



January

2010

In This Issue

[FEBRUARY MEETING](#)

[President's Message](#)

[Programs](#)

[Research Promotion](#)

[Membership](#)

[YEA](#)

[Student Activities](#)

[Refrigeration](#)

[Honors and Awards](#)

[Announcements](#)

FEBRUARY **MEETING**

February 4, 2010

Digital Scroll
Compressors
with Brian Justice

Tech Talk: Economizers
with Gil Avery

11:30am-1:30pm
Byron's Southend

Design Center of the
Carolinas - Courtyard
101 W. Worthington
Avenue, Suite 110
Charlotte, NC 28203

President's Message

[Jerry McAuliffe \(East Coast\)](#)

Mr. Chris Edmondson certainly didn't disappoint us at our January meeting. While he probably could have spent all afternoon talking about system balancing, he was able to hit the highlights and still be very informative. Our February meeting will be a double header this time. We have Mr. Gil Avery who we've had the pleasure of speaking in the past. We will also have a presentation by Mr. Brian Justin with Aeon to discuss the features of digital scroll compressors. Neil tells us more about the presentations below. Our Honors and Awards committee will be recognizing another engineering firm in our area. This month's recognition will be McKnight, Smith, Ward, Griffin Engineers and their contribution to our community. National Engineers Week is coming in February, as well. Todd Horton will have more details about this below.



Thanks to everyone who signed up early to help us with our head count. Remember to sign up for this next month's meeting before Tuesday, February 2. I look forward to seeing you next week.

Programs

[Click for MAP](#)

[*See Announcement section for a note on the monthly meeting fee change*](#)

[RSVP ONLINE](#)
(Registration using PayPal is available online, or you can [RSVP by email to Neil Poissant, neil@aci-hvac.com](#))
(\$20/\$25 per person)

[SCHEDULE](#) **[2009-2010](#)**

February -

[*See Announcement section for a note on the monthly meeting fee change*](#)

4th-
Lunch Meeting - Variable Capacity and Digital Scroll Compressors w/ Brian Justice and Tech Talk on Economizers w/ Gil Avery

March-

4th-
Lunch Meeting - ASHRAE President Gordon Holness

April-

1st-
Lunch Meeting - Energy Management w/ Dick Pearson and 3 hr continued ed (for a fee)

14th-
Spring Golf Tournament at Pine Lake Country Club

May-

6th-
Lunch Meeting - Leadership and Motivational speaker Emory Austin

June-

3rd-
Continuing Education Class

[Neil Poissant \(Adams Companies Inc\)](#)

During this month's lunch meeting we will have two speakers. Our first speaker is Gil Avery. Gil has many years of experience in the HVAC industry. Gil will conduct a short "tech-talk" on economizers.



Our featured presenter will be Brian Justice with AAON inc. Brian is the Southeast regional sales manager with AAON and a big proponent of ASHRAE. Brian will provide a general overview as well as discuss the benefits of digital scroll compressors. Digital scroll compressors have higher efficiencies and can operate at lower ambient conditions than standard "on/off" style compressors. The latest generation digital scroll compressors are being used in VRF style equipment, packaged roof top units, and chillers due to their high COP and tight capacity control.

Again, you'll be able to pay for monthly meetings, golf outings, donations, etc on the website. You can pay via credit card or paypal account. As always checks and cash are still accepted at the door. If you intend on paying at the door, simply e-mail me (neil@aci-hvac.com) to make your reservation. Please RSVP at your earliest possible convenience so that we can accurately plan.

During the last few meetings, we had several folks use either the light rail or carpool. Hopefully this trend continues.

Please mark your calendars for this year's meetings as well as the spring golf outing. We hope to see you all soon.

Please note that we have added a 4-hour continued education class that will be held on June 3rd.

Research Promotion

[Billy Austin \(Shultz Engineering Group\)](#)



Thank you so very much for your participation in our Fall Golf Tournament and Christmas Auction this year! We have two very important dates for you to put on your calendars - 1) April 14th: The Spring ASHRAE Research Promotion Golf Tournament returns to Pine Lake Country Club; and 2) June 3rd: Our 4 PDH continuing education course featuring Dave Knebel of AAON regarding practical psychrometric applications, to be held at the Piedmont Natural Gas Cooking Technology Center with a fabulous lunch prepared by PNG's renowned chef, Doug Allen.

Please know that your ASHRAE chapter has been, and will continue to make these events the best they possibly can be!

Membership

[Bill Brown \(AME Consulting Engineers\)](#)



Why become a member? ASHRAE membership provides direct access into the Society's HVAC&R technical library of knowledge that is continually updated and expanded. Rooted in the Handbook, this knowledge base extends into cutting edge research papers and technical discussions published in the ASHRAE Journal and other Society periodicals. How do you keep up to date with changes in the industry? Where did you read about the details of a new integrated refrigeration control system strategy? Where did you see an advertisement for a new type of air quality sensor that's exactly what you need for a job you're bidding out next week? You probably read it in an ASHRAE publication...just part of your ASHRAE Membership experience.

* Important New Membership Policies *

It is very important to check your membership

status. Changes have recently been made to membership policies. A member is considered delinquent after 3 months past the due date of membership renewal. A member is completely dropped from the rolls after 6 months past the due date of membership renewal. A dropped member can either a) Pay all past dues for years missed to regain their continuous membership status b) Rejoin as a new member (and not pay past dues) but lose credit for past years towards life membership. Your membership status begins at the time your application is processed and when dues are paid in full and good for one year.

For a pdf membership application you can print out, fill out, then mail or fax to ASHRAE, please visit www.spashrae.com/pdf/ASHRAE_application0707.pdf. Include the following with/on your application:

1. Please state your intention to participate in the Southern Piedmont Chapter.
2. National membership dues are \$165...please include an additional \$30 for Chapter dues...total=\$195.

We look forward to having you all on board!!!

YEA (Young Engineers in ASHRAE)

[Michael Collarin \(HESM&A\)](#)



I was fortunate enough to spend the past few days in Orlando attending technical seminars and Technical Committee meetings at ASHRAE's 2010 Winter Conference. If you weren't able to attend the Winter Conference in Orlando, ASHRAE has made a virtual conference available online (<http://www.ashrae.org/events/page/1337>).

While the online conference is a great way to see

the technical seminars and expand your knowledge, it's not the same as being there and taking it all in. Not to mention the networking possibilities and the opportunity to attend the committee meetings. Therefore, I would like to take this time to recommend to fellow YEA members reading this, at some point in your career (hopefully sooner rather than later), that you take the opportunity to attend one of these conferences. It is a great way to learn what is taking place in our industry, network with other ASHRAE members from around the world, and get involved with a Technical Committee or some other society level function.

In case you didn't already know, there is a conference held in the winter and also one in the summer which is referred to as the Annual Conference. If you had to choose just one, I've been told the Winter Conference is the one to attend. And it just so happens that the 2011 Winter Conference is in Vegas, baby! Do you really need any more motivation than Las Vegas? Visit the ASHRAE website for a listing of other future ASHRAE Conferences (<http://www.ashrae.org/events/page/562>)

Student Activities

[Todd Horton \(Hahn-Mason\)](#)



It's February and that means our biggest Student Activities event is around the corner. N.E.W (National Engineers Week) is the 14th-20th this year. ASHRAE along with many other organizations will be promoting it. I encourage as many of you as possible to participate in one activity related to N.E.W. We have resources and plenty of activity ideas available if you would like to participate. Check out <http://www.eweek.org/Home.aspx> for the National Engineers Week Foundation website or the ASHRAE Student Zone link below for additional. Busy the week of the 14th-20th? Not a problem! Just because we celebrate N.E.W.

during this time it is only a loose guideline for what society will accept as activities done to promote engineers in our communities. We can count pretty much anything in February towards our involvement.

Remember that many of the ideas that are available work any time of year, and that our local teachers love to have people from the community come speak to their classes, especially professionals such as those of us within ASHRAE. Spring is typically the busiest time of year for teach in opportunities. Whether it is judging a science fair, doing a class drop in, or volunteering your time for career day, there should be plenty of opportunities to influence some of the young minds in our schools.

To learn more about activities and opportunities you can participate in, please visit the Student Zone on the ASHRAE website:

<http://www.ashrae.org/students/>

On the college front, we have some big news. Our first meeting at UNCC will be held January 28, at the Duke . Mike McGuire with AME Consulting will be speaking to a variety of students about consulting engineering the HVAC industry and comparing it to some of the other options that are typically emphasized through many of the classes the students have or will be taking. I will have a full report at the February meeting and hope to see you all there.

Refrigeration

[Dr. R. Gary Wilson \(UNC-Charlotte\)](#)

We are just completing our third week of the semester here at UNC-Charlotte. So far my Mechanical Engineering Refrigeration and Air Conditioning class has been focused on refrigeration and I am about to take the class through the design process for sizing the



condenser, evaporator and compressor. I have gone through a review of the standard vapor-compression cycle and shortly we will begin studying multi-pressure systems that are commonly found in industrial applications.

Speaking of industrial applications, the 43rd Offering of the Industrial Refrigeration Workshop will be offered here in Charlotte February 14-19. I have been involved with the workshop for the past several years and now that Will Stoecker has retired I will be supporting the workshop as the Associate Director and Instructor. The workshop project will involve the design of a refrigerated warehouse and the industrial staff will represent Stellar Group, Guntner U.S., ALTA Refrigeration, York Corp, and Evapco. You may contact me (704/687-8340) for more information or check the workshop webpage Industrial Refrigeration Workshop.

Remember, without refrigeration there is no air conditioning.

Honors & Awards Committee

[Bill Garrott \(East Coast\)](#)

Recognizing the 'E' in ASHRAE

The Honors and Awards Committee will recognize and thank

McKnight, Smith, Ward, Griffin Engineers for their contribution to our industry at the February meeting.

Announcements

MONTHLY MEETING FEE CHANGE

Our contract with Byron's requires us to inform them of the number of attendees so they can properly plan our meal. The only way we can accurately do this is by RSVP's or pre-payments made online. We have to do this by 12pm on the Tuesday before the meeting. The Southern Piedmont Chapter has been losing money at each meeting due to having to subsidize this shortfall. Therefore, starting

with the February meeting, RSVP's before this deadline is still \$20. After this deadline, we have to charge \$25 at the door or online.

ASHRAE STANDARDS LIBRARY

Check out the main library in downtown Charlotte for hard copies of all of the ASHRAE Standards. These are available in the reference section.

Email tracie.monfort@hesm.com to add announcements, job postings, etc. in future newsletters.
