



# Post Time

## ASHRAE Newsletter – Bluegrass Chapter

### September Meeting & Program

#### Proper Sound Attenuation Design

by Karl Peterman, Manager of Research and Development for Vibro-Acoustics

Date	<b>Friday, September 21, 2007</b>
Time	11:45 am Buffet lunch 12:00 – 1:00 Meeting
Place	<b>Crown Plaza Lexington At The Campbell House</b> 1375 Harrodsburg Rd. Lexington, KY
Meal & Cost	<b>Buffet lunch</b> <b>Members: \$17</b> <b>Students: \$4</b> Meal plan: \$85

The Bluegrass Chapter of ASHRAE kicks off the 2007-2008 year with a program that is related to the topic of acoustics; proper sound attenuation design.

The presentation will provide a primer on HVAC acoustics and discuss current trends in HVAC system design. ASHRAE recommendations for the systems approach method will be discussed along with noise control application issues. Acoustical system analysis examples will be given with an emphasis on silencer selection to meet room criteria. Attendees should get a better understanding of good HVAC system design to avoid noise problems and potential aerodynamic disasters.

Karl Peterman has been Vibro-Acoustics' Manager of Research and Development for five years. For eight years prior to that, Karl was an HVAC systems designer and acoustical engineer. Karl is a registered professional mechanical engineer and is a member and past-chairman of ASHRAE's Technical Committee on Sound and Vibration. He is also a member of ASHRAE's Technical Committee on Seismic and Wind Resistance, the Acoustical Society of America, Institute of Noise Control Engineers, and the American Society for Testing and Materials' Committee on Environmental Acoustics. Karl graduated from Penn State's Architectural Engineering program with an emphasis in HVAC design and has since been involved with hundreds of projects including virtually every building type, from academic facilities to zoo buildings. Visitors and guests are welcome to attend!

### President's Letter

by Tom Erpenbeck, P.E., 2007-08 Chapter President

This newsletter announces our first chapter program for the '07 – '08 ASHRAE year. Mr. Karl Peterman will be presenting on "Proper Sound Attenuation Design" for HVAC equipment. Sound attenuation is a very important topic for HVAC system designers and installers; please make plans to come and hear Mr. Peterman's presentation.

I have a correction to the August newsletter regarding our **program meeting dates**. Due to some schedule problems with the Crown Plaza, **the 3<sup>rd</sup> Monday of each month is not available**. Therefore **we will have our meetings on the 3<sup>rd</sup> FRIDAY of each month**.

The exception to this will be December, which is our annual ASHRAE/ASME evening Holiday party. Please take a few minutes right now to add the ASHRAE lunch program dates to your calendar, which will be the 3<sup>rd</sup> Friday of each month. All of our lunch meetings will start at 11:45 AM.

I want to remind everyone that the chapter will be providing Continuing Education Hours (also known as PDH – Professional Development Hours) for attending the ASHRAE programs and seminars. Each lunch program will give you 1 PDH. Certificates will be passed out at the meeting. The chapter is also offering a meal plan for the year. Each lunch program cost \$17 if you pay at the door. The meal plan cost \$85.00 and will cover all 8 of the lunch programs for the year. If you attend just 5 lunch programs you will break even. If you attend all 8 programs you will save 38% over the regular program cost. Please take advantage of both the PDH credits and the meal plan.

The strength of our Bluegrass ASHRAE chapter is its members; I want to thank each one of you for supporting ASHRAE by being a member of our chapter. I want to ask each of you to make an effort to attend our chapter programs. The Crown Plaza offers us a great lunch with dessert, you also get a chance to catch up with other ASHRAE members and you get to hear from speakers on important topics in the HVAC industry. Please also bring guests with you to the meetings; your guests are always welcome to attend our meetings. We will even pay for their lunch if they choose to join ASHRAE.

I'm looking forward to seeing everyone at the meetings.

Thanks, Tom

## 2007-2008 Programs

Date	Topic
September 21	Sound Attenuation Design
October 19	ASHRAE 55
November 16	Duct Systems
December 2007	Christmas Party
January 18	Fire Protection

Check the monthly newsletter for more updates.

## Sustainability at Home

*By Chris Tyler, 2007-08 President-Elect*

I just returned from the ASHRAE Region VII Chapter's Regional Conference (CRC). Past ASHRAE Society President Terry Townsend was among the numerous key note speakers. As he talked to the attendees about leading the world to an independent and sustainable future, he said: "We don't inherit the earth from our parents; we are merely borrowing it from our children." "What will you do today, tomorrow or next week that will make a difference?"

As I thought about that, I realized that just this summer, I convinced my next door neighbors to stop throwing 100% of their weekly waste into the garbage and to start recycling instead. Our family and theirs now recycle approximately 80% of the weekly waste while only 20% goes to the landfill. If I could change these two people's habits, maybe I could persuade others as well. So I've listed below all of the things that my family does at home to help make a difference on the environment and a brief description as to the impact that action may have. I sincerely hope this list helps you make a change in your daily activities around the house. Although I realize this is not an all inclusive list and there are other things we can do, this is just a sample of what we've done at home and a guide for you to start to make a difference yourself.

### Recycle as much of your waste as possible.

*Impact:* Less waste going to the landfill, less natural resources required for these products (i.e. oil, trees, water, etc.) and less energy required for producing these new products when recycled materials are used. If not recycled, glass bottles may last up to 1,000,000 years.

**Buy your foods and products in recyclable containers** such as orange juice in plastic jugs rather than non-recyclable containers.

*Impact:* See recycling above.

### Buy products in bulk.

*Impact:* Reduce packaging materials and energy usage in production.

**Compost egg shells, coffee grounds, fruit and vegetable peels in your garden** (no meats).

*Impact:* Puts nutrients back into the soil, saves space in the land fill and reduces amount of energy required to take the waste to the landfill.

**Car pool to work and other places with your spouse or friends.**

*Impact:* Saves gas, oil, emissions into the air and wear & tear on cars.

**Use cold water** when washing hands, food, laundry, or any other time possible.

*Impact:* Using hot water will waste energy and water since hot water takes time to get from the water heater to the point of use (we sometimes let the water run until it gets hot). This heat is lost through the pipes when the hot water is shut off and it sits in the un-insulated pipes of the house.

**Use less water when taking a shower.** Turn off the water when lathering your hair and washing your body.

*Impact:* Saves our limited fresh water and saves energy that is required to clean this water, provide it to our houses and the energy required to take care of our waste water.

**Set your thermostat** up around 77° – 78° F in the summer time and down around 68° F in the winter time.

*Impact:* Reduces electric and/or gas usage from the utility company.

**Using ceiling fans** will enable you to adjust your thermostat even further and still let you feel comfortable.

*Impact:* Reduced energy usage.

If you do not have a programmable thermostat, adjust your thermostat's temperature up in the summer or down in the winter by 5 degrees when you leave the house for an extended period of time.

**Install a programmable thermostat** to automatically adjust your thermostat temperature when you go to work and sleep at night. Some local utility companies, including Kentucky Utilities (KU), will even install these for free.

*Impact:* Reduced energy usage.

**Let your local utility company install a regulator on your air conditioner** to regulate the compressor during times of peak power demand. You will not notice a difference in comfort at home and your utility company will even credit your monthly bill during the summer months (I save \$5/month for four months each year).

*Impact:* Since utility plants generally determine when to build new plants based on peak demand requirements, this will slow the need for your utility company to build a new plant.

**Air dry and sun dry clothes after washing them.**

*Impact:* Reduces energy usage from the power plant, which in turn reduces the power companies usage of natural resources and reduces the amount of energy required to bring those natural resources, such as coal, from the mines all of the way to the power plant point of use.

**Maximize the use of sunlight** (day light lighting). Open your window blinds and let in the natural sun light, turning off your lights unless you need them for reading or other reasons.

*Impact:* Reduced energy usage.

**Turn off the lights, TV and other items when they are not being used.**

*Impact:* Reduced energy usage and longer life expectancy of life bulbs, etc.

**Change your HVAC filters on a regular schedule.**

*Impact:* Less energy used by the system.

**Clean the coils on your refrigerator once/year** to improve its efficiency.

*Impact:* Reduced energy usage.

**Change your incandescent light bulbs to energy savings bulbs** especially in the more commonly used light sockets. They can typically be purchased for as low as \$2/bulb during the day after Thanksgiving sales and will pay for themselves within a short time period with the energy you save.

*Impact:* Reduced energy usage and longer life expectancy of life bulbs.

**Give some of these light bulbs to family and friends as Christmas presents.**

*Impact:* Reduced energy usage and longer life expectancy of light bulbs as well as helping educate others and save them money.

**Capture rain water** with buckets for your garden and plants.

*Impact:* Reduced water usage from the water company.

**Water the garden and yard between 6-10 AM or 6-10 PM.**

*Impact:* Not as much water is required due to less evaporation of the water.

**Collect water from washing fruits and vegetables for your garden or lawn.**

*Impact:* Reduced water usage.

**Lower the water flow on your faucets** (under the sink) to conserve water.

*Impact:* Reduced water usage.

**Place a brick or jar(s) filled with water in the toilet's water reserve tank** to reduce the water used during each flush.

*Impact:* Reduced water usage.

**Buy rolls of paper towels with smaller paper towels** or tear the larger ones in half.

*Impact:* Less material used, less waste going to the landfill and less energy used to make the material and discard it after being used.

**If you have a fireplace or wood burning stove, use the blower when burning fires to heat up the house.** You can even turn off your house's heat and turn on the fan to circulate the warm air throughout the house. Free firewood can often be found around town throughout the year when people cut trees down and stack the wood for others to pick up.

*Impact:* Reduced energy usage.

**When buying a car you don't have to buy a hybrid to get a fuel efficient car.** Four cylinder cars are often times nearly as fuel efficient as their hybrid counterparts for the 6 cylinder model.

*Impact:* Less fuel used.

**Lower your water heater temperature** below 120° F.

*Impact:* Reduced energy usage.

**Insulate the pipes going into and out of the water heater.**

*Impact:* Reduced energy usage.

**Lower the refrigerator/freezer settings** below the factory setting.

*Impact:* Reduced energy usage.

**Print on both sides of the page.** This can be done at home by printing the odd pages only first and then flipping over the paper in the printer and printing the even pages only.

*Impact:* Fewer natural resources required for the paper (i.e. trees) and less energy required for producing less paper.

**Pass this list along to somebody else to help them change as well.**

*Impact:* You too can help change the world.

Aside from all of the benefits mentioned above for the environment, you also save a lot of money when you reduce your usage of these resources.

## **Student Activities Update**

*By Harold "Howie" Sherrard, P.E., Student Activities Committee Chair*

The Bluegrass Chapter of ASHRAE is really gearing up for an exciting year. Our chapter is more focused than ever on the students in our region. This year, we have increased our budget in this area exponentially. For example, we will subsidize meals for college students, so that a student will only be charged \$4 for a meal. I want to personally invite our members to get involved in some very specific ways. After all, none of us advanced in our career without the support of older engineers who mentored us, showed us the ropes, and gave us opportunities to grow.

1. Join the student activities committee and help us organize opportunities for everyone to get involved.

2. Volunteer at an event (1-2 hours of your time). Various opportunities are available throughout the year.
3. Invite a college student (or more) to the monthly chapter meeting.
4. Also, many of you have hired interns and co-ops and we want to know. Our chapter meetings are an excellent way for your younger engineers to learn and become exposed to technologies that can grow your business. We get PAOE points as a Chapter from this, but I'll be writing more about this in future articles so stay tuned.

Please email me at [hsherrard@trane.com](mailto:hsherrard@trane.com) or call me at 859-288-2661 if you want to get involved or learn more.

## Honors and Awards Committee

*By Angela Penn, Honors and Awards Committee Chair*

This month highlights personal honors awards that are available through ASHRAE. If you are eligible please contact Angela Penn at [apenn@trane.com](mailto:apenn@trane.com).

### ASHRAE Hall of Fame

This award honors deceased members who have made milestone contributions to the growth of ASHRAE-related technology. Individuals inducted into the Hall of Fame must have been an ASHRAE member (any grade) or a member of a predecessor Society and must have shown evidence of distinction in the Society, either technically or academically.

- Recognition is in the form of a plaque and crystal award for the family, including transportation to the Annual Meeting and one night's lodging; a permanent listing with the recipient's accomplishments will be on display at Society headquarters as well.
- Maximum of two may be awarded per year
- Completed ASHRAE Hall of Fame Nomination Form required (Available via Honors and Awards Webpage)
- Deadline for nomination: December 1<sup>st</sup>

### F. Paul Anderson Award

This award, named in honor of F. Paul Anderson, 1927-28 President of the American Society of Heating and Ventilating Engineers, is the Society's highest award. This award honors members for notable achievement, outstanding work or service in any field of the Society. Accomplishments should include exceptional leadership in the HVAC&R industry, ASHRAE, and society. Broad-based activities of outstanding value in consulting, contracting, engineering, design, and related activity within ASHRAE are desired. Previous

recipients of this award include Willis Carrier, Sam Lewis, Carl Ashley and Donald Krockner.

- Recognition is in the form of a medallion, plaque, and transportation, if not otherwise reimbursed by the Society
- One awarded per year
- A letter of nomination and current ASHRAE Biographical Record are required
- Deadline for nomination: December 1<sup>st</sup>

### Louise and Bill Holladay Distinguished Fellow Award

This award honors Fellows of the Society for continuing preeminence in engineering or research work.

- Recognition is in the form of a medallion, plaque, and transportation, if not otherwise reimbursed by the Society
- One awarded per year
- A letter of nomination and current ASHRAE Biographical Record are required
- Deadline for nomination: May 1<sup>st</sup>

### Fellow

ASHRAE members who have attained distinction in the fields of heating, refrigeration, air conditioning, ventilation or the allied arts and sciences through invention, research, teaching, design, original work, or as an engineering executive on projects of unusual or important scope. The individual must have made substantial contributions and have been a full grade member in good standing for at least ten years prior to the date of their election.

- Recognition is in the form of a medallion, plaque, and lapel pin
- No limit on number awarded per year
- A completed Fellow Nomination Form and at least two sponsor letters, at least one of whom is an ASHRAE member, are required. (Available via Honors and Awards Webpage)
- Deadline for nomination: December 1<sup>st</sup>

### Andrew T. Boggs Service Award

This award named after Andrew T. Boggs, former ASHRAE Executive Vice President, recognizes past recipients of the Distinguished Service Award for continuing, unselfish, dedicated and distinguished service to the Society.

- Recognition is in the form of a medallion, plaque, and transportation, if not otherwise reimbursed by the Society
- One awarded per year
- A letter of nomination and current ASHRAE Biographical Record are required
- Deadline for nomination: May 1<sup>st</sup>

### ASHRAE-Alco Medal for Distinguished Public Service

This award recognizes ASHRAE members who

have performed outstanding public service in their community, and in doing so, have helped to improve the public image of the engineer.

- Recognition is in the form of a medallion, plaque, and transportation, if not otherwise reimbursed by the Society
- One awarded per year
- A letter of nomination and current ASHRAE Biographical Record are required
- Deadline for nomination: December 1<sup>st</sup>

#### **E.K.Campbell Award of Merit**

This award honors an individual for outstanding service and achievement in teaching.

- Recognition is in the form of a \$3,000 honorarium, medallion and plaque
- One awarded per year
- Recommended by Life Members Club

#### **Honorary Member**

Honorary Member status is granted to individuals in recognition of preeminent professional distinction without regard to whether the individual is or has been a member of the Society. Previous recipients include Milton Eisenhower and Herbert Hoover.

- Recognition is in the form of a medallion and plaque
- Maximum of three may be awarded per year
- A letter of nomination and current curriculum vitae/resume required
- Deadline for nomination: December 1<sup>st</sup>

#### **CRC Recap**

*By Chris Tyler, 2007-08 President-Elect*

The Bluegrass chapter had another strong showing at the 2007 Chapter's Regional Conference (CRC) for Region VII. On August 23-25, eleven Bluegrass Chapter members attended the three day conference held at the Space and Rocket Center in Huntsville, AL. ASHRAE Society President Kent Peterson has named the 2007-'08 year, "Greater Efficiency Today, Blue Skies Tomorrow". In walking the talk of the theme, the CRC practiced sustainability by holding the conference at the Space and Rocket Center next door to the CRC's hotel (within walking distance). Filtered tap water and plastic cups were provided for drinking rather than bottled water. Other sustainable actions included locating aluminum can recycling containers adjacent to the conference rooms and hospitality room. The five technical presentations on Thursday all pertained to sustainability and energy design guidelines. Speakers included Terry Townsend, P.E., FASHRAE (2006-'07 ASHRAE Society President), Jeff Haberl, Ph.D., P.E., FASHRAE, Don Colliver, Ph.D., P.E., FASHRAE (past ASHRAE

Society President), Dennis Stanke (ASHRAE 62 Committee chairman), and Jeff Christian from the Oak Ridge National Laboratory. These five presentations are now available on the chapter website. Thanks to Boeing, video recordings of these presentations in their entirety shall be available soon on the chapter website. Eleven Chapter members attended the CRC which enabled the Bluegrass Chapter to win the Region VII Flying Eagle Award for the third year in a row. This is awarded to the chapter whose members as a collective travel the most miles to attend the CRC (i.e. total number of attending members \* distance traveled from the chapter to the CRC). The chapter also won the PAOE Honor Roll Award. In addition to the chapter awards, Ganeson Kandasamy received an award for the Chapter achieving Full Circle for Research and Promotion and for exceeding the Chapter's Research Promotions goal. Rick Larson won two certificates of appreciation: one for being the Electronic Communication Chair of Region VII and one for being the Region VII Regional Webmaster. Thanks again to the 11 members who attended the CRC and to the entire Bluegrass Chapter for your help this past year in enabling us to win these awards.

#### **Research Promotion Update**

*By Ganeson Kandasamy, Research Promotion Chair*  
ASHRAE is known for its research that produces engineering standards that paves the way to building sustainability. ASHRAE standards strive to improve mankind's daily lives now and for the future.

Last year (June 2006-June 2007) our Bluegrass ASHRAE Chapter collected \$8875 for Research Promotion. We had a goal of \$7825. On behalf of our Society and Chapter, let me take this opportunity to express my appreciation to our contributors and to give you all a heartfelt "Thanks!"

#### Individual contributors:

Dr. Richard S. Gates, P.E., PhD.  
Mr. Rick Larson  
Mr. Joseph Farley Moore  
Mr. Art Hallstrom, P.E., ASHRAE Fellow  
Mr. Dennis L. Nierman  
Mr. Kevin R. Davies  
Mr. Ganeson Kandasamy  
Mr. Christopher R. Tyler  
Mr. Thomas D. Erpenbeck, P.E.  
Dr. William E. Murphy, P.E., PhD.

#### Corporate contributors:

Big Ass Fans  
Trane - Lexington, KY

Bluegrass ASHRAE Chapter  
Trane – Corporate

This year we are planning to contact as many members as possible to urge you to contribute to ASHRAE Research Promotion. But even if you're not personally contacted, please consider a pledge. Support your society, make a difference in this world and join the Honor Roll list of contributors in the Society journal. Last year only 10 of the 170 members of our Chapter joined the list. Now is your chance to become a part of ASHRAE history. (Honor Roll level contributions listed in the ASHRAE October Journal issue start at \$100.00 for individuals and \$150.00 for companies). Any amount will make a difference. So please take a few minutes to make a contribution and make a difference today. To contribute online go to [https://www.ashrae.org/aboutus/resource\\_promotion.asp](https://www.ashrae.org/aboutus/resource_promotion.asp), or mail a check to "ASHRAE Research Promotion". Send it to ASHRAE Research Promotion, 1791 Tullie Circle NE, Atlanta, Georgia 30329-2305. All contributions to ASHRAE are fully deductible under Section 170 of the U.S. Internal Revenue Code.