



CLEVELAND ASHRAE NEWSLETTER

September 2008

SEPTEMBER MEETING

The Evolution of VAV Systems - In Tribute to Bob Urban

September 15, 2008

Times:	4:15-5:30pm	Board Meeting
	5:30-6:15pm	Happy Hour
	6:15-7:15pm	Dinner
	7:15-8:15pm	Presentation

Speaker: Jim Karpinski, Dave Nachman, Carl Opatrny, Brian Wagner & Jim Wickert

Location: Harry's Steakhouse
5664 Brecksville Road
Independence, OH 44131

R.S.V.P. @ (216) 373-0315 by 12:00 Noon on Friday, September 12th for Reservations.
Please state if you need a CPD Certificate. Dress Attire is Business Casual.

Fall is in the air and we all know with every Fall comes a new year of ASHRAE! Hopefully, everyone had a great Summer and are now ready for a great year of ASHRAE!

For our first meeting on Monday, September 15, 2008, we will assemble a great team of industry professionals: Jim Karpinski of Karpinski Engineering, Dave Nachman of Panzica Construction, Carl Opatrny of the City of Independence, Brian Wagner of Comfort Control Group and Jim Wickert of Wickert Engineering. These gentlemen will be enlightening us about Bob Urban's revolutionary VAV Design in the 1960's (a first in the World, right here in Cleveland!), where VAV systems stand today, control characteristics of VAV systems and a possible look into the future of VAV.

Remember....this meeting is also STUDENT NIGHT...if you know any hard working students, offer them a "night-out-on-the-town" and bring them to the ASHRAE meeting!

This Month's Sponsor



3800 Towpath Road
Cleveland, Ohio 44147-3296
Phone 440-526-3020
Fax 440-526-0503

CLEVELAND • COLUMBUS • TOLEDO

If you are interested in sponsoring the newsletter,
please contact Matt Morgan at 216-391-3700.



THE PRESIDENT'S CORNER

BY MATT NELSON



September 9, 2008

Welcome back, I hope everyone had a fun and relaxing summer and is ready for the Cleveland ASHRAE chapter to kick-off another year of programming. In case you missed it, the first event of the year has already come and gone. The August outing, benefiting ASHRAE Research, was held a few weeks ago with much success. Our thanks go to Lou Bentzen and the other members who helped pull it off again to raise nearly \$4,000 to support ASHRAE Research. The winning team of Shawn Beres, Matt Morgan, Mike Heymann and Ken Tilley won the scramble on beautiful but windy day. I asked Shawn what his team's secret was and he said, "It was just total luck." If I had known that I would have bought them tickets to Vegas and made some money!<rimshot>

To start my presidential year I want to unveil this year's theme "The Year of the Freshman". This may not be as cool as Rick Long's "Let's Have Fun" theme or as sexy as Ken Borah's "Steak: It's What's For Dinner", but instead I wanted to set a theme that brought focus to what I think are important areas for us to develop ASHRAE locally. Some of the important goals that I would like to concentrate on this year are reviving a local student chapter, involving our younger engineers in our chapter, providing quality programming for our membership, and giving back to our community. If any of these topics strike a chord with you let me know. Don't be scared to get involved. What I strive for is to have all of us do a small part for our chapter instead of having a few members do all the "heavy lifting". This will involve the reinvestment of our older members as well as some first steps for our younger ones.

Now with my school theme in mind, our first program of the year will be revisiting some history curriculum titled "The Evolution of VAV, in Tribute to Bob Urban". This will be an exciting time so make sure you call into our reservation line to save your seat today.

Oh and Mr. Borah, yes, we will be having steak!

OFFICERS & COMMITTEE CHAIRMEN

2008-2009 Officers and Board of Governors

President Matt Nelson
President Elect Robert Laneve
Treasurer Billy Kodosky
Secretary Shawn Beres

Board of Governors

Ken Wissner
Joe Deucher
Dominic Cacolici

Committees and Chairs

Chapter Technical Transfer Committee Robert Laneve

Programs (CTTC) Robert Laneve

Refrigeration (CTTC)

Gov't Activities (CTTC)

Membership & Roster

Product Directory

Research Promotion

Newsletter

Student Activities

Honors & Awards

Richard B. Long

Matt Nelson

Billy Kodosky

Daniel J. Bacik

Dominic Cacolici

Matt Morgan

Scott K. Jordan

Fred H. Hollman

Historian

Science Fair

Meeting Host

Scholarship Fund (Sal Triana & Gardiner)

Golf Outing

Engineer's Week

Special Events (December Social)

Dave Deschler

Steven R. Armstrong

Shawn Beres
Joe Deucher

Scott K. Jordan
Richard B. Long
Jerald K. Cohen
Gary Gardiner

Louis A. Bentzen
Ken Borah

James G. MacMillan

Mike Denk

Budget & IRS Compliance

Sunshine Fund

Fred H. Hollman

James W. Wickert



SUMMER RECAP

Current Awards...



2007-2008 CHAPTERS' REGIONAL CONFERENCE (CRC) HONORS & AWARDS REGION V

CRC PRESIDENTIAL AWARD OF EXCELLENCE (PAOE): KEN WISSNER

PAOE - Achieved minimum requirements in all categories of Chapter Operations, Technology Transfer, History, Membership Promotion, Research Promotion and Student Activities. Additionally, the Cleveland Chapter had the highest point total for Research Promotion in Region V.

Programs

TOP DOG – CIRCULATION PLAQUE: ROB LANEVE

*This is the Second year in a row that Rob Laneve has won.

Research Promotion

FULL CIRCLE AWARD (PATCH FOR BANNER): CHAPTER OFFICERS

*Each Chapter Officer and Research Promotion Chairman Dominic Cacolici has contributed at least \$100 to Research, in addition to the Efforts of their Office.

GOAL AWARD: DOMINIC CACOLICI

*The society amount assigned to the Chapter has been achieved

HIGH "5" AWARD: DOMINIC CACOLICI

*High 5 Award is computed as the average of last 5 years that has been exceeded.

CHALLENGE AWARD: DOMINIC CACOLICI

*Challenge Award adds 10% to the High 5 Award and has been exceeded.

TOP 5 AWARD: DOMINIC CACOLICI

*Top 5 Award is sharing recognition with other CRC Chapters.

Next CRC at:

Akron

July 30, 31, & August 1st, 2009

GOLF OUTING WINNERS

Membership Promotion (June): Mike Baraldi

Research Promotion (August): Shawn Beres
Matt Morgan
Mike Heymann
Ken Tilley

CONGRATS TO NEWLY ELECTED OFFICERS AND BOARD OF GOVERNORS

President

Matt Nelson

Treasurer

Billy Kodosky

President-Elect

Rob Laneve

Chapter Board of Governors

Dominic Cacolici

Joe Deucher

Ken Wissner

Secretary

Shawn Beres



ASHRAE RESEARCH PROMOTION CAMPAIGN '08-09



Thank you to all of you who attended and/or sponsored the Research Promotion Golf Outing this year at Columbia Hills. As you know your support goes on to provide the continually needed improvement in testing and design guidelines for the HVAC industry.

Last year the Cleveland Chapter rounded up 5 awards at the CRC for our member's participation, congratulations! Many times people ask me where their donations are going, or how it helps them, other than getting their name published in the October ASHRAE journal. Besides the updated handbooks, below is a list of research projects being performed in our region, noting that our region has the most dollars of research throughout the entire country!

For more information on how ASHRAE can benefit your industry, go to www.ashrae.org/researchpromotion

ACTIVE RESEARCH PROJECTS AND GRANTS BY REGION

Spring 2008

IDENTIFIER	TC/TG	COST	RESEARCH TITLE OR SUBJECT	CONTRACTOR	NOTES	
1083-RP	9.8	98,420	Chemical Out-Gassing From Indoor Swimming Pools	IMAGINATION RESOURCES, INC. - Dublin, OH		
1249-RP	3.2	99,000	Determine the Mechanism for Copper Plating and Methods for Its Eliminations for HVAC Systems	U. of DAYTON		Completed Nov. 2007
1262-RP	9.3	980,952	Relate Air Quality and Other Factors to Comfort and Health related Symptoms Reported by Passengers and Crew on Commercial Transport Aircraft (Part 2);	BATTELLE MEMORIAL INST. - Columbus OH		
1303-RP	3.1	49,625	Partitioning of Non-Condensable Gases I Refrigerant Liquid and Vapor Phases	IMAGINATION RESOURCES, INC. - Dublin, OH		
1373-RP	5.3	99,332	Air Distribution Effectiveness with Stratified Air Distribution Systems	BUILDING ENERGY AND ENVIROMENT ENGINEERING - Lafayette, IN		
1476-RP	8.2	228,294	Woven Compressor Enabling Economic and Scalable R-718 Chillers - Phase 1: Proof of Concept	MICHIGAN STATE UNIV.	NEW!	
1484-RP	3.1	71,259	Energy and Performance of Secondary Coolant Low-Temperature Refrigeration Systems	PURDUE	NEW!	
GIA 07-08		10,000	Liquid Flooded Ecrisson Cooler with Optimized Compressor and Expander	PURDUE - Ian Bell	Graduate Student Grant-in-Aid	
GIA 07-08		10,000	Microchannel Flow Boiling of Carbon Dioxide Near Critical and Sub-Critical Pressures	U. OF CINCINNATI - Prakash Rapolu	Graduate Student Grant-in-Aid	
GIA 07-08		10,000	Modeling Airflow and Contaminant Transport in Commercial Aircraft Cabin	PURDUE U. - Zhao Zhang	Graduate Student Grant-in-Aid	
NI 08-09		45,000	Cost-Effective Fabrication Methods for Hydrophobic Metallic Heat Exchanger Fins	U. OF MIAMI OF OHIO - Andrew Sommers	New Investigator Award	
GIA 08-09		10,000	Development of a System Design Methodology for Robust Thermal Control Systems to Support Operationally Responsive Space	PURDUE U. - Derek Hengeveld	Graduate Student Grant-in-Aid	
GIA 08-09		10,000	Convective Heat Transfer in a Novel Enhanced Heat Transfer Core Surface - Wavy Fins with Periodic Wall Perfusion for Macroscopic Mixing and Swirl Production	UNIV. OF CINCINNATI - Omar Huzayyin	Graduate Student Grant-in-Aid	
GIA 08-09		10,000	Development of a Electrostatic Precipitation Technology for Effective Dust Control in Animal Facilities	OHIO STATE UNIV. - Roderick Manuzon	Graduate Student Grant-in-Aid	
GIA 08-09		10,000	Experimental and Numerical Study of Moving Body Effects on Airflow and Airborne Contaminant Transport in an Airline Cabin	PURDUE U. - Sagnik Mazumdar	Graduate Student Grant-in-Aid	
REGION V		1,741,882				



IN THE NEWS...



ASHRAE Publishes New Guidance on Commissioning Process

ATLANTA – Specific tasks to successfully implement the commissioning process for HVAC&R systems and assemblies are featured in a new guideline from ASHRAE.

ASHRAE Guideline 1.1, *HVAC & R Technical Requirements for the Commissioning Process*, describes the technical requirements for the application of the commissioning process described in ASHRAE Guideline 0-2005 that will verify that the HVAC&R systems achieve the owner's project requirements.

"The quality-oriented process outlined in the guideline provides improved quality and greater cost effectiveness compared to commissioning as currently practiced by many commissioning providers," Walter Grondzik, secretary of the committee that wrote the guideline, said. "One problem with the current practice is that 100 percent checking is performed during the construction phase of the project delivery process, and this checking usually focuses on limited or targeted systems. Quality-based sampling is not used, and so the current approach has limited quality-based random inspection procedures."

The guideline contains more than 100 pages of annexes, providing concrete examples of forms and documents to assist the commissioning team and owners in their efforts to deliver quality buildings that meet the owner's project requirements. Twenty-five sample checklists, covering pre-design, design and construction, are included along with a sample owner's project requirements verification test procedure.

The cost of **ASHRAE Guideline 1.1, *HVAC & R Technical Requirements for the Commissioning Process***, is \$69 (\$55, ASHRAE members).

To order, contact ASHRAE Customer Service at **1-800-527-4723** (United States and Canada) or **404-636-8400** (worldwide) or visit at www.ashrae.org/bookstore.



IN THE NEWS...



Cleveland ASHRAE Obituaries

ASHRAE Fellow Robert A. Urban, Chapter President in 1958-59, passed away Monday, June 16, 2008 at age 84, several years after a stroke affected his speech. Bob was a 1945 graduate of the Case School of Applied Science (now part of Case Western Reserve University).

Bob is best remembered for a truly Promethean achievement. Those of us who started careers in air conditioning design in the 1940s and 1950s were told by our bosses and mentors that "Variable Air Volume is great in theory, but bad in practice, because we all tried it in the 1930s and proved it can't work." Then, in the late 1960s came Bob Urban and the Cuyahoga Savings tower in downtown Cleveland. Bob at that time led the design and implementation of the first successful large variable volume air conditioning system in the world, for that building. Bob's concepts, proved in this project, have now become the world-wide standard for large building air conditioning.

On a more personal note, I have worked in ten different organizations in my career. The time I spent working for Bob at Byers, Urban, Klug & Pittenger was a truly unique experience. This was the only organization in my experience where everyone, from Bob to the office boy, was truly dedicated to doing the very best work they could. Perhaps Bob's greatest achievement was establishing that culture in his company.

- Jim Wickert

Every one of us have had teachers and mentors who have helped us in our careers. These words, originally a prayer of thanks to teachers from students, seem appropriate:

*At the rising of the sun, and at its going down, we remember them
At the blowing of the wind, and in the chill of winter, we remember them
At the opening of the buds, and in the rebirth of spring, we remember them
At the shining of the sun, and in the warmth of summer, we remember them
At the rustling of the leaves, and in the beauty of autumn, we remember them
At the beginning of the year, and at its end, we remember them
As long as we live, they too will live, for they are a part of us, as we remember them
When we are weary and in need of strength, we remember them
When we are lost and sick at heart, we remember them
When we have joy we crave to share, we remember them
When we have decisions that are difficult to make, we remember them
When we have achievements that are based on theirs, we remember them
As long as we live, they too shall live, for they were a part of us, as we remember them*

Our industry also lost two other former colleagues recently.

Anthony E. Lavelle passed away at age 91 after several years in a nursing home. Tony was one of the leaders of the Gorman Lavelle Company, and was widely respected for his honesty, fairness and integrity.

Leslie R. Buchanan passed away at age 84 on May 28, 2008. Les was a design engineer who worked in Consulting Engineer offices, mostly Havens & Emerson.

We also extend our sympathy to Member Dan Austrian on the loss of his mother in late August, and to Life Member Paul Berkild on the loss of his wife on August 31, 2008.



CHAPTER CALENDAR



September 15, 2008

Evolution of VAV Systems

Location: [Harry's Steakhouse](#)

October 20, 2008

Control Systems

Location: [Harry's Steakhouse](#)

November 19, 2008

CEUniversity (Bus. of Eng. & Applied Eng)

Location: [Corporate College East](#)

December 2008

ASHRAE Social

Wednesday, January 21, 2009

Lunch Meeting: Energy Rates

Location: [Sheraton Hotel](#)

Wednesday, February 18, 2009

Lunch Meeting: AEDG K-12

Location: [Sheraton Hotel](#)

March 16, 2009

Cleveland Market Trends OR ASHRAE Pres

Location: [Harry's Steakhouse](#)

April 20, 2009

Cleveland Market Trends OR ASHRAE Pres

Location: [Harry's Steakhouse](#)

May 18, 2009

ASHRAE Learning

Location: [Harry's Steakhouse](#)

June 2009

Membership Promotion Golf Outing

