

SEPTEMBER
2009 EDITION



GET CONNECTED!!!

WWW.CHARLESTON.ASHRAECHAPTERS.ORG

“THE GEE CHEE”

CHARTERED APRIL 14, 1971

THE OFFICIAL PUBLICATION OF THE REGION 4 CHARLESTON CHAPTER 113 AMERICAN SOCIETY OF HEATING, REFRIGERATING, AND AIR CONDITIONING ENGINEERS, INC.



MEETING SCHEDULE

SEPTEMBER 8, 2009

LOCATION: NORTH CHARLESTON
RADISSON HOTEL

B.O.G MEETING: 5:00-5:30PM

“HAPPY HALF HOUR”: 5:30-6:00PM

TECH PROGRAM: 7:00-8:00PM

8:01.....SEE YOU NEXT MONTH!

COST: \$20 / PERSON + \$5 OPEN BAR

**THIS MONTH'S PRESENTATION BY:
JAMIE EDMONDSON
TOPIC:
ENERGY EFFICIENT PUMP SELECTION**

This Month's Articles:

- **Presidential Message**
- **Monthly Topic and Speaker**
- **The CTT Corner**
- **NEW!!! CHARLESTON CHAPTER AWARDS**
- **Member News**
- **Sponsorships and Investors**
- **The Wall of Honor**
- **Upcoming Events**
- **NEW!!! ASHRAE JOBS**
- **Get Involved**

Presidential Message

Let me begin by welcoming everyone back to a fresh, new year in the Charleston Chapter of ASHRAE. I hope you all had a chance during the summer to spend time with your families and take a little time away from your professions to recharge.

The summertime marks the Chapters Regional Conference (CRC) in St. Pete Beach, Florida. The conference was attended by several members of our chapter, and we all came away with a new vision for the chapter. The presentation by Society President, Mr. Gordon Holness, P.E., was a special treat, as he spoke on increasing energy efficiency in Existing Buildings. Existing buildings consume over 72% of electrical power generation and 55% of natural gas generation in our country, and a VAST majority of these buildings will still be in use 20 years from now. What a tremendous opportunity for conservation! There were also training and continuing education opportunities which we took advantage of. CRC is a great place to network with other chapters and we encourage all members to attend next year's CRC in Greensboro, NC.

Make note of the Awards section of this month's newsletter, and ensure you congratulate those chapter members who received special recognition for their extra efforts during the year. It is these efforts that give the Charleston Chapter its reputation as an outstanding chapter not only in the region, but in the entire society.

Pete Conroy
Chapter President

Monthly Topic and Speaker

This month's topic is **“Energy Efficient Pump Selections”**

Pumps consume a large percentage of the energy used in a building HVAC system. In this session we will learn about pump efficiency, horsepower, and how to select and apply the best pumping configuration for your applications, including variable-speed and parallel pumping options.

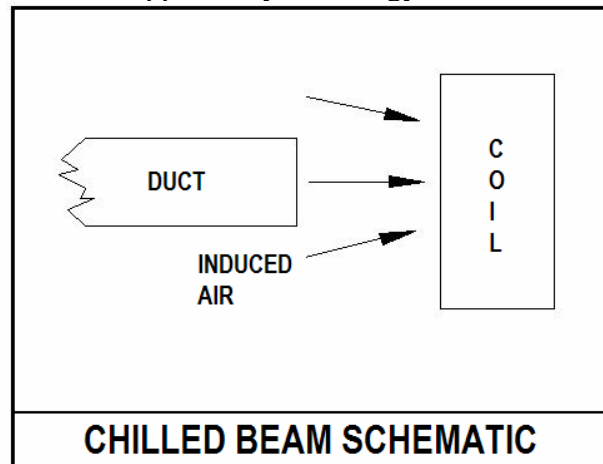


Jamie Edmondson is Vice President of James M Pleasants Co, the ITT Bell & Gossett representative for our area. He has been in the hydronics industry for 15 years.

The CTT Corner

The Chapter Regional Conference in St Pete was outstanding. Some very interesting technical information was presented. It was also stressed that people are needed to review chapters in the ASHRAE handbooks.

One energy saving feature incorporated in a laboratory was a chilled beam. An air handler provides cooling and dehumidification. The air is ducted to the room where the chilled beam is routed across overhead. The chilled beam consists of two chilled-water cooling coils which extend the length of the room. The air from the ducts is blown through the coils, inducing room air to be drawn through the coil along with the ducted air. The discharge air is maintained at 3 F above dewpoint so that condensation does not occur in the coils. It takes less energy to pump the chilled water to the room than to blow ducted air to the room so a reduction in operating cost is achieved. Laboratories with exhaust hoods use 5 to 10 times the energy used by other facilities so the chilled beam offered an excellent opportunity for energy conservation.



There are sensors which can view pixels in front of laboratory hoods. If there is no change in pixels for one minute, the face velocities reduce to 60 FPM. If a person steps in front, the velocity goes to 100 FPM almost instantly.

Forty percent of energy use in the US is consumed by buildings.

The energy (BTUH/person) used by the US is about twice that of Europe, but the energy used by the United Arab Republic is about 1-1/2 times that of the US.

Cost of LEED certification is less than 2% of construction. For the highest LEED certification it is approximately 4%. This investment pays off many times over.

The biggest natural gas deposits are in Russia. The second largest are in Iran.

We were encouraged to emphasize communication with building officials. One engineer convinced a building official that VAV was the intelligent application in a hospital even though the code prohibited this.

The CTT Corner (CONTINUED)

Ninety four percent of building cost is for people. Spend a little more for comfort, health and productivity.

Commissioning should include building envelope, electrical systems and vertical transportation.

One of our speakers cited an example where he put a building into fire mode. Not one damper closed. Everything should be commissioned.

Variable frequency drives (VFD) are excellent tools for saving energy but they can cause harmonic voltage problems in the building circuits. A harmonic study can be provided by VFD manufacturers if requested.

One speaker was a building owner who indicated that the green construction paid for itself in 6 or 7 years in utility costs alone. When you sell your building you will be competing against others who are selling green buildings.

The Montreal Protocol addressed the ozone layer. The ozone layer is coming back so environmental efforts are paying off.

A lot of work is being done to see how closely the performance of buildings tracks in comparison to the design energy consumption.

Anyone with questions can contact me at gene_brown_jr@yahoo.com.

Charleston Chapter Awards

The following awards were presented at CRC in St Pete Beach, Florida:

Carl McGartlin	The Lamp of Knowledge	(Best Student Activities Chair)
Emad Afiffi	Buddy Williams Award	(Best Student Chapter Faculty Advisor)
Emad Afiffi / SCAD	1 st Place in Regional Design Competition, Project "Office Zero"	
Gene Brown	The Emmy	Best CTT Chair
Dan Cartin	Century Award	Raised \$100.00/member Average for Research
Dan Cartin	Full Circle	\$100.00 Contribution from Officers
Dan Cartin	Certificate of Achievement	Reached Goal for ASHRAE Research
Rob Turner	PAOE with Gold Star	Presidential Award of Excellence
Dave Tomayko	History Ribbon	
Randy Jones	Chapter Service Award	
Louis Schweers	Chapter Service Award	
Dennis Knight	Regional Award of Merit	

" The Gee Chee "

Charleston Chapter Awards (CONT.)

Design Awards:

Rob Turner	1 st Place, Public Assembly, Existing
Craig Buck	1 st Place, Institutional Building, Existing
Craig Buck	1 st Place, Institutional Building, New
Seth Spangler	1 st Place, Public Assembly, New
Don Zimmerman	1 st Place, Industrial Facility, New
Don Zimmerman	1 st Place, Industrial Facility, Existing
Brett West	1 st Place, Residential, New
Dave Crutchfield	1 st Place, Commercial Buildings, Existing
Dave Crutchfield	2 nd Place, Commercial Buildings, New

Member News

If you have recently moved to the Charleston area and wish to transfer your membership, please contact our Membership Chair, **Charles Hipp**, or make the change online at www.ashrae.org.

Sponsorships and Investors

2009-2010 ASHRAE RESEARCH INVESTORS

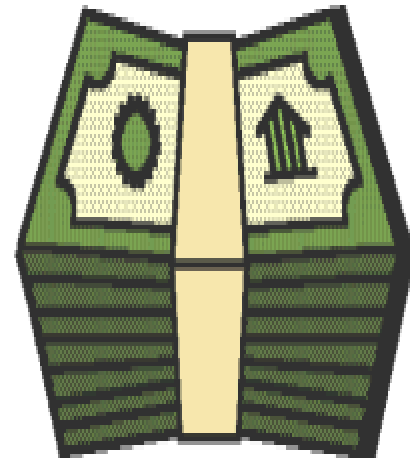
Triad Mechanical Contractors



The Wall of Honor

Individual Donations of \$100.00 or More

**Pete Conroy
Pamela Phillips**



Much of ASHRAE Research funding comes in through individual donations, so please give.

CAN WE PUT YOUR NAME HERE?

" The Gee Chee "

Upcoming ASHRAE Events

"FALL RESEARCH PROMOTION" GOLF TOURNAMENT

LOCATION: THE LINKS AT STONO FERRY

DATE: OCTOBER 23, 2009

TIME: 1:00PM SHOTGUN START

COSTS: \$75 INCLUDES GOLF, CART, BOX LUNCH & PRIZES

PLEASE EMAIL PAMELA PHILLIPS TO REGISTER YOUR TEAM AT
PAMELA.PHILLIPS@ARCADIS-US.COM

PLEASE CALL PAMELA AT 375-5990 OR FAX YOUR REGISTRATION FORM
TO 375-5993

AHR EXPO

LOCATION: ORANGE COUNTY CONVENTION CENTER

ORLANDO, FLORIDA

DATES: JANUARY 25-27TH, 2010

ASHRAE CHAPTER MEETINGS

October Meeting

Student Activity Night

Tuesday October 13, 2009

Location: North Charleston Radisson Hotel

Speaker: TBD

November Meeting

Donor Recognition Night

Tuesday November 10, 2009

Location: North Charleston Radisson Hotel

Speaker: TBD

December Meeting

Oyster Roast

Tuesday December 8, 2009

Location: Trane Office

Speaker: TBD

January Meeting

Membership Promotion Night

Tuesday January 12, 2009

Location: North Charleston Radisson Hotel

Speaker: TBD

February Meeting

National Engineers Week

Tuesday February 9, 2009

Location: North Charleston Radisson Hotel

Speaker: TBD

March Meeting

Research Promotion Night

Tuesday March 9, 2009

Location: North Charleston Radisson
Hotel

Speaker: TBD

April Meeting

History Night

Tuesday April 13, 2009

Location: North Charleston Radisson
Hotel

Speaker: TBD

May Meeting

Student Activity Night

Tuesday May 11, 2009

Location: North Charleston Radisson
Hotel

Speaker: TBD

June Meeting

Chapter Social

Tuesday June 8, 2009

Location: TBD

Speaker: TBD

" The Gee Chee "



On June 15th, ASHRAE launched its full services Career Center for ASHRAE members and HVAC hiring authorities. The reception has been magnificent as the number of job seekers, resumes, and employer job postings have risen each week. We are very pleased.

The Career Center is user friendly. The products and services match that of traditional big box boards such as Monster.com, yet the information and postings are specific to the ASHRAE Community. Job seekers have a shorter and more pleasurable search experience, and employers have immediate access to a pre-filtered pool of talent.

One unique feature is that the Center highlights ASHRAE members. The online job application form requires an applicant to identify themselves by membership status as does the résumé posting form. Employers can sort applications and résumés by their status.

Why did we agree to keep this open to non-ASHRAE members? Because career research is the fastest growing use of the web and we also see this service driving ASHRAE membership.

<http://www.ashraejobs.com/>

" The Gee Chee "

GET INVOLVED

CONTACT ONE OF OUR COMMITTEE CHAIRS TO SEE HOW YOU CAN MAKE A DIFFERENCE

CHAPTER OFFICERS

PRESIDENT

Pete Conroy
Phone: 377-2300
Fax: 377-2301
petec@jmpco.com

VICE PRESIDENT

Brian Keiser
Phone: 971-9639
Fax: 971-9641
bkeiser@rmf.com

SECRETARY

Eric Crawford
Phone: 556-7272
Fax: 556-7487
trsecrawford@bellsouth.net

TREASURER

Clarence Ham
Phone: 991-4845
Fax: 553-5565
clarenceham@bellsouth.net

CHAPTER COMMITTEE CHAIRS

HISTORIAN

Dave Tomayko
Phone: 819-2742
dtomayko@knology.net

MEMBERSHIP

Charles Hipp, III
Phone: 367-2404

MEMBERSHIP VICE CHAIR

Barrett Williams
Phone: 881-3201
Fax: 881-3628

REFRIGERATION

Scott Peak:
Phone: 881-8282
Fax: 881-8290

TEGA/CTT

Eugene G. Brown, Jr.
Phone: 963-4983
Fax: 963-4993

RESEARCH PROMOTION

Pamela Phillips
Phone: 375-5990 x 20
Fax: 375-5993
pamela.phillips@arcadis-us.com

STUDENT ACTIVITIES

Carl McGartlin
Phone: 406-0035
Fax: 406-0035

PROGRAMS

Brian Keiser
Phone: 971-9639
Fax: 971-9641

RESEARCH

Dan Cartin
Phone: 744-4477
Fax: 747-3399

SAVANNAH SECTION CHAIR

Pete Conroy
Phone: 377-2300
Fax: 377-2301

SAVANNAH SECTION VICE-CHAIR

MYRTLE BEACH SECTION CHAIR

Eric Crawford
Phone: 556-7272
Fax: 556-7487

NEWSLETTER EDITOR

Eric Crawford
Phone: 556-7272
Fax: 556-7487

HOMEPAGE WEBMASTER

Tim Walker
Phone: 553-5513
Fax: 824-0501

STUDENT ACTIVITIES VICE CHAIR

Dr. Emad Afifi
Phone: (912) 525-6876

HONORS AND AWARDS

Bo Nutting
Phone: 745-6748
Fax: 744-5553

CHARLESTON ENGINEERS JOINT COUNCIL LIASION

Eric Crawford
Phone: 556-7272
Fax: 556-7487