



The PENNANT

Newsletter of the
ASHRAE® Central Pennsylvania Chapter

<http://www.cenpenn.ashraechapters.org/>

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President's Message...



Dear ASHRAE Members:

November will be an action-packed month for the Central PA Chapter. Wednesday the 8th we will have our monthly meeting. This will be a joint meeting with RSES and RETA. It will also be Membership promotion night, so bring your friends and colleagues who are not yet members and encourage them to join. We will be honoring some new Life Members and new Fifty-Year Members. Life and Fifty-Year Membership are real achievements. Please join us to applaud these men for their stellar commitment to ASHRAE.

There is also official business to conduct. We will accept nominations for members to serve on the Nominating Committee. The Nominating Committee will present a slate of qualified officers to be voted into service for the 2007-2008 ASHRAE year. See page 5 of the Pennant for more information.

Then on November 10th we will host Fred Bauman, foremost researcher on underfloor air distribution, for an all day professional development seminar. This PDS is the same course offered by ASHRAE at the Winter/Summer Meetings, but is only a fraction of the normal cost. It also includes breakfast and lunch! Attendance will be capped at 60 people, so register early to secure a seat.

Of course, we want to thank Werner Stebner for his informative and humorous presentations at our October meeting on seismic restraint and vibration isolation. These subjects are not well understood by engineers who are more comfortable navigating the psychrometric chart than Mohr's Circle, but their importance was well stressed at the meeting. Werner clearly presented the common pit-falls and their remedies – valuable lessons for all who were present.

If you missed October's meeting, don't miss November's. Julian DeBullet and Ole Christensen promise to bring stimulating discussions on refrigeration. See page 2 for the details. I look forward to seeing you at the meeting!

Sincerely,

Jason T. Richwine, P.E.
President
Central PA ASHRAE

Inside this Issue

November Meeting Information
Nominating Committee Letter
Membership Promotion Night

Professional Development Seminars
A Word About Research Promotion
AHR Expo in Dallas
General Announcements

Wednesday, November 8, 2006

5:00 – 5:30	Social
5:30 – 6:15	CO2 Industrial Refrigeration System by Ole Christensen, M&M Refrigeration
6:15 – 6:30	Nominating Committee Nominations & Research Promotion Raffle
6:30 – 7:30	Dinner – Catered Buffet
7:00 – 8:15	Variable Flow Chiller Plant Design by Julian de Bullet, ASHRAE Distinguished Lecturer

!!!MEMBERSHIP PROMOTION!!!

ANY NEW MEMBERS ARE FREE! *
BRING A NEW MEMBER AND GET IN FREE! **
TWO DRINK TOKENS TO ASHRAE MEMBERS!

*Must join ASHRAE between October 12th and November 8th. (Bring your internet receipt.)
**Guest must sign up by the end of the night.

Main Program**Variable Flow Chiller plant Design**

Julian de Bullet – ASHRAE Distinguished Lecturer

We will focus on primary/secondary and variable primary flow chiller plant design as influenced by ASHRAE Std 90.1. The material will cover pros and cons, design parameters and control issues. Next we will discuss low delta T syndrome. We will explain what it is and why it happens. Then we will discuss how to correct it.

Julian R. de Bullet has over 30 years experience in the HVAC industry. His career has concentrated on the applied use of Chilled Water and All-Air systems as a manager of applied equipment sales and as a manager of a service/performance contracting operation.

He is the Director of Industry Relations for McQuay International, based in Washington D.C. He is responsible for assisting McQuay customers and McQuay sales representatives in HVAC&R system design and specification. He is a member of numerous industry associations concentrating on energy efficiency and responsible refrigerant use.

As ASHRAE Vice President (2001/2003), he served on the Board of Directors and the Executive Committee and was Chair of Member Council and Publishing Council. He is Past President of the National Capital Chapter and was Director and Regional Chair for ASHRAE Region III. He is an ASHRAE Distinguished Lecturer. He Chairs the Professional Development Committee and is a member of the Publishing and Education Council and the Society Nominating Committee

He is a Graduate of the London University system in England, where he obtained an Electrical Engineering degree and a Diploma in Marketing.

Tech Session

System design for industrial CO2 / Ammonia cascade installations

Restrictions in using CFC, HCFC and even HFC refrigerants are getting more and more extensive in most countries. That leaves natural refrigerants, such as Ammonia, CO2, Propane, Butane etc. as the only practical choice. However, HC refrigerants like Propane and Butane are highly flammable and explosive, and will probably never be widely used refrigerants. For most industrial refrigeration installations the choice will be between Ammonia and a combined CO2/Ammonia system. Many countries/states are also getting restrictive on large Ammonia charges and many end-users do not want Ammonia in working/processing areas and storages. These facts have turned CO2/Ammonia cascade systems to a popular solution all over the world.

This presenter describes advantages in using a CO2/Ammonia cascade system compared to a traditional Ammonia system. Various system design solutions, including oil management, for industrial CO2 cascade systems are discussed and demonstrated. Selection of components, sizing of valves, relief valves pipes and vessels are discussed.

The discussion is a guide for deciding in which applications a CO2/Ammonia cascade system might be interesting. Guidelines for selection of system design, how to size and select different components, sizing of valves, relief valves pipes and vessels will be discussed.

Ole Christensen has a Master of Science degree in mechanical engineering, specialized in refrigeration technology, graduating in 1980 from the Technical University of Denmark.

Ole Christensen started his career in a Danish consulting engineering company, specialized in refrigeration. From 1988 to 1998 Ole Christensen had positions such as Sales Manager, Factory Manager and R&D Manager for Applications and Systems in Sabroe Refrigeration A/S, Denmark.

Following Sabroe Refrigeration A/S' take-over of part of the shareholding in M&M Refrigeration Inc., USA, Ole Christensen was in 1998 appointed as Senior Business Coordinator between M&M Refrigeration and Sabroe Refrigeration.. In 2001 Ole Christensen resumed working in YORK Refrigeration in Denmark (Sabroe) as Global Product Manager, responsible for reciprocating compressors, heat exchangers and CO2 refrigeration systems world wide. In 2004 Ole Christensen returned to M&M Refrigeration, Inc., USA, for his current position as Vice President, Engineering.

**Holiday Inn Hotel & Conference Center
148 Sheraton Drive, New Cumberland, PA 17070
Phone # 717-774-2721**

Reservations: <mailto:Robert.Miller@mail.ashrae.org>

Deadline: Friday November 3rd at 1:00 p.m. PLEASE!

Program

Cost: \$ 30.00

Retired/Students: \$ 5.00

Note to all Chapter Officers and Committee Chairs: Chapter Officers, Board Members and Committee Chairs have standing reservations. If you do not RSVP by the deadline, you will be billed for the fun time you missed.

Directions:

From Harrisburg

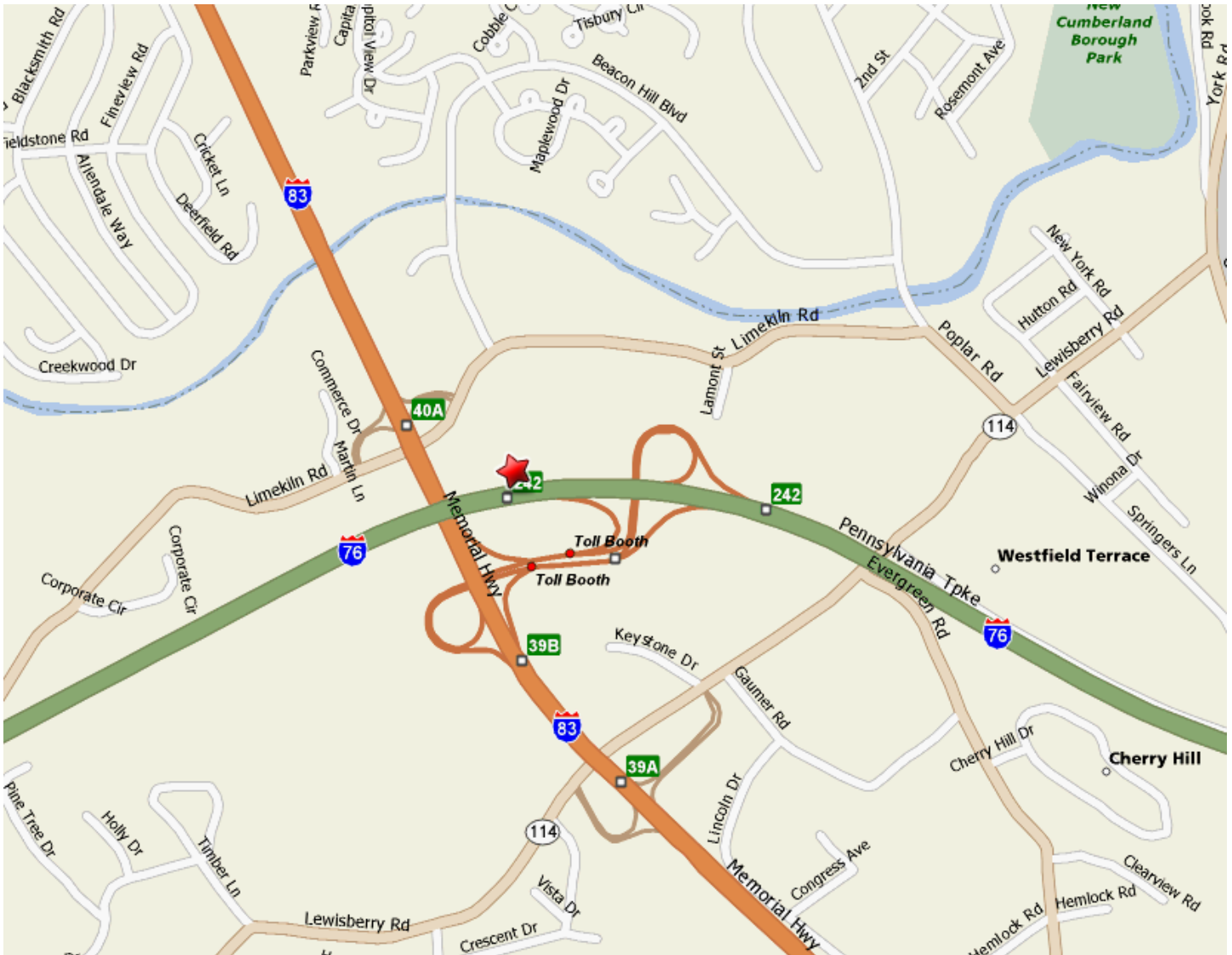
83 South to LimeKiln Road
Left on Limekiln Road
Right onto Sheraton Drive

From Lancaster:

283 West to 83 South
83 South to LimeKiln Road
Left on Limekiln Road
Right onto Sheraton Drive

From York:

83 North to LimeKiln Road
Right on Limekiln Road
Right onto Sheraton Drive



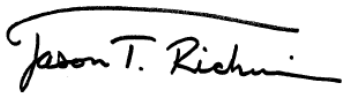
Ladies and Gentlemen:

At the November 8th meeting the Board of Governors will entertain nominations from the membership for members to be elected to the Nominating Committee. The Nominating Committee is charged with the vital task of preparing a slate of officers to stand for election to service for the following ASHRAE year. It is important that members who serve on the Nominating Committee are selected by the general membership and not simply by the existing Board. They are to represent you and your interests regarding the future leadership of this chapter.

If you know people who are qualified to serve on the Nominating Committee, please ask them to stand for election to the committee. If they agree, please come to the November meeting to publicly nominate them. It is preferred that members who make a nomination obtain a brief written statement from the nominated member stating his/her intent to stand for election. This will be helpful if the nominated member is not physically present to verbally affirm his/her willingness to stand for election.

Excerpts from our Chapter By-Laws explaining the duties of the Nominating Committee and the process by which the Nominating Committee is elected are provided below. Please read them carefully and keep them in mind when asking members to stand for election to the Nominating Committee. On behalf of the Board of Governors I thank you for your consideration and action on this matter.

Sincerely,

A handwritten signature in black ink that reads "Jason T. Richwine". The signature is written in a cursive style with a long horizontal flourish above the name.

Jason T. Richwine, P.E.
President
Central PA ASHRAE

From the Chapter By-Laws

8.3.1.1 Chapter Nominating Committee. The Nominating Committee shall consist of five (5) members in good standing. One member of the Board of Governors may serve on the Nominating Committee, but not as its chair. The Committee shall be elected by the Chapter at the January meeting. At the preceding meeting, the Board of Governors shall submit to the members their nominations for the committee. Additional nominations may be made by members from the floor at said meeting. Nominees receiving the five highest number of votes shall be elected. In the case of a tie, there shall be a runoff election which shall be held at the same meeting. The Nominating Committee shall elect its own chair.

7.2 Duties of Nominating Committee. The Nominating Committee shall select from the members eligible to hold office one candidate for each office except President, and for each member to be elected to the Board of Governors and shall obtain from each candidate a written statement that the candidate is a member in good standing in the Society and consents to stand for election. Not less than thirty (30) days before the March meeting the Nominating Committee shall present to the Secretary the names of the candidates selected, together with their statements.



PROFESSIONAL DEVELOPMENT SEMINAR

“Designing Underfloor Air Distribution (UFAD) Systems”

A FULL DAY SEMINAR OFFERED BY
THE CENTRAL PENNSYLVANIA CHAPTER OF ASHRAE

FRIDAY, NOVEMBER 10, 2006

YORK - A JOHNSON CONTROLS COMPANY - AUDITORIUM
631 S. Richland Avenue, York, PA

Presenter: Fred S. Bauman, P.E.
Center for the Built Environment at University of California, Berkeley

FRED S. BAUMAN, PE, is a Research Specialist with the Center for the Built Environment (CBE) at the University of California, Berkeley. Fred is the author of the *Underfloor Air Distribution (UFAD) Design Guide*, published by ASHRAE in 2003. He has conducted research in UFAD since 1987, and has led the development of CBE's world renowned research program on UFAD technology. Fred is frequently invited to speak on UFAD at workshops and conferences. He is an active member of ASHRAE, having served as Chair of TC 5.3 (Room Air Distribution), 1995-97, and Chair of SPC 113-1990 (Method of Testing for Room Air Diffusion), 1995-2002. He has received two Best Symposium Paper Awards from ASHRAE (1992, 1993), and in 1997 received the ASHRAE Distinguished Service Award.

Presentation will include discussion on:

- Diffusers and Stratification
- Underfloor Plenums
- Horizontal and Vertical Distribution
- Comfort and IAQ
- Load and Energy Calculations
- Commissioning
- UFAD Lab Demo/Open Discussion

SEMINAR COST

Cost for the Seminar is \$75.00, which includes continental breakfast, coffee/soda breaks and lunch. A copy of the ASHRAE UFAD Design Guide will be available at a special Seminar price of \$50.

Checks/cash will be collected at registration *on the day of the seminar*. Make checks payable to: CENTRAL PENN CHAPTER ASHRAE. *Sorry, we do not accept credit cards.*

RSVP

Email your RSVP to: Tom Long – thomas.long@mail.ashrae.org

Please RSVP by Friday November 3rd. This seminar will fill up quickly so RSVP early! Include your name, phone number, and company/school name. Also, tell us if you wish to purchase the UFAD Design Guide, and if you plan to stay for the UFAD laboratory demonstration.

SEMINAR SCHEDULE

REGISTRATION & CONTINENTAL BREAKFAST 7:45 – 8:30 AM

SEMINAR 8:30 – 3:00 PM (WITH COFFEE BREAKS & LUNCH INCLUDED)

UFAD LABORATORY DEMONSTRATION 3:15 – 4:30 PM – The lab demo is optional.



when
Tuesday, November 14th, 2006

1pm – 4pm Live Program

Join us at 12:30pm for a light lunch.

where
Trane Harrisburg Sales Office
3909 TecPort Drive
Harrisburg, PA 17111



Be our guest ... and attend this live, satellite broadcast as ASHRAE presents:

Multiple Benefits Solutions for Enhanced Building Security

Topics covered during this live satellite broadcast:

- Principles of risk management and how they can allow treatment of health, safety, and security issues that extend beyond those normally considered in current practice, codes, and standards

Panelists:

- George Glavis, P.E. – U.S. Department of State
- D. Scott Fisher, P.E. – State Farm Insurance Company
- James Woods, Ph.D., P.E. – The Buildings Diagnostics Research Institute, Inc.
- Richard Bielen, P.E. – National Fire Protection Association
- Ronald Vallort, P.E. – Ron Vallort and Associates, Ltd.

- The application and integration of architectural and engineering principles and practices to achieve the levels of acceptable risk and benefits as defined by the Risk Management approach

Panelists:

- Stuart Knoop, FAIA – Oudens + Knoop Architects, P.C.
- Andrew Persily, Ph.D. – National Institute of Standards and Technology
- William Coad, P.E. – Coad Engineering Enterprises
- Patrick Spahn, P.E.
- Lawrence Spielvogel, P.E. – Consulting Engineer

How do you register for this event?

- Complete the form provided below.
- Contact your Trane sales office with this information.
- Registration deadline: **Friday, November 10th, 2006**

To register: call Alicia Moore at 717.561.5405, or fax this form to 717.561.5499, or e-mail this information to acmoore@trane.com.

Yes! I plan to attend this Trane satellite broadcast:

Multiple Benefits Solutions for Enhanced Building Security

Your name _____

phone _____

e-mail _____

Your company _____

Number of attendees _____

Research Promotion Committee

Gary C. Debes – RP Chair

I attended a Research Promotion kick-off meeting in Chicago last month along with other chairs from Region III and Regions I, II, V and VI. At this meeting I was given a challenge goal of \$11,500 to collect for this year's Research Campaign. This is our Chapter's fair share in a campaign destined to collect over \$3 million this year. I plan on using this space to list the contributions I have received to date in the campaign.

I am also pleased to announce the Central Pennsylvania Chapter was the first in our Region to achieve the Full Circle of contributions. This is the President, President-Elect, Vice President, Treasurer, Secretary and the Research Promotion Chair contributing at the Honor Roll level of \$100 or more. This shows the Chapter leadership's commitment to the Research program. Thank you to the Chapter Officers Jason Richwine, Bob Miller, Mark Tome, Ron Hoover and Gary Booth.

- Dr. Fred Nicholas
- MDK Engineering
- Anthony Schneider
- Dr. Kenneth Hickman
- Kirby Slear
- George Keller
- Dr. Kenneth Cooper
- Kenneth Hutchinson
- Jason Richwine
- Bob Miller
- Mark Tome
- Gary Booth
- Gary Debes
- Ron Hoover
- Jason Richwine – donated his 50/50 raffle winnings
- Central Pennsylvania Chapter ASHRAE – 50/50 Raffle proceeds

I also am announcing a new Corporate Sponsorship program. For a contribution to the Chapter of \$500 a company or individual can receive a 2006-2007 Program ticket, five (5) Manufacturer's Directories and also make a \$250 contribution to ASHRAE Research. The program ticket gives the holder 7 programs for the price of 6 as well as two guest passes. A special section on the Chapter website will list the Corporate Sponsors and give a brief description of the company, there will also be a plaque made up with brass plates listing the sponsors that will be displayed at every meeting. If you are interested in participating in this program, call Bob Miller at 717-664-0106 and let him know.

Members can submit individual or company contributions with their dues payment, or by allocating all or a portion of their reimbursements on the Travel Vouchers, or by sending their contributions to their chapter's Research Promotion chair. Companies can also send their research investments to their local ASHRAE chapter chair or directly to ASHRAE headquarters made payable to *ASHRAE Research* and addressed to: Research Promotion, 1791 Tullie Circle, Atlanta, GA 30329.

ASHRAE, Inc. is a 501(c)(3) non-profit organization Contributions from U.S. citizens and businesses are deductible as allowed by law.

2007 AHR EXPO®

January 29 - 31
Dallas, TX

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honorary sponsor:



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Announcements

Promotions

New Employees

New Members, Membership Transfers, & Membership Upgrades

We would like to recognize our local members who have achieved significant tenure with ASHRAE

NEW LIFE MEMBERS

Ernest Nute
Robert Schmitt

50-YEAR MEMBERS

Burton Kniseley
Glenn Maneval

Weddings/Births/Deaths

Anniversaries

Misc.

**Put it in the Pennant -- Send your announcements to
gary.booth@mail.ashrae.org**