

THIN-AIR BULLETIN

NEW MEXICO CHAPTER REGION IX ALBUQUERQUE, NEW MEXICO

ASHRAE

AMERICAN SOCIETY OF HEATING, REFRIGERATING, AND AIR CONDITIONING ENGINEERS

October 2003

Designing for Occupant Acceptance

In order to meet the increased expectations of building occupants, designers must be aware of the conflicts between first cost economics, occupant productivity and life cycle costs. Buildings that do not meet the needs of the occupants often result in expensive redesign or worse, result in lawsuits against all parties involved. Recent court cases make it imperative that designers understand the changing 'rules' of the road.

This month's speaker is Dan Int-Hout III who is an ASHRAE distinguished lecture and chief engineer for Krueger. Mr. Int-Hout will be discussing the following subjects:

1. Air Distribution: Selecting components and system parameters for effective air mixing.
2. Thermal Comfort: Determining optimum occupant comfort strategies.
3. Acoustics: Accurately predicting end use environments.
4. IAQ: The changing face of ASHRAE Standard 62, and upcoming developments, including Demand Controlled Ventilation.

This program is at the Petroleum Club on Tuesday October 21st. The cocktail hour starts at 5:30 pm then the dinner and program follows at 6:30 pm. Dinner will be amaretto chicken almondine. Cost is \$22.00 inclusive. Please reply by noon on Friday October 17th by e-mail davidg@cmenm.com or call David Graham at 884-8868.

(Continued on page 2)

PRESIDENT'S MESSAGE

Well, we had a great start to the year at our first meeting! The meeting was a joint meeting with the New Mexico Facility Manager's Network and the New Mexico Association of Energy Engineers. We also had a number of UNM students in attendance.

I would really like to encourage everyone to attend the monthly meetings. You can gain some valuable information to be used in your business, by meeting with other members in our industry including a good time to socialize. Please bring the younger salesmen, engineers, estimators, etc. from your offices who do not normally attend meetings.

We have an exciting meeting this month featuring an ASHRAE Distinguished Lecturer, Dan Int-Hout III, speaking on designing systems for occupant acceptance. We all know how hard it is to please everyone, so come out and hear what Dan has to say on the subject.

I would also like to remind you of the upcoming seminar on October 30 at the Best Western in Rio Rancho (directly across from Intel). You can attend either the morning or afternoon session only with lunch included or best of all – attend both sessions. See the article below for further details. For those registered engineers in need of continuing education points, this is an inexpensive way to get 8 credits.

Please note that we have published the meeting

(Continued on page 2)

October Speaker Profile



Dan Int-Hout, Chief Engineer, Krueger, is responsible for the presentation of technical data and advanced application engineering for the Grilles, Registers and Diffusers, as well as the VAV air terminals, produced by Krueger.

Dan has been in the Air Distribution research and design business since 1973, and has a Masters in Business Management from Central Michigan Univ., and a Bachelor in Biology & Physics from Denison University.

Dan originally joined Krueger in 1981, but has had several other jobs in the industry, including Owens Corning Fiberglas, Carrier, Titus and Environmental Technologies, in engineering, marketing and product research roles.

Dan has written over 30 technical papers and articles on VAV system performance, acoustics, air diffusion, controls and occupant comfort. He was recently Chairman of both ASHRAE Technical and Standards Committees on Thermal Comfort, is a past Chairman of several other related ASHRAE Technical and Standards Committees, as well as ASHRAE Standards & Environmental Health Committees. He received the ASHRAE Distinguished Service Award in 1993. Dan is currently the Chairman of the ARI committee on Applied Acoustics (885) and Chair of ISO 205 US Panel on Thermal Comfort. He is presently a Member of the ASHRAE Technical Activities Committee (TAC).

PRESIDENT'S MESSAGE - Continued

schedule for the year in this newsletter. Make note the December meeting is a tour of the new central plant at UNM and that we have two lunch meetings scheduled.

Mike Dunavant

2003-2004 Chapter Officers

Past-President:	Jim Asperger
Research Promotion Chair	
President:	Mike Dunavant
President-Elect:	David Graham
Programs Chair	
Secretary:	Jason Moorhead
Treasurer:	Deward Stegall
Board Member #1:	Richard Reif
Newsletter Chair	
Board Member #2:	Dan Beckley
Golf Tournament Chair	
Chapter History :	Gary Grange
Region IX Historian	
Membership Promotion Chair:	Bob Galler
Student Activities Chair:	Charlie Scoggin
TEGA/Refrigeration Chair:	Dan Harmeyer
2004 CRC Co-Chairs:	Bruce Davis Ed Reyes



Not Shown: Bruce Davis, Ed Reyes, Charlie Scoggin, Bob Galler, Dan Beckley, or Jim Asperger.

Membership Night

October's chapter meeting is designated as a Membership Orientation meeting. Membership drives are not like NPR drives or other fundraisers, obviously, because we are not looking for money. We want to attract new membership blood, retain our short-term members and encourage further participation from our experienced, long time members.

New members, student members and returning members are ASHRAE's way of meeting the technical demands of the HVAC affiliated industries now and in the future. As importantly, we promote our own goals and agendas through the chapter for the benefit of our local communities, industries, universities and governments.

How better to achieve this work than by inviting membership from different areas, even outside the immediate HVAC area. The chapter will pay for any new candidates' dinner this month and we will present to the candidate Society information detailing the advantages of ASHRAE membership.

Society's target groups for increasing membership this year are public utilities, education, manufacturers and building owners and managers. We will announce our goals for these categories at the October meeting. Invite a prospective member to join you for dinner. You get to treat them to dinner at no cost to you, they add to the chapter by becoming a member and the chapter grows making its benefit to you all the better.



Resource Promotion

Research and the resources of ASHRAE provide members and everyone you know with tremendous benefits: Improved HVAC efficiency, better home/office/auto HVAC, quieter air handling systems, better filtration systems, easier systems to specify, operate and on and on.

Who provides the funds to achieve these improvements? You do; or you can. Your contribution can and has helped to make your life more comfortable and your work more effective. The little bit of contribution you give pays you back in ways that you may never imagine. Think about how HVAC affects what you do and where you are today.

Members can submit individual or company contributions to their chapter's Resource Promotion chair. (**Jim Asperger, 7005 4th St. NW, Albuquerque, NM 87107**) or directly to ASHRAE headquarters made payable to **ASHRAE Research** and addressed to: **Resource Promotion, 1791 Tullie Circle, Atlanta, GA 30329.**

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

September Program Review

- Last month's program featured Eddie Padilla, who heads PNM's Bulk Power Marketing group, discussing the new wind farm that PNM is bringing on line this year. FPL Energy is constructing and will own and operate the 204-megawatt (MW) facility, located 20 miles northeast of Fort Sumner. PNM will buy all of the power from the facility under a long-term contract. The facility is expected to begin commercial operation this year. It will produce enough electricity to supply 94,000 average-sized New Mexico homes. It will be home for 136 towers and turbines with significant space for future expansion. The wind farm is an outstanding renewable energy source and will provide power and unique issues for many years to come. Thanks to all who made it last month and we look forward to see everybody at this month's meeting.

- OCTOBER MEETING -

SPEAKER: **Dan Int-Hout**
ASHRAE distinguished lecturer

TOPIC: **Designing for Occupant Acceptance**

DATE: **Tuesday, Oct. 21st, 2003**

Santa Fe Location: No Meeting

Albuquerque Location: Petroleum Club
500 Marquette NW

TIME: 5:30 Social Hour

TECHNICAL SESSION: No tech session this month

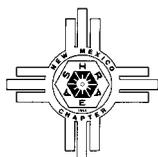
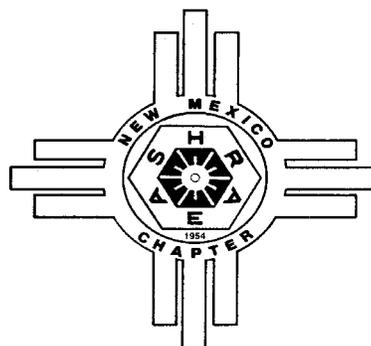
6:30 Dinner and Main Program

MENU: Amaretto Chicken Almondine

COST: \$22.00

All cost are inclusive of tax and tip

RSVP: Friday, October 17th, to David Graham
at 505-884-8868 or
davidg@cmenm.com



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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.

New Mexico Chapter of ASHRAE 2003-2004 Programs Schedule

Listed below is the 2003/2004 schedule of programs. Please note that there are two lunch meetings this year located at Gardunios on the Green. Also, refer to each month's newsletters for further information on that month's program and speaker.

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| September 17, 2003 | Main: | New Mexico Wind Energy
Edward Padilla Jr., Vice President Public Energy Company of New Mexico, Head of Bulk Power Marketing Group |
| | Note: | Joint dinner meeting with NMFMN and NMAEE. |
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| October 21, 2003 | Main: | Designing for Occupant Acceptance
Dan Int-Hout III, Chief Engineer, Krueger
ASHRAE Distinguished Lecture. |
| | Note: | Dinner meeting. |
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| November 18, 2003 | Main: | New Mexico Energy Codes,
Current Status and the Future
Harold Trujillo, New Mexico Resource
and Minerals Department |
| | Note: | Lunch meeting. |
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| December 9, 2003 | Main: | Tour of the University of New Mexico's new
Central Plant.
Steve Marquez, Utilities Manager
University of New Mexico
Physical Plant Department |
| | | |
| January 20, 2004 | Main: | Radiant Slab Heating
Gary Soha, Owner of the Soha Company |
| | Note: | Dinner meeting. |
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| February 17, 2004 | Main: | Scheduling conflict new topic to be announced |
| | Note: | Lunch meeting. |

March 16, 2004	Main:	Compressor Technology and Refrigerant Piping. Paul Solberg Applications Engineer for the Trane Company.
	Note:	Dinner meeting.
April 20, 2004	Main:	Laboratory Sound Issues Fred Lorch, Phoenix Controls
	Note:	Dinner meeting.
May	Main:	Joint meeting with New Mexico Facility Managers Network (NMFMN). Speaker to be provided by NMFMN.
	Note:	Joint dinner meeting with NMFMN.

All Main Meetings:

Dinners are at the Petroleum Club, 15th floor. Cocktails at 5:30 pm dinner at 6:30 pm. Room to be announced. Cost \$22.00 inclusive.

Lunches are at Gardunios on the Green in their meeting room. Buffet serving starts at 11:45 am speaker starts at 12 noon. Question and answer period at 12:45pm. Cost \$15.00 inclusive.

New Mexico Chapter of ASHRAE

Continuing Education Seminars

Thursday, October 30, 2003

Best Western Rio Rancho Inn & Conference Center

1465 Rio Rancho Blvd.

Rio Rancho, NM

(505) 892-1700

Half-Day Seminar with BBQ Luncheon Buffet: \$45.00 per person (4 CEU's)

Full Day Seminar with BBQ Luncheon Buffet: \$75.00 per person (7 CEU's)

SEMINARS:

Sign-in: 8:00 AM to 8:30AM

Session I: 8:30 AM to 10:00 AM

Presenter: Curt Gagner – Vice President, Burch Associates - 22 year tenure

Topics: Gas Controls for Make-Up Air Applications

Most engineers agree that obtaining good temperature control is the most difficult part of a Make-Up Air Application. This seminar is aimed at identifying and selecting the most appropriate and user-friendly burner controls for all the disciplines involved: the engineer, the supplier, the contractor, as well as the building owner. To aid in this objective, the most popular burner choices, for both Indirect-Fired and Direct-Fired units, have been mounted on display boards for your examination. This discussion also includes the effects of burner performance variations between gravity-vented and power-vented equipment.

Session II: 10:15 AM to 11:45 AM

Presenter: Bob Witt - CIPE, CPD
Regional manager, RBI Water Heater Company

Topics: Energy 101... Boiler Efficiency

A very Eye-Opening presentation concerning the application and selection of boilers...

This presentation starts with a very complete discussion of Exothermic Chemical Reactions, leading into the relationship of Efficiencies versus Flue Temperatures versus Return Water Temperatures. Along the way, the discussion will also touch on venting, piping and codes.

The wrap up for this seminar includes a review of one of the most thorough checklists for boiler application produced for our industry (Seminar handout).

Lunch with speaker: 12:00 PM to 1:00 PM

Session III: 1:15 PM to 2:45PM

Presenter: Ken Luther – Engineer for Bell & Gossett

Topics: Modern HVAC Pumping Systems

Ken Luther is an Engineer who has worked at various positions at Bell & Gossett including the Little red schoolhouse. Currently he is Bell & Gossett's western regional manager. Ken is an active member of ASHRAE and is serving as chairman of the TC 6.10 committee. He is also a voting member of ASHRAE Std. 90.1, and a former chair of TC 1.9. He is a distinguished lecturer with ASHRAE and is also involved Ken's lunch presentation will be a basic session on Modern HVAC pumping systems with a more in-depth presentation in the afternoon session.

Session IV: 3:00 PM to 4:30 PM

Presenter: Michael Pugh – National Field Sales Manager for Baltimore Aircoil Co.

Topic: Evaporative Cooling of Condenser Water-Methods, Equipment, and Selection

A short historic evolution from the early wood towers to the large factory built units that are produced today. Then a discussion of different types of cooling towers and how to apply them to different situations. Materials, type of construction and their affects on design. What are the affects of altitude, wet bulb temps and cold weather? How to select units for free cooling. Plus, additional discussion of closed circuit cooling towers and hybrid towers and how to save on their water usage.

Contact David Graham for Reservations

Phone: 884-8868

Fax: 884-7048

e-mail: davidg@cmenm.com

Registration Deadline: 10/22/03 A late registration fee of \$10.00 will be assessed to cover the added cost of additional late registration for meals.

Please provide the following information on the registration:

Attendees' names

½ day or Full day

Total dollars owed to ASHRAE

Contact person

Contact Person's Phone number and e-mail