



The A.S.H.R.A.E. Newsletter

American Society of Heating, Refrigeration and Air conditioning Engineers, Inc.
Southwest Florida Chapter # 139

Voted Region XII Best Newsletter for ASHRAE Year 1998-1999

October 2004

Volume 10 Issue 2



PRESIDENT'S MESSAGE

Well, it is fall again. That should mean less or no more hurricanes. The first thing I wanted to mention is that we still have two dinner programs that need to be planned. Keeping with our objective of serving the design engineering community—it would be good to have some of our local engineers provide the program chairman (Randy Munsey) with some ideas for the programs. It would be even better to volunteer to organize the program as well. Figure 3 to 7 hours of volunteer time. There is a certain amount of effort involved in finding a speaker and making the arrangements. Trying to plan eight all at once is a task that lends itself to some help from co-chairs. So if you are up to it, contact Randy Munsey at Tom Barrow Company and get started!

On the subject of volunteering, there is a benefit to volunteers in that one advances their leadership/organization/business type skills at a faster rate by volunteering than would happen normally by simply working at the office alone. In fact, two people mentioned at the regional conference that they felt their years of volunteering for ASHRAE served as a sort of MBA type training (with heavy type emphasis in practical applications).

Lawrin Ellis, our chapter historian has taken on the interesting history project his year of compiling and documenting our contractor's and building owner's experiences with the hurricane damages from this summer. This of course includes damage to mechanical equipment installed both before and after the code changes. Clearly, Lawrin would welcome some volunteer assistance in putting all the data into a useable format and possibly co-writing some articles on the subject. If interested, contact Lawrin at Anchor Engineering.

And in closing best wishes and condolences are in order to Lily Salkoff, our Secretary and Membership chair (and her daughter) with the passing of David, her husband this past week. If you never met David, he was a fine and upbeat person who will be missed by all. (Technically, I also extend my condolences and best wishes to David to.)

Hope to see you all at the next meeting—don't forget to RSVP early. Sam Seltzer's has different policies than did Bogert's in that they must have a confirmed minimum number of meals three days before the meeting and we get charged for no shows if we are below that number.

Guy Van Meulebrouck PE, President SWFL ASHRAE Chapter

OCTOBER MEETING NOTICE

Topic:

DDC for Lighting

Guest Speaker:

John Bagwell

NEW Meeting Location:

**Sam Seltzer's Steak House
In the Radison Hotel**

12635 S. Cleveland Ave. Fort Myers
239-277-7261

Date:

Wednesday, October 13, 2004

Time:

5:00 - 6:00 Board of Governors
Meeting

5:45 - 6:30 Social

6:30 - 8:30 Dinner, Meeting and
Program

Cost:

\$30.00 per member.

Reservations are a must!!

Call Mary Kay Gonzalez
239-939-9098

This Month's Topic: DDC for Lighting

Presented By: John Bagwell - Triatek

John Bagwell is President of Triatek Lighting, Inc., a manufacture of lighting control systems designed to be incorporated into a building automation system for control of HVAC and lighting from a single system. John graduated Eastern Illinois University, Charleston, IL, where he received a B.S. in Business with a major in Energy Management. He worked for a private consulting firm and Building Automation System manufacture prior to starting a sensor & control manufacturing firm in 1985. John has over 15 years in the lighting control industry with emphasis on incorporating the lighting controls into a Building Automation System.

**Past Presidents of
#139 Southwest Florida Chapter**

1982 - 1983	Edward O'Neal, P.E.
1983 - 1984	Edward O'Neal, P.E.
1984 - 1985	Dennis Holland
1985 - 1986	Ross Montgomery
1986 - 1987	Jeff Dorini
1987 - 1988	Kermit Rood
1988 - 1989	Bill Malphus
1989 - 1990	Tom Delnay
1990 - 1991	Nelson Tarbox
1991 - 1992	Gary H. Griffin
1992 - 1993	Gary H. Griffin
1993 - 1994	Jeff Zenoniani
1994 - 1995	Lisa A. Duritsch
1995 - 1996	Jason Grabowski
1996 - 1997	James Faulkner
1997 - 1998	Robert Risley
1998 - 1999	Winifred Denius
1999 - 2000	Paul Martin
2000 - 2001	Don Pine
2001 - 2002	Randy Saul
2002 - 2003	Jason Allen
2003 - 2004	Mark Brant

**Please help us update the ASHRAE
mailing list**

Email to Kurt Vega at kvega@saftronics.com,
call 239-693-7200 X218 or mail to:

Kurt Vega
5580 Enterprise Pkwy
Fort Myers, FL 33905
239-693-7200 ext. 218

Please include the following:

Name: _____

Address: _____

Phone: _____

Fax: _____

Email: _____

Membership # _____

ASHRAE Assessing HVAC&R Market Needs

Research Focused on Products & Services

Release Date: 09/10/2004

ATLANTA – To help develop and maintain products and services to better meet the needs of its members and others in the global HVAC&R industry, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) is launching a comprehensive market research program.

“It’s vital that we have a better understanding of the needs of our members and others so we can better serve them with valuable products and services,” said Kent W. Peterson, P.E., P2S Engineering of Long Beach, Calif., an ASHRAE volunteer leading the program.

The market research program involves collecting data from current members, former members and non-members around the world. As part of the assessment, ASHRAE will conduct a survey via email all of its current members as well as conduct focus groups and telephone interviews. Some 50,000 people are expected to be asked about how they use existing ASHRAE products and services, how those products and services could be improved and what products and services should be developed to better assist the industry.

The effort focuses on ASHRAE’s key stakeholders: consulting and design engineers, contractors, manufacturers and their sales representatives, and facility managers and building owners.

The results of the research program will be delivered prior to ASHRAE’s 2005 Winter Meeting, Feb. 5-9, Orlando, Fla.

“The goal of this assessment is to facilitate changes in the way ASHRAE does business through strategic recommendations,” Peterson said. “The market research program will deliver actionable strategic recommendations that will be used in ASHRAE’s planning committee and throughout the Society.”

Peterson leads a team of volunteers, staff and market research consultants that are carrying out the program. The consulting firm, Kerr-Downs Research Inc., has 20 years of experience in delivering successful market research programs to technical/engineering associations.

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.

Membership



Why Join A.S.H.R.A.E.?

Membership Benefits

While technical education and information is one of the greatest benefits of ASHRAE membership, there are many other professional and personal advantages:

Learn Technology

ASHRAE is a great place to learn technology:

- Technical program content presented at chapter, region, and Society meetings. Presentations cover a wide range of HVAC&R topics, including Indoor air quality, Compliance with ASHRAE Standards, and more.
- Technical periodicals (link):
 - [ASHRAE Journal](#), a monthly magazine included in your membership, reviews current HVAC&R technology of broad interest through publication of application-oriented articles.
 - [The International Journal of Heating, Ventilating, Air-Conditioning and Refrigerating Research](#) a quarterly journal, reports significant research from ASHRAE and the international HVAC&R research communities
 - [IAQ Applications](#), a quarterly magazine, provides practical, applicable information on indoor air quality, and also provide a platform for debate on issues that surround IAQ.
- [ASHRAE Handbooks](#) — the most widely cited reference source for HVAC&R technology in the world. ASHRAE members receive one volume of the ASHRAE Handbook (which sells for \$155) each membership year at no charge..
- [ASHRAE publications](#) — some 300 current titles -- which members are able to purchase at a 20% discount.
- [ASHRAE professional educational products](#) — From the ASHRAE Learning Institute,

ranging from the Society's semiannual conferences to home study courses -- feature discounted registration prices for ASHRAE members.

- [ASHRAE Standards & Guidelines](#) – Provide design and application guidance for your projects with more than 100 Standards and Guidelines currently in print. Members can purchase at 20% discount.

Develop Leadership Skills

ASHRAE is a great place to learn leadership skills. If you can learn to motivate volunteers via ASHRAE programs, you can soar when working with teams you are managing. With ASHRAE, there are many opportunities to lead some of the teams driving our industry's technical future.

Network with Industry Professionals

ASHRAE is a great place to network with others in our profession. Even competitors who compete fiercely on bid day can enjoy fellowship on the neutral turf of an ASHRAE meeting. Opportunities include:

- ASHRAE Chapter, Region, Society meetings
- Talk with engineers worldwide in the online forums in ASHRAE's Society Connections eNewsletter (twice monthly).

You also keep updated with the industry via:

- ASHRAE's Insights newsletter – This monthly publication provides news about ASHRAE at the chapter, region and Society levels.
- HVAC Industry eNewsletter – This weekly newsletter keeps you up-to-date on our rapidly-changing industry.

Career Advancement

ASHRAE is a good place to let it be known that you are looking to hire, or sometimes more importantly, that you are looking to be hired. Also, the ASHRAE Learning Institute provides a wide range of education courses that help you advance your career by maintaining your professional designation. Other great ways to further your career:

- Network with other HVAC&R professionals at ASHRAE Chapter, Region and Society meetings.
- Participate in the job postings on the ASHRAE web site.

Professional Development / Education

The ASHRAE Learning Institute offers a unique variety of programs to help you maintain your

professional education and designation. With many of the 40+ available courses, you'll earn Continuing Education Units (CEUs) or Professional Development Hours (PDHs), and architects are eligible to receive AIA Learning Units (AIA LUs). Other benefits: by completing a course, you'll be a stronger contributor on the job and enhance your chances for career growth.

Other educational opportunities include:

- Technical topics at your local ASHRAE Chapter meetings;
- and at ASHRAE Region and Society meetings.

Industry Insight

By joining ASHRAE, you'll gain continued insight into the HVAC&R industry. You can be on the "team" with thousands of members who volunteer their time on industry-driven committees, focusing on technology, ASHRAE Standards, and other key topics. In addition, ASHRAE's weekly HVAC&R Industry eNewsletter keeps you informed in developments in our industry.

The Industry's Future: Students

ASHRAE serves a valuable function by attracting the best and brightest students to our industry. Participating in ASHRAE Student Activities gives you first shot at recruiting these students.

Both You and Your Company Benefit

In addition to all these personal and professional benefits for you as an individual, there are a number of benefits your company receives. For more information, [read our brochure](#).

Other Benefits

One of the business benefits of ASHRAE membership: Group Insurance — group rate premiums on term life, high-limit accident, disability income; major medical expense, excess major medical, in-hospital expenses and Medicare supplement.

For information on joining please contact:

<mailto:imthewoman@bikerider.com>

Lily Salkoff
Membership Promotion Chair



Request from the Editor

In an effort to advance the knowledge of the readers of this newsletter, I'm seeking input on technical subjects related to the HVAC&R industry. My goal is to include in each newsletter a section called "Technical Roundup". I will start this month by including an article that I am most familiar with Variable Frequency Drives (VFD's). I would appreciate any basic technical subject matter related to the industry. If you wish to provide an article please email the article to kvega@safronics.com I need to have it no later than two weeks prior to the monthly meeting.

Kurt Vega
Vice President/Newsletter

Technical Roundup

What is a Variable Frequency Drive (VFD)? A VFD is an electrical device designed to control the speed of an AC induction motor. Most all VFD's on the market today are of a variety termed Pulse Width Modulation (PWM) which contain these four basic sections.

1. Converter – This section changes or converts Three phase AC line voltage (480/240/208V) to a fixed level DC voltage. This section typically uses a full wave rectifier diode bridge. To calculate the amount of DC voltage take the line voltage $\times \sqrt{2} = \text{DC voltage}$.
2. DC BUS – This section is basically the filter section and in its most basic configuration contains the DC Bus Capacitors. It may also include DC Bus reactor(s) to add additional filtering capabilities. Typically this section is protected by a fuse.
3. Inverter – The inverter section contains the output devices, typically Insulated Gate Bipolar Transistors (IGBT's). The IGBT's switch on and off at a rapid rate to produce the variable frequency variable voltage output to the motor.
4. Control – The control section provides the timing functions to control the switching of the IGBT's, as well as the monitoring/protective functions. It also allows the interface between the customer's Building Management System and the VFD.

There are varied ways to control the amount of voltage and frequency supplied to the motor. The most common maintains a constant Voltage to Frequency ratio of 7.66 volts per Hertz. This ensures the proper amount of torque can be maintained through out the speed range. If you enjoyed this short article let me know, if you hated it let me know that too.
Kurt Vega

Resource Corner



Brian Mumme

Golf Tournament Update

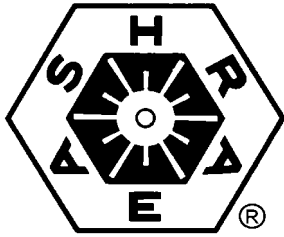
Anyone who wishes to sponsor a hole in the upcoming Golf Tournament, must get their forms in ASAP. We **must** order Sponsor flags this week in order to meet manufacturing deadlines.

To date we have 11 golf teams registered. If you plan on playing golf, please do not wait until the last minute to register. We need to coordinate the number of carts and dinners required.

Golf not your game? Volunteers are still needed to assist on tournament day. If you want to be part of the activities and can help in some way. Please contact Jason Grabowski or Brian Mumme at 239-332-4646.

Historian

Our Historian Lawrin Ellis will be issuing a survey. This survey will collect data on damage to roof mounted equipment from hurricane Charley. One of the bits of information would be to know the year the equipment was installed. By knowing the year the equipment was installed would help to determine what building code requirements were in place at the time of installation, and how the equipment fared under those codes. Survey is available from Lawrin Ellis you may contact him at 239-936-4003 or via email <mailto:ltegator@comcast.net>



SWFL ASHRAE #139
ANNUAL
GOLFTOBERFEST



FORMAT: 4-Person Scramble with a Shotgun Start.

PRIZES: Low Scores, Longest Drive & Closest to the Pin, Door Prizes and a few Surprises!

FOOD: Heritage Palms is offering a nice Banquet at the Awards Dinner in the Clubhouse after the event.

DRESS CODE: Shirts must have collars, shorts within 3" of knee. No denim. No spikes!

TIME: Registration @ NOON

1:00 p.m. – Shotgun Start

5:30 p.m. – Dinner & Awards

ENTRY: Please complete the following Registration Invoice. Send payment via mail to Jason Grabowski (see registration form). Forms can be faxed to Jason at (239) 332-5928. Please be sure to list all golfers in your foursome. Thank you!

THIS YEAR'S ASHRAE GOLF
TOURNAMENT
WILL BE HELD ON

FRIDAY,
OCTOBER 29, 2004
BEGINNING WITH A 1:00 P.M.
SHOTGUN START @
Heritage Palms
Golf & Country Club
10420 Washingtonia Palm Way
Fort Myers FL 33912
(239) 278-9090

GOLF CHAIR: **Jason Grabowski**
Phone: (239) 332-4646
Fax: (239) 332-5928
jasong@bandicontractors.com



DIRECTIONS TO THE COURSE:

10420 Washingtonia Palm Way
Fort Myers, FL 33912

Located on Ben C Pratt Six Mile Cypress Parkway in Fort Myers, just south of Colonial Boulevard (I-75, Exit 136).



This event benefits **ASHRAE Resource**, which funds our local chapter and ASHRAE Research and Education.

Golf Tournament Hole Sponsors as of October 6, 2004

Air Flow Specialists – Greenheck Food Services
Air Source
Anchor Engineering
Applied Dehumidification
Associated Air Services
B&I Contractors, Inc.
BMR Insulation
Boyd Brothers
Burch Corporation
Carrier
Carroll Air
Commercial Air Management
Corrosion Solutions, Inc.
CRS Technology - Computer Solutions
Diversidified Fluid Controls
Dynatherm Resources
Eastern Sheet Metal, Inc
ESSI
FAFCO, Inc
Florida Air Solutions
Florida Hydronic Solotions, Inc
G.L. Spies Company Inc.
Gemaire
George A. Israel
Gulfstream S.W. Florida
Honeywell
Indoor Air Professionals
Johnson Controls, Inc.
Mark Brant PE
McGill Airflow
Metro Mechanical Systems Inc.
Nemeth Air
Northwestern Mutual
Penn Ventilation
Price Air Distribution
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Slade Ross, Inc. Manufacturer's Representatives
Southwest Florida Trane
Tekplan Solutions
Tom Barrow
United Mechanical
Vickery and Company
Victor Distributing

ASHRAE 2004-05 Chapter Meeting Dates

Meeting Date	Program	Speaker / Representative	Location
Sep. 8, 2004	Moisture Control Through Desiccant Dehumidification	Cheryl Hughes / Munters	Sam Seltzer's Steakhouse
Oct. 13, 2004	DDC for Lighting	John Bagwell / Triatek	Sam Seltzer's Steakhouse
Oct. 29, 2004	Golftoberfest	Jason Grabowski	Heritage Palms Golf and Country Club
Nov. 10, 2004	TBA		Sam Seltzer's Steakhouse
Dec. 10, 2004	Everblades Hockey Game and Dinner		Germain Arena
Jan. 12, 2005	LEED Program	Paul Shahriari	TBA
Feb. 9, 2005	TBA		TBA
Mar. 9, 2005	C.H. Motor Cars Tour		Naples
Apr. 13, 2005	U.V. Lights in A/C	Chuck Dunn / Lumalier Co.	TBA
TBA – April	7 th Annual Backwater Fishing Tournament	Don Pine	Cape Coral Yacht Club
May 11, 2005	To Be Announced		TBA
TBA – May	5 th Annual 8-Ball Pool Tournament	Lisa Duritsch	Miscue Lounge
June 2005	President's Party		TBA

A.S.H.R.A.E - Southwest Florida Chapter 2004-2005 Officers and Committee Directory

Chapter Officers:

President

Guy Van Meulebrock
Ph. 239-693-6120
Fax. 239-694-4633

President Elect

John Pennington
Ph. 941-627-8881 ext. 215
Fax. 941-743-9475

Vice President

Kurt Vega
Ph. 239-693-7300 ext. 218
Fax. 239-693-2431

Treasurer

Mike Myers
Ph. 239-275-4240

Secretary

Lily Salkoff
Ph. 239-841-1323

Chapter Board of Governors:

Don Pine

Ph. 239-939-4502
Fax. 239-939-4225

Mark Brant

Ph. 239-939-9098
Fax. 239-939-9038

Lisa Duritsch

Ph. 239-425-5038
Fax. 239-332-8510

Jason Allen

Ph. 239-275-9420
Fax. 239-275-9775

ASHRAE

1-800-527-4723

Chapter Committee Chairpersons:

Programs

Randy Munsey
Ph. 239-278-1988
Fax. 239-278-5884
Email: rmunsey@tombarrow.com

Technical, Energy, and Governmental Activities

John Trowbridge
Email: johntrowbridge@shellpoint.org

Membership

Lily Salkoff
Ph. 239-841-1323

Research

Brian Mumme
Ph. 239-332-4646
Email: bmumme@bandicontractors.com

Chapter Committee Chairpersons:

News Letter Editor

Kurt Vega
Ph. 239-693-7300 ext. 218
Fax. 239-693-2431

Honors and Awards

Don Pine
Ph. 239-939-4502
Fax. 239-939-422

Historian

Lawrin Ellis
Ph. 239-936-4003
Fax. 239-936-0819

Student Activities

Robert Lesnau
Ph. 239-275-4240

Statements made in this publication are not expression of the Society.