



The Razorback Report

Arkansas Chapter #062, Region VIII

American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.

www.arkansasashrae.org

Volume XVI, Issue II, October 2004

The President's Message

By John Carter, P.E., 2004-2005 Arkansas ASHRAE Chapter President

Hello AR ASHRAE. We had two great meetings last month. The central section meeting was packed full with the beginning of a new year. In addition, we had a chance to hear from Alan Bell who provided us with an update on the status of the Educational Facility Task Force commissioned by the Arkansas State Legislature. With over 80 million square feet of facility space, we have a tremendous opportunity and responsibility to provide the best possible learning environment for our children.

Our keynote speaker last month was Jeff Trower who provided an update for Thermal Guidelines for Data Processing Environments. Among the ASHRAE membership that heard Jeff speak were several interested guests from Arkansas based companies, Alltel and Axiom. Data Processing environments continue to require greater and greater needs from the HVAC systems.

Our first Northwest Section meeting was a great success with over 40 people attending. Murl Meredith provided us with a rare glimpse of a not-so-ordinary "home". We sure appreciate the Don Soderquist Center for Leadership and Ethics for allowing us a peak at The Greystone Estate. This was a real treat to see the recent Air Distribution and DDC retrofit for a world renowned leadership training facility.

I want to thank the committee and board members again for their service. They continue to invest their time to provide value for your membership dollar. For example, we are developing a new PDH recording tool. Just make sure you sign-in at each monthly chapter meeting and we can provide you a database of your attendance for PDH recording purposes at the end of the year. Tom Hanlon and Chance Hollingsworth are developing a very good continuing education program this year. The first seminar is October 15th. For only \$75 - this is a great seminar for anyone involved in the design and/or operation of air and/or hydronic distribution systems. Send in the RSVP form today to reserve your seat.

Mark October 29th on your calendar for the ASHRAE golf tournament. Remember player names and money should be received by October 26th to guarantee play. Contact Eddie Finley at Powers of Arkansas for more information.

Our chapter was awarded the *Pinnacle Award for Resource Promotion*. Special thanks go to Randy Moore, Rick Sellers, Sam Cummings and ALL OF THE DONORS for continuing to help make AR ASHRAE a Society leader in research fund raising and promotion.

This month, both sections will have an opportunity to hear from Don Huggins, P.E. Don will educate us on the practical "ins and outs" of hydronic systems. I think this will be one of the best programs of the year for design professionals. Don will provide us with practical tips on how to reduce air, properly allow for expansion and how to select boilers for your next hydronic application. In addition, we will receive an update of the AR Plumbing Code from an AR Department of Health representative. What better way to spend your "lunch hour" than seeing some good friends and picking up some real nuggets to build upon your career? See you on October 6th at the Whole Hog Café - please remember to park in the parking lot in front of the theatre.

October Meetings



Central Arkansas

Date: WEDNESDAY, OCTOBER 6th
"Membership Promotion"
Location: WHOLE HOG CAFÉ CANTRELL
Cost: \$15.00 / person
Schedule: 10:30 am Board Meeting
11:30 am Technical Session
12:00 pm Buffet Lunch
12:15 pm - 1:00 pm PROGRAM

"HYDRONIC PRACTICES IN THE EQUIPMENT ROOM"

Speaker - Mr. Don Huggins, P.E.

Northwest Arkansas

Date: THURSDAY, OCTOBER 7th
Location: FORT SMITH - TBA
Tentative location is Sparks
Regional Medical Center
Schedule: 5:30 pm Social
6:00 pm Business / Dinner
6:45 pm - 7:30 pm PROGRAM
(Same as Central Arkansas)

Please return RSVP form enclosed
or reply via electronic invite

ASHRAE/IES Standard 90.1-2001

Energy Code Training Workshop

November 3, 2004 • 8 PDH Credits • 8 am - 5 pm

Pulaski Technical College - North Little Rock

(Registration form attached as separate file)

2004 ASHRAE Research

Fall Golf Tournament

FRIDAY, OCTOBER 29th

1:00 pm

Country Club of Arkansas
Maumelle, Arkansas

(Registration form enclosed)



Board Meeting Minutes of September 1, 2004

Officers and Board Members present were:

John Carter - President
 Chance Hollingsworth - President Elect /Technology Chair
 John Hodoway - Secretary
 Steve Titus - Treasurer
 Tom Hanlon - BOG
 Randy Moore - CRC Delegate, Honors/Awards Chair
 Rick Sellers - CRC Alternate, Resource Promotion Chair

Committee Chairs present were:

James Dayer - Membership Promotion Chair
 Kim Koch - Student Activities Chair
 James McKinnie - Historian
 Eddie Finley - Social Chair
 Shawn Wilson - Reception Chair

Guests Present were:

Susan Recken - Arkansas Energy Office

Meeting Minutes

President John Carter called the meeting to order at 0:41a.m.

He thanked everyone for their work in helping to put the chapter year together and reminded everyone of the need for MBOs and co-chair names.

Chance Hollingsworth announced that Alan Bell will present the meeting technical session on the ongoing survey of school facilities in Arkansas. The meeting program will be presented by Jeff Trower, a member of TC9.9, on "Thermal Guidelines for Data Processing Environments".

A discussion was held on the conflict between the Arkansas Energy Code Update Seminar on November 3 and the regular ASHRAE chapter meeting scheduled for that date. It was agreed that it is impractical to attempt to hold the ASHRAE meeting during the seminar lunch date. Moving the chapter meeting to November 10 was discussed. Discussion was tabled to the October Board meeting.

Treasurer Steve Titus provided copies of the August Treasurer's Report and the 2003-2004 Actual Budget. Acceptance of these items was tabled to the next meeting.

There was a discussion of whether the chapter is required to file with the IRS. The consensus opinion is that it became necessary with the 2003-2004 year. Filing for that year is due November 15, 2004. Motion by Randy Moore, second by John Hodoway that John Carter ask his accountant for a proposal to prepare the necessary forms. Motion passed.

There was a discussion of making an annual prepaid meal arrangement available to the members. After extensive discussion of alternate ways that this is done in other organizations, John Hodoway was asked to come up with a prepaid meal proposal along with the advantages and disadvantages of the ways of implementing such a policy.

Resource Promotion - Chair Rick Sellers reported that his committee has been formed and the 2004-2005 campaign is getting underway.

Newsletter - President John Carter announced that the newsletter deadline is September 22, 2004 and that due to a computer glitch, the September newsletter had been distributed by e-mail only. No hard copies were mailed.

Student Activities - Chair Kim Koch reported that Joe Smith, the 2003-2004 scholarship recipient, would be introduced at the meeting.

Membership Promotion - Chair James Dayer reported that the membership database is up to date and that he needs an additional meeting designated as a "Membership Promotion Night".

Webmaster - No Report

Honors and Awards - Chair Randy Moore reported that evaluations for the Young Engineer Award.

Social - Chair Eddie Finley reported that the fall golf tournament is set for October 29 at the Country Club of Arkansas.

Reception - Chair Shawn Wilson expressed interest in an annual meal ticket as a way to streamline the check-in procedure. This subject is tabled to the October Board meeting.

Board of Governor Tom Hanlon stated that it did not appear practical to hold our regular meeting on November 3rd because of the Arkansas Energy Code Update Seminar scheduled for that day. The seminar cannot be rescheduled because of the speaker's schedule.

President John Carter announced that the Whole Hog Café has requested that ASHRAE members park in front of the Riverdale 10 Theater instead of in front of the restaurant.

The meeting adjourned at 11:28 a.m.

*Submitted by John Hodoway, Secretary
 2004-2005 Arkansas ASHRAE Chapter #042*

Membership

By James Dayer, *Committee Chair*

In looking at last months meeting attendance, we are off to a great start to the new Arkansas ASHRAE schedule. We had several people bring guests to the September meeting. I encourage everyone again to take an active part in promoting our chapter by bringing guests of their own. We will be setting up a board once again at the meetings that will have membership applications, membership advancement forms and several other brochures for your use.

If you are an associate member and think you might meet the requirements for membership advancement, please contact me. Society does NOT automatically award membership advancements - you must apply. Please contact me for an application or to discuss further.

Membership Meeting Minutes of September 1, 2004

The meeting began at 11:34 57 Members and 8 Guests were in attendance.

Chance Hollingsworth introduced Alan Bell to present the Technical Session – “Task Force to the Joint Committee on Educational Facilities”. Mr. Bell is the Public Relations Committee Chair of the Task Force.

Mr. Bell reported that a wealth of information about the Task Force and the assessment of educational facilities is available at: www.arkansasfacilities.com

The Task Force is assessing the condition of about 5,700 K-12 buildings encompassing about 80,000,000 square feet. There is a maintenance committee charged with establishing standards for keeping up the buildings. The assessment has come about because of the Lakeview decision of the Arkansas Supreme Court that held the legislature responsible for adequate and equal facilities throughout the state.

Because there are no Engineers on the Joint Committee, the Task Force was established. The Task Force has hired assessment teams of Architects and Engineers to evaluate the buildings in the K-12 system. The teams will assess compliance with ASHRAE 62 and ASHRAE 90.1 as well as the general condition of the facilities. The assessments are occurring from June 1 through September 30.

The assessments are substantially complete and the final report to the Joint Committee is due on December 1. The report will be submitted on time and on budget.

Chance introduced Jeff Trower to present the Program “Thermal Guidelines for Data Processing Environments”. Mr. Trower is a member of TC 9.9, which has responsibility for Chapter 17 in the ASHRAE Applications Handbook.

Mr. Trower discussed precision cooling of data processing requirements that require 70F to 75F \pm 1F and 45% to 50% \pm 3% on a 24/365 mission critical basis. Sensible heat factors usually run between 0.90 and 0.99. Loads expressed on a square feet per ton

basis are 50 to 100 in a data processing facility compared to/ 250 to 300 in an office. Units for this application are usually designed for 500 to 600 CFM per ton and 500 FPM across the coil. Ventilation air is a big issue because the units need to operate at a very high sensible heat factor to avoid the need for re-humidification of the air. Units for this service usually discharge air into the raised floor that is also used for computer cables. Cooling may be chilled water, DX air-cooled or DX with a glycol loop. Units are supplied to meet or exceed the requirement with redundancy requirements calculated at N+1, 2N, 5/9, or 7/9.

Rooms require a good vapor barrier with 6-mil polyethylene film sandwiched between two pieces of drywall as the most common. In the past few years loads have grown from 1.5 watts per rack to 25 kW per rack. By 2010 it is expected that, within the standard rack footprint, loading will approach 2.4 kW per square foot.

In order to cool loads that concentrated, new techniques will be necessary. There may be a return to liquid cooling of computers with some promising work taking place investigating micro droplet spray directly onto the chip. Raised floors may reach 72 inches in height to accommodate airflows for some high density cooling needs. Floor planning for data processing centers is no longer as simple as the traditional location of cooling units around the perimeter of the room.

The congestion of cables under the floor leads to large cable cutouts that bypass cool air back to the unit instead of distributing it to the computers. Computational Fluid Dynamics and a program called “TileFlow” are useful in predicting cooling performance in data processing centers.

Chance Hollingsworth announced that the October meeting will feature Jerry Duncan from the Arkansas Department of Health with a Technical Session on “Plumbing Code Update” and Don Huggins with a Program on “Hydronics”.

The meeting adjourned at 13:04

*Submitted by John Hodoway, Secretary
2004-2005 Arkansas ASHRAE Chapter #042*

Student Activities

By Kim Koch, *Committee Chair*

The student activities committee has increased in size since our last report. I have been fortunate to have Todd Castleberry and Drew Harrison volunteer to help reach out to students in the state this year. Todd Castleberry will be initiating contact with students at Pulaski Tech in efforts to start a new student chapter. In addition Todd will be assisting with Engineers Week activities in February. Drew Harrison has set the bar in Region VIII student activities the past few years in the Austin chapter. We are excited to have him back in Arkansas. We will be able to greatly increase the number of students we are able to introduce to ASHRAE and the industry with his help in Northwest Arkansas. I would like to thank both Drew and Todd for volunteering their time and enthusiasm to student activities.

On September 19th Chris Ahne, Drew Harrison and myself started the year off at the University of Arkansas. Dr. Darin Nutter was gracious enough to allow the three of us to give a presentation explaining the benefits of ASHRAE membership and scholarship opportunities to his senior level HVAC course. The course is also being broadcast to a group of students at the University of Arkansas at Fort Smith. Several of these students and students from Arkansas Tech have given me their resumes. Please contact me at kkoch@tmecorp.com if you are interested in speaking with these students about career opportunities.

Arkansas ASHRAE Chapter Events

Oct. 15, 2004 *2004 AR NEBB Recertification & ASHRAE Educational Seminar*
 Oct. 20, 2004 *Newsletter Submission Deadline*
 Oct. 29, 2004 *Fall Golf Tournament for ASHRAE Research*
 Nov. 3, 2004 *ASHRAE/IES Standard 90.1-2001 Energy Code Training Workshop*
 April 14-16, 2005 *Region VIII CRC 2005 San Antonio, Texas*

ASHRAE Society Meetings & Sponsored Events

International Mechanical Engineering Conference and Exposition, Dec. 5-8, Kuwait. Cosponsored by ASHRAE. Contact organizers at imec@imec2004.com or www.imec2004.com

ASHRAE Winter Meeting, Feb. 5-9, Orlando, Fla. Contact ASHRAE Meetings Section, 1791 Tullie Circle NE, Atlanta, GA 30329; 404-636-8400, jyoung@ashrae.org or www.ashrae.org

International Air-Conditioning, Heating, Refrigerating Exposition (AHR Expo), Feb. 7-9, Orlando, Florida, ASHRAE and ARI. Contact International Exposition Company at 203-221-9232 or www.ahrexpo.com

ASHRAE Annual Meeting, June 25-29, Denver. Contact ASHRAE Meetings Section, 1791 Tullie Circle NE, Atlanta, GA 30329; 404-636-8400, jyoung@ashrae.org or www.ashrae.org

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2004-2005 Chapter Officers

<u>President</u> John Carter	501.666.5463	john@jcarterco.com
<u>Pres-Elect</u> Chance Hollingsworth	501.374.5420	chollingsworth@powersofarkansas.com
<u>Secretary</u> John Hodoway III	501.372.2900	jwhodoway@cromwell.com
<u>Treasurer</u> Steve Titus	501.375.1181	sctitus@aristotle.net

Board of Governors

Tracy Hayes	501.834.3320	tracy.hayes@comfortsystemsusa.com
Tom Hanlon	501.661.0621	tjhanlon@trane.com
Randy Ragsdale	501.223.9302	rragsdale@lesarch.com
Randy Moore (Delegate)	501.280.0404	rmoore@airetechcorp.com
Rick Sellers (Alternate)	501.374.3731	rsellers@pettitinc.com

Committee Chairs

Membership	James Dayer	501.663.8886
Student Activities	Kim Koch	501.666.6776
Technology Transfer	Chance Hollingsworth	501.374.5420
Historian	James McKinnie	501.987.7666
Refrigeration	Chris Ahne	501.661.0621
Resource Promotion	Rick Sellers	501.374.3731
Honors & Awards	Randy Moore	501.280.0404
Newsletter	Tracy Hayes	501.834.3320
NW Section	Murl Meredith	479.443.0571
Social	Eddie Finley	501.374.5420
Reception	Shawn Wilson	501.570.7464
Webmaster	Ben Baugher	501.280.0404

**The Razorback Report**

Arkansas Chapter of ASHRAE
P.O. Box 180



2004 Arkansas NEBB Recertification
& ASHRAE Educational Seminar
October 15, 2004

ASHRAE/IES Standard 90.1- 2001
Energy Code Training Workshop
November 3, 2004



American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

Arkansas Chapter Meeting RSVP Form

Company Name: _____

Phone #: _____ Fax #: _____

Signed: _____ E-mail: _____

ROUTING

For reservations to the Central Arkansas Chapter meeting fax this form by **Monday, October 4th** to 501.370.9298 *Attn: Chance Hollingsworth*

For reservations to the Northwest Arkansas Chapter meeting fax this form by **Tuesday, October 5th** to 479.443.0580 *Attn: Murl Meredith*

MEMBER NAME (Please Print)	CENTRAL Oct 6 th	NW ARK Oct 7 th	EATING (Y or N)

NOTES: Please fax this form to the name and fax number as referenced above.
 The meal is no cost to student members, however an RSVP is necessary.
 All "no shows" will be responsible for the cost of their meal.
In order to provide you with the best service for your Chapter's money, it is necessary to RSVP for each meeting.

October Program & Meeting Sponsor:

"HYDRONIC PRACTICES IN THE EQUIPMENT ROOM"

Presented by Mr. Don Huggins, P.E.

This program is a result of questions that have been asked and information members provided on program survey forms regarding "Hydronic Practices in the Equipment Room". The program will cover the need and proper use of expansion tanks, air separators, make-up water pressure regulators and various other tidbits of information pertaining to the engineering, design and installation of hydronic systems.



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www.fluidsolutionsinc.com

Designers and contractors are often too busy to worry about the small details and simply copy what has been done before with little thought or understanding as to *why* things are done the way they are done. Hopefully this "back to the basics" information will educate and refresh some of those principles.

Mr. Don Huggins will be our speaker for this program. He has been a registered professional engineer since 1982. Starting his career at the Arkansas Department on Health, he later moved to H.W. Goodman Engineers where he stayed for thirteen (13) years. Mr. Huggins is currently a principal with Pettit & Pettit Engineers in Little Rock where he has been a mechanical engineer since 1992. Mr. Huggins has been an active ASHRAE member since 1980 and served as Arkansas Chapter President in 1986.



2004 ASHRAE Research Fall Golf Tournament

FRIDAY – Oct 29th – 1:00 P.M.
Country Club of Arkansas
Maumelle, Arkansas



Entry Fee: \$300.00 per team
Includes cart, refreshments,
and lunch. (Before Play)
Each player gets 2 mulligans

Prizes Awarded for: 1st Place Team
2nd Place Team
3rd Place Team
Longest Drive
Closest to Pin
Special contests
and prizes

Lunch: Hamburgers, hotdogs, etc...
Provided by Powers of Arkansas

Format: 4-Man Team Scramble
Limited to the first 22 teams (first 22 paid play)
Ties will be broken by using score & hole handicaps

Fill out this form and return to: Eddie Finley

(Fax: 501.370.9298 or E-mail: efinley@powersofarkansas.com)

Player names and money must be received by October 26th. Any team received after this date may not get to play. Each team is responsible for replacement players due to cancellations.

Phone: 501.374.5420 **Fax:** 501.370.9298

Player 1: _____
Player 2: _____
Player 3: _____
Player 4: _____

Total enclosed:\$ _____

Checks should be made out to **Arkansas ASHRAE** and mailed with this form.

*****100% of proceeds raised goes to ASHRAE Research*****

- ___ I will sponsor a hole - \$100. (Hole sponsors will be recognized by a sign at a hole)
- ___ Corporate Sponsorship -\$200 (There will be a special area near the scoreboard to recognize corporate sponsors. Please send banners to the below address.)
- ___ I will donate \$_____ for prizes & awards.
- ___ I will donate the following merchandise: _____
(We need vendors to donate logo golf balls, towels, etc...)

Workers, hole sponsors and prize contributors will be recognized at the tournament and in the Razorback Report.

Please return this form & checks for contribution to:
Eddie Finley, 1111 West 6th Street, Little Rock, Arkansas 72201

Name: _____ Company: _____
Phone: _____ Fax: _____ Signed _____ Date _____