ASHRAE

www.daytonashrae.org

ISSUE III | 2022

CURRENT OFFICERS

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Неару

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SECRETARY Zak Schultz zak.schultz@ferguson.com

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Us on Facebook

April 13 Tour/Meeting!!!

FR

Main Presentation: Dayton ASHARE Technical Tour Of Gem City Market *****IN PERSON ONLY****

Theme: STUDENT NIGHT!!

Technical Tour Highlights: ⇒Scroll Booster Architecture at the Gem City Store to demonstrate: ⇒A Low Pressure Refrigerant for both MT and LT Loa

- ⇒A Low Pressure Refrigerant for both MT and LT Loads. Gem City is using R513A (R134a like), the only store we know of.
- ⇒A store running <650 GWP, with the potential to go <10 GWP
- ⇒Maintain circuits below 200lbs
- \Rightarrow **5-10% efficiency boost**

Address: 324 Salem Avenue, Dayton, OH 45406 (Corner of Salem and Superior)

> Social Hour: 5:00pm to 5:30pm Tour: 5:30pm to 6:00 pm Dinner: 6:00pm to 7:00pm



Please email Vincent Caudill at vcaudill@ecomfortohio.com or by calling 740-971-7795 to <u>sign up by April 8th</u>. Please remember that this is an In-person event!

FROM THE PRESIDENT

Thank you to everyone that joined us for our March meeting. James Dean, Todd Fowl, and Erdem Kokgil with Oxygen 8 gave their presentation on Passive House and Ventilation Strategies for Healthy and Energy Efficient Buildings. This was also a joint AIA meeting so thank you to all of the AIA members that were able to attend.

Please join us on April 13th for our Chapter Meeting being held at Gem City Market. This is an in person only event that will include a technical tour of Gem City Market. This is also Student night so we hope to see everyone there.

Don't forget to sign up your foursome for our upcoming ASHRAE Golf Scramble. Our 2022 Golf Scramble is being held at Pipestone Golf Club on May 27th. Please register your foursome at Day-tonashraegolf2022.eventbrite.com.

We are sad to share that Bob Patterson passed away on Monday, March 7, 2022. Bob was a past president of the Dayton ASHRAE chapter and a member of the Dayton Engineers Club for over 60 years.

https://www.legacy.com/us/obituaries/dayton/name/john-patterson-obituary?id=33579901

Thank you, Matt Dill-President, Dayton ASHRAE

Upcoming Events

Mar 9th ASHRAE Chapter Mtg. 11:30 AM, Hybrid Meeting

Mar 16th Board of Governors 8:00 AM, Virtual Meeting

April 13th ASHRAE Chapter Mtg. 5:00pm, Tech. Tour!!!

April 20 Board of Governors 8:00 AM, Virtual Meeting

See Additional Events & Volunteer Opportunities Here

(1966-1967)

President:

John R. Patterson

Trane Company

Vice Pres: Secretary: Treasurer: BOD: Gifford Solem Norman Pleimann Thomas Ferdelman

Cecil York

Johnson Service Hughes Bechtol Ahart & Assoc.

Hughes Bechtol

Regional Director: Don Phillips

Meetings were held at the Dayton Engineering Club. CRC held in Akron, Ohio.

1965-1966: The chapter had \$8 when started. The Engineers Club did not have a liquor license, so Glen Black offered his to the meetings and could only be used at the Engineer's Club.

Committee Chairs

MEMBERSHIP Vincent Caudill

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HISTORY Bryan Schenck

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CTTC

Evan Nutt ENutt@elitaire.com ElitAire

GOVERNMENT AFFAIRS Paul Hawkins

Paul.Hawkins@waibelenergysystems.com Waibel Energy Systems

> YEA (Chair) Phillip Reid PAReid@heapy.com Heapy

Board of Governors

Rick Pavlak Heapy

Larraine Kapka Sinclair College

> Evan Nutt ElitAire

MEMBERSHIP

New Members

The Dayton Chapter is happy to welcome its newest members. If you see them please give them a warm welcome!



February:

Kort Kugel Richard Kramer Carl Christy

Do you know a colleague that would benefit from joining ASHRAE?

You can go to <u>http://web.ashrae.org/connect_a_colleague/</u> and quickly sign up for ASHRAE to send an email to ask them to sign up on your behalf.

Membership Recognition

We would like to recognize the following members who have been with ASHRAE for the following years! Thank you for all your contributions to the field!

20Years:Brian Arbgast10 Years:Doug Thoma & Eric Heinrich5 Years:Stephen Ray, Brian Turner
& Amanda Alvarado

Membership Promotion Committee

Looking for a way to get involved with your local ASHRAE chapter and meet new people? The membership promotion committee is looking for volunteers to join the committee. The committee's primary responsibility is to recruit new members and retain existing members. If you are interested in serving please contact **Vincent Caudill** at **vcaudill@ecomfortohio.com** or by calling 513-512-5359.

Membership Application Here

Spring is here! We are working on the final push to meet our goals for ASHRAE Research. To date, we are at 37% of our goal for the fiscal 2021-22 ASHRAE year. The campaign ends with end of the ASHRAE year on June 30, 2022. If you have not donated, now is the time to do so in order to receive the recognition that you deserve as a supporter of ASHRAE. Please consider donating to ASHRAE RP / Education / Scholarships. See the link BELOW to donate today!

Please note again that in order to be recognized with a commemorative coin, and have your name published in the ASHRAE Journal, the minimum donation is \$150 for individuals and \$500 for Corporate Donors .

% to GOAL: 37%

Partner Level

Silver Level

Waibel Energy Russell Marcks Dayton ASHARE Chapter

Honor Roll

\$ 19,680

<u>\$ 7,325</u> \$ 12.355

Steve Meier Tom Mastbaum Evan Nutt Brian Turner Larraine Kapka Trent Hayden Vince Caudill Kyle Schroeder Bryan Schenck Zak Shultz Jennifer Eller Matt Dill 100% 90% 80% 170% 50% 140% 20% 10%

> <u>Bronze Level</u> Uptime Solutions

Honorable Mention

Keith Strayer Jeremy Fauber

Thanks for all your help and support. If you would like to donate NOW simply click this link:



DONATE NOW

And make your donation to help ASHRAE in its Research Efforts. Thank you so much!!





It's that time of year again to get your foursomes together for the Dayton ASHRAE Golf Scramble!

We will be returning to PipeStone on May 27th for a great start to your Memorial Day weekend. Registration and payments will be through Eventbrite. Please find the URL below.

If you have any questions or would like to pursue sponsorship opportunities, please reach out to Mike Weisman at mweisman@elitaire.com. We are looking forward to seeing you at the event!

THE ANNUAL DAYTON ASHRAE GOLF SCRAMBLE

May 27, 2022 PipeStone Golf Club Shotgun Start at 9:00 am

Drink Tickets Sponsored by Trane

Mulligans Sponsored by Point 2 Point Systems



Systems

itleist



Bloody Mary Bar and Lunch Sponsored by SolidBlend Technologies

Register at Daytonashraegolf2022.eventbrite.com EMAIL QUESTIONS TO MWEISMAN@ELITAIRE.COM





Student Scholarship Winners for 2022

Keller Memorial Scholarship: \$1500 goes to...... Abigail Almanrode whom is a Senior at UD ME and Spanish

Waibel Energy Systems Scholarship: \$1000, goes to... Jacob Pentasuglio whom is a Sophomore ME Major



Dayton Chapter Scholarship: \$1000 goes to..... Addison Grigsby whom is a Junior ME with concentration in Energy Systems



Why YEA (Young Engineers in ASHRAE) ?

YEA is for young professional ASHRAE members, 35 years old and younger, by identifying, creating, and supporting activities and services focused on their needs. A primary focus of the committee will be attracting and developing YEA members for future membership and leadership in ASHRAE and the HVAC&R industry.

For the Dayton Chapter we are looking for your feedback on a future YEA Networking Event. Please see the link below to fill out a survey.

https://www.surveymonkey.com/r/5VNX8PQ

Thanks for your Time and look forward to seeing you soon! Sincerely,

Phil Reid YEA Chair



ASHRAE Send Letter to Congress on the Importance of Standards Development in the "Innovation Bill"

The America COMPETES Act of 2022 (H.R. 4521) and the United States Innovation and Competition Act of 2021 (S. 1260) are separate bills addressing investment in innovation in the U.S via manufacturing and scientific research. On February 4, 2022, the House passed the COMPETES Act, and the Senate voted on March 28, 2022, to pass USICA. In the coming weeks, the House and Senate will meet in conference to resolve differences and find agreement before sending the bill to President Biden. ASHRAE's letter educates committee members on the importance of standards development, and made them aware of provisions in the COMPETES Act that would assist ASHRAE and our members in the work we do for the public. The provisions include:

- Sec. 10245. International Standards Development
- Sec. 10245(d) Reaffirming the Importance of Voluntary Consensus-based International Standards Bodies
- Sec. 10248. Standards Development Organization Grant

At IEA Ministerial Meeting, Global Energy Leaders Vow to Strengthen Energy Security and Accelerate Clean Energy Transitions

Global energy leaders met in Paris on March 23-24 for the <u>International Energy Agency's 2022</u> <u>Ministerial Meeting</u>, sending a message of unity on the need to strengthen energy security, reduce market volatility, and accelerate clean energy transitions worldwide. Chaired by U.S. Secretary of Energy Jennifer M. Granholm, the two-day meeting of energy and climate ministers representing more than 40 governments included discussions on critical minerals needed for clean energy technologies and how to accelerate the deployment of low emissions technologies to emerging economies. To read more, please visit <u>here.</u>

EPA Opens "Clean Air in Buildings Challenge" to Improve IAQ

On March 17, 2022, the U.S. Environmental Protection Agency (EPA) announced the "Clean Air in Buildings Challenge," a new part of President Biden's National COVID-19 Preparedness Plan. The initiative will assist building owners and operators in reducing risks from airborne viruses and other contaminants. The recommendations in the Clean Air in Buildings Challenge include creating a clean indoor action plan; optimizing fresh air ventilation; enhancing air filtration and cleaning; and conducting community engagement, communication, and education. Find more information about the guidance <u>here.</u>



Europe's Heat Pump Demand Highlights Bottlenecks in Manufacturing, Skilled-Labor

Rising gas prices have created an increased demand for heat pumps across Europe, exposing a range of bottlenecks limiting industry's ability to deliver, including a shortage of skilled labor, as well as the need to simultaneously insulate buildings to ensure maximum efficiency. "The UK have very ambitious targets at 600,000 heat pumps per year by 2028," says Jan Rosenow, director of European programs at the Regulatory Assistance Project (RAP), a nonprofit group. <u>Read more</u>

Saving Energy: Improving the Performance of Steam Turbine Chiller Plants

By Charles C. Copeland, P.E., Fellow/Life Member ASHRAE

Retrofitting older multistage steam turbines with state-of-the-art controls, single-stage compressors and other technologies can improve the performance of existing steam turbines, often at a fraction of new chiller installation costs. This article will focus on advanced controls, replacement drives and other upgrades that improve chiller operation. **Download here**

Johnson Controls Prepares Channel Partners for DOE 2023 Efficiency Regulations

The U.S. Department of Energy (DOE) has issued a new set of appliance standards with new minimum heating and cooling efficiency requirements for residential and commercial central air conditioners, heat pumps and commercial gas furnaces to take place in 2023. Additionally, new test procedures will take effect, impacting how systems are tested and rated. To mitigate this change, Johnson Controls is preparing distributors and contractors with in-depth resources, ongoing webinars and in-person training on the DOE 2023 efficiency transition. <u>Read more</u>

Do you have a budding Engineer in the family, or would you like a good tool to introduce Engineering to other youngsters? Here a book for you. Simply click on the picture below to buy a PDF or hard copy for your use to reach the young minds of today.



Join Lucy on an Engineering Adventure!

Grab your hard hats and let's go on Lucy's Engineering Adventure, a new children's book from ASHRAE! With its rhymes and beautiful illustrations, this book is a great introduction to building and HVAC engineering through a young girl's visit to an unfinished building. Follow along as Lucy goes to work with her father and learns how beams and columns, electrical systems, and HVAC ducts work like the human body to make buildings what they are. Read more...



HVAC Design Track: In Person Training is Back!

Choose the HVAC Design Level I & II training that best fits your needs. <u>Check out the schedule</u> through June 2022.

More Info

Level I: Essentials

Level II: Applications 28-30 Mar. 2022 | 12:30 p.m.–4:30 p.m. (Virtual)

4-6 Apr. 2022 | 8:00 a.m.-5:00 p.m. (Live in Denver)

18-22 Apr. 2022 | 8:00 a.m.–12:00 p.m. (Virtual) 25-27 Apr. 2022 | 12:30 p.m.-4:30

7-8 Apr. 2022 | 8:00 a.m.-5:00



<u>Lessons Learned: What I Wish I'd Known</u> <u>When I Became an Engineer</u>

p.m. (Live in Denver)

p.m. (Virtual)

"I think just being visible and accessible is the key to mentorship. When you open yourself up to the opportunity—whether you're giving it or receiving it—then friendships are formed and bonds are made," said Jennifer Leach, P.E., Member ASHRAE. Jennifer and Katherine Hammack, Fellow ASHRAE, talk mentorship, lessons learned from past experiences and how engineers should nurture their curiosity on this episode of *ASHRAE Journal* Podcast.

Guests, left, Katherine Hammack and Jennifer Leach

National Healthy Schools Summit – Climate, Children, and Schools

Join the Healthy Schools Network's <u>National Healthy Schools Summit 2022</u>: COVID, Climate, Children & Schools that will include several sessions, including one on the decarbonization of schools with **ASHRAE panelists Don Colliver**, ASHRAE Presidential Member and Co-Chair of ASHRAE's Task Force for Building Decarbonization, and **Corey Metzger**, Schools Team Lead of ASHRAE's Epidemic Task Force. The summit will be held virtually, and registration is free.

When: April 5-6, 12:30 PM - 4:30 PM EDT

Register here, and view the agenda here. Find out more about the Healthy Schools Network.



Upcoming ASHRAE Online Training !

More Info

6-8 April | 12:00 p.m. - 4:30 p.m. ET NEW! Soft Skills Essentials for Engineers

In this highly interactive 3-day course, problems of poor communication and engagement, lack of team collaboration, conflicts, inefficient meetings, unengaging presentations, poor management performance, decreased productivity, difficulty to retain talent and overwhelmed workload will be addressed. Learn More>

6 April | 11:00 a.m. - 2:00 p.m. ET IAQ Best Practices for Design, Construction and Commissioning

This course points to the part of the project process that are especially vulnerable to risk. There are decisions made in the project process related to building envelope, building HVAC, and building operations and maintenance that affect the long-term health of the building and its occupants. Knowledge conveyed is based upon ASHRAE's *Indoor Air Quality Guide*. Learn More>

14 April | 10:00 a.m. - 1:00 p.m. ET

Labortory Exhaust Stacks: Safe and Energy-Efficient Design

This course provides designers and operators of laboratories with wet lab exhaust systems with the proper methodology to ensure safe systems operation. *Laboratory Exhaust Stacks: Safe and Energy-Efficient Design* walks students through the entire design process. Training topics include how to properly locate air intakes and exhaust stacks and the various methods for applying variable-air-volume (VAV) control to minimize energy usage while avoiding adversely impacting the air quality.

Learn More>

27-28 April | 11:00 a.m. - 2:00 p.m. ET Commercial Building Energy Audits

This seminar provides guidance on how to perform commercial building energy audits. Best practices and other information relevant for building owners, managers, and government entities are covered. The seminar includes a summary of materials essential for performing ASHRAE Level 1, 2, and 3 audits, time-saving tips for every auditor, how to hire an auditor, what to ask for in a comprehensive audit report, and how to build a successful energy efficiency retrofit team. Learn More>

10-11 May | 11:00 a.m. - 2:00 p.m. ET

Healthcare Facilities: Best Practices for HVAC Design and Operation

This seminar introduces many unique and up-to-date healthcare design considerations and applications. Common medical terminology are introduced, and terminology differences between the medical and e ngineering fields are examined. Infection particles and their transport mechanisms are covered, followed by infection control methods. The second half of the course focuses on air-distribution designs for surgical and patient rooms. Various control and energy efficiency techniques for cooling and heating plants are presented along with O&M and other commissioning topics. Smoke control and life safety best practices and application issues finish the course. Learn More>