# Keeping it Cool with ASHRAE



Florida West Coast Chapter ASHRAE 3203 Queen Palm Drive Tampa, Florida 33619

### From the Desk of the President

It's Thanksgiving time again! And for most of us, this holiday conjures up memories or anticipation of such traditions as the huge Thanksgiving dinner with cranberry sauce (that always seems to be forgotten in my house until after dinner), someone carving the turkey, and the fighting over the comfy spot on the couch to watch football after dinner (and of course take a nap).

With the recent untimely passing of ASHRAE's immediate past President Mrs. Lynn Bellenger I would like to remind everyone that you should always be thankful for what you have and look your family and friends in the eye and express to them your gratitude for sharing this wonderful time together because life is too short.

I personally want to give thanks to my family of ASHRAE members for supporting the chapter by attending a monthly meeting or special event, contributing to Research Promotion, and just being a member of the chapter because without you there wouldn't be a chapter.



Embrace those around you and your ability to give thanks to those you love and who love you.

Shawn M. Jeffrey, Sr., FWC President (2011-2012)

# **How to Contribute to ASHRAE Made Easy**

### 2010-2011 ASHRAE RESEARCH

# Florida West Coast Chapter

### **Contribution Form**

This industry gives all of us our livelihood. ASHRAE's research and educational programs are what keeps our industry and profession on the leading edge and assures its continued existence. Confident that you will recognize the benefits of this investment, I am asking you to help fund future HVAC&R research and development.

Together, we can all make a difference!

Amount enclosed: \$250 _	\$150 \$100 \$50 Other (specify)
Name:	
	Mamban Numban (If bu avia)
Phone Number:	Member Number (If known):

Mail completed form with your check, payable to ASHRAE Research to:
Stan Weaver and Company
Philippe Jean
4607 North Cortez Avenue
Tampa, FL 33614

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### **Research Promotion**

As our current fiscal year enters its 4rth month, we are starting to gain momentum on our goal of raising \$21,500 for ASHRAE research. The second annual sporting clay event has over 60 participants on 16 teams ready to become chapter champion. A great turn out for just the second event that was founded by Jason Proctor just last year. We feel that this event will continue add value to our chapter dynamics as well as supporting ASHRAE research. Good luck to all of our shooters.

I would like to send out a special thanks to all of our early contributors.

Miss Heather A Tank, PE
Aqua Air Products – Tampa
Malia Powers
Mr Daniel R Rogers, PE
Mr Mike Costello
Mr Philippe B Jean, PE
Mr Shawn M Jeffrey, Sr
Ms Jennifer A Isenbeck, PE
Mr Joseph R Cox
Mr Joseph D Souza, III
Mr Jason C Proctor
Ross D Montgomery, PE
Florida West Coast ASHRAE Chapter



Your generosity will help all of us make our industry more effective on our journey to safe and sustainable buildings. Thank you to the following donors for their generous support of ASHRAE Research and the Florida West Coast Chapter during the 2011-12 Campaign.

Trying the following links to learn more about ASHRAE research and donate yourself:

Click here to Donate

Click here to see RP Contributors

Click here to see the Research Projects funded by your donation

Philippe Jean, PE, LEED AP Research Promotion Chair (2011-2012)

# **Membership Promotion**

Interesting question...

The membership committee is often asked "why should I become a member of ASHRAE FWC", and I suppose there are as more reasons than we can count. Membership means different things to different people, but some of the reasons promoted by Society include:

Access to the latest and best technical information in the HVAC&R industry

Professional development opportunities

Networking opportunities with industry peers

Opportunity to give back to an industry that gives its leaders so much

These are all great reasons and as a society ASHRAE has enjoyed tremendous success, some of our notable achievements include:

Development of Standard 90.1, the nation's first energy standard

A strong research program for over 90 years

Recognized standards developer

ASHRAE Handbook, the industry's book of choice for HVAC&R guidance

The Chapter occasionally polls our membership to determine what we want to see and do, and that's great, but I'd like to pose a more personal question... why are <u>you</u> an ASHRAE member? I challenge our membership to take 5 minutes to fire off an email telling me why you belong to ASHRAE so I can share your thoughts in future newsletters, and more importantly, the committee can better identify what's really important to prospective members. Names can be withheld if you so choose, just make a note in your email.

I hope to see a great response!

Joe Souza, Membership Promotion Chair (2011-2012)

## State, Local, and Provincial ASHRAE Affairs Roundup

- I. Florida Governor Rick Scott (R) and Massachusetts Lieutenant Governor Timothy Murray (D) both announced science, technology, engineering, and mathematics (STEM) education initiatives in recent days. Building a pipeline of up-and-coming engineers is a priority for the Society as a whole, so ASHRAE members in the Sunshine and Bay States are encouraged to speak with your colleagues in the profession, seek alliances with other engineering societies, and support these proposals.
- II. Several Canadian ASHRAE members are working actively within the development process to incorporate ASHRAE standards within the newest iteration of the Canadian Building Code and the new model National Energy Code. This is just part of an effort to enhance public policy outreach in Canada, for which ASHRAE is seeking "champions" to be part of its grassroots corps of engineer-advocates.
- III. ASHRAE staff will be on the road the next two weeks, visiting Hartford, Connecticut October 26-27 and in Tacoma, Washington, November 1-3; both journeys relate to regional energy efficiency partnership conference attendance (the Northeast Energy Efficiency Partnerships and the Northwest Energy Efficiency Alliance, respectively). If you are an ASHRAE member in one of those areas and have an interest in learning more about our government affairs efforts, please let us know by contacting Mark Wills at <a href="mailto:mwills@ashrae.org">mwills@ashrae.org</a>.



Florida West Coast

CHAPTER

## DOE Updates National Standard for Commercial Buildings to 90.1-2010

ATLANTA – Following preliminary analysis that ASHRAE/IES's 2010 energy efficiency standard contains significant energy savings over the 2007 standard – 18.2 percent source energy savings and 18.5 site energy savings – the U.S. Department of Energy (DOE) has issued a ruling that establishes the 2010 standard as the commercial building reference standard for state building energy codes.

In an announcement in the Oct. 19 edition of The Federal Register, DOE attributes the greater energy savings to improvements in ANSI/ASHRAE/IESNA Standard 90.1-2010, Energy Standard for Buildings Except Low-Rise Residential Buildings, related to better lighting, day lighting, controls and building envelope and better mechanical systems and application to more systems.

With the Oct. 19 ruling, Standard 90.1-2010 serves as the commercial building reference standard for state building energy codes under the federal Energy Conservation and Production Act. As a result, states are required to certify by Oct. 18, 2013, that they have updated the provisions of their commercial building code regarding energy efficiency to meet or exceed 90.1-2010.

"The foundation of energy efficient buildings continue to grow stronger with the news that DOE is now referencing the 2010 standard," Ron Jarnagin, ASHRAE president, said. "ASHRAE hopes to make that foundation even stronger through our current work with IES developing the 2013 standard."

"The DOE has determined that the quantitative analysis of the energy consumption of buildings built to Standard 90.1-2010, as compared to buildings built to Standard 90.1-2007, indicates national source energy savings of approximately 18.2 percent of commercial building consumption," according to DOE. "Additionally, DOE has determined site energy savings are estimated to be approximately 18.5 percent."

The DOE noted that the newer version of the standard contains 19 positive impacts on energy efficiency. These impacts included changes made through the public review process in which users of the standard comment and offer guidance on proposed requirements. Specifically the positive impacts include:

- Requirements for day lighting controls under skylights and commissioning of day lighting controls; increased use of
  heat recovery; cool roofs in hot climates; lower luminance in certain exterior zones; skylights and day lighting in some
  building types; reduced ventilation energy; supply air temperature reset for non-peak conditions; efficiency requirements for data centers; lower lighting power densities; control of exterior lighting; occupancy sensor for many specific
  applications; day lighting control requirements for side-lighted spaces; and day lighting controls in more spaces.
- Updated chiller efficiency requirements.
- Extension of VAV fan control requirements.
- Expansion of new lighting power densities to more retrofits and automatic damper requirements and use of economizers
- Minimizes exceptions to switched receptacle requirement.

The ruling comes on the heels of a July announcement that established the 2007 standard as the as the commercial building reference standard for state building energy codes. The DOE noted that because the 2010 determination was published prior to the two-year deadline states have to demonstrate that their energy code meets or exceeds the stringency of the 2007 standard, states are allowed to file just one certification to address both determinations.

Since being developed in response to the energy crisis in the 1970s, Standard 90.1 now influences building designs worldwide. It has become the basis for building codes, and the standard for building design and construction throughout the United States. ASHRAE and IES publish a revised version of the standard every three years.

If you would like to receive more information about this, or have any questions, please feel free to contact the FWC Refrigeration Chair, Debie Horsey at <a href="mailto:dhorsey@carrollair.com">dhorsey@carrollair.com</a>.

### **ASHRAE Awards**

ASHRAE's Honors and Awards Program recognizes the dedicated ASHRAE members who give freely of their time and expertise to fulfill the Society's mission of advancing the arts and sciences of HVAC&R to serve humanity and promote a sustainable world.

Any successful organization has a way of rewarding those who contribute to its mission in a meaningful manner – so it is with ASHRAE. Our award recipients exemplify the best in engineering and engineering technology by continually bringing credit to the profession and the Society.

ASHRAE is proud of the many contributions its men and women have made on behalf of the Society and to our industry. We encourage you to help us recognize those members who deserve to be thanked by nominating them for an appropriate award.

Please contact me if you would have any questions or would like to learn more.

Malia Powers TEGA Chair (2011-2012)

# In Retrospect: Chicago Codes Conference

As mentioned in the October 7 *Government Affairs Update*, ASHRAE staff participated in the Midwest Energy Efficiency Alliance's (MEEA) Second Annual Building Energy Codes Conference in Chicago. The event – at which nearly 50 state and municipal employees, building code officials, nonprofit advocates, public policy professionals, utility and manufacturer representatives, and architects took part – provided a great opportunity for learning about energy issues unique to the 13-state region MEEA covers, for strengthening existing public policy alliances, and for developing new relationships.

The conference began with a review of the status of energy code adoption, implementation, and enforcement across the 13 states comprising MEEA's jurisdiction, as offered by either attendees from those states or MEEA staff.

The first formal panel was an overview of ASHRAE Standard 90.1-2010 and the 2012 International Energy Conservation Code (IECC). A representative from the U.S. Department of Energy's (DOE) Building Energy Codes Program (BECP) noted that DOE has a new goal of reaching 40 states adopting American Recovery and Reinvestment Act (ARRA) – target codes of meeting or exceeding Standard 90.1-2007, or the most current model codes by 2015.

The next session centered upon utility energy efficiency codes programs, which formalize the role of utilities in the adoption of, and compliance with, advanced energy code compliance and, in return, give utilities credit toward meeting their energy efficiency program goals.

The second day commenced with a discussion of best practices discovered by Illinois, Iowa, and Wisconsin in their State Energy Code Compliance Pilot Studies, which, over the past year (concluding June 30, 2011), have been funded by BECP and the regional energy efficiency partnerships in an effort to measure code compliance and, consequently, help states in their compliance efforts, while at the same time providing valuable insight into the effectiveness of these tools and suggestions for their improvement.

The final panel of the conference addressed third-party enforcement of energy performance standards, including the use of Home Energy Rating System (HERS) raters in state and local code compliance work – particularly in rural areas of the Midwest to which it is often difficult for state or local government officials to cover on a frequent basis – and experiences in utilizing third-party enforcement mechanisms and the challenges ahead. In particular discussion focused on the potential adoption and subsequent enforcement of all-encompassing "green" codes and standards that do not limit themselves strictly to energy efficiency.

For more information about any of the aforementioned state-level topics, please contact <u>Mark Wills</u>, ASHRAE's Manager of State and Local Government Affairs.

# **Public Policy Internship Seeks ASHRAE Student Applicants**

ASHRAE is now accepting applications for the 2012 Washington Internship for Students of Engineering (WISE) program. The WISE program provides selected participants with a unique opportunity to interact with and learn from government officials, professional societies, and others who are involved with crafting national public policy that affects the engineering profession and building industry.

Applicants must be ASHRAE student members. Applications are available at <a href="http://www.ashrae.org/advocacy/page/1226">http://www.ashrae.org/advocacy/page/1226</a>, and must be postmarked or emailed by December 31, 2011.

# ASHRAE Standars 90.1-2010 Saves More Energy Than 2007

This week the U.S. Department of Energy (DOE) issued its final determination that ANSI/ASHRAE/IES Standard 90.1-2010 *Energy Standard for Buildings Except Low-Rise Residential Buildings* saves more energy than Standard 90.1-2007. Specifically, DOE found national source energy savings of approximately 18.2 percent, and site energy savings of approximately 18.5 percent, when comparing the 2010 and 2007 versions of Standard 90.1.

Please note: When comparing Standard 90.1-2010 with the 2004 version, site energy savings for Standard 90.1-2010 are 32.6 percent and energy cost savings are 30.1 percent (without plug loads). With plug loads, site energy savings are estimated at 25.5 percent, and energy cost savings are 24 percent.

This week's DOE determination compared Standard 90.1-2010 with the 2007 version.

As a result of this week's DOE final determination, states are required to certify by October 18, 2013 that that have reviewed the provisions of their commercial building code regarding energy efficiency and updated their code to meet or exceed Standard 90.1-2010. States may request extensions of this deadline from DOE if a state can demonstrate that it has made a good faith effort to comply with this code update.

To view the PDF file containing DOE's notice of its final determination, please visit:

DOE Officially Determines ASHRAE Standard 90.1-2010 Saves More Energy than 2007 Version; States Required to Certify Compliance by October 18, 2013

This week the U.S. Department of Energy (DOE) issued its final determination that ANSI/ASHRAE/IES Standard 90.1-2010 *Energy Standard for Buildings Except Low-Rise Residential Buildings* saves more energy than Standard 90.1-2007. Specifically, DOE found national source energy savings of approximately 18.2 percent, and site energy savings of approximately 18.5 percent, when comparing the 2010 and 2007 versions of Standard 90.1.

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### **Past Presidents**

1957-58 Karl K. Hickman 1958-59 Sam F. Graziano 1959-60 Julian Johnson 1960-61 Ken Whittington 1961-62 Mark E. Mooney 1962-63 James A. Hargan 1963-64 Daniel R. Manrique 1964-65 E. J. Bauerlien 1965-66 Henry Graham 1966-67 Richard Kohle 1967-68 Lamar King/Leland Menard 1968-69 Ed Fuller 1969-70 William A. Smith 1970-71 Fareed T. Ossi 1971-72 Lee Bendall 1972-73 John Degian 1973-74 Mark Chambers 1974-75 Charles "Stan" Weaver 1975-76 Charles D. Jacobs 1976-77 Peter Scott 1977-78 Ray Rinke 1978-79 Lloyd H. Biossoneault 1979-80 James H. Carroll, Jr. 1980-81 S. Michael Tappouni 1981-82 Alberto J. Sanchez 1982-83 James L. Repp 1983-84 Rodney C. Thomas

1984-85 Charles E. Langbein 1985-86 Thomas H. Williams 1986-87 Caire A. Boe 1987-88 Frank Grandinetti 1988-89 Carl B. Lawson 1989-90 Robert M. Little 1990-91 Edward C. Spivey 1991-92 Robert P. Sutton 1992-93 Roger B. Redman 1993-94 Stephen Chittenden 1994-95 William M. Slade 1995-96 Juan A. Soler 1996-97 Timothy J. Citek 1997-98 Mark Smith 1998-99 Joseph Griner, III 1999-00 Colleen Smith 2000-01 John W. Wells, III 2001-02 Gary Stenlund 2002-03 Bill Wright 2003-04 Don Crosby 2004-05 Ted S. Hansen, Sr. 2005-2006 P.J. Crespo 2006-2007 Dan Herrera 2007-2008 Jennifer Isenbeck 2008-2009 Debie Horsey 2009-2010 Drew Elsberry 2010-2011 Jeff Ross





nd Annual Rorida West Coast Clay Shoot ish Hawk Clays, Lithia

ch Promotion Hecognition r: Mike Lawler (Data Aire)

### 2011-2012 Florida West Coast

### Schedule of Events

n Meeting at the Columbia Restaurant

ual Florida West Coast Golf Tournamen

eting at the Columbia Restaurant stion Night

### **Special points of interest:**

- Still looking for this year's publicity chair.
- See You in November for our Next Meeting
- Hope you enjoyed the Clay Shoot on November 4th.

### **Board Members, Committee Chairs and Contact Info:**

**Shawn Jeffrey** Jason Proctor Joe Souza Joe Cox Mike Costello Philippe Jean Secretary/Student V.P./Research Promotion President Pres. Elect/Programs Membership Treasurer 813-300-4662 813-731-1062 813-250-0488 813-541-3516 813-309-2155 813-763-9654 Leon Boe Dan Herrera **Ike Crimm Debie Horsey** Malia Powers Michael Cowles Governor/ Golf Event Refrigeration **Government Affairs** Newsletter/Governor YEA Chair/Governor Historian 813-241-6488 813-879-2749 813-839-0506 813-758-2749 813-748-9406 813-220-0588

Jeff Ross Nominating/Governor 813-250-0488

Technical Energy Joe Souza 813-309-2155

Jacob Moberg Reception 813-448-0225

**LAIR Services** Cyber Chair 813-404-2955

Eric Viera Chapter Roster 813-448-0225

Could Be You? **Publicity** ???



### AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS



Immediate past ASHRAE President Lynn G. Bellenger, who served as the first woman president in the Society's 116 year history, passed away Wednesday, Oct. 19. She was president for the 2010-11 Society year, with her term ending in June 2011.

Bellenger, P.E., Fellow ASHRAE, was a recognized expert in energy management, with a strong focus on the need for energy modeling to help create and refine more efficient buildings. She was a partner, Pathfinder Engineers & Architects, Rochester, N.Y.

"We at ASHRAE are greatly saddened by the death of our former president and our friend," Ron Jarnagin, ASHRAE president, said. "Her lifelong passion for engineering excellence resonated within our

membership and our industry, inspiring us through her belief that engineers will lead an energy revolution with innovation. Through her service, she showed that there is a path available to all who wish to extend the influence of engineering principles to better serve the world we live in."

As ASHRAE president, Bellenger focused on Modeling a Sustainable World, sharing her thoughts about the role of modeling tools and how all involved in the built environment industry must come together to take advantage of "the rich opportunities for optimizing building performance through a collaborative approach from the beginning."

In an interview last year, Bellenger talked about her involvement in energy efficiency and how much has been put in recent years on the need to save energy.

"One of the cool things about the sustainability movement is that it has ignited a passion in people that is changing the world. That passion has brought a sense of energy and excitement to the industry and attracted people who are committed to designing and operating sustainable buildings. I don't see that changing in the future," she said.

Bellenger is a recipient of an ASHRAE Exceptional Service Award, a Distinguished Service Award, two first-place ASHRAE Technology Awards and the Lincoln Bouillon Membership Award.

She received a Bachelor of Science in mathematics from Principia College and a Master of Science in environmental science from Rutgers University.

Funeral arrangements are private.

If you would like to send your condolences please respond to this email. Messages will be assembled into a remembrance for the Bellenger family.

# ASHRAE

# FLORIDA WEST COAST CHAPTER

NOVEMBER 15, 2011 MIKE LAWLER COLUMBIA RESTAURANT, YBOR CITY

The Florida West Coast Chapter of ASHRAE is proud to have Mr. Mike Lawler from Data Aire Inc. coming to speak to our chapter on November 15, 2011 at the Columbia Restaurant in Ybor City about:

### Keys to Efficiently Designed Data Centers

Mike Lawler has more than 30 years of field experience in all aspects of commercial air conditioning. His experience includes in depth knowledge of humidity control and data room cooling issues.



As a member of ASHRAE, AFCOM, and 7 X 24 he regularly attends their conferences for continuing education on data center cooling. He is currently working on projects that improve cooling efficiency and airflow management in the data room.

He is the Southern Regional Manager for Data Aire, Inc., and has worked with them for the last 6 years.

# This meeting is be Research Promotion Night and recognition of last years contributors!

Please RSVP on the FWC website at: <a href="http://www.ashrae-fwc.org/chapter\_meetings.htm">http://www.ashrae-fwc.org/chapter\_meetings.htm</a> Cost: \$35 thru Paypal or \$40 day of Event (It is still \$40 day of even if you RSVP but do not pay thru Paypal)



Email me with any questions or to RSVP @ <u>iproctor@sladerossinc.com</u> or call (813)250-0488. Jason Proctor, FWC Programs Chair

### Meetina Schedule:

 Board Meeting:
 4:15pm — 5:30pm

 Registration:
 5:00pm — 6:00pm

 Main Meeting:
 6:00pm — 8:00pm

Columbia Restaurant 2117 East 7th Avenue Ybor City, Florida 33605





Florida West Coast

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You're about to graduate. Your career and life are in front of you. Start your professional engineering journey with smart resources from ASHRAE when you transfer your student membership into associate membership.

Your first year of membership out of college is only \$20. And for the next two years you only pay \$50 a year – a \$420 savings and the smartest start to your career when you're armed with the resources of ASHRAE. Plan ahead. Save money. SUCCEED.

### www.ashrae.org/smartstart

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