



Greenville  
Chapter of  
ASHRAE

# Giga-Joule

November 2005

## *Meeting Announcement*

This month's meeting will be held on **Tuesday, November 15, 2005, from 11:30 a.m. to 1:00 p.m.** at the **Roper Mountain Science Center** located at the intersection of I-385 and Roper Mountain Road. For directions, please contact Programs Chairman, Eric Scott, by phone at (864) 232-6633 x21, email at [programs@ashrae4greenville.com](mailto:programs@ashrae4greenville.com) or by visiting <http://www.ropermountain.org>.

## *A Message from the President*

James Bryan PE  
Greenville  
Chapter President



The Greenville chapter would like to thank Chris Edmondson for another wonderful presentation of water-source heat pumps. We had a very good turnout. Chris also mentioned some great points which I've elaborated on regarding ASHRAE involvement at the National (Society) level. 1. How do you get involved in ASHRAE Technical Committees (TCs)? First, you should attend ASHRAE Winter and Summer Meetings. Then, volunteer with the manager, research and technical services of the committees you're interested in serving. Last, you will need to update your current Biographical Record Form. Visit [www.ashrae.org](http://www.ashrae.org) and use the "Technical Committees" shortcut on the upper right hand window pull down to review committees and download forms.

2. Energy and Environment - these are two of the main points regarding LEED certification as well as ASHRAE technological advancements. I recently received an ASHRAE Research Strategic Plan over the next 5 years (2005-2010) titled "Navigation for a Sustainable Future". The full plan can be downloaded from the following website: [www.ashrae.org/research](http://www.ashrae.org/research). Several of the issues discussed are Energy and Resources; Indoor Environmental Quality; Tools and Applications; Equipment, Components and Materials; and Education and Outreach. With an ever-changing marketplace, this strategic plan is a great tool to assist and plan for your sustainability. Twelve (12) research projects ready to bid request for proposals (RFPs) are also available at the ASHRAE Research webpage mentioned above.

The date of Friday, April 21, 2006, with a noon shotgun start will be the Spring Golf Tournament. Please plan accordingly now.

If you have any questions or comments, please feel free to contact me.

**James Bryan PE**  
**Greenville ASHRAE President**  
[president@ashrae4greenville.com](mailto:president@ashrae4greenville.com)

# Chapter Programs



## Program: Controls Protocols and Interpretation

- a) Acronyms in the IT/IP world and what they mean to us.
- b) Protocols – Myths and Monsters. A realistic view of the different protocols in the HVAC-R controls and building management industry and what the differences are, features and limitations.
- c) Internet and Intranet terms and applications
- d) Designing and understanding Web based sequences of operation
- e) Web products and solutions available today!

## Presenter: Jeff Swiderski

Jeff has a BSE in electronic engineering. His background in DDC control systems began in 1983 with Parker Electronics, where he began designing HVAC DDC system products for many applications. Jeff is currently the president of the Carrier Control Council, which is a group of DDC control engineers from around the world who gather to discuss and direct the engineering efforts of designed products as pertained to market trends and changes.

**Location:** Roper Mountain Science Center - Auditorium  
(See front page for directions)

**Date:** Tuesday, November 15, 2005

<b>Schedule:</b>	11:30 a.m.	Doors Open
	11:35 a.m.	Lunch served
	11:50 a.m. to 12:00 p.m.	Chapter Business
	12:00 p.m. to 1:00 p.m.	Main Program

**Cost:** \$10/person - Lunch is included & guests are welcome

**Education:** This program qualifies for 1.0 PDH credit.

**Eric Scott**  
**Programs Chairman**

### RSVP REQUIRED TO ENSURE LUNCH

Please reply to [programs@ashrae4greenville.com](mailto:programs@ashrae4greenville.com) no later than Friday, November 11<sup>th</sup>.

## ***Research Promotion***

Research Promotion News - Dennis O'Keefe, RP Chairman

Well, we got our first RP fund raising event under our belt, the Fall ASHRAE Golf Outing, held Tuesday, October 11th, at Willow Creek Golf Club. Turnout was, well poor, only 25, but we managed to have a good time and I made sure that we didn't run out of beer. That required an extra road trip for one last case of Coors light. The goal is to raise money and despite the turnout, we received \$900 in hole sponsors and almost another \$100 in profit. I'd like to thank the following for their support:



Bill Knight  
Caviness Lambert Engineering  
Hahn-Mason Air Systems

James M. Pleasants Co.  
Johnson Controls  
Piedmont Natural Gas

“Closest To The Pin” went to Bill Bowers, and Will Thomason got “Longest Drive”. “Longest Drive” was contested by Bill Knight, who claimed that he flew over the green. It was a short hole but you had to be in the fairway to win. First place went to the team of Bill Bowers, Buddy Bowers, Terry Kennemore and Jamie Porterfield.

**I got a lot of feedback about having a golf outing on Friday afternoon, so this spring there will be no reason not to come as we have picked Friday, April 21, 2006. Mark your calendars now. I expect to fill the place up.**

Golf course will be announced as soon as we find out who can give us the best deal. This will be our last fundraising effort of 2005-2006 so I'm counting on our proud sponsors to fill up the course with sponsorship signs. And please make sponsorship checks out directly to ASHRAE Research Promotion (not to an individual). If you or your company can sponsor the event let me know.

I want to thank all of you who have worked for and contributed to Resource Promotion in the past. We'll be having an RP night in November to recognize individual donors (\$50 and up) and companies (\$150 and up) who have helped make ASHRAE what it is today.

If anyone has any ideas on fundraising events that we could apply to this Chapter please see me after the meeting. Thanks!

**Dennis O'Keefe**  
**Research Promotion Chairman**

## ***Membership Corner***

Attendance at the full September seminar were Wade Crow, Jeff Mitchell, Kyle Loseke, Casey Lynn, Peter Henn, Devon Cortright, Robert Carter, Chip Allison, Jeff Redderson, Raymond Kuhne, Bill Sykes, Eric Scott, Jim Reeves, John Powell, Brent Abbott, and Paul Jensen.

Attendees at the lunch September meeting were those listed above plus John Bindewald, Lee Capps, Karl Counts, Bob Dendy, Clint Hunter, Bill Knight, Greg Kyzer, Jay McCutcheon, Dennis O'Keefe, Jody Parker, Billy Austin, Mark Rosenfeld, Mark Schnetzka, Jerry McAulieke, and Chris Adams.



Attendees at the October meeting were Manuel del Valle, Jim Ridenhour, Will Thomason, Bob Leake, Harry King, Bill Knight, Eric Scott, Joe Cain, Walter Tuttle, Carroll Suttles, Bob Speer, Devon Cortright, Ron Brewton, Karl Counts, Dennis O'Keefe, Chip Allison, Graham Fizer, Rodney Hinton, John Adams, Jay McCutcheon, Keith Mattison, Greg Kyzer, James Bryan, Doug Peterson, Robert Carter, James McCarter, Jody Parker, John Bindewald and Jeff Mitchell.

New member applications can be obtained at our regular meetings or call me at (864) 233-7966.

**Carroll Suttles**  
**Membership Chairman**

## ***Happenings in Society***

### ONLINE SEMINAR – EARN CEUs from your Desktop

**Introduction to Green Buildings and Sustainable Construction** - October 20, 2005 - This course will present the basic principles related to sustainable construction and green buildings. Included in the course will be a review of the integrated approach to buildings and systems necessary to achieve green/sustainable buildings, developments, and projects.

**Complying with Requirements of ASHRAE Standard 62.1-2004** - October 26, 2005 - ASHRAE Standard 62.1-2004 Ventilation for Acceptable Indoor Air Quality contains many changes from previous versions. The new standard incorporates more than 15 recent addenda. For more information you may visit the following link  
<http://www.ashrae.org/templates/AssetDetail?assetID=44511>

## ASHRAE Releases Proposed Cabin Air Standard for Public Comment

ATLANTA – A proposed standard that will define air quality and comfort levels on airplanes has moved one step closer to publication. ASHRAE's proposed standard 161P, Air Quality within Commercial Aircraft, is open for public comment until Nov. 7, 2005.

Also open for review until that date is the proposed companion guideline to the standard, Guideline 28P, Air Quality Within Commercial Aircraft. It provides supplemental information on air quality in air-carrier aircraft and on measurement and testing related to aircraft air quality. The proposed standard would apply to commercial passenger air-carrier aircraft carrying 20 or more passengers. It is intended to apply to all phases of flight operations and to ground operations whenever the aircraft is occupied by passengers or crew members. No such standard encompassing ventilation, thermal comfort and filtration currently exists for aircraft.

“The environment aboard commercial aircraft is different than that found in other spaces commonly occupied by people,” Byron Jones, Ph.D., chair of the 161 committee, said. “While aircraft are operated with the comfort of passengers and crew in mind, their safety and health must always be paramount.” Among the reasons aircraft cabin environments are unique are occupant activity levels range from almost completely sedentary (passengers) to active (flight attendants); passengers and crew make up a wide cross section of the general population; and aircraft must be regarded as both a public place (passengers) and a workplace (crew).

The proposed standard requires a minimum total air supply of 15 cubic feet per minute (cfm) and recommends 20 cfm per person. The requirement may be met with a mixture of outside air and filtered recirculated air or with 100 percent outside air. A minimum of 7.5 cfm per person of outside air is required. In addition to ventilation requirements, the proposed standard addresses supply air quality and control and monitoring of contaminants to further ensure satisfactory air quality is maintained, according to Jones. Requirements for comfort factors, such as rate of change of cabin pressure, air temperatures and surface temperatures, and minimum and maximum air velocities, also are included.

An informative appendix supplements the requirements of the standard with background information on a variety of potential air contaminants, methods of measurements, references to standards and guidelines of allowable levels, and data for levels measured on aircraft.

Drafts of ASHRAE's proposed standards and guidelines are available only during their related public review periods. To obtain electronic draft versions of the Standard 161P or Guideline 28 during the comment periods, log on to ASHRAE Online at [www.ashrae.org/standards](http://www.ashrae.org/standards).

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## ASHRAE Launches Engineering for Sustainability Effort

ATLANTA – The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) has launched a new campaign emphasizing its role as “the engineering engine that drives sustainability.”

As part of ASHRAE's stronger focus on its involvement in green buildings, the Society has introduced a new logo, theme, Engineering for Sustainability, and Website, [www.engineeringforsustainability.org](http://www.engineeringforsustainability.org). These will be used to identify ASHRAE products and services related to sustainability.

“ASHRAE has long provided ‘engineering for sustainability’ by applying its diverse technology assets to the sustainability movement in energy efficiency, indoor environment and industrial processes,” Ron Jarnagin, chair of a committee developing a roadmap for sustainability for the Society, said. “With growing focus in the industry on the green movement, we need to emphasize that ASHRAE is the engineering engine that drives sustainability.”

Jarnagin noted that the Society’s recent efforts include publishing and working on the Advanced Energy Design Guide series, Standard 90.1, which contains a section guiding designers on how to meet requirements for building rating programs, and the ASHRAE GreenGuide, all part of an ASRHAE green “toolkit.”

Sustainability also is addressed through other standards and special publications, ASHRAE Journal articles, ASHRAE Learning Institute courses and in the ASHRAE Handbook.

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### User’s Manual Provides Better Understanding of ASHRAE 62.1

ATLANTA – A new user’s manual provides users with a better understanding of the design, installation and operation requirements in ASHRAE’s ventilation standard.

The Standard 62.1 User’s Manual explains the requirements of ANSI/ASHRAE Standard 62.1-2004, Ventilation for Acceptable Indoor Air Quality, and contains numerous examples of their application in an easy-to-follow question and answer format. “Because the standard is written in code-intended language, such material could not be included in the standard itself, so the manual helps users better understand the intent and apply it to their work,” Dennis Stanke, chair of the Standard 62.1 committee, said. “It helps users understand what Standard 62.1 requires and how those requirements can be met. It’s a document that designers have needed for many years and will find useful for many years to come.”

The manual includes a CD containing a spreadsheet to assist in the standard’s new ventilation rate procedure calculations. The manual was developed through ASHRAE research and partially funded by the National Institute of Standards and Technology, the Air-Conditioning and Refrigeration Institute and the U.S. Green Building Council.

The cost of the Standard 62.1 User’s Manual is \$55 (\$44, ASHRAE members). To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, by mail at 1791 Tullie Circle NE, Atlanta, GA 30329, or visit the ASHRAE.org Bookstore at [www.ashrae.org](http://www.ashrae.org).

**Jamie Porterfield**  
**CTT (Chapter Technology Transfer) Chairman**

# Greenville Chapter ASHRAE

## 2004-2005 Chapter Officers

Office	Officer	Company	Phone	Fax	email
President	James Bryan	O'Neal, Inc.	298-2148	298-6330	<a href="mailto:president@ashrae4greenville.com">president@ashrae4greenville.com</a>
Programs/ PE	Eric Scott	Carrier Carolinas	232-6633 x21	242-0290	<a href="mailto:programs@ashrae4greenville.com">programs@ashrae4greenville.com</a>
Secretary	Scott Houston	Thermal Resource Sales	250-2822	250-0585	<a href="mailto:secretary@ashrae4greenville.com">secretary@ashrae4greenville.com</a>
Treasurer	Devon Cortright	H2L	233-8844	232-2679	<a href="mailto:treasurer@ashrae4greenville.com">treasurer@ashrae4greenville.com</a>
Membership	Caroll Suttles	Piedmont Natural Gas	235-5844 x3055	233-6104	<a href="mailto:membership@ashrae4greenville.com">membership@ashrae4greenville.com</a>
Resource Prom.	Dennis O'Keefe	Piedmont Natural Gas	250-2822	250-0585	<a href="mailto:rp@ashrae4greenville.com">rp@ashrae4greenville.com</a>
CTT	Jamie Porterfield	Waldrop Heating & Air	578-7252	578-3414	<a href="mailto:ctt@ashrae4greenville.com">ctt@ashrae4greenville.com</a>
Student Activities	Karl Counts	Day & Zimmermann	241-8335	241-6750	<a href="mailto:sa@ashrae4greenville.com">sa@ashrae4greenville.com</a>
Historian	Paul Jensen	Trane Upstate Carolina	672-6130	672-6001	<a href="mailto:history@ashrae4greenville.com">history@ashrae4greenville.com</a>
Webmaster	Karl Counts	Day & Zimmermann	241-8335	241-6750	<a href="mailto:webmaster@ashrae4greenville.com">webmaster@ashrae4greenville.com</a>

## Tentative Meeting Dates for 2005-2006

Tues 9/20/2005	Radiant Cooling Panels	Dr. Stanley Mumma PhD, PE; Penn State
Tues 10/18/2005	Why Water Source Heat Pumps?	Chris Edmondson PE, James M Pleasants
Tues 11/15/2005	Controls Protocols and Interpretation	Jeff Swiderski, Carrier Controls
Tues 12/13/2005	Interpretation of Mold Analysis	John McNamara CIAQP, AAA Environmental
Tues 1/17/2006	Warehouse and Industrial Heating & Make Up Air	Jamie Fry, Faulkner/Haynes & Associates
Tues 2/21/2006	Ductwork for Pharmaceutical/Biological Facilities	Manuel Del Valle PE, Fluor
Tues 3/7/2006	Joint Meeting with Mechanical Contractors Asso.	David Hensley, Hosted by GM Mechanical
Tues 3/21/2006	Natural Gas Piping 101	Steve Abernathy, Piedmont Natural Gas
Tues 4/18/2006	Understanding Waterhammer in Steam Systems	Wayne Kirshner PE
Wed 4/19/2006	Green Buildings: Sustainability and the Building Environment	ASHRAE Satellite
Tues 5/16/2006	Humidity Control for Commercial Buildings	Mark Nunnely PE, Nunnely & Associates

**Greenville Chapter of ASHRAE**



**ASHRAE**

Technology for a Better Environment