



ASHRAE ACTION

ROANOKE CHAPTER NEWSLETTER

(WWW.ASHRAEROANOKE.ORG)

OCTOBER, 2008

OCTOBER MEETING

PLEASE JOIN US FOR OUR FIRST MEETING OF THE YEAR AT THE HOTEL ROANOKE

Tuesday, October 14th at 6:30 pm
Hotel Roanoke
110 Shenandoah Ave Roanoke VA 24016

SPEAKER:

TOM WATSON, McQuay Int.

TOPIC:

**COMPRESSOR TECHNOLOGY
&
REFRIGERANT SELECTION**

AGENDA:

BOG Meeting: 5:15 pm

Sign In : 6:15 pm

DINNER: 6:30 pm

BUSINESS MEETING AND PROGRAM: 7:00 pm

**RESERVATIONS MUST BE MADE BEFORE
NOON on OCT. 9th TO Patrick Murdock:**

E-mail: pmurdock@trane.com

Phone: 540-563-2828

*Tip: Make your reservation online at our Web Site,
see link below*

<http://ashraeroanoke.org/Meetings/registration-form1.htm>

MARK YOUR CALENDERS:



November Meeting --- Nov. 11th for LUNCH
Topic: Noise and Vibration Control

December Meeting --- Dec. 16th for DINNER
Topic: Commissioning

January Meeting --- Jan. 7th for DINNER
**Topic: Advanced Energy Conservation
and IEQ Design Guidance**

BOARD OF GOVERNORS MEETING @ HR
TUESDAY, OCTOBER 14TH - 5:15 BEFORE THE MEETING

PRESIDENT'S CORNER

"Maintain to Sustain – Delivering ASHRAE's Sustainability Promise" – Bill Harrison, ASHRAE President, 2008-2009

Last month we had our first meeting of the year with a family social event that included a tour of the Homestead Creamery and free ice cream. Several of you took advantage of this, and brought your families with you, whom I enjoyed meeting and talking to.

My wife came along, and she actually told me that she really enjoyed and got a lot out of the evening. She liked learning about the different processes and seeing all of the machines the milk goes through before going into the grocery store's refrigerated display. She also like the farm because our guide discussed the more intricate details of a dairy farm that it is not just sitting on a stool and milking Bessie anytime one feels like it. Never in my wildest dreams would I thought that she would tell me that she enjoyed attending an ASHRAE event, so I am going to classify this meeting as being a success.

This month Tom Watson will be speaking about compressors and refrigerants. Environmental concerns, recent legislation, and LEED credit requirements have lead to the movement away from traditional refrigerants such as R-22 towards more environmental friendly refrigerants. Along with a discussion about compressor basics and application, Tom will also speak about what affect the new refrigerants have on compressor construction and selection.

Tom has deep roots in the world of compressors and refrigerants, and is sure to give a great presentation. I urge you to do what you can to come listen to this phenomenal source of information.

MEMBER RECRUITING BONUS!

Any member who brings a non-member to the October meeting will receive a \$5 discount whether or not the non-member joins.

Any non-member who signs up at the October meeting as a paying member for chapters will have **FREE** admission.

ATTENTION MEMBERS:

INTERESTED IN SAVING MONEY?

STAR CARDS ARE AVAILABLE FOR PURCHASE. PAY NOW AND **SAVE** LATER!

\$50.00 STAR CARD – ADMISSION TO ANY THREE MEETINGS

\$100.00 STAR CARD – ADMISSION TO ANY SIX MEETINGS

SPOTLIGHT ON ... THIS MONTH'S SPEAKER

TOM WATSON HAS BEEN AN INTEGRAL PART OF ASHRAE FOR MANY YEARS AND HOLDS A PROFESSIONAL ENGINEER'S LICENSE. TOM SERVED OUR COUNTRY IN THE US ARMY AND THEN JOINED McQUAY WHERE HE HAS WORKED FOR OVER 25 YEARS. HE HOLDS 5 PATENTS IN THE HVAC INDUSTRY AND HAS WORKED AS A DESIGN ENGINEER RESPONSIBLE FOR BOTH RECIPROCATING AND CENTRIFUGAL CHILLERS, AS WELL AS CHILLER AND REFRIGERATION CONTROLS. TOM HAS ALSO MANAGED DESIGN ENGINEERS AND MANUFACTURING ENGINEERS FOR THE CHILLERS AT McQUAY. HE IS NOW THE CHIEF ENGINEER AND IS CURRENTLY INVOLVED IN THE ADVANCED TECHNOLOGY AND RELIABILITY ENGINEERING DEPARTMENTS AT McQUAY.

TOM HAS CONTRIBUTED TO ASHRAE BY SERVING AS A CHAIR OF ASHRAE SSPC-15 SAFETY CODE FOR MECHANICAL REFRIGERATION, HAS BEEN A MEMBER OF SEVERAL ASHRAE STANDARDS & FINANCE COMMITTEES, AND HAS CONTRIBUTED GREATLY TO THE ADVANCEMENT OF CHILLER TECHNOLOGY. HE IS CURRENTLY ON THE BOARD OF DIRECTORS SERVING AS THE VICE PRESIDENT.

ASHRAE RESEARCH PROMOTION 2008-2009 CONTRIBUTORS

The Roanoke chapter had a tough goal to beat last year's goal of \$9,500. We are very proud to announce we have reached our goal thanks to the generous support of the following people and companies:

Dr. William C Thomas	Mr. Robert D Hockett	Mr. Kenneth E Gunther	Mr. Bertam Y Kinzey Jr.
Mr. Thomas E Watson	Mr. Patrick Castelvecchi	Mr. Jeff Consroe	Des Champs Technology
HSMM/AE COM	Lawrence Perry & Assoc.	Spirax Sarco Inc	Aerofin Corporation
Buffalo Air Handling Co	Southern Air Inc	Mr. Bradley G Dawes	Mr. David A Pierson
Dr. Nicholas H Deschamps, PhD	Shultz & James Inc	Mr. Thomas E Brannen	Mr. Ronald S Bessette, PE
Mr. Christopher N Beverly	Mr. Gary L Seek	Mr. Jeffrey A Perry, PE	Mr. Jeffrey Wolfe
Mr. Kevin R Milz	Mr. Andrew D Fuller	Mr. Keith A Workman	Mr. John Patrick Castelvecchi, Jr
Mr. Tom E Sikes, III	Mr. John M Mann	Ms. Patricia A Cady	Mr. Daniel N Lieber Environmental Construction Services
Mr. Boyd G Headley, III	Mr. Patrick W Murdock	Miss Amanda B Looney	Mr. Robert N S Chiang
Mr. Willard M Hamill	Mr. Jason M Fulop Hudson Industrial Consulting LLC	Summerell Co Inc	Mr. Daryl K Showalter
Mr. Terrell D Moseley	Mr. Andrew R Pressing, PE	Mr. Rodney D Fanning	

THANK YOU TO ALL CONTRIBUTORS SO FAR THIS YEAR. PLEASE NOTICE THAT ALL THE ROANOKE CHAPTER OFFICERS HAVE DONATED, SO PLEASE DO NOT HESITATE TO CONTRIBUTE TODAY

To have your name added to this list this year, contact Patrick Castelvecchi!

ASHRAE NEWS!

New Ventilation Design Requirements for Health Care Facilities Available from ASHRAE

ATLANTA – JUST LIKE THE RIGHT DOSE OF MEDICINE CAN IMPROVE HEALTH, PROPER VENTILATION IS AN INTEGRAL PART OF PATIENTS' WELL-BEING IN HEALTH CARE FACILITIES.

REQUIREMENTS TO ENSURE HIGH-QUALITY VENTILATION CAN BE FOUND IN A NEW STANDARD WRITTEN BY ASHRAE AND THE AMERICAN SOCIETY FOR HEALTHCARE ENGINEERING (ASHE). ANSI/ASHRAE/ASHE STANDARD 170-2008, VENTILATION OF HEALTH CARE FACILITIES, DEFINES VENTILATION SYSTEM DESIGN REQUIREMENTS THAT PROVIDE ENVIRONMENTAL CONTROL FOR COMFORT, AS WELL AS INFECTION AND ODOR CONTROL.

THE STANDARD IS THE FIRST ANSI STANDARD IN THE NATION TO SPECIFICALLY ADDRESS VENTILATION IN HEALTH CARE FACILITIES AND IS AVAILABLE FOR ADOPTION BY VARIOUS AUTHORITIES FOR HEALTH CARE FACILITY CONSTRUCTION SUCH AS CITY, STATE AND FEDERAL GOVERNMENTS AND BY PRIVATE NATIONAL ORGANIZATIONS SUCH AS THE FACILITIES GUIDELINES INSTITUTE AND THE JOINT COMMISSION ON THE ACCREDITATION OF HEALTHCARE ORGANIZATIONS (JCAHO). WITHOUT HIGH-QUALITY VENTILATION IN HEALTH CARE FACILITIES, PATIENTS, HEALTH CARE WORKERS AND VISITORS CAN BECOME INFECTED BY SIMPLY BREATHING.

"AIR-TRANSMITTED PATHOGENS CAN BE FOUND EVERYWHERE IN POORLY VENTILATED HEALTH CARE FACILITIES," RICHARD HERMANS, P.E., ASHRAE CERTIFIED HEALTHCARE FACILITY DESIGN PROFESSIONAL (HFDP), CHAIR OF THE COMMITTEE THAT WROTE THE STANDARD, SAID. "BECAUSE THESE ORGANISMS ARE FOUND IN HIGHER CONCENTRATIONS IN HOSPITALS AND BECAUSE PATIENTS ARE SUSCEPTIBLE TO THEM, ADDITIONAL CARE SHOULD BE TAKEN IN THE DESIGN OF VENTILATION SYSTEMS."

THE STANDARD ADDRESSES SYSTEMS AND EQUIPMENT; SPACE VENTILATION FOR A VARIETY OF AREAS IN HEALTH CARE FACILITIES, INCLUDING AIRBORNE INFECTION ISOLATION ROOMS, CRITICAL CARE UNITS, BURN UNITS, SURGERY ROOMS, AND CLASS B AND C OPERATING ROOMS; AND PLANNING, CONSTRUCTION AND SYSTEM STARTUP.

THE COST OF ASHRAE/ASHE STANDARD 170, VENTILATION OF HEALTH CARE FACILITIES, IS \$54 (\$43, MEMBERS).

NEW STANDARD PROVIDES GUIDANCE ON TESTING SEISMIC RESTRAINTS FOR HVAC&R EQUIPMENT

ASHRAE STANDARD 171-2008 PUBLISHED

ATLANTA – FORGET WHAT JERRY LEE LEWIS SAID; THERE'S *NOT* GOING TO BE A WHOLE LOTTA SHAKIN' GOING ON WITH A NEW STANDARD FROM THE AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS (ASHRAE). ANSI/ASHRAE STANDARD 171-2008, METHOD OF TESTING SEISMIC RESTRAINT DEVICES FOR HVAC&R EQUIPMENT, PROVIDES MANUFACTURERS A STANDARD WAY OF TESTING SUCH DEVICES TO PREQUALIFY PRODUCTS FOR EARTHQUAKE-PRONE AREAS.

"THIS STANDARD IS A BREAKTHROUGH FOR ASHRAE," SAYS JAMES TAUBY, CHAIR OF THE COMMITTEE THAT WROTE THE STANDARD. "THIS NEW NATIONAL STANDARD MOVES TESTING FROM THE WEST COAST TO THE ENTIRE UNITED STATES.

IT IS THE FIRST NATIONAL STANDARD FOR SEISMIC RESTRAINT TESTING OF NON-STRUCTURAL COMPONENTS THAT DOES NOT REQUIRE SHAKER TABLE TESTING, WHICH IS THE REQUIRED TESTING FORM IN MANY CALIFORNIA PROJECTS. STANDARD 171 PROVIDES PROVIDE STATIC-TEST PROCEDURES FOR DETERMINING THE CAPACITY OF SEISMIC RESTRAINTS FOR HVAC&R EQUIPMENT. THESE TEST PROCEDURES DETERMINE THE MAXIMUM FORCE A RESTRAINT CAN WITHSTAND WITHOUT BREAKAGE OR PERMANENT DEFORMATION.

MANUFACTURERS OF VIBRATION ISOLATORS, SEISMIC RESTRAINT VENDORS AND STRUT CHANNELS CAN USE THE STANDARD TO TEST THEIR PRODUCTS' SUITABILITY FOR STANDING UP TO EARTHQUAKE CONDITIONS, AND CONSULTING ENGINEERS CAN USE THE STANDARD AS A REFERENCE IN SPECIFICATIONS.

THE COST OF STANDARD 171-2008 IS \$39 (\$31, ASHRAE MEMBERS).

TO ORDER THESE STANDARDS, CONTACT ASHRAE Customer Service at 1-800-527-4723 or ASHRAE.ORG

ELECTRONIC NEWSLETTER

Any member with material to submit for inclusion in the monthly newsletter may send the information to:

Jeff Consroe
11 Dalewood Ave.
Salem, VA 24153

E-mail: jeff@breeden-collier.com
Phone: 540.797.7899
Fax: 540.526.9460

This is your newsletter. We welcome your contributions and commentary.

Material can include letters to the editor, member news, upcoming events, comments on chapter programs or issues, etc.

ROANOKE CHAPTER ASHRAE

2007– 2008 OFFICERS AND GOVERNORS

		<u>Phone:</u>	<u>Email:</u>
President	Dan Lieber	540-857-3100	Daniel.Lieber@aecom.com
Pres. Elect	Jeff Consroe	540-797-7899	jeff@breeden-collier.com
Vice Pres.	Patrick Murdock	540-563-2828	pmurdock@trane.com
Secretary	Kyle Longbrake	540-857-3100	Kyle.Longbrake@aecom.com
Treasurer	Justin Biller	540-772-2065	jbiller@roanokecountyva.gov
Governor	Patrick Castelvechi	540-857-3100	Patrick.Castelvechi@aecom.com
Governor	Jason Price	540-342-5498	jason.price@ies-co.com
Governor	James Sledd	540-857-3100	James.Sledd@aecom.com
Governor	Roger Jones	540-890-7114	rjones5632@aol.com

2007 – 2008 COMMITTEE CHAIRS

		<u>Phone:</u>	<u>Email:</u>
Shenandoah Section	Jeff Clinton	540-248-9207	jeffery.clinton@mcquay.com
Membership	Lee Hammarback	336-287-2868	lhammarback@sfcsc.com
Student Activities	Rick Hughes	540-342-6001	rhughes@spectrumpc.com
Technology Transfer	Patrick Murdock	540-563-2828	pmurdock@trane.com
Historian	Pat Cady	540-857-3100	Pat_Cady@aecom.com
Research Promotion	Patrick Castelvechi	540-857-3100	Patrick.Castelvechi@aecom.com
Newsletter	Jeff Consroe	540-797-7899	jeff@breeden-collier.com
Home page	James Sledd	540-344-5200	James.Sledd@eeiengineers.com

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WANT TO SAVE EVEN MORE MONEY?

IN SUPPORT OF THE SOCIETY GAME (GREENING ASHRAE MEETINGS AND EXPOSITIONS) PLAN, THE ROANOKE CHAPTER WILL OFFER DISCOUNTS ON MEMBERS WHO CARPOOL OR USE ALTERNATIVE TRANSPORTATION TO ATTEND MEETINGS.

\$2.00 DISCOUNT FOR DRIVING A CARPOOL.

\$1.00 DISCOUNT FOR ANY OF THE FOLLOWING:

- RIDING IN A CARPOOL
- WALKING
- BIKING
- RIDE PUBLIC TRANSPORTATION
- DRIVE HYBRID VEHICLES
- DRIVE ALTERNATIVE FUELED VEHICLES

BE SURE TO LET **JUSTIN BILLER** KNOW IF YOU QUALIFY FOR THE MEETING DISCOUNT WHEN YOU PAY FOR THE MEETING.

The poster features a green and white logo at the top with the text "SUSTAINABLE Urban Design" and "Engineering - Architecture - Today" and "2009 ASHRAE Winter Conference". Below the logo, the text "engineering tomorrow... today" is written in a stylized font. The main text reads "ASHRAE's 2009 Winter Conference January 24-28" and "AHR Expo Jan. 26-28". At the bottom, there is a photograph of a modern city skyline and the website "www.ashrae.org/chicago".