



# THIN-AIR BULLETIN

NEW MEXICO CHAPTER      REGION IX      ALBUQUERQUE, NEW MEXICO

ASHRAE

AMERICAN SOCIETY OF HEATING, REFRIGERATING, AND AIR CONDITIONING ENGINEERS

March 2006

## Albuquerque's Economic Climate

I recently read an article that stated that 2005 was the year that Albuquerque was finally "found". It explained that individuals and companies alike had discovered the many benefits our city has to offer which has translated into considerable growth and put Albuquerque at the top of many of the most favorable city lists. The question many have after hearing this is how will this affect our Economic Climate of our city, our we attracting the right business and what might the future hold. At this months meeting we hope to give you some insight into this and are please to have Gary Tonjes as our guest speaker.

Gary Tonjes is the President of Albuquerque Economic Development, Inc. (AED) a position he has held since November 1, 1994. Mr. Tonjes was raised in Albuquerque, and graduated from Eastern New Mexico University in 1978 with a Bachelor of Science degree in Communications. He worked for the Roswell, New Mexico Chamber of Commerce (1979-81), the Odessa, Texas Chamber of Commerce (1981-84), and was President of the Joplin Area Chamber of Commerce for ten years.

Albuquerque Economic Development (AED) is a non-profit corporation funded principally by leading members of the business community. Since 1960, AED has served as Albuquerque's lead organization for the recruitment of more than 180 new companies to the metropolitan area. AED

*(Continued on page 2)*

## ***PRESIDENT'S MESSAGE***

After feedback the last couple of years, it was understood by your Board of Governors that day meetings would be more advantageous and that members would be more likely to come to the meetings.

Also, we (the Board of Governors) were told to expand the topics of the presentation. I believe that our program chair has done a great job this year.

With all that said, our chapter has 175 registered members. We have been averaging under 30 members at meetings this year. For those of you who attend regularly, thank you. For those that do not, I would like to hear your truthful feedback on why you or why you think other members are not attending these meetings. Feel free to contact me either by email or phone. My email address is [jason@mechrep.com](mailto:jason@mechrep.com) and my phone number is 821-2563.

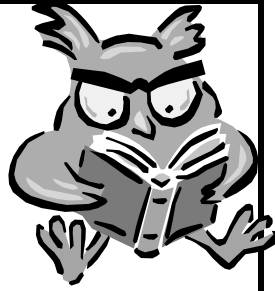
I believe that your Board of Governors has done things to support what the majority of members have asked for. In return we ask that you support us and our local chapter meetings. I hope to see you at this month's meeting.

Stay healthy,

Jason A. Moorhead

## From the History Books

September 1976



Chapter Officers were:

President:	Dick Supple
President-Elect:	Buford Ohnhaus
Secretary:	Allan Moorehead
Treasurer:	Rick Hobson

The speaker for the evening was Dr. Klaus Keil who spoke on the Viking landings on Mars. He had spent several months as a member of the scientific team that is attempting to extract all of the

*(Continued from page 1)*

also assists existing industry in the region. AED's recruits include Gap Inc.'s Corporate Shared Service Center, Eclipse Aviation, Intel, General Mills, Tempur-Pedic, and Verizon Wireless. AED was ranked one of North America's Top Ten Economic Development Organizations for the year 2000, and Albuquerque has been ranked among the top 20 cities in America for new and expanding business for five years in a row, according to *Expansion Management* magazine's survey of 75 site selection consultants.

Plan now to join us for a lunch meeting at Gardunos on the Green on Tuesday March 21<sup>st</sup>. Lunch will be served at 11:45 and the program will start at noon. Please RSVP by March 17<sup>th</sup> to Deward Stegall at (505) 884-2044 or Dwstegall@trane.com. Email is preferred.

## **February Program Review**

### **Ten Tips to Surviving in a Litigious Society**

Last month's program featured Gerald G. Dixon Attorney at Law as our guest speaker. Mr. Dixon is a partner in the law firm of Dixon, Scholl

& Bailey, P.A., where he practices in the areas of commercial litigation, professional malpractice defense and construction disputes. There were definitely some valuable topics discussed, including but not limited to tips on information transmission, documentation and record keeping. Mr. Dixon is a very accomplished speaker and the attendees all agreed that this was most certainly a worthwhile and enjoyable program. Thank you to those who attended and a special thanks to our guest speaker.

## **Membership Promotion:**

### Membership Promotion Day:

Our New Mexico Chapter will be having the second Membership Promotion day at this month's meeting. We encourage everyone to attend and invite potential members to see how vital ASHRAE is to our industry. Membership applications will be available.

### ASHRAE Mentoring Program:

Our New Mexico Chapter is still working to establish the Mentor-Protégé Program and is looking for volunteers to serve as mentors. Mentors will help inexperienced ASHRAE members or student members in development by teaching, coaching, counseling and/or championing with a focus on the Protégé's professional and ASHRAE development.

Please contact me at your earliest convenience with any questions regarding membership or the Mentor-Protégé Program.

Pat Davis  
M&E Engineering, Inc.  
Patd@mneengineering.com

## **Research Promotion:**

To improve the quality of life and to answer tomorrow's questions through research today is ASHRAE Research's mission statement. What does this really mean? In short ASHRAE has supported research, since 1919, in the effort to improve the quality of life. This is all possible because of the membership, you, and once again ASHRAE is asking for your continued support. This month's meeting is Research Promotion day and I ask that you consider donating to ASHRAE Research. I look forward to seeing you at this month's meeting.

For more information on Research Promotion, e-mail me at [dave72graham@aol.com](mailto:dave72graham@aol.com) or call 323-7629, or send your check to Research Promotion, 11930 Menaul NE, Suite 214 Albuquerque, NM 87112.

Take care,

David Graham  
Research Promotion chairman

## **ASHRAE Satellite Broadcast**

### **Sustainability Topic of ASHRAE Satellite Broadcast**

ATLANTA – Registration opens today for ASHRAE's satellite broadcast on sustainability and the building environment.

Information about building sustainability principles, practices and emerging concepts will be presented in the free April 19, 2006, satellite broadcast and Webcast, Sustainability and the Building Environment. The program will take place from 1-4 p.m. EDT.

Registration opens today for satellite broadcast site coordinators and Webcast participants. Registration opens March 15 for satellite broadcast site participants. To register or for more information, visit [www.ashrae.org/greenbuildingsbroadcast](http://www.ashrae.org/greenbuildingsbroadcast).

The speakers for the broadcast will provide guidance on how to practice sustainable building design. They are:

- Joe Van Belleghem, partner, Windmill Developments, Victoria, Canada, Green Buildings and Sustainable Communities – A Developer's Perspective;
- Hal Levin, Fellow ASHRAE, research architect, Building Ecology Research Group, Santa Cruz, Calif., Sustainability: What Does It Mean and Why is It Important ;
- Jean Lupinacci, director, ENERGY STAR commercial and industrial branch, Climate Protection Partnerships Division, U.S. Environmental Protection Agency, If It's Not Energy Efficiency, It's Not Sustainable: How to Ensure Top Energy Performance in Green Buildings;
- Kevin Hydes, P.E., P.Eng., vice president, Sustainable Practice, Stantec, Montreal, Canada, Better by Design: Project Studies;
- Malcolm Lewis, Ph.D., P.E., president, CTG Energetics, Irvine, Calif., Integrated Design for Sustainable Buildings.

ASHRAE, founded in 1894, is an international organization of 55,000 persons. Its sole objective is to advance through research, standards writing, publishing and continuing education the arts and sciences of heating, ventilation, air conditioning and refrigeration to serve the evolving needs of the public.

## **Baseline Standard for Green Building**

ASHRAE, USGBC, IESNA Partner on Baseline Standard for Green Building

--New standard to drive high performance building practices to the mainstream

(Washington, DC) – The U.S. Green Building Council (USGBC); the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE); and the Illuminating Engineering Society of North America (IESNA) announced today that the three organizations have agreed to co-sponsor the development of a new ASHRAE/

*(Continued on page 4)*

(Continued from page 3)

USGBC/IESNA minimum standard for high performance green building.

Proposed Standard 189, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings, will provide minimum requirements for the design of sustainable buildings to balance environmental responsibility, resource efficiency, occupant comfort and well-being, and community sensitivity. Using USGBC's LEED Green Building Rating System, which addresses the top 25% of building practice, as a key resource, Standard 189P will provide a baseline that will drive green building into mainstream building practices.

Scheduled for completion in 2007, the proposed standard will apply to new commercial buildings and major renovation projects, addressing sustainable sites, water use efficiency, energy efficiency, a building's impact on the atmosphere, materials and resources, and indoor environmental quality.

## HVAC SIMPLIFIED

HVAC Simplified in New Book from ASHRAE

ATLANTA – Step-by-step engineering design methods and tools are emphasized in a new design manual from ASHRAE.

“HVAC Simplified provides an understanding of fundamental HVAC concepts and explains simple design tools used to create building systems that are efficient and provide comfortable and healthy environments,” said author Stephen Kavanaugh, Ph.D., a professor of mechanical engineering at the University of Alabama.

Topics include equipment selection and specification, comfort and indoor air quality, ventilation air, ASHRAE standards, building assemblies, heating and cooling loads, electrical and control systems, and design of air and water distribution systems.

The book includes a CD with spreadsheet programs that incorporate design and computation procedures.

The cost of HVAC Simplified is \$79 (\$59,

ASHRAE members).

To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, by mail at 1791 Tullie Circle NE, Atlanta, GA 30329, or visit the ASHRAE.org Bookstore at [www.ashrae.org](http://www.ashrae.org).

## ASHRAE's Most Used Standards Available on One CD

ATLANTA – ASHRAE's “greatest hits” – its 12 top selling standards and guidelines - are now available on one CD.

Design Essentials: ASHRAE's Most Referenced Standards and Guidelines contains a library of documents that can be easily searched and printed with copy and paste features for text and graphics. The standards and guidelines address design or system operations, and most are code-intended standards.

“Because ASHRAE standards/guidelines often refer to requirements in other standards, our documents need to be used together in order to understand the means for compliance with any one of them,” Rick Hermans, chair of ASHRAE's Standards Committee, said. “The Design Essentials CD is intended to make that process simpler for the user.”

Hermans noted that the standards and guidelines included in the CD serve as the basis for HVAC&R design and some of them are referenced in building codes.

Included are:

- ANSI/ASHRAE Standard 15-2004, Safety Standard for Refrigeration Systems;
- ANSI/ASHRAE Standard 34-2004, Designation and Safety Classification of Refrigerants;
- ANSI/ASHRAE Standard 52.2-1999, Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size;
- ANSI/ASHRAE Standard 55-2004, Thermal Environmental Conditions for Human Occupancy;
- ANSI/ASHRAE Standard 62.1-2004, Ventilation for Acceptable Indoor Air Quality;
- ANSI/ASHRAE Standard 62.2-2004, Ventilation and Acceptable Indoor Air Quality in Low-

(Continued on page 5)

*(Continued from page 4)*

Rise Residential Buildings;

- ANSI/ASHRAE/IESNA Standard 90.1-2004, Energy Standard for Buildings Except Low-Rise Residential Buildings (I-P edition);
- ANSI/ASHRAE Standard 90.2-2004, Energy-Efficient Design of Low-Rise Residential Buildings;
- ANSI/ASHRAE Standard 135-2004, BACnet®: A Data Communication Protocol for Building Automation and Control Networks;
- ASHRAE Guideline 0-2005, The Commissioning Process;
- ASHRAE Guideline 1-1996, The HVAC Commissioning Process;
- ASHRAE Guideline 13-2000, Specifying Direct Digital Control System.

The cost of the single-user version of Design Essentials: ASHRAE's Most Referenced Standards and Guidelines is \$499 (\$429, ASHRAE members). Annual renewal fee for access to updates after the first year is \$290 (\$220, ASHRAE members).

A network version also is available for organizations so multiple users can have simultaneous access.

To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, by mail at 1791 Tullie Circle NE, Atlanta, GA 30329, or visit the ASHRAE.org Bookstore at [www.ashrae.org/bookstore](http://www.ashrae.org/bookstore).

## **ASHRAE Undergraduate Grants**

Energy Recovery Methods Studied with ASHRAE Undergraduate Grants

ATLANTA – While most residential air conditioners work on 100 percent return air to reduce energy costs, this creates a problem in lack of sufficient fresh air.

This is particularly true in hot humid climates like Miami or in northern regions with long winters. Through a grant from ASHRAE, students at Florida International University in Miami are designing a new type of residential ventilator with en-

thalpy wheel heat recovery, which will minimize additional energy use while improving indoor air quality.

Twenty-six grants, totaling some \$120,000, have been awarded by ASHRAE to colleges and universities worldwide to promote the study and teaching of HVAC&R, encouraging undergraduate students to pursue related careers. The grants are used to design and construct projects.

The residential ventilator project will provide an opportunity for students to develop their problem solving skills but also to practice energy conservation design.

Some of the other ASHRAE grant recipients are:

- All India Shri Shivaji Memorial Society's College of Engineering, Pune, India, build an experimental setup to understand the enhancement of condensation heat transfer using micro-fin tubes;
- Bradley University, Peoria, Ill., design an apparatus to test fans and diffusers;
- Cairo University, Cairo, heat exchanger performance educational test stand and heat exchanger design software;
- Georgia Institute of Technology, Atlanta, automated camera positioner for particle image velocimetry used in HVAC air distribution studies;
- Hofstra University, Hempstead, N.Y., design and build a multi-purpose heat exchanger apparatus;
- Illinois Institute of Technology, Chicago, pressurization and depressurization impact on stack effect – experimental study;
- London South Bank University, London, low energy pumpless refrigeration absorption cycle;
- Mapua Institute of Technology, Manila, basic refrigeration and air-conditioning system used for laboratory experiments and simple sensitivity analysis;
- National Chin-Yi Institute of Technology, Taiping, Taichung, Taiwan, design and construction of an HFC-407C machine cooler demonstrator in refrigeration lab;
- Purdue University, West Lafayette, Ind., heat transfer measurements in mini-channel cold plate evaporators;
- Purdue University Calumet, Hammond, Ind., thermoelectric refrigeration using nanofluid circulation heat exchangers.

- MARCH MEETING -

SPEAKER: **Gary Tonjes**  
**President of Albuquerque**  
**Economic Development, Inc**

TOPIC: **Albuquerque's Economic**  
**Climate**

DATE: **Tuesday, March 21, 2006**

**Albuquerque Location:** Garduno's on the Green  
9401 Balloon Museum Dr.

**LUNCH MEETING**

TIME: 11:45am Buffet; 12 pm Program

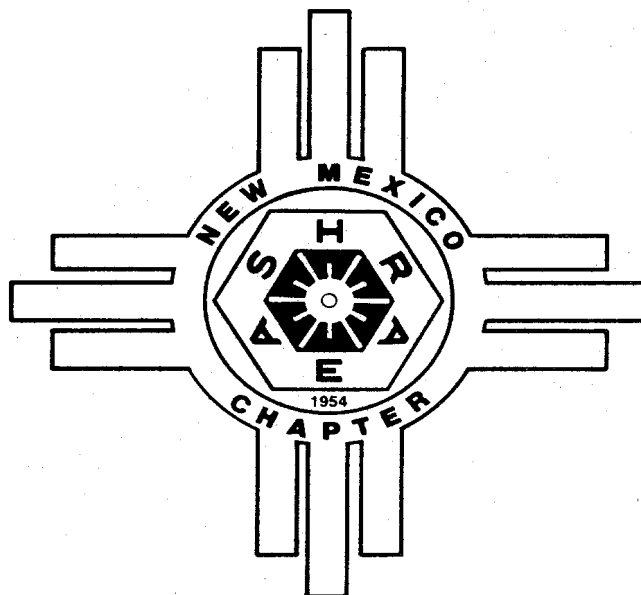
TECHNICAL SESSION: None

MENU: Buffet

COST: \$15.00

All cost are inclusive of tax and tip

RSVP: Friday, March 17th, to Deward Stegall at  
505-884-2044 or **Dwstegall@trane.com**  
**Email preferred**



New Mexico Chapter of ASHRAE  
Dan Harmeyer  
Harmeyer Nellos Engineering, Inc.  
915 Yale Blvd SE  
Albuquerque, New Mexico 87106  
505-888-5808  
505-888-5809 fax

**CHAPTER MAY NOT ACT FOR SOCIETY**

STATEMENTS MADE IN THIS PUBLICATION ARE NOT EXPRESSIONS OF THE SOCIETY OR OF THE CHAPTER AND MAY NOT BE REPRODUCED WITHOUT SPECIAL PERMISSION OF THE CHAPTER.



**THE HASSLE FREE WAY OF DONATING TO ASHRAE RESEARCH  
FAX TO DAVID GRAHAM NOW! AT (505) 323-7594, OR...**

Mail Check To:  
**ASHRAE RESEARCH**  
c/o The Response Group, Inc.  
11930 Menaul NE Suite 214  
Albuquerque, NM 87112  
[davidgraham@trg-inc.net](mailto:davidgraham@trg-inc.net)

**Your Contribution puts us closer to achieving our goal. Please send what you can today!**  
\* Individual contributions of \$100 or more and Corporate contributions of \$150 or more receive this year's Commemorative Coin and Honor Roll Contributions status.

Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

INDIVIDUAL	\$50.00	\$75.00	\$100.00*	\$125.00	Other: _____
CORPORATE	\$100.00	\$150.00*	\$250.00	\$500.00	Other: _____

\*Minimum of Honor Roll Recognition by Society

*Individual and corporate contributions advance industry research resulting in better products, installation methods, buildings and profits.*

*Please invest in your future through ASHRAE RESEARCH.*

**Our chapter's thanks and society gratitude are extended to the following member for this year.**

**\$500 and above:**

**\$250 and above**

Miller Bonded Inc.

**\$100 to \$249**

Nick Nellos Endowment

Dr. Maurice Wildin

Jim Feeney Consulting

John Grapsas

Rivera Engineering

Lyle Anderson

Jim Asperger

Michael Slaman

Michael Dexter

Keith Wilson

NM Sheetmetal Contractors  
Association

**Full Circle - \$100 per Board Member**

Dan Beckley

Dave Graham

Gary Grange

Dan Harmyer

Jason Moorehead

Rich Rief

Charlie Scoggin

Charles Steele

Deward Stegall

JR Sunderman

**Up to \$100**

Scott Salisbury

Brad Turk

Andrew Beall

Current  
Collections  
for 2005 - 2006

\$11,000

\$10,000

\$9,000

\$8,000

\$7,000

\$6,000

\$5,000

\$4,000

\$3,665

\$3,000

\$2,000

\$1,000

