

Upcoming Event Excitement!

We have a lot of exciting events around the corner!

ASHRAE Spring Golf Tournament— 03/27/20

- 8:45 am shotgun start
- 60 people or 15 teams max.

Government Outreach Day - 04/28/20

Sustainability Event TBD



Next Chapter Meeting Tuesday, March 10th

Harbor Breeze at Patriots Point, Mt. Pleasant

BOG Meeting 5:00pm-5:30pm

Happy Hour 5:30pm-6:00pm

Chapter Meeting/Dinner 6:00pm-7:00pm

\$30/person

[REGISTER ONLINE](#)

Join us on Tuesday March 10th, 2020!

Presentation: The Cold Truth about Refrigerants and Refrigeration

There's a lot of talk currently about the environmental impacts of refrigerants. However, unless we opt to completely eliminate the cool comforts of our modern lifestyle, refrigerant is not going away. It will always be a necessary evil in the built environment.

We'll take a trip down memory lane and review the vapor compression cycle and how the first-generation refrigerant systems performed. We will revisit the high performance and energy efficiency of the first generation of air conditioning systems and reflect on the unintended consequences.

We will discuss the next few iterations of refrigerant blends, focusing on the performance, trade-offs and sustainability sides of all the changes to refrigerant systems along with the sustainability and environmental impacts.

Where is refrigerant today and what are the real-life limitations of where we can go tomorrow?

Speaker Bio: Andy Hayes

Andy Hayes has over 15 years' experience in various HVAC roles and industries. His career has covered a wide range of development and leadership positions in hydronic heating and cooling as well as refrigerant based air conditioning.

Andy has a strong heat transfer and fluid dynamics foundation holding a Master's of Science in mechanical engineering from the Rochester Institute of Technology. Andy is the Training and Development Manager at Hahn Mason Air Systems.



ASHRAE Research Investors

Thank you for your sponsorship. If you would like to support the chapter, please contact the President.

Corporate Donors (\$1,000+)

Corporate Donors (\$500+)

Corporate Donors (\$300+)

MSS Solutions

Corporate Donors (\$150+)

Carolina Heat Pipe

Honor Roll Donors (100+)

Austin Huggins

David Kauffman

Dennis Knight, PE

Philip Runyon

Steven A. Marek

Randy Jones

Timothy Niles

Bret Turkall

Ricky Espinosa

Joe Fisher

Pete Conroy

ASHRAE Technology Awards Program

All members are encouraged to submit entries for a technology award. This will be a good advertisement for your company and will help our chapter compete for regional awards.

Building Energy Quotients (BEQ). BEQ looks at buildings before they are built and after they are constructed. BEQ gives a list of low hanging fruit for saving energy. The potential for saving energy is typically 30% as compared with a few years ago.



CTTC CORNER

For more information about this column, contact **Gene Brown** (gene3380@gmail.com).

January Recap: At our January meeting Darbis Briggman gave an outstanding presentation. Mr. Briggman's job is to make sure the facilities meet the intent of the code. Mr. Briggman was appointed by Nikki Haley. He deals with state-level inspectors. North Charleston has training classes which anyone can attend. Pete Conroy made the statement that we have a voice. If the code is not up to date, talk to your legislator. You can sit down and talk with a code official if you need to resolve a question about the code. If you disagree with an inspector, call the code official. Home builders are powerful. They want codes to be updated every 6 years rather than every 3 years. There is a bill up for a vote on this.

Solar panels are here to stay. There are lawsuits against homeowners associations which do not allow solar panels. Do not install the panels on an old roof. When the roof is replaced, the cost to remove and reinstall the panels may be \$10,000. There are 1,000 apartments under construction in one area of North Charleston.

The required elevation for mechanical equipment is changing due to flooding. Any mechanical equipment facing the road must be screened.

There are meters which will measure release of VOC's where vehicles are spray painted. This discharge must be in compliance with the code. Mr. Briggman worked with NATO making sure that radioactive contamination did not occur.

February Recap: At our February meeting Dennis Knight, head of ASHRAE Technology Council, gave a short presentation.

There are over 140 technical committees (TC). Each chapter of each handbook is governed by a TC.

Any ASHRAE member can be a corresponding member of a TC and travelling will not be required. A corresponding member does not get to vote. ASHRAE Standards committees are governed by ANSI.

ASHRAE always needs more volunteers.

Dr Robert Rabb gave the main presentation, Mechanical Engineering at the Citadel. Dr Rabb is responsible for 39 courses. The Citadel was the 5th school in the US to teach engineering. The engineering building was constructed in 1938. All other courses are taught in Bond Hall. The Citadel initiated engineering courses, 2+2 programs with Trident Technical College in 1988. In 2015 3 new MS degrees were added: civil; mechanical and electrical. Approximately 20% of graduates are in engineering. Many students are in the MS program for project management. Eighty four and a half percent of students graduate in 4 years. Ninety five percent graduate in 6 years or less. The goal is for more MS degrees to be completed online. Engineering study abroad is offered. One student is studying in Sweden.

Concluding his presentation he told us that Citadel engineering is number 21 in the nation according to US News and World Report.

Members are encouraged to submit entries for Technology Awards. Entries should be submitted to me, GENE3380@GMAIL.COM, by April 15. To find the form for Chapter Technology Award, type: ASHRAE Technology Award Form; then enter; then Chapter-Regional Application.

Anyone with a refrigeration project should enter it into competition for the Milton Garland award, So far I have never seen anyone in our chapter apply for this award.

Submissions must be sent to the Refrigeration Committee Staff Liaison (morts@ashrae.net) by May 1st to be considered for that year's competition. A copy to me, gene3380@gmail.com, would be appreciated. For additional information see [here](#).

Gene Brown
CTTC Chair



OFFICER OFFERINGS

President's Piece:

On behalf of the Charleston ASHRAE chapter, I would like to congratulate both Dennis Knight and Steve Marek. Dennis has been honored with ASHRAE's Exceptional Service Award. Steve has been honored with ASHRAE's Distinguished Service Award. Thank you for all you have done for ASHRAE over all the years!!

Don't forget about the Spring Golf Tournament right around the corner! Sign up now to reserve a spot (or team). Holes are still available for company sponsorships that will help contribute to this year's RP goal of \$18,000! See attached flyer for more information on signing up!!

We are now looking for several volunteer positions for next year. A few open positions include Secretary, CTTC Chair, YEA Chair, Historian Chair, and plenty others! Please reach out to me or other current officers if you are interested in getting more involved in ASHRAE. Thank you again to all of our sponsors and volunteers!

Tim Niles
President

Vice President's Voice:

It was a real pleasure having Dr. Robert Rabb from the Citadel as our February presenter. I personally was amazed at how much the Citadel has grown and am pleased to know our young men and women have leaders such as Dr. Rabb taking interest in their development both as people and as engineering and construction professionals. Dr. Rabb is an incredible resource available to our community and has proven to be a strong ally in continuing the interest in the Mechanical field.

For March, we are pleased to have Andy Hayes present the topic "The Cold Truth about Refrigerants and Refrigeration". However, we still have the May slot to fill, so if any of y'all have someone in mind, please feel free to contact me directly.

Thank you!

Bret Allan Turkall, PE
Vice President

Government Affairs Committee (GAC) Update:

The Government Outreach day for 2020 has been scheduled for Tuesday, April 28th at the State Capital in Columbia. If you have any contacts in our state legislature, we can reach out ahead of time to make an appointment and discuss how ASHRAE be a resource to or lawmakers.

If you are interested in attending or helping with this event, please let me know. All are welcome!

Pete Conroy
GAC Chair

2020 Spring Events



Chapter Officers

PRESIDENT—Tim Niles

Phone: 875-3637
tniles@cems-ae.com

VICE PRESIDENT—Bret Turkall

Phone: 875-3637
bturkall@cems-ae.com

SECRETARY— Austin Huggins

Phone: 566-3405
sahugginssc@gmail.com

TREASURER—Randy Jones

Phone: 881-0051
rjones@chapmancompany.com

**BOG— Jacob Yount, Philip Runyon,
Pete Conroy**

March 10th, 2020 **6:00 PM Meeting** @ Harbor Breeze—

STUDENT ACTIVITIES NIGHT

“The Cold Truth about Refrigerants and Refrigeration”

March 27th, 2020 **8:45 AM Spring Golf Tournament** @ Shadowmoss—

April 14th, 2020 **6:00 PM Meeting** @ Harbor Breeze—

CTTC NIGHT

“VFD Packaged Solutions vs Standalone Harmonic Filtering Systems”

April 28th, 2020 **Government Outreach Day** @ State Capitol in Columbia — If interested in attending, contact Pete Conroy!

May 12th, 2020 **6:00 PM Meeting** @ Harbor Breeze—

GGAC NIGHT

“XXX XXXX”

June TBD, 2020 **SUMMER SOCIAL AND OFFICER INITIATION**

August 13-15th, 2020 **Region IV Chapters Regional Conferences (CRC)** @ Greenville, SC



What is YEA?

To ensure a bright future for ASHRAE and the industry, the Young Engineers in ASHRAE (YEA) Committee was developed to create programs and develop a path





ASHRAE GOLF

CHARLESTON CHAPTER'S

"SPRING RESEARCH

PROMOTION"

CAPTAIN'S CHOICE GOLF TOURNAMENT

FRIDAY, MARCH 27, 2020

**8:45AM SHOTGUN START
SHAWDOWNMOSS GOLF COURSE
20 DUNVEGAN DR
CHARLESTON, SC 29414**

**\$100.00 includes GOLF, CART, LUNCH TO BE
SERVERD AFTER GOLF, BEVERAGES, and
PRIZES (CLOSEST TO PEN, LONG DRIVE,
ETC)!!!!!!**

Bring your own team or we can assign you to one.

Player:

Player:

Player:

Player:

Contact: Philip Runyon (843)729-1883; David Kauffman(843)693-1908;

Email this form to: prunyon@chapmancompany.com &

david.kauffman@rpecontracting.com

SPONSORSHIP LEVEL DESCRIPTION

GOLD LEVEL

- Company name will be prominently displayed at ALL Chapter activities, i.e. Chapter Meetings, Golf Outing (as a hole sponsor), Technical Seminars.
- (2) Spots at all Research Promotion activities including the spring golf tournament
- Special recognition in publications including the *ASHRAE Insights and Monthly acknowledgement in The Charleston "Gee Chee" Chapter Newsletter.*
- Hole Sponsor in the Chapter Research Promotion Golf Tournaments
- Honor Roll Research Donor recognition in Chapter Newsletter (\$ 800 Contribution)
- Sponsor of Engineering Week Activities

SILVER LEVEL

- Hole Sponsor for the Chapter Research Promotion Golf Tournament
- Honor Roll Research Donor recognition in Chapter Newsletter (\$ 500 Contribution)
- Special recognition in publications including the *ASHRAE Insights and Monthly acknowledgement in The Charleston "Gee Chee" Chapter Newsletter.*
- Sponsor of Engineering Week Activities

BRONZE LEVEL

- Hole Sponsor in the Chapter Research Promotion Golf Tournament
- Honor Roll Research Donor recognition in Chapter Newsletter (\$ 300 Contribution)
- Special recognition in publications including the *ASHRAE Insights and Monthly acknowledgement in The Charleston "Gee Chee" Chapter Newsletter.*

HONOR ROLL LEVEL

- Honor Roll Research Donor recognition in Chapter Newsletter (\$ 250 Contribution)
- Special recognition in publications including the *ASHRAE Insights and Monthly acknowledgement in The Charleston "Gee Chee" Chapter Newsletter.*

- Chapter Meeting sponsors are also available recognition on front page of Chapter Newsletter and recognition at the meeting (ADD \$200)

ASHRAE CHAPTER SPONSORSHIP
REGION IV

CHARLESTON
CHAPTER 2019-2020
FISCAL YEAR

NAME _____

COMPANY/ORGANIZATION _____

MAILING ADDRESS _____

TELEPHONE: _____ FAX: _____

EMAIL: _____

SPONSORSHIP LEVELS: GOLD \$1,000 _____

(PLEASE CHECK ONE)

SILVER \$ 500 _____

BRONZE \$ 300 _____

HONOR \$ 250 _____

CHAPTER MEETING SPONSOR ADD \$200

PLEASE EMAIL COMPLETED FORM TO:
PHILIP RUNYON:
PRUNYON@CHAPMANCOMPANY.COM