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[www.ashraeiowa.org](http://www.ashraeiowa.org)

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**ASHRAE Society**

**Headquarters**

ASHRAE, Inc.  
1791 Tullie Circle N.E.  
Atlanta, Georgia 30329  
(404) 636-8400

<http://www.ashrae.org/>

**Tuesday, October 24, 2006**

**Research Promotion, Membership Night, Joint CSI**

**Location: Sheet Metal Training Center**

4534 N.W. 6<sup>th</sup> Drive  
Des Moines, IA 50313

**See Map Inside**

**Schedule:** Refreshments/Tour..... 5:00  
Dinner ..... 6:00

**\$15 - Members**

**\$7 - Students**

**Always Free – ASHRAE Student Members**

Program ..... 6:45

**Multiple Topics**

Jack Webster, Director of Certification **National Energy Management Institute**, Alexandria, VA will speak on Training Apprentices including: TABB, Commissioning, Sound and Vibration, Moisture Management, IAQ, Duck Leakage, BioSafety Cabinets and Fire/Smoke Dampers.

Stu Crine, Building Code Commissioner, **State of Iowa**, will speak on Revisions to the Iowa Building Code – Effective Jan. 1, 2007 including: Updating of the IBC, New Plan Review Fee Structure and Initiation of Building Code Inspections.

**ASHRAE WINTER MEETING AND AHR EXPO**



**DALLAS** – Join ASHRAE in Dallas for its 2007 Winter Meeting and the AHR Expo and get energized!

The meeting takes place Jan. 27-31, 2007, at the Adam’s Mark Hotel, while the AHR Expo is held from Jan. 29-31 at the Dallas Convention Center.

## Past Presidents

Chuck Heldenbrand	2005-2006
Jeff Gross	2004-2005
Ron Engelhardt	2003-2004
Dan Zaug	2002-2003
Susan Oltrogge	2001-2002
Christopher Nelson	2000-2001
Donald Swanson	1999-2000
Edward Truslow	1998-1999
James Hall	1997-1998
Robbin Vannoy	1996-1997
Mark Conway	1995-1996
Paul Melton	1994-1995
Gregory Maxwell	1993-1994
Jeffery Hammer	1992-1993
Jack Culp	1991-1992
James Lee	1990-1991
Clint Leonard	1989-1990
Charles Pedersen	1988-1989
Gary Reynolds	1987-1988
Dennis Hogan	1986-1987
Eugene Zefron	1985-1986
Donald Hagge	1984-1985
Rober Rist	1983-1984
Joseph Proctor	1982-1983
Mark Allen	1981-1982
Curtis Klaassen	1980-1981
Gerald Anderson	1979-1980
C.W. Miller	1978-1979
Richard South	1977-1978
LaVerne Stewart	1976-1977
Curtis Hammer	1975-1976
Ralph Schilling	1974-1975
Donald Bonicamp	1973-1974
Kent Mosher	1972-1973
Thomas Van Hon	1971-1972
Robert McBride	1970-1971
William Whitman	1969-1970
Einar Dahl	1968-1969
Eugene O'Neil	1967-1968
James Green	1966-1967
Neil Hanson	1965-1966
Bob Flanagan	1964-1965
Lyndon Kelley	1963-1964
Elwood Giberson	1962-1963
Vern Polly	1961-1962
John Bain	1960-1961
Crom Campbell	1959-1960
R.T. Howard	1958-1959
W.A. Schworm	1957-1958
D.E. Schroeder	1956-1957
G.J. Kraai	1955-1956
W.E. Nanes	1954-1955
J.F. Sandfort	1953-1954
R.H. Schnell	1952-1953
C.H. McGuiness	1951-1952
R.S. Stover	1950-1951
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D.C. Murphy	1948-1949
C.A. Wheeler	1947-1948
E.O. Olson	1946-1947
B.E. Landes	1945-1946
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C.W. Helstrom	1943-1944
P.E. Triggs	1942-1943
Perry LaRue	1941-1942
R.A. Norman	1940-1941
Tracy Johnson	1939-1940
W.R. White	1938-1939

# The President's Corner

From the desk of Jason Kems

Fall is definitely here – the many leaves in my yard are testimony! Thanks to all that helped with and participated in the Annual Fall Frolic at Waveland. I know I had a good time and I hope everyone that participated did as well.

I hope to see everyone at the meeting on the 24<sup>th</sup>. Last time we visited the Sheet Metal Apprentice School, we had a great time seeing how the trade passes on information from one generation of sheet metal workers to the next. Jack Webster's talk will be interesting as he informs us of apprenticeship changes and Stu Crine will have very important information on the International Building Code, plan reviews and inspections.

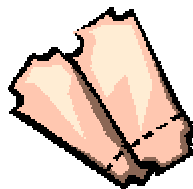
If you would like to sponsor a student for any of the meetings this year, just let Kit Cartwright know when you pay at the door. We would like to have all of the students sponsored that attend any of the meetings this year.

Some of you may have noticed a few changes in the product directory this year. One of the main changes is that we used the information we have from Society for the membership list. If you see something that is not correct, go on-line and submit the changes or get with Matt Jesson who will help you thorough getting the changes made.

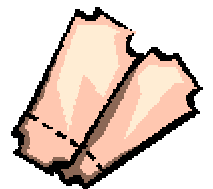
Thanks for helping make the Iowa Chapter of ASHRAE one of the best in the Nation!

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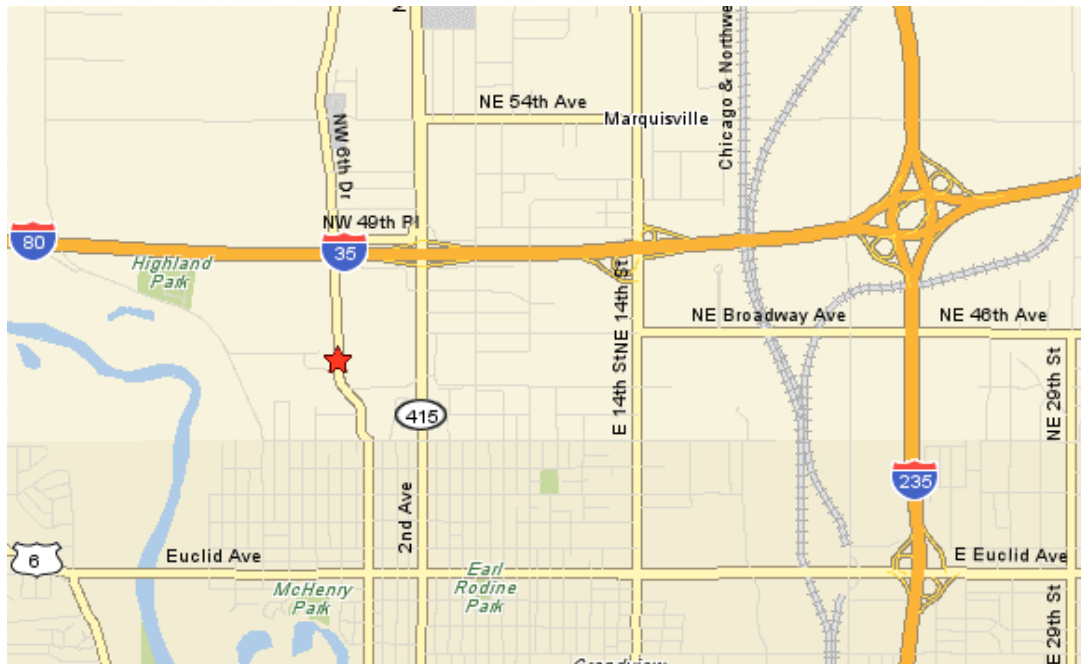
**Just a reminder that we will be trading cash donations for paper tickets that may be exchanged for a valuable prize if yours matches the one pulled out of the hat by the end of the chapter meeting.**



**1-ticket for \$3 or 2-tickets for \$5**



## MAP TO SHEET METAL TRAINING CENTER



## LEARNING THE HARD WAY:

### **Contraction Loop?**

ROGER LESHER

As a young neophyte engineer, one of my first projects was to design a liquid nitrogen system that would connect to a series of oven sized environmental test chambers. These chambers simulated an airplane wing and were designed to deliver quick changes in temperature with electric coil for heating and a quick burst of liquid nitrogen for rapid cooling.

Anyway, being as thorough as possible I found all the right products for cryogenic applications, multi-layer closed cell insulation over the welded copper pipe, correct valve packing with extensions on valve stems, cryogenic bleed device located at the end of the line; etc. All the system components were perfect. At least until the line was filled.

You see the liquid nitrogen is *minus* 220°F, and the tank was about 300 feet away and of course the shortest distance between two points is a straight line. And as a good engineer, to minimize waste that's exactly how I ran my pipe. Now being aware of need expansion loops on a hot lines, never did it occur to me the need to take in consideration pipe contraction.

And contract it did, as soon as that extremely cold liquid nitrogen hit that pipe. The main shrank, but the connection to the environmental chambers was fixed. The pipe creaked and strained as my once perfectly vertical drops were now spring back 5 degrees, then 10 degrees then 15 degrees. I was awaiting that fateful POP and outrush of gas but it never happened. Luckily, we had enough vertical drop to take up the slack.

Disaster only avoided by luck, I had the system vented and added the contraction loops. Now I remember, some things that should be obvious are some of the things most easily overlooked.

# ANNOUNCEMENT:

## **ASHRAE/ACCA Inspection, Maintenance Standard Open for Review**

ATLANTA – A proposed standard currently open for public review will be the first to deal exclusively with inspection and maintenance of HVAC systems in buildings where the public is exposed to the indoor environment.

ASHRAE/ACCA Standard 180P, Standard Practice for Inspection and Maintenance of Commercial Building HVAC Systems, would establish minimum HVAC inspection and maintenance requirements that aid a system's ability to achieve acceptable thermal comfort, energy efficiency and indoor air quality in commercial buildings.

The standard is being developed by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and the Air Conditioning Contractors of America (ACCA).

“Inconsistent practices in inspection and maintenance of HVAC systems is common in the building industry,” Bob Baker, chair of the committee writing the standard, said. “As a result, systems frequently operate outside optimum performance, without providing the energy efficiency, thermal comfort and indoor air quality they were designed to provide.”

Baker notes that a standard practice would benefit occupants and also ensure that indoor environmental conditions are maintained as energy efficiently and cost effectively as possible.

Highlights of the proposed standard include:

- Responsibility for compliance with the standard is clearly on the building owner; a common reason given for lack of maintenance is lack of sufficient resources available to maintenance personnel.
- Each building must have a written plan that addresses 57 inspection/maintenance items required if those components are present in the building (for example, if a building has cooling towers, items dealing with cooling towers are mandated as part of the plan).
- An additional list of 563 optional inspection and maintenance items that building owners/operators may wish to consider when preparing their individual plans is included. “This listing assembled by 24 of the most knowledgeable persons about HVAC system maintenance in the industry is an incredible resource that has never before been available to those planning and managing maintenance activities,” Baker said.
- The standard especially concentrates on those factors that impact thermal comfort, energy efficiency and indoor air quality so as to promote sustainability.
- The proposed standard is open for public comment until Nov. 6. To read a draft of the standard or to comment, visit [www.ashrae.org/publicreviews](http://www.ashrae.org/publicreviews).

ASHRAE, founded in 1894, is an international organization of 55,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.

ACCA is the nationwide association of heating, ventilation, air conditioning, and refrigeration contractors, representing members in every state. For over 40 years ACCA has served the educational, policy, and technical interests of the small businesses who design, install, and maintain indoor environmental systems.

## ANNOUNCEMENT:

### **New Designations Proposed for ASHRAE Refrigerant Safety Standard**

ATLANTA – Eight proposed addenda, including three adding new refrigerant designations, to ASHRAE's refrigerant safety standard are open for public review.

ANSI/ASHRAE Standard 34-2004, Designation and Safety Classification of Refrigerants, establishes a simple means of referring to common refrigerants in place of chemical names, formulas or trade names. It also establishes safety classifications based on toxicity and flammability data.

To read the proposed addenda or to comment, visit [www.ashrae.org/publicreviews](http://www.ashrae.org/publicreviews).

The following addenda are open for public review from Sept. 22 until Oct. 22:

- 34d would require refrigerant applications to be submitted in electronic format in addition to printed copies.
- 34i would add a designation of R-426A to a blend of R-125/134a/600/601a.
- 34j would add a designation of R-427A to a blend of R-32/125/143a/134a.
- 34l would add a designation of R-428A to a blend of R-125/143a/290/600a.

The following addenda are open for review from Sept. 22 until Nov. 6:

- 34m would remove the requirement to submit refrigerant property data elements that are not needed in determining the refrigerant designation or safety classifications.
- 34t would add an informative appendix containing refrigerant data removed from the standard by addendum 34u-2004 and bubble/dew points for azeotropic blends.
- 34v would update addendum 34u-2004 text and tables based on an increased oxygen depletion concentration level from 69,100 parts per million (ppm) to 140,000 ppm, increased cardiac sensitization default from 0 to 1000 ppm, new toxicity information for R-22, 32 and 227ea, new lower flammability limit values, and addition of new refrigerants.
- 34w would add an informative appendix containing toxicity values for single-compound refrigerants, compiling toxicity information from various sources into one table.

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## PRODUCT DIRECTORY ANNOUNCEMENT

ROGER LESHER

Please remember to pick up your project directories at the next two meetings.

See the Product Directory of someone else you know? Take them their Product Directory also.

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**Get Noticed!!!**

Please contact [Roger Leshner](#) at (515) 254-8237 for details.

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**RICK KAPUSTKA**

Thanks to all the sponsors of the Iowa Chapter newsletter for 2005-2006. Your support was greatly appreciated and we look forward to your participation again this year!

**SAILING INTO THE FUTURE  
2007 CRC – Madison, WI**

May 3 (Thursday) to May 5 (Saturday), 2007

**Monona Terrace Convention Center**  
One John Nolen Drive, Madison WI 53703

[http://www.ashraemadison.org/crc\\_2007.htm](http://www.ashraemadison.org/crc_2007.htm)



# ASHRAE RESEARCH PROMOTION FUND 2006-07

ASHRAE Research Investors 2006-07		
Individual Investors HR = Honor Roll participants \$100 min		Company Investors HR = Honor Roll participants \$150 min
Mr Jerrod J Sieverding (HR)	\$15,000 _____	Products Incorporated
Mr Jeffrey J Gross (HR)	\$14,000 _____	Corn States Metal Fabricators Inc.
	\$13,000 _____	Control Installations Of Iowa Inc. (HR)
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	\$11,000 _____	HVAC Resources, Inc. (HR)
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	\$3,000 _____	
	\$2,000 _____	
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	\$0 _____	

Current Campaign Total - \$900.00  
Campaign Goal - \$15,000.00

6.0% of Goal  
Money Required for Goal - \$14,100.00

*Your contribution puts us closer to achieving our goal. Please send what you can today!*

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**ASHRAE is a 501(c)(3) organization. Contributions are deductible as allowed by law. A receipt will be sent to the address listed above.**

Send to:  
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Marshalltown, IA 50158  
Attn: James Wahlert

PHONE: 641-753-5557  
FAX: 641-752-7977

Thank you for your donation!

**Donations may also be contributed via the Internet at [www.ashrae.org](http://www.ashrae.org) under the "Contribute Online" quick link.**



**IOWASTALKS**  
 Roger Leshar, Editor  
 c/o Brooks Borg Skiles  
 317 6<sup>th</sup> Ave. Suite 400  
 Des Moines, IA 50309

## Iowa ASHRAE Chapter 2006 – 2007 Calendar

WHEN	WHAT	WHERE	THEME
Friday, September 22 <sup>nd</sup>	Fall Frolic	Waveland	Golf / RP
Tuesday, October 24 <sup>th</sup>	Training Apprentices/IBC Revisions	SMTS	Membership / RP / Joint CSI
Monday, November 13 <sup>th</sup>	Tour ISU Power Plant	ISU Power Plant	Student Night
Monday, December 11 <sup>th</sup>	DSM River Front Update	Embassy Club	Lunch - Past Presidents
Tuesday, January 11 <sup>th</sup>	Tour Compressor Controls Corp.	TBD	Resource Promotion / Joint DMEC
Monday, February 19 <sup>th</sup>	TBD	TBD	Membership Night
Monday, March 19 <sup>th</sup>	TBD	TBD	“R” in ASHRAE / Elections
Thursday, April 19 <sup>th</sup>	IAQ – ASHRAE Broadcast	TBD	Lunch – RP / Student / ASHRAE Broadcast
Thursday, May 10 <sup>th</sup>	Spring Fling	Echo Valley	Golf / RP

Check out our website at [www.ashraeiowa.org](http://www.ashraeiowa.org)

### Get this by E-mail TODAY!

The Iowa Chapter is now mailing newsletters electronically! If you're one of the few people still receiving this by "snail mail" and want to jump on the technology bandwagon send a message to [aospisal@mail.ashrae.org](mailto:aospisal@mail.ashrae.org) or call Andrew at 515-727-6973 and we'll get you on the mailing list! Act now and receive the newsletter in full color PDF format!