

Giga-Joule

Greenville Chapter

March, 2011

<http://www.ashrae4greenville.com/newsletter.php>

Meeting Announcement

The March meeting will be held on Thursday, March 10th at the Roper Mountain Science Center. The details are listed on the Programs Page. For more information, please contact our Programs Chairman, Grant Wiegmann, at 864-672-6105 or email at programs@ashrae4greenville.com

A Message from the President

Thank you to Mark Johnson of Calmac and his presentation on Thermal Storage. It appears that thermal storage is more applicable in our area than I previously believed. This month a favorite returns; Chris Edmondson is going to quietly explain steam traps.

I heard that Rodney Hinton, Bob Gluszik, and Derrick Vigil attended ASHRAE's winter meeting was in Las Vegas. Who else attended? Drop me an e-mail and let me know if you did.

Engineer's week was February 21 through 25. I made a presentation at Sterling Middle School about engineering as a possible career choice and got to play teacher for a little while. Previously our chapter has had strong participation in engineer's week which been a high point in student activities. Let us know if you participated.

Daniel is making progress towards establishing a student chapter at Clemson. As I write this the paperwork may already be entering the system. Good work Daniel!

Over the next month chapter officers will be calling some of the members asking if they are willing to donate some of their time in the operation of the Greenville Chapter during 2011-2012 chapter year. Please give it some thoughtful consideration.

Chapter Administration

The Board of Governors meeting for February 15 included discussion on the following:

- Possible officers for 2011-2012
- Brandt Williams was elected chairman of the 2012 CRC
- Hotel selection for 2012 CRC. Report on Embassy Suites presented by Brandt.
- Bi Lo tour and hockey
- Fall golf research finances
- Chapter made a \$100 donation to research promotion per Dennis Knight's request in lieu of travel reimbursement.
- Clemson student chapter is in the organizational stages.



Devon Cortright
President
president@ashrae4greenville.com

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Greenville ASHRAE President
president@ashrae4greenville.com

Membership Corner

Thanks to all who came out for our February meeting – We had a great turnout and appreciate your participation.

As the ASHRAE Membership Chair for the last few years, we are constantly looking for ways to boost our membership...Your participation is greatly appreciated. Bring a friend to a lunch meeting and let him/her know how ASHRAE Membership has benefited you. All mechanical engineers, mechanical contractors, facility managers, engineering students and anyone involved in any and all aspects of the HVACR industry are welcomed to join ASHRAE.



Our second Membership Promotion Meeting is scheduled for May. This is a great opportunity to bring a friend with a completed application and you both will enjoy lunch and the meeting on us...applications can be completed online or downloaded at www.ashrae.org – Don't forget to select Membership in the Greenville Chapter.

Note to existing members – Please update your BIOS at www.ashrae.org (if you need assistance with this, please do not hesitate to contact me)

Ideas are always welcome to assist us with promoting ASHRAE Greenville Membership, as well as retaining current Membership, and fund raising...Please feel free to contact me at membership@ashrae4greenville.com or 864-444-0219 or any of the other ASHRAE Board Members.

For your Future Planning: Calling ALL MEMBERS...In 2012, Ashrae Greenville, will be hosting the annual CRC Meeting for all Ashrae Board Members in the Southeast...we are currently seeking members who wish to be involved in the planning as well as serve on the Board help us to plan for a successful and well attended event. Please see any of the Board Members at our monthly meetings or contact us directly...

Best Regards,
Dorothy Bertolini
Membership Chair – ASHRAE Greenville SC
membership@ashrae4greenville.com

Chapter Programs



Last month we had Mark Johnson of Calmac Manufacturing give a presentation on Energy Storage. It was evident that rising energy costs and rebates by Power Companies are making Energy Storage systems more and more viable. Thank you Mark for making the trip for Florida to give us a presentation.

This month, Chris Edmundson will be joining us for a (1) hour lunch meeting followed by an additional (3) hour presentation. As always it will be both an entertaining and educational lesson. Mr. Edmundson's topic is "Is There a Hole in Your Bucket, Steam?." He will also be presenting a (3) hour seminar after the primary meeting on "Cooling Tower System Piping for Multiple Chillers and Waterside Economizing Applications for

Better System Efficiencies". Please RSVP soon so that we can make sure there will be enough room and food for everyone. Please see the meeting agenda below for information on the program.

Grant Wiegmann
Programs Chair
programs@ashrae4greenville.com

March Meeting

Program: Is There a Hole in Your Bucket, Steam?

Presenter: James Christopher Edmondson

Chris Edmondson received his B.S. degree in Mechanical Engineering from North Carolina State University in 1967. During the summers, he worked at Barber Coleman and Jay Johnson Controls. After graduation, he spent four and a half years as a salesman with the Trane Company. In 1971, he came to work for the James M. Pleasants Company, Inc. (Manufacturer's Representative for the ITT Fluid Handling Division). He worked as an outside salesman until 1978, when he was promoted to Vice President and Sales Manager until 1987. Since 1987 to the present time, he has served as President of the James M. Pleasants Company, Inc.

Mr. Edmondson has served many years in the ASHRAE organization, holding positions such as Secretary/Treasurer, Vice President and President of the North Piedmont Chapter. For the fiscal year, 1985-86, he received the Rudy Ferguson Memorial Award (Presidential Award of Excellence). In 1985, he became a technical speaker to various ASHRAE chapters and continued through 1989. He spoke at the ASHRAE Region VII CRC in 1992 and also at the Birmingham Region VII CRC. He also held the position of Educational Activities Vice Chair for Region IV from 1992-1994. In 1994, he was the Chapter Programs Chair for Region IV. In 1998-2000, he was Region IV ARC. He is currently Region IV DRC.

During 1980-1990, he has presented papers to various engineers on the following subjects:

Basic Primary/Secondary Variable Volume Pumping
Chiller Piping
Air Control
Plumbing Piping Systems

His principal areas of interest are energy savings, primary/secondary variable volume systems, heat transfer, hydronic systems, plumbing piping systems and control chilled water plant design.

LECTURE TOPICS:

A Review of Primary Secondary Systems

A history of primary secondary systems and a basic review of the principals involved will be discussed. Typical applications for chilled water, hot water and chillers will be reviewed.

The Primary Secondary versus Variable Primary Debate

A basic review of both systems will be discussed. A comparison of the two with pros and cons will be presented. A comparison of the two in chiller applications will be presented.

Cooling Tower and Condenser Piping

This is a basic review of multiple cooling tower and condenser water piping requirements with special emphasis on the required flow rates and sequencing of the major components.

An Introduction to Ice Storage Systems

With energy deregulation, there is an increasing awareness of alternate systems to decrease energy cost. This is a basic introduction to the ice storage system and its potential impact on providing chilled water to HVAC systems with reduced energy cost.

Manual versus Automatic Balance of Hydronic Systems

The pros and cons of manual versus automatic balance are discussed and evaluated. There are applications and needs for both types of systems. This talk will review the issues involved.

Is It Raining in Your Boiler?

This presentation examines ways to prevent condensing in non-condensing appliances. It reviews the basics of combustion and what causes condensation. The basic boiler piping arrangements will be examined along with a review of temperature mixing in those systems. It concludes by looking at different boiler return water temperature protection solutions, including boiler cycle times and minimum system volumes.

Location: Roper Mountain Science Center (www.ropermountain.org)

Date: Thursday, March 10, 2011

Time: 11:30 a.m. Doors Open
11:35 a.m. Lunch Served
11:45 a.m. to 12:00 p.m. Chapter Business
12:00 p.m. to 1:00 p.m. Main Program
1:00 p.m. to 4:00 p.m. Extended Program

Cost: Lunch Program: \$10/chapter member \$15/non-chapter member (catered lunch)

Education Credit: This program qualifies for 1.0 PDH (including NC PE)

**Please RSVP to programs@ashrae4greenville.com
No later than Noon Tuesday, March 8, 2011**

Chapter Technology Transfer

Contractor & Design Professional Liability & Insurance

The following is based on a column in the Gibbs Burton LLC Design and Construction Newsletter and information on the JDSUPRA website. Links to both sources are at the bottom of this column.

On January 7, 2011 the SC Supreme Court issued a ruling that has some consequences in the design and construction industry that design engineers should be aware of. In *Crossman Communities of North Carolina, Inc. vs. Harleysville Mutual Insurance Co.* negligent construction, by a subcontractor led to water intrusion. That water intrusion over time, resulted in millions of dollars in property damage in the condominiums. The developer-contractor sued their Comprehensive General Liability (CGL) insurer to collect. The court decided that there was no CGL coverage for the loss. The court ruled that CGL coverage is triggered by an occurrence or accident which results in unintended damages or loss. In this case faulty workmanship led to predictable consequences; therefore, no accident to trigger coverage.



**Devon Cortright
PE
Chapter Technology
Transfer Chairman**

The Gibbs Burton newsletter goes on to say:

- Contractors need to realize that their company's financial assets may be on the line should their CGL policy not provide coverage.
- Owners need to be more careful in their selection of contractors and select ones that have a history of quality work. In those situations where there is no insurance coverage, the financial assets of the contractor needs to be substantial enough to cover the potential damages associated with their work.

Interestingly, design professionals typically carry insurance written to cover errors and omissions. The Gibbs Burton newsletter states:

Since design professionals are typically covered by errors and omissions policies which provide coverage for negligent acts, errors and omissions, they can expect to become defendants in every construction defect case. As a result of *Crossman*, design professionals may be the only party with insurance to cover a potential claim.

Link to JDSUPRA website:

<http://www.jdsupra.com/post/documentViewer.aspx?fid=abc48047-fd54-4c81-9418-cb1551bf16da>

Link to Gibbs Burton LLC Design and Construction Newsletter:

http://campaign.r20.constantcontact.com/render?llr=atywm8n6&v=001ERobWwfqaaeN_vuLiejZWCw9WOneUi_KAs_UTqK_opl-WCCyw2_WMaeaUxt6GqiLehpSkzQDicvXz9RjtDGH-nVwtbpHmuciaEVsboBv-xUO058XMR_FVIsTiPtLygZx8iN9sBOl6Pc%3D

Devon Cortright, P.E., LEED AP
Chairman Chapter Technologies Transfer, Greenville Region IV
ASHRAE Member Since 1982

History

Some of ASHRAE history - part 2

From the beginning the Society documented its work and published the proceedings in documents called Transaction of the American Society of Heating and Ventilating Engineers. By the 25th anniversary meeting the Society had over a thousand members and they had established a Research Bureau. In 1922 the Society had published The American Society of Heating and Ventilating Engineers Guide this was the first of the guidelines for engineers to work with for a standardization of their designs.

The Society continued to improve on The Guide and two years later it was recommending that every member use it and to recommend it to others to use. The Society was looking to bring about “good engineering practice”.

Here are some of the Chapters in the 1922 issue: Steam and Hot Water Systems, Heat Losses, Infiltration, Pipe Sizes, Pumps for Heating Service, Comfort Zone, Ventilation Requirements of Buildings, Air Duct Sizes, Air Conditioning and Cooling, Humidifying and Dehumidifying (These title sound familiar don't they). The Guide had 60 firms advertising in it and they were looking to have more than 150. I remember some of my earliest ASHRAE Guides had advertisements in it.

John Mullis

Historian

history@ashrae4greenville.com

Tentative Event Dates for 2010-2011

Thursday 09/09/2010	September Chapter Meeting: Building Leakage & Testing	Presenter: Rodney Hinton
Thursday 10/14/2010	October Chapter Meeting: Product Liability & IAQ Liability	Presenter: Ward Lambert
Friday 10/22/2010	ASHRAE Golf Tournament	
Thursday 11/11/2010	November Chapter Meeting: Humidity Control and Outside Air	Presenter: Chris Adams
Thursday 12/09/2010	December Chapter Meeting: Right Sizing	Presenter: Dennis Knight
Thursday 01/13/2011	January Chapter Meeting: Open Control System or What's in a Name?	Presenter: Bryan T. Lampley, P.E.
Thursday 02/10/2011	February Chapter Meeting: Energy Storage for a Low Carbon Future	Presenter: Mark Johnson
Thursday 03/10/2011	March Chapter Meeting: Is there a Hole in Your Bucket, Steam?	Presenter: Chris Edmondson
Thursday 04/14/2011	April Chapter Meeting: Ductless VRF System Applications	Presenter: Scott Graham
Friday 4/22/2011	ASHRAE Golf Tournament	
?	ASHRAE Webcast:	
Thursday 05/12/2011	May Chapter Meeting: What's New with Electric Motors and VFD's	Presenter: Bob Gluszik



ASHRAE
Technology for a Better Environment

Region IV
Greenville Chapter