

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



Keeping it Cool with ASHRAE



Special points of interest:

- > The next FWC Meeting of the new year will be Tuesday, January the 18th at The Columbia.
- > Have a great Christmas and New Year!



From the Desk of the President

What? December already? Great that means Santa is coming. I'm not 100% sure the "nice's" will outweigh the "naughty's" this year; could mean trouble for me. I'll probably get a new psych chart or maybe finally get someone to print that fan curve that makes my computer crash every time I try to print it.

Speaking of fans.....yes.....it's time for another horrific segue.....did you know that Willis Carrier actually didn't invent the first air conditioner for a building? Well, he didn't. The first recorded "air conditioner" was actually invented by Mr. Ding Huan of the Han Dynasty back in 180 A.D. You see back in the Han Dynasty, the emperor was the most important man in the land. If he was happy, everyone was happy. But if he were unhappy, especially if due to perspiration, well, people lost their heads. If you don't believe me, just watch the movie Shogun. It's how they used to roll back in the day. So in an effort to please his emperor, and keep his head firmly attached to his neck, good 'ol Ding came up with a system of 7 fans, each 10 feet in diameter, that could be powered by one person. These fans produced enough air movement to supposedly cause the occupants of the building to "shiver". Let's see, Occupant comfort, Energy Efficiency, Innovative Design..... Heck, Ding got enough points by himself to get that building at least LEED certified.

I hope everyone enjoyed the Bucs game on December 5th. Shawn Jeffrey put on a great event that helped put over \$500 to ASHRAE Research Promotion. We will not be having a regular meeting this month so I would like to take this opportunity to wish all our members a Merry Christmas.

Jeff Ross, FWC President (2010-2011)

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Program Events

The Florida West Coast Chapter had an excellent event on December 5th for the Tampa Bay Buccaneers / Atlanta Falcons game. We had over 40 people show up for a great BBQ / Tailgate then off to the game that was more reminiscent of a northern football game than one in Florida. In case you don't get my meaning, it was COLD! Very cold, some people (myself included) didn't plan for such a cold day and wore shorts. Suffice to say that won't happen again.

I would like to thank Malia Powers and Luvata for sponsoring the event. With their help and the support of the Florida West Coast Chapter we raised over \$500 for Research Promotion.

Thanks to all who supported this event!

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



Research Promotion

Let me start by personally thanking each and every investor both individual and corporate, it is because of you that the Florida West Coast Chapter continues to set the standard and lead the way, not only in Region XII but on a national level.

As of November 31, the Florida West Coast Chapter has collected over \$ 5,283.32, please be sure to recognize those investors that are listed in this newsletter.

The Florida West Coast Chapter is leading the entire Region XII in our collecting efforts; our next goal is to reach 30% by 15 December 2010. Please help us by making you tax deductible donation this year.

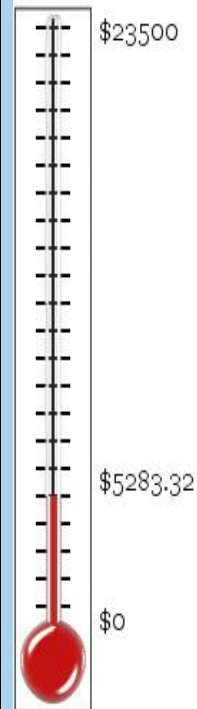
If you have not yet donated, please consider making your tax deductible donation this month for 2010!!!

Please make your contributions early this year either by check 'Payable to ASHRAE Research' and turn them in to me or if you prefer you can make online donations at https://www.ashrae.org/aboutus/resource_promotion.asp.

If you make a donation online, please forward me a copy of the emailed invoice so I can ensure that proper credit is given at jason@vickerycompany.com.

As of November 31, 2010, we are at 23.3 % of our goal; remember if you make your tax deductible before December 31, 2010 you can use it on this year's tax return. Please contact me at jason@vickerycompany.com for your receipt for tax purposes.

Jason Proctor
FWC Membership Chair (2010-2011)



Membership Promotion

Membership Advancement: Why me, because you have earned your advancement. Greetings from your Florida West Coast Chapter of ASHRAE. In talking to several members, they were unaware that they could advance to the level of member from associate or from student member to associate. A few didn't realize that there were different grades which I take on as a failure on my part for not bringing this in front of the greatest chapter on this green earth. Here is the breakdown of a few of the grades in ASHARE with a brief description of your benefits:

Life Member/Life Associate Member

Be in Good standing and a member or associate member for 30 years or greater and 65 years old.

Rights and privileges of most recent membership grade

Member

At the time of admission or advancement, a Member shall have the equivalent of 12 Society-approved years of experience composed of an approved combination of: (1) completed education beyond high school; (2) work experience*; and (3) professional engineering or related registration or license issued by a legally authorized body. *Qualifying work experience must be in the performance of duties in work related to ASHRAE fields and shall have included research, teaching, design, contracting, engineering sales, or engineering management.

Members have voting privileges; receive the ASHRAE Journal, Insights, ASHRAE handbook and the eNewsletters; Access to the Members only website; discounts on ASHRAE products and services; and access to group insurance.

Associate

An Associate Member shall have had experience in technical matters or in design, operation, or maintenance in HVAC&R fields; shall have an interest in the advancement of the Society's aims, and shall possess sufficient qualifications to cooperate with HVAC&R engineers in the advancement of the knowledge relating to HVAC&R engineering and its application.

Associate Members have voting privileges; receive the ASHRAE Journal, Insights, ASHRAE handbook and the eNewsletters; Access to the Members only website; discounts on ASHRAE products and services; and Group insurance.

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Refrigeration

A Little History on Vehicle Refrigerants

Not long ago, all vehicles on the market used an efficient, but bad for the environment, refrigerant commonly referred to from the brand name, Freon. The scientific name of **R-12** is dichlorodifluoromethane which is a chlorofluorocarbon (CFC). **R-12** was commonly found in refrigeration applications and as a propellant for aerosol cans. Fast forwarding to 1994, the Montreal Protocol called for a ban of **R-12** due to the potential damage to the ozone layer.

The primary **R-12** replacement refrigerant for the US vehicle market has been **R-134a**. Interestingly enough, there are signs that even **R-134a** may soon be replaced by a refrigerant with a lower global warming potential (GWP). **R-134a** is a hydrofluorocarbon (HFC) that has a zero ozone depletion potential (ODP) but a global warming potential (GWP) that is seen as relatively high. In 2006, the European Union has started a phase-out schedule for **R-134a** in vehicle applications.

Refrigerant	ODP	GWP	Flammability Classification
CFC-12	1	8100	Non-Flammable
CFC-22	0.05	1700	Non-Flammable
HFC-134a	0	1410	Non-Flammable
HFO-1234yf	0	4	Mild Flammability (2L)

The big question is what refrigerant should replace **R-134a**? A recently developed refrigerant looks promising as an **R-134a** replacement in the vehicle market. That refrigerant is a hydrofluoro-olefin refrigerant, **HFO-1234yf**, known by its brand name, Opteon. It is a non-ozone depleting refrigerant with a relatively low GWP of 4. One of the attractive features of **HFO-1234yf** is that it is nearly a “drop in” replacement for **R-134a**. The same cannot be said of **R-152a**, which is another **R-134a** replacement candidate. Below is a table that lists out some of the characteristics of two commonly used vehicle refrigerants and this newer refrigerant.

The world of refrigerants continues to change and evolve to find those near perfect properties that balance system capacity and efficiency with low environmental impact and flammability. It’s a tough balancing act. The good news is that numerous companies in the refrigerant market continue to spend time and resources to spur further innovation.

Adam Park, Refrigeration Chair (2010-2011)

Membership Promotion (Cont.)

Continued from Page 2.

Affiliate

An Affiliate Member shall have had HVAC&R experience; Interest in Society’s goals; must be a new member (cannot have ever held Student Member status).

This is an introductory membership into ASHRAE that automatically graduates to Associate Member after 3 years.

Student

In approved course of study in Society-related field; must be a full-time student

Student Members receive the ASHRAE Journal, Insights, the eNewsletters; discounts on ASHRAE products and services.

If you have any questions regarding your membership, please contact me at your earliest convenience. 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.

Philippe Jean, PE Membership Promotion 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	

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The ASHRAE Florida West Coast Chapter would like to thank all those who have donated this year already.

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>.

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>Phillippe 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
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Florida West Coast Chapter

AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS

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



Men's: Blue/White Stripe

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X-Large, Qty: _____
XX-Large, Qty: _____



Women's Columbia (Green)

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Large, Qty: _____
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XX-Large, Qty: _____



Women's: Silk/Cotton (Light Pink)

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X-Large, Qty: _____
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Payment (circle one): Cash

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

Check
(Make check payable to ASHRAE FWC)

Total Payment: _____



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Seminars & Courses at ASHRAE's Winter Conference in Las Vegas, NV

2 WAYS TO REGISTER

Internet: www.ashrae.org/lasvegascourses

Phone: Call 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)



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Full Day Professional Development Seminar

\$485/\$395 ASHRAE Member -- Earn 6 PDH/6 CEU or 6 AIA LU credits

The Commissioning Process in New & Existing Buildings
Saturday, Jan 29 – 8:00 a.m. to 3:00 p.m.

Implementing Energy Management in New and Existing Buildings: A Sustainable Activity
Saturday, Jan 29 – 8:00 a.m. to 3:00 p.m.

Healthcare Facilities: Best Practice Design and Application
Saturday, Jan 29 – 8:00 a.m. to 3:00 p.m.

Integrated Building Design
Saturday, Jan 29 – 8:00 a.m. to 3:00 p.m.

Complying with ASHRAE/IES Standard 90.1-2010
Saturday, Jan 29 – 8:00 a.m. to 3:00 p.m.

Energy Modeling Best Practices and Applications: HVAC/Thermal
Tuesday, Feb 1 – 9:00 a.m. - Noon, 2:00 p.m. - 5:00 p.m.

Half Day Short Courses

\$159/\$119 ASHRAE Member -- Earn 3 PDH/3 CEU or 3 AIA LU credits

Fundamental Requirements of ASHRAE Standard 62.1-2010
Saturday, Jan 29 – 8:00 a.m. to 11:00 a.m.

Application of Standard 62.1-2010: Multiple Spaces Equations & Spreadsheet Calculation
Saturday, Jan 29 – Noon to 3:00 p.m.

Understanding Air-to-Air Energy Recovery Technologies and Applications
Sunday, Jan 30 – 2:00 p.m. to 5:00 p.m.

Chilled Beam Technology for Excellent Indoor Climate in an Energy Efficient Manner
Sunday, Jan 30 – 2:00 p.m. to 5:00 p.m.

Using Standard 90.1 to Meet LEED Requirements
Sunday, Jan 30 – 2:00 p.m. to 5:00 p.m.

The Commissioning Process & Guideline 0
Monday, Jan 31 – 2:30 p.m. to 5:30 p.m.

Determining Energy Savings from Performance Contracting and LEED Projects: M&V
Monday, Jan 31 – 2:30 p.m. to 5:30 p.m.

Understanding Standard 189.1-2009 for High-Performance Green Buildings
Monday, Jan 31 – 2:30 p.m. to 5:30 p.m.

Understanding & Designing Dedicated Outdoor Air Systems (DOAS)
Tuesday, Feb 1 – 9:00 a.m. to Noon

Low Temperature Radiant Heating & High Temperature Radiant Cooling Systems
Tuesday, Feb 1 – 9:00 a.m. to Noon

Successful Solar Applications for Commercial & Industrial Facilities
Tuesday, Feb 1 – 9:00 a.m. to Noon

Avoiding IAQ Problems: Using ASHRAE's New IAQ Guide
Tuesday, Feb 1 – 2:00 p.m. to 5:00 p.m.

District Cooling & Heating Systems: Central Plants
Tuesday, Feb 1 – 2:00 p.m. to 5:00 p.m.

Designing Toward Net Zero Energy Commercial Buildings
Tuesday, Feb 1 – 2:00 p.m. to 5:00 p.m.



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ASHRAE Certification Programs

Take advantage of ASHRAE's special pencil & paper administration of our certification examinations on Wednesday Feb. 2, 2011, in conjunction with the 2011 ASHRAE Winter Conference.

- Building Energy Assessment Professional (BEAP) **NEW**
- Building Energy Modeling Professional (BEMP)
- Commissioning Process Management Professional (CPMP)
- Healthcare Facility Design Professional (HFDP)
- High-Performance Building Design Professional (HBDP)
- Operations & Performance Management Professional (OPMP)

For more info, visit www.ashrae.org/lasvegascertification

New Publications from ASHRAE

- Standard 189.1-2009: Standard for the Design of High-Performance Green Buildings (A Jurisdictional Compliance Option of the IGCC)*
 - Standard 189.1-2009 User's Manual (A Jurisdictional Compliance Option of the IGCC)*
 - ASHRAE GreenGuide 3rd Edition – The Design, Construction, and Operations of Sustainable Buildings*
 - ASHRAE Standard 90.1-2010: Energy Standard for Buildings Except Low-Rise Residential Buildings*
 - ANSI/ASHRAE 55-2010 – Thermal Environmental Conditions for Human Occupancy*
 - ANSI/ASHRAE 62.2-2010 – Ventilation for Acceptable Indoor Air Quality in Low-Rise Residential Buildings*
 - ANSI/ASHRAE 62.1-2010 – Ventilation for Acceptable Indoor Air Quality*
- Package:
- ANSI/ASHRAE 15-2010 – Safety Standard for Refrigeration Systems*
 - ANSI/ASHRAE 34-2010 – Designation and Classification of Refrigerants*

Visit www.ashrae.org/bookstore to order



Florida West Coast
CHAPTER