



# CLEVELAND ASHRAE IMPACT

April, 2004

## APRIL MEETING

### *MARKETS TO YOU PRODUCT SHOW*

*APRIL 19, 2004*



**Schedule:**

3:00 PM – 8:00 PM

5:00 PM – 8:00 PM

Product Show & Seminars

Cash Bar & Hors d'oeuvres

**Location:** *Holiday Inn, Richfield-Ohio Turnpike & 77*

*See Pages 3, 4 & 5*

## ASHRAE JUNE GOLF OUTING

June 15<sup>th</sup>, marks a change in the way ASHRAE supports the Sal Traina scholarship fund. This year our outing will take place at Tanglewood Country Club and is open to everyone. Non-members who show up and pay that day to be a member can play and eat for free. The individual low score will win the converted Gardiner Trophy. Here is the schedule for the day:

|          |                         |
|----------|-------------------------|
| 11:00 am | Registration Begins     |
| 11:30 am | Lunch                   |
| 1:00 pm  | Shot Gun Start          |
| 6:00 pm  | Happy Hour              |
| 6:30 pm  | Prime Rib Dinner/Prizes |

**This Month's  
Sponsor:**

 **YORK** INTERNATIONAL  
CORPORATION

9000 Bank Street  
Valley View, OH 44125-3426  
Telephone (216) 447-0696  
Fax (216) 524-3589

## Officers and Committee Chairmen

2003-2004

### Officers and Board of Governors

|                    |   |
|--------------------|---|
| President          | Dale VanLehn                                      |
| Vice President     | Richard B. Long                                   |
| Treasurer          | Brian P. Chambers                                 |
| Secretary          | Kenneth F. Borah                                  |
| Board of Governors | Kenneth Wissner<br>Richard A. Zbin<br>Matt Nelson |
| Region V Director  | James Escamilla                                   |

### Committees and Chairs

|   |   |
|---|---|
| Programs                                | Richard B. Long<br>Chuck Nachman                  |
| Meeting Host                            | Kevin Kindbom                                     |
| Membership                              | Frank Eisenhower                                  |
| Roster                                  | Frank Eisenhower                                  |
| Product Directory                       | Daniel J. Bacik                                   |
| Research Promotion                      | Richard Zbin<br>Ken Wissner                       |
| Newsletter                              | Andrew Tenhundfeld                                |
| Student Activities                      | Scott K. Jordan                                   |
| Honors & Awards                         | Fred H. Hollman                                   |
| Historian                               | Dave Deschler                                     |
| Science Fair                            | Steven R. Armstrong                               |
| Technical, Energy &<br>Gov't Activities | Matt Nelson                                       |
| Sal Traina<br>Scholarship Fund          | Adrian Keefe<br>Edward JayJack<br>Jerald K. Cohen |
| Golf Outing                             | Louis A. Bentzen                                  |
| Engineer's Week                         | James G. MacMillan                                |
| Special Events                          | Mike Denk   |
| Budget & IRS<br>Compliance              | Fred H. Hollman                                   |
| Sunshine Fund                           | James W. Wickert                                  |
| "Markets to You"<br>Product Show        | Jerald K. Cohen                                   |
| Mentoring                               | David A. Deschler                                 |
| Bill Gardiner<br>Scholarship Fund       | Gary Gardiner<br>Joe Denk Jr.<br>Mark Stefanek    |

## The President's Message

by Dale A. VanLehn

Thanks to **Fred Radtke** and **Joel Altland** for being our local speakers for the breakfast seminar in March. We had a lot of positive feedback from the breakfast seminar and will plan on doing it next year. We learned about cold air distribution and how can be used to downsize equipment physical size and energy usage. Please refer to Chuck Nachman's Programs Recap in this issue of the **IMPACT**. The Program Recap from the previous meeting will be a regular feature in the newsletter to help reinforce the information learned at the meeting and to educate those members that could not make it to the meeting.

**Jerry Cohen** has several good seminars planned for the April 19<sup>th</sup> Markets To You Product show. We would like to see young engineers from all firms represented at the show. They are the people that we will benefit the most from seeing different types of equipment available to specify.

Also, we have secured CEU credits for contractors that attend the seminars. In 2007, Ohio will be requiring continuing education for all licensed Professional Engineers. So, starting in 2006, we will start offering credits at the regular meetings.

I hope to see you at the Product show.

## HOMELAND SECURITY FOR BUILDINGS

The Cleveland Chapter of ASHRAE is pleased to announce that we are hosting a downlink site at WKYC TV-3 and there is still limited seating available. The broadcast is on Wednesday April 14th from 11:45 to 3pm. Lunch is being provided at 11:45 and we will be having some special guest attendees from around the Cleveland Area. Register today by calling Matt Nelson at 440-243-3535 or e-mail him at [mnelson@brewer-garrett.com](mailto:mnelson@brewer-garrett.com).

The following is a brief description of the broadcast: "Terrorist attacks targeting the built environment are a critical and compelling issue to the nation, especially to building designers, owners and managers and first responders. Multiple hazards and threats intersect within a building, and critical questions concerning the danger of chemical, biological or radiological (CBR) attacks remain. This broadcast will address questions of design, construction and operation of buildings. The primary goal is to address the key issues related to building protection from CBR incidents and draws heavily from ASHRAE's most credible and timely reports and publications."



# HISTORY OF CLEVELAND COMPANIES

## *This Month:* **THORSON BAKER & ASSOCIATES INC.**

The story of THORSON BAKER & Associates, Inc. (TBA) begins when the career paths of two young structural engineers merged in the mid 80's. Working together for six years at a prominent Cleveland structural engineering firm, both had risen to the rank of Vice President when the two decided to combine their professional experience and form their own firm.

Gordon Baker and Mike Thorson started TBA in 1993 and worked side-by-side for seven months before hiring their first employee. By the end of the first year, the firm had six employees and doubled that number by the end of their second year. The structural engineering firm added mechanical and electrical engineering services in their fourth year of operation. They recruited and hired Jeff Miterko to head the new electrical department and Jeff Zunt to head the new mechanical department. In 1998 they relocated to their current location in Richfield, across from the old Coliseum. Purchasing a 14,000 SF former surgical center on 12 acres, the partners gutted and renovated the facility to accommodate a staff of 25. In 2001 and still growing, the firm increased the size of the facility to 26,000 SF with a 12,000 square foot addition and added the civil engineering department. In 2002, Jeff Zunt and Jeff Miterko were added as Principals in the firm.

Today TBA is a multi-disciplined consulting engineering firm, with 60 employees, offering structural, mechanical, and electrical engineering design services nationwide, and civil services throughout the State of Ohio. The firm's portfolio includes significant commercial, educational, hospitality, health care, senior housing, libraries, public, recreational, and retail projects.

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### **Chapter Programs Corner:**

What a great way to start your morning. Go to an ASHRAE meeting and have a great technical seminar. It was a good change of pace for our chapter. Please let us know if this alternate time is something we should have more of. We would like to thank Joel Altland of TEC, Inc. and Manfred Radtke of The Osborn Engineering Company for their presentation on "Cold Air Distribution". They both went into great detail of the design consideration on both the air and water side. The pro's of decreasing pump and fan horsepower was both in first cost and operating cost. The ability to down size the ductwork and the piping size was also a benefit to the project for first cost a more available room above the ceilings. They also brought up the penalty that is paid for the less efficient chillers to produce 40 lwt or lower. The economizer cycle would also be reduced due to the lower temperature of the air handler. The discussion of using fan powered boxes that would run continuously to blend the cold air with the return air plenum to obtain a 55 deg. F temperature down stream of the box. This also added cost to the project. Yet, due to this feature the system could utilize standard diffusers. Is this the new standard of design for chilled water systems only time will tell.

## **ASHRAE “Markets To You” April 19, 2004 - Speaker Bio**

Richfield Holiday Inn

### **3:00 – Continuously Running**

### **Video, “Homeland Security For Buildings”**

Room – Heartland III

The Cleveland Chapter of ASHRAE is pleased to announce that we are re-playing the satellite broadcast on “Homeland Security For Buildings”. Brief description of the broadcast: “Terrorist attacks targeting the built environment are a critical and compelling issue to the nation, especially to building designers, owners, managers and first responders. Multiple hazards and threats intersect within a building, and critical questions concerning the danger of chemical, biological or radiological (CBR) attacks remain. This broadcast will address questions of design, construction, and operation of buildings. The primary goal is to address the key issues related to building protection from CBR incidents and draws heavily from ASHRAE’s most credible and timely reports and publications.

### **3:00 – 4:00 p.m. -**

### **“Specialized Environments For Health Care, Labs & Clean Rooms”**

Room - Heartland I

Jerry Sipes is Director of Engineering for Price Industries and Senior Research Engineer at the Center for Environmental Research at Kansas State University where he earned his Masters and Ph.D in Mechanical Engineering. Mr. Sipes is Head of the Price Industries Technical University teaching air distribution classes for CEU Units. He brings fourteen years of experience to the air distribution field.

### **3:00 – 4:00 p.m. –**

### **“Review of Methodology For Using ASHRAE 62-2001 Indoor Air Quality Procedure To Reduce Code Required Outdoor Ventilation Air”**

Room – Heartland II

Paul Pickering is the Midwest Territory Manager for Environmental Dynamics Group. Mr. Pickering holds a Bachelors of Science Degree from the University of Toledo. He brings fifteen years of experience to the HVAC industry with ten years of experience in Indoor Air Quality, IGSHPA Certified.

He will be discussing indoor air quality procedures, benefits to using IAQ procedures, pros and cons to using ventilation rate procedures, and polarized media air cleaner technology.

### **4:00 – 5:00 p.m. –**

### **“Infection Isolation For Surgical Cases”**

Room – Heartland I

Carl Schultz is Chief Mechanical Engineer with the URS Corporation in Columbus, Ohio. Mr. Schultz is a 1988 graduate of the Ohio State University with a Bachelor of Science Degree in Mechanical Engineering. He has sixteen years of experience designing mechanical systems for institutional and commercial facilities. including specialized work in hospitals, laboratory, correction and data center designs.. He also is a registered professional engineer in thirteen states plus the District of Columbia and a Certified Energy Manager (CEM).

### **4:00 – 5:00 p.m. -**

### **“Optimize Your GEO Fields”**

Room-Heartland II

Greg Wells, CGD, is the Geothermal Sales Engineer for Jackson & Sons Drilling Company in Mansfield, Ohio. Mr. Wells brings nineteen years of Geothermal Experience including eight years as Marketing Advisor for an electric utility company, four years as Territory Manager for a geothermal heat pump manufacturer, and seven years as General Manager for a commercial mechanical contracting company specializing in geothermal design and installation. Mr. Wells holds numerous professional affiliations and is IGSHPA Accredited.

### **5:00 – 6:00 p.m.**

### **- Break (No Seminars)**

## **ASHRAE “Markets To You” April 19, 2004 -**

### **Speaker Bio**

Richfield Holiday Inn

**6:00 – 7:00 p.m. -**  
Room - Heartland I

#### **“Competitive Advantages in Business Operations – Utility Tarrifs & Energy Dollars”**

Michael Brakey of Brakey Consulting in Shaker Heights, advises clients on energy issues and manufacturing process. Mr. Brakey holds a Bachelor of Science in Engineering Physics from the University of Maine and an E.M.B.A. from Baldwin-Wallace College. He has authored papers on energy topics and has US and international patents on several heat exchanger designs for marine and industrial applications plus registered copyrights on BEARS computer software that aids businesses in analyzing and reducing utility energy costs.

**6:00 – 7:00 p.m. -**  
Room – Heartland II

#### **“Systems Approved To The Application of HVAC Silencers”**

David Wolon is Applications and Sales Manager of Vibro-Acoustics in Westampton, New Jersey. Mr. Wolon holds a Bachelor of Science Degree in Architecture from Penn State University followed by post-graduate studies in Architectural Engineering with emphasis in architectural acoustics and noise control. He has worked in the field of HVAC noise control with Vibro-Acoustics for twenty years. Prior to joining Vibro-Acoustics, he was employed as a HVAC staff engineer with Ballinger, an A/E firm in Philadelphia. Mr. Wolon has been a speaker on “Silencers for Rooftop Air Handling Units and Duct Breakout Noise” at numerous ASHRAE meetings in Seattle, Atlanta, Albuquerque, Santa Fe and Minneapolis.

**7:00 – 8:00 p.m. -**  
Room – Heartland I

#### **“Encapsulated Eutectic Salt & Encapsulated Ice TES Technology”**

Moudood Aslam is an Electrical Engineer and US Representative for Cristopia Thermal Energy Storage, Inc. based in San Dimas, California. The parent company is Cristopia Energy Systems in Vence, France. Cristopia manufacturers encapsulated eutectic salt and encapsulated ice nodules (ice balls) for thermal energy storage application in process refrigeration and building air conditioning. Mr. Aslam holds an Electrical Engineering Degree from the University of Dacca in Bangla Desh and an MBA from the University of Pittsburgh. He brings a diversified experience in customer energy efficiency, electrical engineering, marketing and business planning.

**7:00 – 8:00 p.m. -**  
Room – Heartland II

#### **“Web Based Temperature Controls”**

Ebbe Hassl is the Systems Manager for Invensys Building Systems, CTR-Mid Atlantic Region. He brings twenty years of experience to the field of Building Automation and ten years of teaching experience.

# 2004 Markets To You Show

Cleveland & Akron Chapters-Northeast Ohio Product Show

**Monday, April 19, 2004**

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**Holiday Inn Richfield - Ohio Turnpike & I-77**

## **Markets To You Exhibitors**

Air Control Products, Inc.

Allied Equipment Company

Alpha Engineering Corporation

Belimo Air Controls

Carrier

Carpenter Fluid Systems

C. J. Michelson Company, Inc.

F. F. Leonard / RAYPAC Boilers

Gardiner Trane

Getter Industries / TAMCO

Jacco & Associates, Inc

Ketchum & Walton Company

LIBB Co. / A.O. Smith Water Heaters

Marsh Company

Mastroianni & Associates, Inc.

Mussan Sales

Pier Associates

Preferred Piping Systems

R.L. Deppman Company

Refrigeration Sales Corporation

Roth Bros.

Siemens Building Technologies

Story Equipment

Thybar Corporation (ThyCurb)

Wadsworth Slawson Northeast

York International

Victaulic Company of America

**A HEARTY THANKS FOR ALL  
VENDORS FOR THEIR EFFORTS**

# **ASHRAE MEMBERSHIP PROMOTION GOLF OUTING**

**JUNE 15, 2004  
TANGLEWOOD COUNTRY CLUB**

sign-up

Team Captain (Sponsor) \_\_\_\_\_

Player No. 2 \_\_\_\_\_

Player No. 3 \_\_\_\_\_

Player No. 4 \_\_\_\_\_

for each additional foursome please complete an additional registration

Golf / Dinner \_\_\_\_\_ x \$95 / person = \_\_\_\_\_

Dinner Only \_\_\_\_\_ x \$45 / person = \_\_\_\_\_

Sponsor A Hole \_\_\_\_\_ x \$75 / Hole = \_\_\_\_\_

Name On Sign: \_\_\_\_\_

Donation to the Sal Traina Scholarship Fund = \_\_\_\_\_

Advanced 50/50 Raffle Tickets (7 for \$5) \_\_\_\_\_ x \$5 = \_\_\_\_\_  
(tickets will be 5 for \$5 on the day of event) (7 tickets)

TOTAL = \_\_\_\_\_

Make checks payable to: **CLEVELAND ASHRAE CHAPTER**

Send payment to: **CLEVELAND ASHRAE GOLF OUTING  
c/o Karpinski Engineering  
Attn: Jeremy Bowers  
3135 Euclid Avenue  
Cleveland, Ohio 44115**

If you bring a non-member and they join the Society and the local chapter of ASHRAE that day, then that individual's golf and dinner is free. A completed application and a check for \$215.00 (made payable to ASHRAE) must be received on the day of the event.

## Chapter Calendar:

### RESEARCH THEROMETER

| Donations by Cleveland Chapter |  |          |         |
|--------------------------------|--|----------|---------|
|                                |  |          |         |
|                                |  | \$13,745 | Goal    |
|                                |  |          |         |
|                                |  |          |         |
|                                |  | \$7,697  | To Date |
|                                |  |          |         |
|                                |  |          |         |
|                                |  |          |         |
|                                |  |          |         |
|                                |  |          |         |

April 14, 2004 Homeland Security Satellite Broadcast

Location: WKYC TV-3 (Lakeside & E. 14<sup>th</sup>)

2<sup>nd</sup> Site Gardner Trane

RSVP Matt Nelson 216-243-3535

May 17, 2004 Past President's Night, Dedicated Outside Air  
Systems with Distinguished Speaker: Dr. Stan

Mumma, Penn State

Location: Harry's Steak House

June 15, 2004 Membership Promotion Outing

Location: Tanglewood Country Club



**WWW.CLEVELANDASHRAE.ORG**



**CLEVELAND  
ASHRAE IMPACT**

#### ***ASHRAE Cleveland Chapter***

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*Valley View, Ohio 44125*

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