


The official newsletter of the Triangle Chapter of ASHRAE
(the American Society of Heating, Refrigeration and Air conditioning Engineers)

President's Message	Upcoming Events
<p>December 12, 2017</p> <p>It has been a busy few months since ASHRAE Triangle Chapter has gotten back into the swing of things. We have had three very informative monthly meetings with some great speakers including two distinguished lecturers, two society level officers/committee chairs, and two former Triangle Chapter Presidents. We have had some excellent extracurricular activities including a Cornhole Tournament at Lynnwood Grill & Brewing Concern, a refrigeration plant tour at Phononic, and just had our 5K Fun Race with forty-eight runners competing.</p> <p>Many special thanks go out to the folks that arranged these activities. I keep reminding myself that this is a 100% volunteer organization and everyone involved already has a 40+ hours per week regular job. And then I am amazed at how much effort goes into the planning and execution of these events. I know I am very grateful to have such talented and motivated individuals working with me on the Board of Governors, including the current slate of Officers and Committee Chairs. When you see them at our next event please speak with them and let them know how much they are appreciated...I know I certainly do.</p> <p>I hope all of you have plans for attending the ASHRAE Annual Christmas Party this week. Our goals for the event was to keep it low key and show some appreciation for the Triangle Chapter Past Presidents, as well as for our local sponsors. It is from the generosity of our sponsors, and our members, which allows our organization to continue to be one of the premier Chapters in Region IV.</p> <p>Thanks to all again. I hope that each of you has a very safe and relaxing Holiday Season, and I hope that each of you are able to spend valuable time with family.</p> <p>See you at the next ASHRAE meeting! Greg Mills 2017-2018 Chapter President</p>	 <p>Jan 10 (Wed) [5:30 - 8:00 PM] <i>Dinner Meeting:</i> BEQ, ASHRAE's Building Energy Labeling Program Speaker: Bruce Hunn, PhD Royal Conference Center</p> <p>Feb 13 (Tue) [11:30 AM - 1:30 PM] <i>Lunch Meeting:</i> PSNC Update Royal Conference Center (The ONLY lunch meeting of 2018 spring session)</p> <p>Feb 23 (Fri) [5:30 - 8:00 PM] <i>Winter Bowling Tourney</i> AMF Pleasant Valley Lanes - - - Come out and support our students by helping raise money for scholarships! Come out for bowling and beer to support our student branches at NC State, ECU, and Wake Tech Community College.</p>

Free ASHRAE Webinar - (Monday April 16, 2018 from 2-3 PM)

"Making Energy Efficiency a Reality"

Debunk myths about energy efficiency during the FREE ASHRAE Webcast. Featured ASHRAE speakers will discuss the ability of commercial and high-rise residential buildings in North America and developing economies to effectively achieve optimum energy performance. There is not a "one size fits all" design for buildings. Learn best design practices to achieve optimal energy performance in varying climate zones and economic conditions. Understand when technologies can be applied regardless of climate zone and when climate zone and economic conditions limit the potential implementation of various energy efficiency measures.

Speakers:

Tom Durkin, PE, LEED AP, ASHRAE Fellow; Senior Partner, Durkin & Villalta Partners Engineering, Indianapolis, IN.
Mark Frankel, ASHRAE, AIA, LEED Fellow; Technical Director, New Buildings Institute, Portland, OR,
Christopher Mathis, ASHRAE, President, Mathis Consulting Company, Asheville, NC

If you wish, join fellow HVAC professionals and watch it in a group at Dewberry!
(See the [Triangle ASHRAE calendar](#) for more information)

2017 Refrigeration Tour – Phononic

Thank you to Phononic for hosting this year's Fall refrigeration tour! Phononic gave the Triangle Chapter a tour of their new product, a solid-state technology that is revolutionizing the way refrigeration systems work.



This new technology requires no toxic refrigerants, no compressor, and produces an oscillating temperature range of only 0.2°C. Needless to say, we were very impressed! Thank you to Mike Dixon and Lorrie Todd of the ASHRAE Triangle Chapter for organizing this event, and thank you to Jerilin Kenney, the Vice President and General Manager of Life Sciences and Healthcare at Phononic.

Second Annual ASHRAE 5K

Triangle ASHRAE's second annual 5K walk/run was another success! Over 50 people came out bundled up and ready to run on December 2nd to support and raise money for ASHRAE research. Thank you to everyone who participated, and thank you Evan Lepkowski for leading such a great event!



The winners of this year's race were Tina Morrison-Walkowski (middle), with the Bond Bros Race Team, with a first place time of 20:43. Adam McCoy (right), with Carrier and a second place time of 21:14. And Taylor Mills (left), with Zoetis and a third place time of 21:20.

Congratulations to our winners!

Fall Cornhole Tournament



Another successful event this year was the annual Fall Cornhole Tournament! This year the Young Engineers of ASHRAE committee, led by Jeff Cline, hosted the tournament at Lynwood Brewing Co. and had 16 teams come and compete! Thanks to everyone who came out!



This year's winners were (L to R): Rob Armstrong and Taine Mergenthaler (right) and in second place was Jeff Cline and Natalie MacDonald (left).

NEWS OF THE SOCIETY:

2018 ASHRAE Winter Conference & AHR Expo

January 20-24, 2018 in Chicago

ASHRAE Winter Conference & AHR Expo is where passionate people come together to share knowledge, learn new things and meet new people. This conference is a great way to immerse yourself in a growing community of incredibly smart, dedicated people. The 2018 Winter Conference will be at the Palmer House in Chicago, January 20-24, and the AHR Expo is at McCormick Place, January 22-24. The 2018 Expo will host more than 2,000 exhibitors and 65,000 industry professionals. When you register for the ASHRAE Conference, your ASHRAE badge will give you access to the AHR Expo.

ASHRAE earns UN Award

ASHRAE has received the prestigious Partnership Award from the United Nations Environment Programmer's (UN Environment) Ozone Secretariat for its extraordinary commitment and contribution to the progress and achievements of the Montreal Protocol on Substances that Deplete the Ozone Layer, which is celebrating its 30th anniversary. The award was presented to ASHRAE at the 2017 Ozone Awards ceremony on Nov. 23 in Montreal. The Partnership Award recognizes the work of civil society and other international organizations that have played a critical role in the development of the Kigali Amendment and/or implementation of the Montreal Protocol.

NC State Original Charter

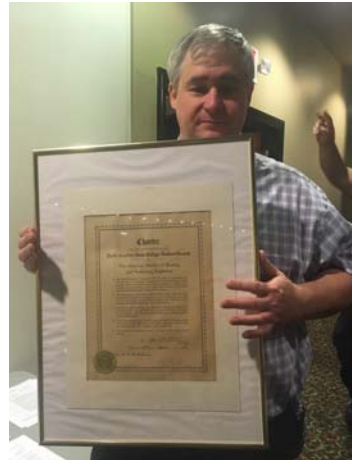
At the Chapter's October Dinner Meeting, Stephen Terry brought the original Charter for NC State University, (pictured to the right).

Pictured below is the original article in HP&AC Magazine, July 1948, showing the formation of the NCSU Student Chapter. It was the **fourth Student Chapter created by ASHRAE**.



(left to right) R. M. Warren, E. S. deWitt, J. C. Lodor, A. V. Hutchinson, W. M. Wallace, II, M. F. Blankin, J. G. Marshall, H. Walker Powell, Jr., Prof. L. L. Vaughn, J. B. Alexander, Prof. R. B. Rice, H. E. Sproull and E. B. Morrison

Heating, Piping & Air Conditioning, July 1948



NC STATE First Year Engineering Design Day (FEDD)

On November 21, members of the Triangle Chapter volunteered their time to serve as judges for NC State University's Freshman Engineering Design Day. Over 1,500 First Year students came to compete in competitions ranging from a precision launcher, education computer games, hovercrafts, fabric buckets, and animatronics! NC State brings in industry professionals to judge this event to give first year students insight from working engineers. Below is Natalie MacDonald, Greg Mills, and Adam Sippel with two first year students and their animatronics project. The students created a teddy bear that would "bob" its head to the beat of whatever song to which it was listening.



**Committee Reports:
Student Activities:**

Student Activities is the point of contact for all student branches within our area. The Triangle Chapter's student branches include NC State University, East Carolina University, and the newly added Wake Tech Community College (WTCC). Student Activities also serves to conduct K-12 outreach activities independently or jointly with other organizations.

Updates

1. Members of ASHRAE have begun this year's STEM Mentoring program, meeting with 9th grade student for one hour a month to mentor students and encourage them to pursue a career in the STEM fields.
2. Wake Tech Community College has elected their officers for this year and are kicking off their new student branch! The Triangle Chapter is so excited to have such an eager and excited group join ASHRAE.
3. ASHRAE members Adam Sippel, Greg Mills, and Natalie MacDonald volunteered their time on November 21st to help judge NC State's Freshman Engineering Design Day. These first year students created a multitude of projects and the university brings in industry professionals to judge their projects and choose the winners. We were excited to represent ASHRAE at this event!

**Committee Reports:
Research Promotion**

The 2016-2017 ASHRAE year was a big one for the Triangle Chapter. Thanks to the hard work of outgoing committee chair, John Quioco, the Triangle Chapter raised a record amount exceeding \$34,000 donated to the ASHRAE Research campaign! At our Christmas party on 12/13 we are going to honor all the donors who were kind enough to help us reach our goal last year. Please join us if you can.

We are off to a good start raising money for the 2017-2018 campaign as well, but we can use all the support we can get! Please donate early and often at www.ashrae.com/contribute or contact me for Chapter sponsorship inquiries.

Regards,
Chris Norwood
Triangle Chapter Research Promotion Chair
chrisn@jmpco.com



**Committee Reports:
GGAC - (Grassroots Government Advocacy Committee)**

Starting in 2018, new and updated North Carolina Building Codes will be introduced. Many ASHRAE members may not be aware of potential changes that have been developed impacting building energy usage and mechanical/plumbing design. The NC Building Code Council typically holds public quarterly hearings throughout the year. The next meeting to be held is scheduled for Tuesday, December 12th starting at 9am at Albemarle Building, 325 North Salisbury Street, Raleigh, NC 27603, 2nd Floor Training Room 240. I encourage Triangle ASHRAE members to attend to understand the process and get involved in the discussion to help promote ASHRAE and the meaningful impact we can offer in advising public decision makers.

For more details info can be found on the NC Department of Insurance and Building Code Council website : NC Building Code Council

Mark your calendars for Triangle ASHRAE "Day on the Hill", scheduled for Wednesday, June 6th

The Triangle Chapter of ASHRAE is planning its 2nd annual Day on the Hill event, during High Performance Building month for the NC General Assembly. Volunteers will meet with state legislators, specifically on committees relevant to the built environment to introduce and discuss how the ASHRAE organization can be utilized as a resource for them.

Stay tuned for additional updates in the new year...

Committee Reports: Membership Promotion

Well, the Triangle Chapter continues to add new members thanks to word-of-mouth sharing all that we have going on and upcoming plans! Keep it going.

When you see a meeting notice, let that be the reminder to invite a friend to come along and hopefully, they'll want to join too.

It's easy: <https://join.ashrae.org/>

Lorrie Todd

Membership Chair

Leadership Recall Interview

(Below is a recap of the communication between 2016-2017 Triangle Chapter Historian Mr. Gregory A. Mills, PE, CEM, LEED AP BD+C and 2015-2016 Triangle Chapter Past President Mr. Chris Norwood, PE, LEED AP on June 6, 2017.)

Questions:

Q1) *What steered you towards mechanical engineering design in the early stages of your career? College classes, HS classes, other?*

A) I knew that I wanted to go to NCSU from middle school on, and I would just figure out later what I wanted to be. When I was a senior in high school and applying for early admission I picked chemical engineering as my major since a) I was pretty good at math and chemistry and b) It had the highest starting salary of any major at NCSU that year!

Q2) *Do you feel the education you received in high school, prep school, or college prepared you for what you have seen in your career? Anything you would have done differently?*

A) It was a little bit of a learning curve going from chemical to HVAC which mechanical engineering does a little better job of preparing you for, but I was surprised how little of the advanced courses that I took in engineering, math, and physics applied to what I ended up doing on a day to day basis. In general though, I think learning how to learn was really important with my education. Even though I don't retain or apply many of the concepts that I did learn in school, it prepared me to be able to pick up new information quicker in the real world. The only thing I might have done different would have been to do a co-op program or summer internships. I think that would have made me better prepared to enter the real world and a more attractive candidate for the companies that I interviewed with.

Q3) *Who was the greatest influence on you as a young engineer?*

A) I would have to say it was Tom Beard who is another former ASHRAE Triangle Chapter President who was my first "boss". I put that in quotes since he didn't actually run the York International office which is where I went to work right out of school, but he was the senior salesperson so by default I ended up doing more work for him than anyone else there. One of his favorite comments to me early in career was, "Son, you are so stupid, you don't even know the right question", but he went out of his way to educate me and teach me how the business worked which I am grateful.

Q4) *What engineering project or accomplishment that you have done in your career do you find to be the most rewarding? Any "lessons learned?"*

A) That is a tough one. I would have to say getting my PE license in mechanical engineering even though my education was in chemical engineering.

Q5) *What do you consider the greatest challenge facing ASHRAE today with regards to recruiting young talent to our industry?*

A) There are many exciting, more sexy sounding industries around today. I hear high school kids talking about going into cyber security, software development, robotics, etc.



Interview with a Past President (cont.)

Q6) If elected to Society Level President what would be your theme or message to our fellow ASHRAE Members?

A) I would encourage ASHRAE to continue to reach out to other organizations at all levels to find common ground and to try to get our message out to more people.

Q7) Any future goals for the later stages of your career? Early retirement at the beach, Senior PGA Tour, spend time with grand-kids, etc.?

A) I like to think that I am still in my prime and have a long way to go. There may still be another turn as chapter president in me 10-15 years down the road. I would love another crack at the Rudy [award for top performing chapter].

Q8) What one law, regulation or guideline would you like to see changed that effects how we design building engineering systems?

A) Another tough one. How about the NC Guideline for lifecycle costing as a means to purchase large chillers, towers, pump, and boilers. It is very arbitrary and leaves a lot open to interpretation. I think if there is a product out there that the state and designer can justify as being a noticeable improvement over the baseline equipment specified in terms of efficiency and durability, that they should just be able to have a preferred brand add alternate instead.

Q9) Do you think LEED is going by the wayside? Is new ASHRAE Std. 189 going to take over?

A) It does seem like some of the early glamour associated with LEED has died down some, but I'm not sure there is a clear winner in the race yet. I think both standards will be around for many years to come.

Q10) If you could have entrance music played every time you walked into an office or meeting similar to wrestling, what would your music be?

A) I'm going to go *Eye of the Tiger* from Rocky. I think life would be more fun if we all got to have entrance music!

Very Respectfully,
Gregory A. Mills, PE, CEM, LEED AP BD+C
Chapter Historian 2016-2017

Contact US	Thank you to our sponsors!!	INFORMATION available on the Chapter Website:
<p>President: Gregory Mills: President@TriangleASHRAE.org</p> <p>Membership: Lorrie Todd: Membership@TriangleASHRAE.org</p> <p>Webmaster & eMail: Ed Davis: Webmaster@TriangleASHRAE.com</p> <p>Want to join ASHRAE? Go to https://www.ashrae.org/membership--conferences/join-now</p> <p>Click "Join Online" Fill out the Information You now belong to ASHRAE ! If you selected the Triangle Chapter as your "home chapter" than within a day your data will be merged with our website as a national AND chapter member, so you can fully use the chapter website's information.</p> <p>Check out our Facebook Group: https://www.facebook.com/groups/TriangleASHRAE/</p>	<p>Bernhard MCC CaptiveAire Chapman Company Dewberry Faulkner Haynes Hahn Mason Heat Transfer Sales Hoffman & Hoffman James M. Pleasants Company Johnson Controls Kirlin Carolinas, LLC Palmetto Air & Water SSI Services Thermal Resource Sales UV Resources Xylem</p>	<p>www.TriangleASHRAE.com</p> <p>Calendar of Events, Chapter Officers, Committee Members, (names, pictures, contact info)</p> <p>About ASHRAE Chapter Charter & Bylaws Classified (local) Job Listing Posted resumes (of members)</p> <p>Also available on the website (for Members):</p> <p>Past Newsletters, BoG Meeting Minutes, Past Meeting Slides Past Chapter Newsletters</p>