU physical plant and had 55 students attend. Lastly, Forrest announced the scholarship application deadline is December 1.

In the YEA committee, Mark Mizell announced that the next event will be held at Diamond Bear on Sunday, November 22 at 2:45.

Joel Funkhouser announced that the chapter currently has 10% membership delinquency. The membership committee started a delinquency campaign by calling those whose memberships have lapsed. He also announced that January will be dedicated as the membership meeting.

Kim Koch reported that the chapter has almost achieved Full Circle and the unofficial extended Full Circle. She encouraged all who could, to donate. Kim also plans to recognize RP donors via a rolling PowerPoint presentation at the December meeting.

Steve Titus reminded everyone to renew their passports for CRC and that he plans to submit articles for the December newsletter on honors and awards.

Lee Greeson set the newsletter article deadline at November 20 and encouraged Student Activities and YEA updates.

Ken Fulk concluded the meeting with a few notes. He reminded the leadership about President Elect training and announced that the CRC website is up

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January is Membership Promotion Month – bring a new guest to the January meeting!

Enroll as a new member during the month of December and win a door prize at the January meeting!

We're also encouraging eligible Associate Members to advance to Member status if you have at least 12 years of industry experience (advancement is free).

President's Message

(Continued from page 1)

Landon about meeting locations that can accommodate a larger crowd.

There are other committees that are vital to our chapter that are doing great. If you see someone that is volunteering their time in service to the chapter, be sure to thank them.

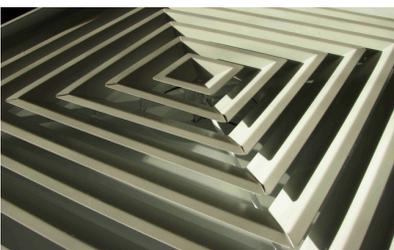
Happy Thanksgiving and don't forget the CRC is in Monterrey, Mexico! ☐

MEMBERSHIP REPORT

Joel Funkhouser—Membership Chair

I'd like to welcome our newest member, Walter Wills of Little Rock. I applaud you for your interest in the HVAC&R field and look forward to seeing you at our December meeting!

We have a strong chapter, and additional members will help to make us even stronger. ASHRAE offers invaluable resources to design engineers, contractors, and owners alike, and everyone that attends meetings is encouraged to seek membership to aid in strengthening our chapter. As always, if you have any questions pertaining to membership, please contact me and I'll be happy to assist you.



November Meeting Minutes

(Continued from page 3)

and will hopefully be well populated in the near future. Ken also explained that he intends to do a biannual regional newsletter. Finally, he praised the Arkansas Chapter and highlighted the chapter website.

Tech Session Minutes

Chris Ahne introduced Ken Fulk, Region VIII Director and Regional Chair (DRC).

Ken explained his role as DRC and illustrated the regional leadership hierarchy. He encouraged feedback regarding ASHRAE and explained that he is the link from Region to Society. Ken broke down the ASHRAE mission statement and detailed the key goals of the strategic plan.

Ken reviewed Region VIII explaining that it is 1 of 14 regions. There are 15 chapters and 6 sections in Region VIII along with approximately 3,419 members and 341 student members. Ken pointed out that Region VIII is widely regarded as one of the strongest regions in society.

ASHRAE as a society has an annual expenditure of approximately \$19 million. There are approximately 51,858 total members of which 43,392 are in the U.S. and Canada.

Ken plugged the ASHRAEjobs.com website and explained that it is the only employment service dedicated to the HVAC&R industry. Ken also highlighted ASHRAE's publications such as the Advanced Energy Design Guides and High Performing Buildings.

Ken concluded by reminding everyone of the ASHRAE winter and annual meetings and CRC.

Program Minutes

Chris Ahne explained that the chapter traditionally donates \$10,000 for ASHRAE research promotion and that it is time to do that again this year. Rick Sellers moved that the chapter write the check and John Hodoway seconded. The motion passed by acclamation.

Chris then introduced Tony Rossi from Greenheck Lab Exhaust Systems.

Tony very simply summarized the purpose of lab exhaust systems—to remove fumes. He then explained many of the standards that govern or guide lab exhaust systems. The most prevalent is ANSI/AIHA Z95. AMCA is a manufacturers' organization that provides third party verification. Tony stressed the need for engineers to ensure that they specify data from industry standards, not manufacturers. He also encouraged engineers to require fans to be tested as assemblies, not as individual wheels.

Tony then explained some of the requirements for various lab designs. Tony said that the minimum discharge velocity shall be 3000 fpm and stack height shall be no less than ten feet. He also pointed out that these requirements are not tied to any particular type of lab.

Tony mentioned that the industry is evolving from individual stacks for each hood to manifolded systems except for some systems such as perchloric acid exhaust systems. He then went on to show how high plume and induced flow fans work to entrain dilution air and create a much higher plume height.

Tony outlined many of the pros and cons of belt drive versus direct drive fans. While direct drive fans do not require belt maintenance, changing motors in a potentially hazardous air stream can be very difficult.

Tony discussed lab exhaust applications with energy recovery as a way to save energy. He discouraged enthalpy wheels and plate, frame heat exchangers and any other type of heat recovery device in which the exhaust and ventilation air streams are in close proximity. Instead he suggested coil run around loops as the best method for energy recovery.

Tony concluded by asking for questions.

Chris reminded the membership in attendance that the December meeting is a facility tour of UAMS on December 2 and adjourned the meeting. ☐

STUDENT ACTIVITIES

Forrest Moseley—Student Activities Chair

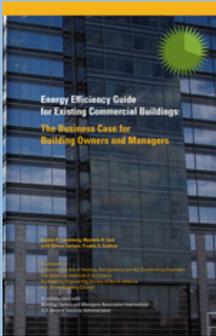
The October and November months for ASHRAE Student Activities was very eventful.

Arkansas Tech University held their first meeting at the end of October. Dr. Helmer reported approximately 55 students attended this meeting. At the meeting Mr. Brian Lasey (assistant director of the physical plant) gave a tour and explanation of the operation of the chillers, boilers, plate heat exchanger, and cooling tower, etc. of the Doc Bryant Student Center at ATU.

The University of Arkansas at Little Rock held their first ASHRAE Student Chapter kick off meeting on November 3. I held a presentation that provided prospective student members with information about ASHRAE and how a student membership can benefit them. We had enough applications turned in to submit for UALR to have their own Student Chapter. The last few steps is to submit the required paperwork to ASHRAE, the Members Council will then vote on this application at the Orlando Winter meeting, and once they are accepted it will become an official branch. They will then receive their official branch banner, certificate and manual of operations.



MAKING A CASE FOR ENERGY EFFICIENCY IN EXISTING BUILDINGS: NEW INDUSTRY PUBLICATION



ATLANTA - Improving energy use all comes down to green - the green of energy efficiency and resource sustainability as well as the green of money.

So, show them the money. Building owners and managers of existing

buildings need to understand the economic benefits of improving systems and operations. A new publication from leading industry organizations provides guidance for the business case to achieve energy savings as much as 30 percent.

Energy Efficiency Guide for Existing Commercial Buildings: The Business Case for Building Owners and Managers provides the rationale for making economic decisions related to improving and sustaining energy efficiency in existing buildings. Approximately 86 percent of U.S. annual building construction expenditures relate to renovation of existing buildings vs. new construction.

"Our goal is to enable business owners to break down the 'mystery' of energy conservation opportunities into business-based scenarios that are both practical and cost-justifiable," said George Jackins, who chaired the committee overseeing the book. "To achieve true sustainability in the build-

ing industry, we must help owners learn that investing in energy efficiency translates into a high rate of return with a low associated risk. Owners and managers typically view buildings in terms of short-term economics. We must make the transition from best value vs. lowest first cost of buildings."

Specifically, the guide provides straight-forward applications that could produce energy savings from 10 to 15 percent to a more aggressive approach that could save 30 percent or more.

The book is a collaboration between ASHRAE, the American Institute of Architects, the Building Owners and Managers Association, the Illuminating Engineering Society of North America, the U.S. General Services Administration and the U.S. Green Building Council.

Here are the some important tips that owners and managers need to know to make their buildings energy efficient:

- Know your current energy utilization index (EUI) (kBtu/SF-year).
- Establish a target EUI and an initial budget estimate for achieving this goal.
- Conduct an internal energy study/audit (using ASHRAE's Procedures for Commercial Building Energy Audits as a basis) or have the facility retro-commissioned by a certified retro-commissioning firm. This activity may result in a modifica-

tion to the original estimated budget amount.

- Identify energy efficiency measures with attractive rates of return on energy retrofit or renovation investments.
- Implement the recommended energy conservation measures that will get the facility to the desired goal with the stipulated budget.
- Commission the energy conservation measures by a certified commissioning firm. This process should include training of facility personnel on properly operating and maintaining equipment and systems.

The book is the first of three planned guides on energy efficiency. The second will be aimed at providing technical guidance in undertaking existing building renovation programs. The third will provide operation and maintenance guidance to help sustain the energy efficiency.

The cost of Energy Efficiency Guide for Existing Commercial Buildings: The Business Case for Building Owners and Managers is \$69 (\$59, 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 www.ashrae.org/energyguide.

FUTURE ASHRAE MEETINGS:

2010 ASHRAE Winter Meeting
January 23-27, 2010
Orlando, FL

2010 Region VIII CRC
April 22-24, 2010
Monterrey, Mexico

2010 ASHRAE Annual Conference
June 26-30, 2010
Albuquerque, NM

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THE RAZORBACK REPORT

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