

# The Central New Yorker

## ASHRAE Newsletter

The CNY Chapter of the American Society of  
Heating, Refrigerating and Air Conditioning Engineers

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## The President's Message

The February meeting was, in my opinion, the most fascinating topic of the year. Scott Reynolds from M/E Engineering came in to discuss Computational Fluid Dynamics (CFD). It's amazing to me how much computers and technology has infiltrated our industry. I was in awe at the level detail you can get from CFD models for fire and smoke propagation through buildings. Scott showed us a number of different models he has done over the past few years. In one case, using CFD he actually proved to an inspector the building could pass code with less exhaust air than called for. Very neat stuff. I wish extend our thanks to Scott and M/E Engineering for coming out and providing a great talk.

The year is moving quite quickly and I'm pleased at the diversity of professionals attending the meetings. One of my goals was to get new faces and so far "mission accomplished." Contractors, engineers, salespeople are all coming out for the meetings which is what ASHRAE is all about. Let's continue the momentum right to the end of the year. April is our off-site "field trip" to Wegman's, where we'll tour the facility and have dinner right in the store from their food court. Wait until you see the menu we have planned for you! Be advised, we are going to ask for a firm reservation

one week before the actual meeting. So by April 2, you'll need to register using our online process. We'll provide reminders and as much advance notice as we can.

March 12 is Carrier sponsored history night. Carrier Corporation has graciously offered to pick up the tab for the dinner meeting this month, so be sure to come and enjoy the meal and presentation at no cost. Our second ASHRAE Distinguished Lecturer for the season will be Ron Wilkinson from Edison, NJ. Ron will be here to talk about the History of Building Commissioning. Other chapters from around the region have enjoyed his talk so be sure to come and check out the meeting.

As always, the meeting will be at the Doubletree and cash bar will open at 5:30 p.m., followed by dinner at 6:00 p.m. and presentation at 6:45 p.m. Dinner is no charge this month, however please be sure to register by Friday March 7 using the link below:

<http://centralnewyork.ashraechapters.org/>

Mark Rabbia  
CNY Chapter President

<http://centralnewyork.ashraechapters.org/>

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## Historically Speaking

*H*ere in Central New York with its long winter season and many heating degree days, we are fortunate to have the comforts of central heating. This reminded me of a vacation trip to Bath, England where there is a restored Roman bath built in the first century with central heating. The Romans occupied some 1600 square miles in England during the first four centuries and used their central heating system in the building of the ancient bath in Bath. This type heating system is called a hypocaust, which literally means "heat from below" from the Greek word hypo meaning below or underneath, and was a little like modern under-floor heating. Hypocausts were a common feature of stone houses and baths in the colder parts of the Roman Empire, but could not be used in timber-framed buildings. It is also a fact that up until the Romans arrived in Britain, the British only knew how to heat one room by using a fire.

In this Roman central heating design, the floor was raised about two feet off the ground by a series of stone pillars on which flagstones would be laid, and then on top of these would be a plastered floor often decorated with mosaic tiles. The hot air and smoke

from a wood fire in a furnace at the bottom of one exterior wall of the bath building would circulate between the pillars under the floor, and then up through ducts in the walls to chimneys in the corners of the room, thereby heating the floors and walls, but not polluting the interior of the room. This heating system was quite labor-intensive, as it required constant attention to feed the fire and remove the ashes, often performed by slaves.

The Roman baths in Bath, England were built around three hot springs flowing almost a  $\frac{1}{2}$  million gallons per day of water at 115 degrees F, which probably did not require heating for the baths. However, this Roman heating technology was used to heat pools in other locations not fed by hot springs. The original pipes used to carry the hot spring water by gravity to the bath in Bath, are made of lead and are largely still in place today. The extensive use of lead for pipes by the Romans throughout their domain, as well as for use in cooking and eating utensils, has led many distinguished historians to believe that this high exposure to lead with its toxicity was a contributing force in the decline and fall of the Roman Empire.

— **Paul Britton, Chapter Historian**

# Program Speakers

## March Meeting

Our meeting this month will again be at the Doubletree Hotel off Carrier Circle. We have another Distinguished Lecturer this month, Ronald J. Wilkinson, P.E. with AKF Engineers out of New York City.

Since March is Carrier sponsored History night we asked Ronald to come in and speak with us about a topic that you see on any medium to large projects, the history of commissioning. Ronald will talk a little about the history of commissioning, what commissioning is, some examples of buildings that have gone through the commissioning process and how commissioning relates to LEED's.

Please have your reservations in by Friday March 7th for this very interesting topic and speaker. Online reservations can be made at <http://centralnewyork.ashraechapters.org/> or you can call Paul Conte at 437-0225 ([paulc@guckianenergy.com](mailto:paulc@guckianenergy.com)).

Next month's meeting will be offsite at Wegmans in Dewitt. We are going to tour the HVAC systems of the newly remodeled facility. This should prove to be a very interesting tour! Dinner will be at Wegmans and tours afterward. Please have your reservations in not later than Tuesday April 1st as Wegmans needs one week notice.

Hope to see you there!

Jim Walker

## Upcoming in 2007-2008

March 12	Carrier History Night	Ronald J. Wilkinson, Dome Tech Commissioning, Edison, NJ	Doubletree, Syr.
April 9	Tour of Dewitt, Wegmans	Richard Kelly, <i>Wegmans</i>	Wegmans, Fayetteville
May 14	Refrigerants	Mark Spatz, <i>Honeywell</i>	Doubletree, Syr.
June 12	ASHRAE Clambake		Hinerwadels Grove
June 16	ASHRAE Golf Tournament		Radisson Greens

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## Calling All HAC'kers – Harry King Needs Us

**T**hose of you who attended SUNY Canton's Air Conditioning Engineering Technology program and joined the school's Heating and Air Conditioning Club (HAC'kers) prob-



*Harry King*

ably remember or know of Harry King. I knew him when I attended SUNY Canton in the late 1970s, but he was around long before that. Professor King founded the heating and air conditioning program at SUNY Canton. Started from the corner of an old barn, with a few tools in 1946, Mr. King nurtured

the program to what it is today, a thriving academic program, with a modern laboratory and computers. The program has even expanded into alternative energy sources, to better prepare the next generation of HAC'kers.

Back in 1946, Professor King began the program to meet a growing need for building comfort in our society. Since the start of the Air Conditioning program at SUNY Canton, many of us have graduated and had great careers in the Air Conditioning field. Hundreds of successful careers owe their start to Mr. King's dedication to the program, whether they met him or not.

That's why it is so important for all of us HAC'kers to get together and show our gratitude to the man who started it all: Professor Harry E. King.

To honor Professor King, there is a big push among the alumni of the Air Conditioning Engineering Technology program to name the Air Conditioning Laboratory at SUNY Canton the Harry E. King Air Conditioning Laboratory. The State University of New York requires \$100,000 for the naming rights, and so alumni, along with the Alumni/Development Office have started a campaign to raise the money.

Professor King is one of the "Great Ones;" of those professors who really stand out in an institution's history for making a difference in so many lives and careers. Many alumni credit Professor King with helping to change their lives and starting them on successful career paths in the industry. Wouldn't it be nice if we could all pitch in and raise the money in time to rename the building at the HVAC Alumni — 60th Year Reunion to be held June 13-15 this year.

To donate, contact Jeremiah Ayrassian at [ayrassianj@canton.edu](mailto:ayrassianj@canton.edu) or 1-800-811-6727. Let's raise that \$100,000 by June 1, 2008 and remember every gift matters.

Together, we can honor Professor King and recognize his contributions to the SUNY Canton Air Conditioning Engineering Technology program and to all of us.

**Chris Martin Class of 1978**  
*President Elect*

## Membership Update

The local CNY ASHRAE chapter would like to recognize a new member: Hamza Salih Erden. Hamza joins us as a student from Syracuse. When you see Hamza please join me in extending them a warm ASHRAE welcome.

If you or anyone that you know is interested in joining ASHRAE, please have them sign-up at [www.ashrae.org](http://www.ashrae.org). Or, if they would like to sign-up in person, the local chapter website (<http://centralnewyork.ashraechapters.org>) is a great place to find out meeting times and locations.

**John Tacklyn**  
**ASHRAE Membership Chair**

## The Advanced Energy Design Guide

The Advanced Energy Design Guide for K-12 school buildings has been released and is available for free download to all ASHRAE members. This is the third of a series of design guides, previous design guides covered Small Retail buildings and Small Office Buildings.

The Advanced Energy Design Guide series provides a sensible approach to easily achieve advanced levels of energy savings without having to resort to detailed calculations or analysis. The four-color guides offer contractors and designers the tools, including recommendations for practical products and off-the-shelf technology, needed for achieving a 30 percent energy savings compared to buildings that meet the minimum requirements of ANSI/ASHRAE/IESNA Standard 90.1-1999. The energy savings target of 30 percent is the first step in the process toward achieving a net-zero energy building, which is defined as a building that, on an annual basis, draws from outside resources equal or less energy than it provides using on-site renewable energy sources.

These guides have been developed through the collaboration of ASHRAE, the American Institute of Architects (AIA), the Illuminating Engineering Society of North America (IESNA), and the U.S. Green Building Council (USGBC), with support from the Department of Energy (DOE), to help meet all of an owner's energy performance requirements. In an effort to promote building energy efficiency, ASHRAE and its partners have made these guides available for download (PDF) at no charge. Print versions may be purchased from the ASHRAE bookstore at <http://www.ashrae.org/publications/>.

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