

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



Special points of interest:

- > The first FWC Meeting of the new year will be Tuesday, September the 21st with Kent Peterson, PE (Green Codes and Standard 189.1)



From the Desk of the President

Welcome back everyone! Historically, September has always been an eventful month. The USF Bulls played their first football game in September of 1997. The first issue of National Geographic was published in September 1888. The first live sporting event was televised coast to coast in September 1951 (it was a college football game between Duke and USF's arch enemy, the University of Pittsburgh). The last people ever hung for practicing witchcraft perished in September of 1692. But most importantly it marks the kickoff of our ASHRAE year.

Our first meeting will be on September 21st at The Columbia Restaurant in Ybor City. We are starting this year off with a terrific meeting. Mr. Kent Peterson, a former society President, will be speaking about ASHRAE 189.1. This will be a joint meeting with the USGBC, The Southwest Florida Chapter and The Central Florida Chapter. This is just the first of several terrific meeting topics that Shawn Jeffrey has put together. And for all of you PE's out there, we are offering PDH's again this year.

I look forward to seeing everyone at our first meeting.

GO BULLS!

Jeff Ross, FWC President (2010-2011)

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Program Events

We are starting our new year with a bang. We have a Distinguished Lecturer Mr. Kent Peterson, PE coming to speak to our chapter about:

Green Codes and Standard 189.1, Standard for the Design of High-Performance Green Buildings.

Mr. Peterson is a 2008/2009 Past Society President of ASHRAE. He is the chair of the ASHRAE Associate Society Alliance working, which works with 49 professional societies around the world. He also chairs the California State University Mechanical Review Board and assists with improving mechanical systems on the CSU campuses.

We have members of the US Green Building Council joining us for this meeting and possibly the Central Florida Chapter and South West Florida Chapters; therefore be sure to RSVP early as this meeting will sell out and we have limited seating.

Please RSVP on the FWC website at:
http://www.ashrae-fwc.org/chapter_meetings.htm

Cost: **\$35** thru Paypal or **\$40 day of Event**
(It is still \$40 day of event if you RSVP but do not pay thru Paypal)

Email me with questions at shawn.jeffrey@kpiengineering.com or call (813)241-6488.

Shawn Jeffrey, Jr.
Programs Chair (2010-2011)



ASHRAE Certification Programs

ASHRAE's certification programs are developed by industry practitioners who understand the knowledge and experience that should be expected for superior building design and system operation. Each individual who earns or renews an ASHRAE certification this Society Year earns 50 PAOE points in the CTT category under Meetings, Presentations or Events.



ASHRAE's certification programs are designed to have international relevance. They do not require candidates to take a course or purchase a publication. Each program is developed by a team of subject matter experts to assess an individual's mastery of a body of knowledge that reflects best practices and that a competent professional in that field has obtained. ASHRAE membership is not required.

Each program launches at an ASHRAE Conference. Approximately eight weeks later, the exam is available on computer at testing centers worldwide, so that candidates can choose a location, a date, and a time of day most convenient to him or her.

Currently, ASHRAE has five certification programs:

1. [Building Energy Modeling Professional \(BEMP\)](#); launched January 2010. The exam is software-neutral and covers the principles of modeling, required inputs, expected outputs, and troubleshooting.
2. [Commissioning Process Management Professional \(CPMP\)](#); launched June 2009. This program targets those individuals who serve as the manager of the commissioning process, typically acting on behalf of the building owner to communicate with the commissioning provider, the design team, the O&M staff, and other members of the commissioning team.
3. [Healthcare Facility Design Professional \(HFDP\)](#); launched June 2007.
4. [High-Performance Building Design Professional \(HBDP\)](#); launched June 2008.
5. [Operations & Performance Management Professional \(OPMP\)](#); launched January 2009.

The next program will be for energy assessors and launches in conjunction with the 2011 ASHRAE Winter Conference and AHR Expo. The Certification Committee welcomes ideas for new certification programs. You can submit an idea by completing the Proposal for New Certification form at the bottom of www.ashrae.org/certification and e-mailing it to certification@ashrae.org. You can find more information about ASHRAE's certification programs at ashrae.org/certification.

Or, you can go directly to a program by clicking on the title above.

Government Affairs Report

By Thomas Werkema

155 countries have committed to greenhouse gas (GHG) reductions under the Copenhagen Accords, representing slightly more than 85% of global emissions. The US committed 17% reductions by 2020, based on 2005 levels. No specific HFC controls, beyond HFC-23 (a byproduct of HCFC-22), have been agreed internationally although the US, Canada and Mexico reintroduced a Montreal Protocol (MP) Amendment to control HFCs under the ozone treaty. That is supported by the MP process technical understanding, and the corresponding lack of understanding under the Climate process. The Climate process Parties meet 5 times in 2010, culminating in a December Cancun, Mexico meeting. Little progress has been noted, year-to-date.

The US Senate discussions continue, with 6 different bills covering various Climate Change aspects, broadly including energy and emissions. It is improbable that a bill will pass in 2010. However, EPA continues to implement regulations including: The Endangerment Finding (GHGs are a danger to health and the environment), The Tailoring Rule (which reduces the impact of the first rule on small enterprises), The GHG Reporting Rules (requiring reporting by any facility or fleet with 25,000 MT CO₂e/year), and possible applicability of Clean Water rules to GHG emissions. In mid July, EPA published draft Confidential Business Information Rules, essentially disallowing CBI claims for all processes related to emissions. A 60 day comment period is expected to generate significant concerns.

The US Department of Justice has prosecuted the first two HCFC-22 smuggling cases, resulting in substantial fines and prison time. Remarkably, the second case involved resale of the HCFC-22 from the first case. Legitimate suppliers can provide EPA documentation.

Membership Promotion

Greetings to the Florida West Coast Chapter of ASHRAE from your humble Membership Promotions Chair. It is an honor to serve one of the best ASHRAE chapters in the world. This chapter was formed decades ago and continues to be supported by the pillars of our industry like Fareed Ossi, Don Crosby, Teddy Hansen, John W. Wells III, Stan Weaver, Bill Slade, Al Sanchez, James Carroll, Colleen Smith and so many other great men and women. We have a great history and now it is time to help secure our future.

Our chapter's strength is in its membership. With every new year we are all met with challenges to carry on with our strengths and build upon our weaknesses. This calls on all of us to enroll our peers, customers, vendors and owners into every aspect of our lives. ASHRAE is one of the areas of your life that needs your active enrollment and participation. ASHRAE is truly a giving organization that provides so many great tools in refrigeration and HVAC engineering that are solving the harsh problems in the world every year. Refrigeration alone may cure world hunger one day by increasing the shelf life of perishable food in the world. You need only to look at the advancements in filtration and building efficiencies. These advancements are implemented every year by the selfless members of ASHRAE. This possibility is created when a new member, renewed member, or advancing member states, "I will make a difference". Which one will you be? Who will you support?

We are here to support you in any direction that you take with ASHRAE. All of us need to contribute to the growth of the chapter. I challenge all members to find just one person you wish to enroll. If you are uncomfortable in approaching them, please let me know so I can introduce them to the benefits of an ASHRAE membership.

You can contact me at pjean@stanweaver.com or call Stan Weaver and Company at 813-879-0383. If I am not available ask for Jackie Johnson or Stan Weaver. For those of who are up for renewal, please do so online at www.ashrae.org or contact me and I will walk you through the process.

The Florida West Chapter will be hosting three membership promotion nights this year to support our chapter. The 1st will be our October 19, 2010 meeting, the second will be our March 15, 2011 meeting and the ultimate social of the year, the third will be our Shrimp Boil on April 18, 2011.

Philippe B. Jean, P.E., Membership Promotion Chair (2010-2011)

Refrigeration (Replacement Choices for R-22)

Most building owners, operators and HVAC professionals know that R-22 is no longer available in new A/C equipment as of January 1, 2010. Refrigerant manufacturers can still make virgin R-22 but only to service existing A/C equipment. After 2020, R-22 systems will have to be maintained by using recycled R-22. Refrigerant manufacturers will not be allowed to make virgin R-22 after 2020. The natural question that arises is: What are my replacement choices? R-22 is currently the most popular refrigerant for small unitary air and light commercial air conditioning equipment. Chances are that your home unit operates with R-22.

The two main candidates are **R-407C** and **R-410A**. As with most things in life, there are advantages and disadvantages to the above refrigerants. We will save discussion on **R-134a** for a later article.

Let's start out the discussion with R-407C. This refrigerant is a blend of R-21, R-125 and R-134a. It is the better candidate for a straight "insertion" into an existing R-22 system, though a small degradation in performance can be expected, roughly a 5% loss in capacity. The suction pressure with R-407C compared to a typical R-22 system will be approximately 10% less while the condenser will operate at a slightly higher pressure, roughly 15% than an R-22 system. The major drawback to R-407C is the glide. Glide occurs in refrigerant blends that do not act as one substance. In the case of R-407C, the R-32 will boil first, then the remaining substance will "glide" to a new boiling temperature. This difference between the starting and ending temperature is known as the glide. Glide can occur during the evaporation or condensing process. The high glide of 8°F for R-407C makes it best suited for DX (direct expansion) applications. The major drawback to R-407C is that it is not commercially available in the U.S. R-407C is much more common in Europe.

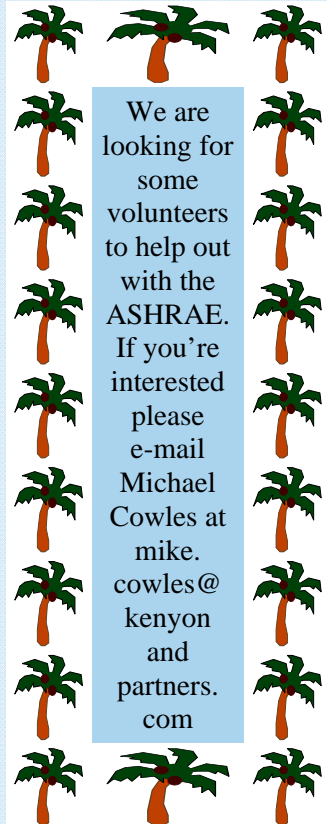
R-410A is a blend of R-32 and R-125. It cannot be "inserted" into an existing R-22 system without major design changes due to the much higher operating pressures in the high and low pressure sides of the refrigeration cycle when compared to R-22. The suction and condensing pressures are roughly 1.5 times greater than in an R-22 system. R-410A systems need beefier compressors, lines, valves, sight glasses, etc. A major shortcoming of R-410A is the lower critical point of 158°F versus 205°F for R-22. This can significantly lower the capacity of an air-cooled air-conditioning unit in a high ambient temperature, say of 105°F. A 5 ton unit could easily be reduced to 3.5 tons. In water-cooled applications, the lower critical point of R-410A becomes a non-issue. R-410A has an advantage over R-407C in that it only has a glide of 1°F. This allows for more flexibility in design application, such as flooded evaporators designs or DX evaporators.

So which way should one go? Straight refrigerant retrofits can be expensive and generally make little economic sense. Conventional wisdom says to keep with the original refrigerant type till the equipment has no more useful life. The question then becomes, "what refrigerant should I get in my new equipment"? We will save this question for a later article.

Adam L. Parke, FWC Refrigeration Chair (2010-2011)

Past Presidents

1957-58 Karl K. Hickman	1984-85 Charles E. Langbein
1958-59 Sam F. Graziano	1985-86 Thomas H. Williams
1959-60 Julian Johnson	1986-87 Caire A. Boe
1960-61 Ken Whittington	1987-88 Frank Grandinetti
1961-62 Mark E. Mooney	1988-89 Carl B. Lawson
1962-63 James A. Hargan	1989-90 Robert M. Little
1963-64 Daniel R. Manrique	1990-91 Edward C. Spivey
1964-65 E. J. Bauerlien	1991-92 Robert P. Sutton
1965-66 Henry Graham	1992-93 Roger B. Redman
1966-67 Richard Kohle	1993-94 Stephen A. Chittenden
1967-68 Lamar King/Leland B. Menard	1994-95 William M. Slade
1968-69 Ed Fuller	1995-96 Juan A. Soler
1969-70 William A. Smith	1996-97 Timothy J. Citek
1970-71 Fareed T. Ossi	1997-98 Mark Smith
1971-72 Lee Bendall	1998-99 Joseph Griner, III
1972-73 John Degian	1999-00 Colleen Smith
1973-74 Mark Chambers	2000-01 John W. Wells, III
1974-75 Charles "Stan" Weaver	2001-02 Gary Stenlund
1975-76 Charles D. Jacobs	2002-03 Bill Wright
1976-77 Peter Scott	2003-04 Don Crosby
1977-78 Ray Rinke	2004-05 Ted S. Hansen, Sr.
1978-79 Lloyd H. Biossoneault	2005-2006 P.J. Crespo
1979-80 James H. Carroll, Jr.	2006-2007 Dan Herrera
1980-81 S. Michael Tappouni	2007-2008 Jennifer Isenbeck
1981-82 Alberto J. Sanchez	2008-2009 Debie Horsey
1982-83 James L. Repp	2009-2010 Drew Elsberry
1983-84 Rodney C. Thomas	



We are looking for some volunteers to help out with the ASHRAE. If you're interested please e-mail Michael Cowles at mike.cowles@kenyon.com and partners.com

Next Florida West Coast Chapter Meeting

September 21st, 2010

Green Codes and Standard 189.1 with Kent Peterson, PE

***The Columbia Restaurant*
2117 East 7th Avenue
Tampa, FL 33605**

**Times:
Guest Arrive Early for Check-In
5:30 P.M.**

**Speaker and Dinner Begin
6:30 P.M. - 8:30 P.M..**

Your Florida West Coast Chapter website has been updated and is looking for more content! Is there information you would like to see made available online? Do you have questions about the Florida West Coast Chapter? Let us know! Feel free to email your Cyber Chair, [Jason Babinec](mailto:Jason.Babinec) with any concerns or comments.

This home page is maintained by the Florida West Coast Chapter of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. ASHRAE chapters may not act for the Society and the information presented here has not had Society review. To learn more about ASHRAE activities on an international level, contact the ASHRAE home page at <http://www.ashrae.org>.



BE GREEN WHEN YOU RENEW!

Board Members, Committee Chairs and Contact Info:

<u>Jeff Ross</u> President 813-918-8252	<u>Shawn Jeffrey</u> Pres. Elect/Programs 813-731-1062	<u>Jason Proctor</u> V.P./Research Promotion 813-917-1648	<u>Philippe Jean</u> Membership/Education 813-541-3516	<u>Joe Souza</u> Treasurer/TEGA 813-309-2155	<u>Joe Cox</u> Secretary/Student Chair 813-763-9654
<u>Debie Horsey</u> YEA Chair 813-97748-9406	<u>Dan Herrera</u> Historian 813-839-0506	<u>David Henry</u> Governor 813-310-8977	<u>Adam Parke</u> Refrigeration 813-228-1755	<u>Mike Costello</u> Publicity/Governor 813-300-4662	<u>Michael Cowles</u> Newsletter/Governor 813-241-6488
<u>Ike Crimm</u> Special Events 813-758-2749	<u>Leon Boe</u> Reception 813-879-0383	<u>Jason Babinec</u> Cyber Chair 813-241-6488	<u>Jason Proctor</u> Chapter Roster 813-917-1648		



Florida West Coast Chapter

AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS

ASHRAE Logo Shirts Order Form

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ASHRAE Chapter _____

Shipping Address _____

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*****All proceeds will go to Research Promotion*****



Men's: Blue/White Stripe

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Medium, Qty: _____
Large, Qty: _____
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Women's Columbia (Green)

Small, Qty: _____
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Women's: Silk/Cotton (Light Pink)

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X-Large, Qty: _____
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Price: _____ \$65.00 each (includes S&H)

Payment (circle one): Cash

Credit Card
(Contact David Henry)
david@noaddress.com
813-310-8977

Check
(Make check payable to ASHRAE FWC)

Total Payment: _____

ASHRAE FLORIDA WEST COAST CHAPTER

**SEPTEMBER 21, 2010
DISTINGUISHED LECTURER MR. KENT PETERSON
COLUMBIA RESTAURANT, YBOR CITY**

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Shawn M. Jeffrey, Sr.
FWC Programs Chair



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



Meeting Schedule:

Board Meeting:	4:15pm — 5:30pm
Technical Topic:	5:50pm — 5:50pm
Registration:	5:00pm — 6:00pm
Main Meeting:	6:00pm — 8:00pm