ASHRAE MONITOR



Mission Statement

To advance the arts and sciences of heating, ventilation, air conditioning, and refrigerating to serve humanity and promote a sustainable world.

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Meeting Schedule

www.hamptonroads.ashraechapters.org

The Discussion Topic: LowEx

Date & Time: Wednesday, March 18, 2009 Lunch at 11:15 A.M. Presentation from 12 - 1:00 P.M.

Speaker: Gary Hayden

Place: AECOM 448 Viking Drive Virginia Beach, Virginia 23452

Cost: Members \$15, Guests \$20 & Students \$10

Signup: Noon Deadline, 3-17-09, See pages 5-7 for

details

Reservations: R.S.V.P. to Rob Ainsley using the

Meeting Fax Back on Page 6

at

RA in sley @enviromechanical sales.com

/or/

(757)483-1390



Host an ASHRAE Meeting

Do you have a venue suitable for hosting an ASHRAE meeting? If so, your support would be greatly appreciated. All we ask is the use of the space for the duration of the meeting. We will set up, clean up, and provide the food. If you are interesting in donating use of your space, please contact Steve Lowe at 757-306-6748.

Publish an Article about Your Project

Do you have a unique, challenging, or otherwise interesting project that you'd like to share? If so, please send a write-up and photos (if applicable) to Paulb@aceshvac.com. We will include one article per month in the ASHRAE Monitor. Preference will be given to local projects exhibiting sustainable design/construction practices.

President - Steve Lowe - Stephen.Lowe@aecom.com President Elect - Gary Hayden - Gary@gbhengineering.com Vice President - Rob Ainsley - RAinsley@enviromechanicalsales.com Secretary - Paul Butler - PaulB@aceshvac.com Treasurer - Bill Quinn - BillQ@pace-pme.com

ASHRAE MONITOR

Committee Participation is Needed and Welcomed

If anyone has an interest in becoming involved with ASHRAE we welcome people to serve in various ways. Please feel free to contact any of the board members to get more information. You can also visit the ASHRAE web site to find out more about getting involved. It is a great way to plug in to your local community of peers and grow personally and professionally. For those of you who have served before, we welcome your participation also. Every effort helps to enrich our local community.

Your Feedback Matters

Are there things that you would like to see happening in ASHRAE? Please feel free to contact us with suggestions for improvement and with ideas on how you would like to see the local ASHRAE chapter change or improve. We welcome and value your feedback. Again, you can contact us utilizing the email addresses on Page 1.

Thanks!

From the Presidents Pen

This month's presentation will be by our own Gary Hayden. Gary is the Chapter President Elect and an ASHRAE Distinguished Lecturer. Gary will be talking to us about Low EX, a design concept currently in use throughout Europe to improve the efficiency of buildings. I am looking forward to learning about this innovative approach to reducing energy use. For a preview, go to www.lowex.net and download the LowEx Guidebook.

We are in the process of planning the details of the spring golf outing. The proceeds from the spring outing will fund the endowed scholarship that we set up last year at Old Dominion University. The endowment provides a \$2000 scholarship every year to an engineering student. The proceeds from this year and the next three spring golf outings will complete the chapter's financial commitment to the endowment. After that, the annual scholarship will be completely funded from the growth of the managed fund. We are already looking into a similar arrangement at Tidewater Community College once we have fulfilled our commitment to ODU.

We are also planning for this year's 2nd Annual Pig Roast Benefit. We are working on improving the event based on our experience from the fall. We will likely have the event earlier in the year to reduce the risk of foul weather. We are also looking at our options for a venue. Any suggestions are welcome. Anyone who would like to help with the planning or preparation should contact Rob Ainsley, the event chairman. If you do not know Rob, just ask any Board Member and we will get you in touch with him.

Speaking of volunteers, we are seeking members who want to participate in the running of our chapter. We need people to serve on committees and we are also looking for future Board Members who want to move up through the chapter ranks. Being a Board Member or a Committee Chairman is a great way to network within the HVAC community here in Tidewater. If you are interested in serving your chapter, please contact any Board Member. Our email addresses are listed in the newsletter.

I cannot overstate the fact that your chapter needs your help. The time commitment is whatever you want it to be. There are a number of activities that will improve our chapter; we just need some help to get them all done. You may have noticed that we need someone to update the chapter website as it is now way out of date. We could use help in putting together chapter communications such as this newsletter. We need folks to help with Research Promotion calling campaigns. The list goes on and on. Every little bit will help. Even if you have only an hour or two a month to donate, we would love to have your help. If you volunteer, I think that you will find the experience very rewarding. You will meet some great people and also grow as both a professional and an individual. I will be calling for volunteers at our remaining meetings. Just talk to me about what you'd like to do to help and we'll make a spot for you on the team.

Sincere Regards,

Steve Lowe, PE, ASHRAE Member Hampton Roads Chapter President





Proceeds to Fund Energy Improvements for St. Mary's Home for Disabled Children



Hankins and Anderson Consulting Engineers



Architecture & Engineering















DAMUTH







Sound Attenuating Enclosures
Commercial Ductwork
Custom Sheet Metal







Presented by the Professional Development Center of Old Dominion University, Engineering Unplugged is the premier green event and the first green conference of its kind in Hampton Roads, providing a unique opportunity to expand your understanding of Green Building, Green Manufacturing and Green Research.

Through a comprehensive curriculum designed to enlighten newcomers and engage those with an advanced understanding of green principles, Engineering Unplugged will provide you with what you need to:

- Prepare yourself for changes in building practices with cutting edge experts from LEED, ASHRAE, solar technologies, and more.
- Identify areas where unknown energy loss and consumption waste your money.
- Increase your understanding of applications for future green technologies.
- Elevate your expertise with tours, demonstrations, case studies and networking.

What Others are Saying About Engineering Unplugged

Stephen Walz, Director of the Virginia Department of Mines, Minerals and Energy, states, "This conference is in direct alignment with Governor Kaine's yearlong initiative, Renew Virginia. We applaud the leadership of the PDC in organizing this important day and the generosity of its many sponsors in making it possible. The Commonwealth is determined to remain among our nation's top sustainable energy states and home to legions of forward-thinking individuals and enterprises that believe in the power of going green."

When and Where:

Tuesday, March 17, 2009 8 a.m. to 5 p.m <u>Ted Constant Convocation Center</u> Old Dominion University, Norfolk Campus

ODU / Professional Development Center pdc@odu.edu or 757-683-5479

GARY HAYDEN, P.E. gbH Engineering P.L.L.C. Norfolk, Virginia



Gary Hayden, P.E. is the owner of gbH Engineering P.L.L.C., a consulting engineering company focused on hydronic design for HVAC systems, and Premier Comfort Systems L.L.C., a design /build contracting company for turnkey installation of hydronic systems. He also consults for various manufacturers of hydronic related equipment, assisting them with product and/or program development. Mr. Hayden received his Bachelor of Science in Mechanical Engineering from Clemson University in 1982. He is a Registered Professional Engineer in Virginia, is a past board member of the Radiant Panel Association, current Chair of ASHRAE TC6.5: Radiant and Convective Space Heating and Cooling and the Hampton Roads ASHRAE Chapter ODU Student Advisor.

Mr. Hayden's career has taken him through all aspects of engineering and implementation in the area of panel radiant cooling and heating used in conjunction with traditional air systems. He assisted with the development of two radiant heating and snow/ice melting programs for two different manufacturers. His experiences have allowed him to understand both the theory and the implementation of hydronic radiant systems and at the same time the equipment required to support these systems as well as the design of the related piping, circulators, tanks and controls. He fully understands the interdependent design protocol of using water and the advantages to zoning, minimizing the use of energy and influencing the design of the building envelope to support these technologies. Recent designs include the following systems used interdependently: radiant floor heating, chilled beams, radiant cooling, geothermal heat pumps, condensing boilers, solar panels and dedicated outside air with air cooling and heating with the use of PLC control systems. Projects are designed to earn and/or meet L.E.E.D. certifications.

From the product development, to design, to implementation, Mr. Hayden has been involved with heating and cooling of many different types of projects, both new and retrofit, such as aircraft hangars, zoos, garages, manufacturing buildings, office buildings, residential homes and one room applications. He has written numerous articles on hydronics and related topics which have been published in PM Engineer, RSES Journal, HPAC, Contracting Business, Contractor, ACHR News, and the RPA Newsletter. He is a member of ASHRAE and ASME.

LECTURE TOPICS:

LowEx

LowEx is hydronic system design using the lowest water temperature for heating and the highest water temperature for cooling. Interdependent design of Hydronic Systems with Radiant Panels, Chilled Beams and Air Handlers with Chillers, Condensing Boilers, and Solar Thermal with PLC controls. Implementation begins with the building envelope and ends with minimizing available energy. The design process works best with integrated design concepts that emphasize the comfort of the buildings occupants while conserving energy.



c/o EnviroMechanical Sales, Inc. 1500 Breezeport Way Suffolk, VA 23435

ASHRAE MONITOR

	Hampton Roads Chapter , ASHRAE MEETING (757) 483.8916
	I Will Be Attending the meeting on Wednesday, March 18th, 2009 My e-mail address is
care of Email Deadli	reting reservations please fax this page to Hampton Roads Chapter, ASHRAE, Rob Ainsley at fax number 757.483.8916 or call 757.483.1390. The for reservations and cancellations: Tuesday, March 17th at Noon. In the shows will be billed to the appropriate individuals.
Cost:	Members \$15.00, Guests \$20.00 and Students – \$10.00
	This FAX will confirm my reservation for the luncheon. This FAX will also confirm the reservations for the following members/guests indicated below:
1	3
2	4

ASHRAE MONITOR



Tuesday March 17th, 2009

8:00 am - 5:00 pm

Ted Constant Convocation
Center

http://www.vatpdc.com/pdc/engineering_unplugged

Committee Chairs

Membership:

Douglas Henderson **Student Activities**:

Gary Hayden

Student Advisor (ODU):

Gary Hayden

Board of Governors:

Joe Hahn, Ben Sablan, Douglas Henderson **Historian**: Joe Hahn **Refrigeration**: Open

Research Promotion: Forrest Morgan

Tech Transfer: Ben Sablan

AECOM

448 Viking Drive Virginia Beach, Virginia 23452



ASHRAE

BACnet Bill Swan

February 12, 2009

LowEx Gary Hayden

March 18, 2009

Spring Golf Outing

TBD

May 21, 2009

Fall Pig Roast TBD

National Engineers Week 2009

February 15-21

ASHRAE Satellite Broadcast

> Damuth Trane April 22, 2009

Tides Baseball Picnic

Details pending