ASHRAE

WWW.DAYTONASHRAE.ORG

ISSUE X | 2022

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SECRETARY Kort Kugel

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October 10th Hybrid Meeting!!!

Chapter meeting is on Monday, and you have a choice to join in person at The Engineers Club (110 E Monument) or virtual!

Main Presentation: Design Build— Executing the Project (Based on ASHRAE Design Build Survival Guide) Presenter: E. Mitchell Swann, P.E. Managing Director for Resolution Mgt. Consultants



Social Hour: 5:30 pm to 5:55 pm Chapter Business/Instructions: 5:55 pm to 6 pm Main Presentation: 6:00 pm

Topic: Long ago in a land not too far away, TC 1.7 published the ASHRAE Survival Guide to Design-Build. Well, since that time, the Design Build (DB) delivery method has exploded. The TC has listened to members in Forums and meetings as they've asked questions and shared their joys and sorrows with DB. This program takes a look a Design-Build as an execution system and a provides an overview of the Design-Build Survival Guide. The program will:

- Identify key elements of the Design-Build execution strategy
- Present project risk considerations in Design-Build execution.
- Present discuss selected business considerations in Design-Build execution.
 Present emerging industry trends and technologies and their impact on Design-Build projects and practitioners.

Presentor Bio: Mr. Swann has over 30 years of experience in the areas of engineering design, project management and consulting for a wide array of clients in diverse industries in the USA and abroad. Mr. Swann's career has included engineering design of HVAC, Piping and Control systems; Project & Department Management, Commissioning, Forensic Engineering & Expert Witness engagements; Dispute Resolution and Project Execution Consulting. He has worked for clients on commercial, institutional and high-tech\industrial projects. He has worked in A/E, E\A and Design-Build firms and Construction Management and as liaison between the design and construction team. (More included on invite to come)

Please email Vincent Caudill at vcaudill@ecomfortohio.com or by calling 740-971-7795 to <u>sign up by October 6th</u>. Please indicate if you are joining in person or by zoom. The meeting information will be sent out closer to the meeting date.

FROM THE PRESIDENT

Monthly Meetings are back! We are looking forward to another interesting year of speakers and other programs that come up for the Dayton ASHRAE Chapter.

This month we having a Monday evening hybrid meeting. Please welcome E. Mitchell Swann, P.E. He will be talking on "Design Build—Executing the Project". He has over 30 year experience and has worked with all kinds of clients and other firms. With his background and experience this should be a very interesting topic on how Design build has exploded and the ups and downs that have come with surviving this ever changing world.

Please make sure to see the main page for details on how to sign up whether virtual or in-person. We look forward to seeing you all there in some capacity.

Thank you, Matt Dill-President, Dayton ASHRAE

Upcoming Events

Oct. 10th ASHRAE Chapter Mtg. 5:30 PM, Hybrid Meeting

Oct 19th Board of Governors 8:00 AM, Virtual Meeting

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

See Additional Events & Volunteer Opportunities Here

<u>CHAPTER HISTOF</u> (1967–1968)

President:

Vice Pres:

Secretary:

Treasurer:

BOD:

Gifford Solem

Norman Pleimann

Thomas Ferdelman

Glenn Black

Johm Patterson

Johnson Service

Hughes Bechtol Ahart & Assoc. Johnson Service

Trane Company

Regional Director: Don Phillips

Meetings were held at the Dayton Engineering Club. CRC held in Indianapolis, Indiana.

Committee Chairs

MEMBERSHIP Vincent Caudill

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Board of Governors

Rick Pavlak Heapy

Larraine Kapka Sinclair College

Jennifer Eller Heapy

MEMBERSHIP

New Members

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

September: Matthew Mills



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!

<u>5 Year:</u> Jason Warner <u>15 Years:</u> Lawrence Sherman 20 Years: Dr. Andrew Chiasson

25 Years: Theresa Root

ANNINERSARY

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.

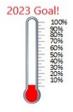
Membership Application Here

Thank you to all those who helped us meet our goals for the 21-22 RP campaign. At this time, our 22-23 goals have not officially been set. Our expectation is that our goal will be close to \$20,000 again this year. For those looking to kick off the next 22-23 season, 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 .

2021 Goal =	\$ 19,680
$\mathbf{YTD} =$	<u>\$ 150</u>
To go =	\$ 19,530

% to GOAL:



Partner Level

Honor Roll

Steve Meier

1%

Bronze Level

Silver Level

Honorable Mention

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!!





ASHRAE Job Board

Design Engineer G&D Chillers; Eugene, Ore.	Electrical Designer-Laser Systems Engineering and
Department Chair Position Michigan Tech University;	Operations Lawrence Livermore National Laboratory;
Houghton, Mich.	Livermore, Calif.
Quality Engineer Andersen Corporation; Bayport,	Electrical Engineer Vision Systems Johnson & Johnson;
Minn.	Redwood City, Calif.
HVAC Service Technician JLL; Oklahoma City, Okla.	Mechanical and Electrical Engineer - Harbour
Electrical Engineering - Associate Design Engineer I	Exchange Square, London Equinix; London, U.K.
(new grad) Fluor Corporation; Sugar Land, Texas	Electrical Installer II - Smart Buildings
Principle Electrical Engineer Saint-Gobain; Oxford,	(Journeyman/Electrician) Siemens; Portland, Ore.
N.C.	

View All



Expand your understanding of the fundamental and technical aspects needed to design, maintain, and operate new and existing HVAC systems.

ASHRAE's HVAC Design: Level I – Essentials

Training that provides participants with practical skills and knowledge to design and maintain HVAC systems that can be put to immediate use.

ASHRAE's HVAC Design: Level II – Applications

Training that provides practicing engineers and designers with advanced information to HVAC systems design procedures for a better understanding of system options to save energy.

Bringing sustainable refrigeration to US stores

USA: A free five-day virtual event in October will highlight sustainable refrigeration solutions in the wake of the implementation of the US AIM Act to phase down HFC refrigerants.

The Sustainable Refrigeration Summit, taking place from 24-28 October (08.00 to 17.00 PST), is organised and hosted by the North American Sustainable Refrigeration Council (NASRC). It will feature the latest regulatory and industry trends, natural technologies, and the benefits and challenges of moving towards sustainable solutions. Attendees will hear directly from the supermarkets, industry experts, and policymakers shaping the future of sustainable refrigeration.

Behind in the race to lower GWP refrigerants, US supermarkets are under pressure to transition from high global warming HFCs to climate-friendly alternatives. Natural refrigerants, including ammonia, CO2, and propane, are considered future-proof from a regulatory standpoint but a unique set of market barriers have prevented widespread adoption in US supermarkets.

"This is one of the rare climate issues where the technology solution exists today," commented NASRC executive director Danielle Wright. "To overcome the challenges and make meaningful progress, we need all hands on deck, and that's what this summit is designed to do." Registration is now open. Further details <u>here</u>.

ASHRAE Joins Letter of Support for e-Access Act

ASHRAE joined a letter of support to the U.S. House Energy and Commerce Committee in support of the Access to Consumer Energy Information Act (e-Access Act). Introduced by Representative Peter Welch, the e-Access act ensures consumers have access to their historical and existing gas and electric consumption. Access to reliable, accurate, and near-real-time energy consumption data is vital to decarbonize buildings. The data can be used for energy management information systems (EMIS), automated building system optimization and other technologies associated with building decarbonization – load shifting, demand response, energy efficiency, grid flexibility and consumer habits. Consumers will also benefit from lower energy costs if this data is used to implement techniques that reduce peak power demand. A copy of the letter can be found <u>here</u>.

The Eiffel Tower Will Turn the Lights Off Earlier

To fight excess energy demand and potentially rationing blackouts, the Eiffel Tower will turn off its iconic lights around midnight instead of 1 am. The effort shows the true degree of stress put on the power grid by the Russian invasion of Ukraine. While the gesture is largely symbolic, Paris will also be turning off the lights at other government buildings at 10 pm and may potentially extend the conservation measure to other monuments such as the Pantheon and the Arc de Triomphe. For the winter months, Paris also plans to lower the temperature in public buildings by 1 degree Celsius during working hours and 3 degrees Celsius on weekends.



South Africa Forced into Nationwide Blackouts

The state-owned power utility in South Africa, Eskom, is implementing a rolling blackout schedule to respond to save electricity and ease grid demand. Eskom produces almost 95 percent of South Africa's electricity, sourced from aging and poorly maintained coal-fired power stations. The black-outs come with just a few hours' notice – they first required businesses and homes to go without electricity for more than 10 hours a day, which has since been reduced to 8 hours a day. Eskom has utilized 2,000 diesel-powered generators while it bides time until it can procure 1,000 megawatts of electricity from renewable energy sources.

U.K. and Czech Governments Planning on Capping Energy Bills

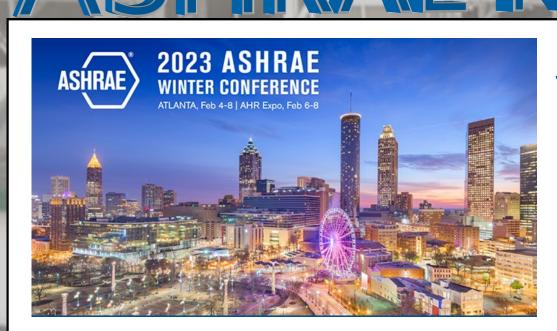
Winter can be a heavy burden on both the electric grid and on consumers finances – governments are looking to provide aid by capping energy costs. In the U.K., the government will pay for nearly half of all business energy bills for 6 months (starting October 1st) projected to cost between \$11 billion and \$22.6 billion. Consumers previously saw a similar benefit through a twoyear plan that caps average household bills for heating and electricity at \$2,828 per year. The Czech government will be providing up \$1.2 billion to help businesses survive the high energy costs spurred by Russia's invasion of Ukraine. The aid is expected to be directed at larger, highconsumption businesses. Individual companies will be able to receive up to \$8.1 million.

DoD Institutes New Climate Drill for Blackout Responses

The Defense Department (DoD) and each of its military departments are now required to conduct at least five blackout scenarios to prepare for increased power outages from climate change. The "energy resilience readiness exercises" have been taking place at a few bases over the last two years, but now these drills are mandatory across the Defense Department. The exercises test readiness and response to power outages at military bases, simulating blackouts from natural disasters or other events. No warning is given before the power outage and some of the scenarios have lasted over 12 hours.

The U.S. Department of Commerce Releases CHIPS Act Implementation Strategy

On July 28th, Congress passed the Creating Helpful Incentives to Produce Semiconductors (CHIPS) and Science Act (HR 4346). The legislation provided a \$50 billion boost to domestic semiconductor manufacturing to help address supply chain issues with microchips. On September 6th, the U.S. Department of Commerce released their implementation strategy for applying the CHIPS Act. The focus of the implementation strategy includes investing \$28 billion for the stable, domestic production of semiconductors, \$11 billion in the research and development of new technologies, and create good-paying manufacturing jobs, and invest. The executive summary of the strategy can be found <u>here</u>, and the complete document can be found <u>here</u>.



Join us in Atlanta, Feb. 4-8, for the 2023 ASHRAE Winter Conference and co-sponsored AHR Expo.

Lock in Early Bird rates by registering for the conference by Oct. 30.

Learn More & Register

Waste Data Center Heat Could Warm Up Dublin Homes

Buildings that house data center hardware and software required to run cloud applications use as much as 1% to 2% of global energy demand. This figure is expected to increase to 20% or more by 2025, even after accounting for improvements in energy efficiency. In Ireland, an energy efficiency agency is partnering with an Amazon data center to capture and use the waste heat the center emits to heat homes and council buildings. The initiative is part of the <u>Tallaght District Heating Scheme</u>, the first large-scale district heating network of its kind in Ireland. **Read more**



Hydrogel-Glass Design for Energy Saving in Buildings

Energy use in buildings contributes to over 40% of the world's total energy consumption, with traditional glass windows being the least energy-efficient components in buildings. In the summer, the near-infrared sunlight transmitted through windows produces undesired heating. In turn, the high reflection of mid-infrared limits heats rejection from the building. To counter this, researchers at Wuhan University in China have proposed a novel design of hydrogel-glass, which consists of a layer of hydrogel and a layer of normal glass that can selectively block heat from the sun without blocking its light. <u>Read more</u>



Integrating a Snow / Ice Melting System into your BACnet BAS Facility

This webinar will cover how commercial snow melting systems can easily be integrated into your new or existing BACnet BAS installation. It is important to understand how to specify control strategies, ensuring safe and economical operation of the snow / ice melting system. The method of operation is dependent on the application, which affects the design and the yearly operating costs. Properly designed, a snow melting system provides many positive attributes.

Available now. Click here for more info.



See All



HVAC Design Training: Tools for High-Performance Building Design



Level I: Essentials

17-21 Oct. 2022 | 12:30 p.m.–4:30 p.m. (Virtual)

31 Oct-2 Nov. 2022 | 8:00 a.m.-5:00 p.m. (Live in Atlanta)

7-11 Nov. 2022 | 8:00 a.m.–12:00 p.m. (Virtual)

14-16 Nov. 2022 | 8:00 a.m.-5:00 p.m. (Live in Austin)

5-9 Dec. 2022 | 8:00 a.m.-12:00 p.m. (Virtual)

(All virtual training shown in Eastern Time.)

Level II: Applications

26-28 Oct. 2022 | 12:30 p.m.-4:30 p.m.. (Virtual)

3-4 Nov. 2022 | 8:00 a.m.–5:00 p.m. (Live in Atlanta)

14-16 Nov. 2022 | 8:00 a.m.–12:00 p.m. (Virtual)

17-18 Nov. 2022 | 8:00 a.m.–5:00 p.m. (Live in Austin)

12-14 Dec. 2022 | 8:00 a.m.-12:00 p.m. (Virtual)

Register Online