



ASHRAE

THIN-AIR BULLETIN

American Society of Heating, Refrigeration, and Air Conditioning Engineers NM Chapter Region IX Albuquerque, NM - FEB. 2011

February Meeting

President's Message

Speaker Topic:

Measuring and Improving Building Energy Performance



How to bring new customers energy savings through the EPA/DOE Energy Star program.

In a down market when everyone is looking to hold onto their cash, reducing overall operating energy cost, can be a yet untapped market for older buildings. Reductions of up to 35% in wasted energy in older buildings can provide incentive to fund design improvements.

Speaker:

Presented by Charlie Scoggin NM Chapter ASHRAE Programs Director.

WHEN: Tuesday February 15. 2011 at 11:45 am

COST: \$20 ASHRAE Members \$25 Non Members

WHERE: Pappadeaux Seafood Kitchen
5011 Pan American West Fwy NE
Albuquerque, NM

RSVP to Charlie Scoggin by Friday February 11th.

Email: scoggin@nationalheat.com

ASHRAE Members,

If you went to the ASHRAE winter meeting in Las Vegas you probably saw and heard of the great things ASHRAE is doing in our society. I'm sure we are all glad it was in Las Vegas and not Chicago with the blizzard conditions they have had. Here in NM we have dealt with our own extreme weather conditions this year with record low freezing temperatures and the problems this has caused with HVAC equipment and adequate utility distribution.

As we move on this year we hope you will continue to join us for our monthly lunch meeting at Pappadeaux Restaurant, Charlie Scoggin is doing a great job getting speakers scheduled to discuss current issues and topics in our industry. If there is something you would like to hear specifically you can email him with your suggestion.

We continue to see great support from our student members at our lunch meetings and we thank you for your continued support. We are close to establishing a NM student chapter and Joe Higham is heading that up, if you know of any students who would be interested in joining our chapter, please have them contact Joe.

We look forward to seeing you all out on the 15th of February, please continue to support your local chapter and ASHRAE national.

J.R. Sunderman

President NM ASHRAE Chapter 2010-2011

Membership:

Don't forget to promote ASHRAE and Benefits of ASHRAE Membership with your co-workers and customers.

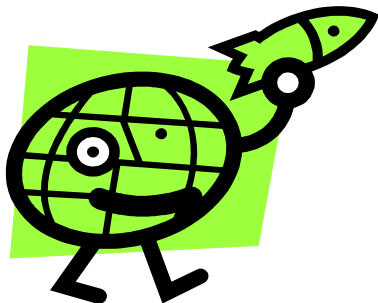
Thanks,
Allen Anaya
allen@wmc Carroll.com
cell: 505-385-7338

Aquarium Tour

On Friday, February 18 at 1pm we will have a behind the scenes tour of the Albuquerque Aquarium. This tour has a limited number of spots so RSVP as soon as possible.

The cost for this tour is \$7.

RSVP
by emailing Joe Higham at jbhigham@gmail.com or calling (505) 550-9730.



www.newmexicoashrae.org

From the History Books

FEBRUARY 1991

Chapter Officers were:

President:	Bruce Davis
President-elect:	John Grapsas
Secretary:	Steve Maggart
Treasurer:	Mike Slaman



In February 1991, Bruce Davis was the New Mexico Chapter President; the monthly meeting speaker was Art Hallstrom, Society Vice-Chairman of the ASHRAE Acoustical and Vibration Committee. He spoke about "Acoustical Awareness in HVAC Design". A membership promotion night was held to allow members to bring a prospective member to the meeting.

ASHRAE Spring 2011 Technical Seminar

We are proud to bring you a full day of technical and informational seminars that we hope will enlighten you to many aspects of our industry as well as assist you in understanding recent and upcoming changes to many industry codes.

When: March 15, 2011

Where: Marriott Pyramid (5151 San Francisco, NE. Albuquerque, NM. 87109

Time: 8:00 am till 4:45pm

Please refer to attached flyer.

**Please RSVP to
Allen Anaya @ Allen@wmc Carroll.com**

Society News Releases:

A web page is being developed, <http://www.newmexicoashrae.org/thin-air-bulletin/thin-air-society-news-releases/>, with links to the following news releases.

For Release Jan 20 Green Tips Provide Guidance for Greening Data Centers New ASHRAE Book

For Release Jan 25 Call for Papers ASHRAE 2012 Winter Conference

For Release Jan 26 Duct Fitting Database Latest ASHRAE Resource to Become Mobile App

For Release Jan 29 ASHRAE Recognizes Outstanding HVAC&R Industry Achievements

For Release Jan 29 ASHRAE Technology Awards Highlight Outstanding Building Projects

For Release Jan 31 Final Energy Savings Figures Announced For 2010 Energy Standard

Thanks

Call for Volunteers:

MATHCOUNTS®

New Mexico State Competition, Feb 26, 2011
UNM Continuing Education Center, 1634 University Blvd NE

If anyone wants to volunteer, they should contact Hank Rosoff hrosoff@ziaeec.com

Thanks

Call for Volunteers:

ASHRAE Members,

I'm part of a group conducting an ASHRAE research project to investigate the air leakage characteristics of mid- and high-rise non-residential buildings ("ASHRAE Research Proposal 1478-TRP"). Our target is a total of 24 -- 36 buildings, to be located in different climate zones across the country. Tests have already been conducted in several buildings in Florida, Minnesota, and Illinois. Our group consists of building science researchers from all over the US, and is led by Wagdy Anis, of WJE Associates in Cambridge ,MA.

We are scout for suitable buildings in New Mexico, west TX, and Arizona -- in climate zones 2B-5B. The buildings must meet the following requirements:

- Mid-rise to high-rise commercial non-residential buildings four or more stories tall
- Constructed during or after the year 2000
- Could include sustainable buildings (LEED Silver rating or better, EnergyStar rated or other certification identified by the contractor and approved by ASHRAE Project Monitoring Committee (PMC))

Depending on the size of the building, testing generally takes one to two days, and requires a genuine commitment by the building owner. We always encourage those interested in the testing to show up on testing day to observe (and to pitch in and help out, if so inclined). Attached is a copy of an informational memo we provide to potential participants.

I'd appreciate if this information could be circulated to other chapter members, to see if anyone could recommend buildings in our area that might be suitable for this testing. If you need more information about the project, feel free to contact me.

Many thanks,

Brad Turk

Brad Turk
Environmental Building Sciences, Inc.
P.O. Box 1364
Las Vegas, NM 87701
505-426-0723 (voice)
www.environmentalbuildingsciences.com



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When: March 15, 2011

Where: Marriott Pyramid (5151 San Francisco, NE. Albuquerque, NM. 87109)

Time: 8:00 am till 4:45pm

PDH Attendance Certificates will be issued upon request

Costs: Full day (including lunch): \$75.00

Half Day – Up to 3 Sessions (including lunch): \$60.00

Schedule:

8:00 – 9:30 – ASHRAE 90.1-2010: We will discuss what is included in this standard, how it is different from 90.1-2004 & 90.1-2007. – Speaker Hugh Crowther

9:45 – 11:15 – Split Sessions

Group ‘A’ – Psychometric Fundamentals – Speaker TBA

Group ‘B’ – New Mexico Energy Code Standard – What’s in the new standard, summary of changes from previous version, basic requirements of the code. – Speaker: Raymond Hensley, P.E.

11:45 – 1:15 (Lunch Included) – ASHRAE 189.1-2010; Discussion on what this standard means, basics of the Standard and how it differs from LEED. – Speaker Hugh Crowther

1:30 – 3:00 – Split Sessions

Group ‘A’ – Air Handler design Fundamentals – Speaker Chuck O’Neal EEST

Group ‘B’ – Round Table Discussion (Facility Managers and Owners) – Round Table Participants – Tony Lucero, UNMH,, Gerald Gallegos, SNL Robert Notary, UNM

What’s reliable, easy to control, easy to maintain, cost effective

1. What keeps them up at night?
2. Features they see as particularly valuable
3. Feedback on some sustainable features that are not mechanical – occupancy sensors, low flow water fixtures, etc.

3:15 – 4:45 – Net Zero Energy Buildings; What are they?, What does net zero mean, Can it be doe, What kinds of Buildings can even get to net zero? – Speaker Hugh Crowther

Please RSVP to Allen Anaya @ Allen@wmcarroll.com or on our website www.newmexicoashrae.org (Payment may be made thru online registration or at the door)

Speaker Bios:

Hugh Crowther is Senior Vice President – Training and Advanced Applications for McQuay International, a Division of Daikin Limited. McQuay is a manufacturer of applied HVAC equipment. He has held previous positions as General Manager of various equipment units and Senior Vice President of Engineering.

Hugh has over 20 years experience in the application, design and commissioning of applied HVAC systems. Hugh is a Professional Engineer (On., Canada) with a Bachelor of Science in Mechanical Engineering from Queen’s University. Hugh is an ASHRAE Member.

At ASHRAE Society level, Hugh has served as a Director and Regional Chair for Region II, RVC Refrigeration, nominating committee and Chair of Standards. He is currently a Director at Large and Ex-officio to Standards Committee. Hugh has written articles for the ASHRAE Journal, HPAC Engineering and Engineered Systems as well as numerous application guides on a wide range of HVAC topics.

Raymond Hensley, P.E., President, THE Hensley Engineering Group

Chuck O’Neal, Principle, EEST

Round Table Participants:

Tony Lucero, Facility Manager, University Hospitals

Robert Notary, University of New Mexico

Gerald Gallegos, Mechanical Operations Engineer, SNL



New Mexico State Competition, Feb 26, 2011
UNM Continuing Education Center, 1634 University Blvd NE

Information for Proctors

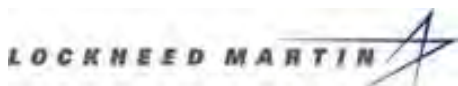
Registration for Mathletes begins at 8:00, and after orientation and instructions, the students begin the test around 9:00am. Proctor orientation begins at 8:30, at the same time that the students are getting their instructions. Testing begins at 9:00 when the competition questions are passed out. We actually start setting up the event when they unlock the doors at 7:00am, so shortly after that, there is coffee and other refreshment available and you're welcome to come early to talk and chat and assist. But, at any rate, we'd like to have you there for Proctor Orientation. For the most part, proctors are done when the team round tests are collected and the extra test materials have been secured, generally around 11:30. Lunch is provided to the students and coaches, and there has always been enough for our volunteers if they want to partake.

We need a few volunteers to help set-up and run the afternoon Countdown Round, but we've never had a problem with having enough people around for that. If you've never watched it, though, you might want to give it a look. We're generally completely done, awards given, materials packed away, cleaned up and out of the building around 3pm.

Information for Scorers

Registration for Mathletes begins at 8:00, and after orientation and instructions, the students begin the test around 9:00am. Scorer orientation generally also begins at 9:00, which gives everyone time to meet, get a scoring partner and get oriented to the intricacies of MathCOUNTS scoring, to make sure all the papers get graded with an even hand and how we deal with issues that always arise during the scoring. We actually start setting up the event when they unlock the doors at 7:00am, so shortly after that, there is coffee and other refreshment available and you're welcome to come early to talk and chat and assist. But, at any rate, we'd like to have you there for Scorer Orientation. Scorers are done when the Team Round has been scored, that's generally around 11:30-11:45. Lunch is provided to the students and coaches, and there has always been enough for our volunteers if they want to partake.

We need a few volunteers to help set-up and run the afternoon Countdown Round, but we've never had a problem with having enough people around for that. If you've never watched it, though, you might want to give it a look. We're generally completely done, awards given, materials packed away, cleaned up and out of the building around 3pm.



MEMORANDUM

Via: E-mail

To: Building Owners

From: Wagdy Anis, FAIA, LEED ap

Date: August 24, 2009

Project: ASHRAE Research Project 1478-RP
WJE No. 2009.1851

Subject: Airtightness Testing of Mid-rise and High-rise Buildings

Thank you for considering our request. We would like to test your building to determine its airtightness. The testing is supported and paid for by ASHRAE Research, the Oak Ridge National Labs of the U.S. DoE and DuPont Building Innovations. With increasing awareness of poor indoor air quality due to ventilation problems, rising energy costs, and growing concern over climate change due to use of fossil fuels, this study is intended to survey the air leakage of non-residential buildings across the United States. Approximately 24 to 36 mid- to high-rise buildings will be chosen to participate. Results of the testing in these buildings will be vital to our understanding of the design, construction, and operation of future buildings that operate more efficiently and use less energy, reduce the risk of moisture and mold problems, reduce occupant complaints, and improve occupant health and comfort.

At the completion of the test, the owner will be provided with a copy of the results, and important information about the building enclosure; testing is capable of identifying significant air leak areas that can be sealed in order to:

- Save energy
- Reduced operational costs
- Increase comfort
- Reduce occupant complaints
- Reduce the likelihood of condensation and mold growth
- Compare the building's performance relative to others

In addition, tested buildings will have a choice of receiving either a wall plaque or a display cube, commemorating its participation in the project.

The schedule for testing will typically cover one to two days of preparation and testing by a team of two to three individuals. It is preferable that the building be unoccupied during the preparation and test (possibly a weekend), since some exits may be blocked, and mechanical ventilation systems shut down. The team will start by meeting with building operations and maintenance staff, reviewing the building and building drawings, and beginning to prepare the building. Preparations will include wedging open all interior doors in order to equalize the pressure on the exterior enclosure (pressure boundary) of the building; closing exterior doors, windows and mechanical system vents and openings; and assuming

control of the building and its mechanical systems. The air leakage testing will be done with large blowers and fans temporarily installed in exterior doors to pressurize the building, or with the building's own HVAC system. The test procedures will be based on *ASTM Standard E 779 Determining Airtightness of a Building's Air Leakage Rate by Single Zone Air Pressurization*, which is a test for the airtightness of a building's exterior enclosure using blower door fans or *CAN/CGSB Standard 149.15, Determination of the Overall Enclosure Airtightness of Office Buildings by the Fan Depressurization Method Using the Building's Air Handling System*

To participate in the study, the building owner must make available, at their expense, a qualified custodian or building engineer with knowledge and control over the building systems and with access to the rooftop, all building spaces, and all building mechanical and electrical equipment. Openings to the exterior such as doors, louvers, chimneys, etc., should also be accessible. Setting up test blowers and fans requires unfettered access to the inside and outside of the building, and this equipment must be plugged into 20 amp circuits. Prior to the testing, we request that copies of plans, elevations, mechanical system drawings, and photos of all exterior sides and roof of the building be mailed to the testing team.

The testing team will be respectful to maintain building security and safety during preparation and testing. During the test, high outdoor airflow will be directed into the building; therefore, team members will take care to avoid disturbing any sensitive items. Following the test, all test equipment will be removed, and the building and mechanicals systems will be returned to their original condition.

Thank you for your participation in this important project.