



ISSUE I | 2021

DAYTON CHAPTER

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Find Us on

LinkedIn

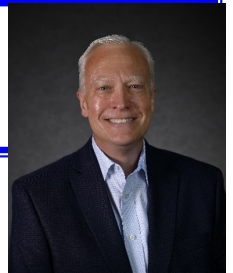
&

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JANUARY 11TH MEETING

Main Presentation: ASHRAE Guideline 36
Presenter: Ken Gilbert, Regional Tech.
Consultant for Automated Logic



This presentation will provide an introduction to “High-Performance Sequences of Operation for HVAC Systems” as described in ASHRAE Guideline 36-2018. This guideline defines best-in-class sequences of operation for HVAC systems that help maximize energy efficiency, improve occupant comfort, and provide real-time fault detection and diagnostics (FDD).

Learning Objectives:

- What are high performance sequences of operation for HVAC systems?
- What is ASHRAE Guideline 36?
- What are the benefits of these high performance sequences of operation?
- How to specify high performance sequences of operation for ASHRAE Guideline 36
The future of ASHRAE Guideline 36

Ken Gilbert is a Regional Technical Consultant for Automated Logic, supporting design engineers and consultants in the Atlanta area. Ken brings significant industry experience to ALC having served with The Trane Company and Honeywell International in a variety of sales, engineering, and consultative roles. Ken graduated from the Georgia Institute of Technology with a Bachelor of Science degree in Industrial Management. Ken is a LEED AP and holds a state of Georgia general contracting license. Ken and his family live in the Atlanta area.

Social Hour: 11:30 AM to 11:45 AM

Chapter Business/Instructions: 11:45 AM—Noon

Main Presentation: Noon (Virtual Meeting, see below)

Join Zoom Meeting

Zoom Meeting Link: <https://us02web.zoom.us/j/86773789743?pwd=L2VDU1grOG1FZmdENForSm90dHh2dz09>

Meeting ID: 867 7378 9743
Passcode: 422510

One tap mobile
+13017158592,,86773789743#,,,,*422510# US (Washington D.C)
+13126266799,,86773789743#,,,,*422510# US (Chicago)

Find your local number: <https://us02web.zoom.us/j/86773789743?pwd=L2VDU1grOG1FZmdENForSm90dHh2dz09>

****Please login/display your first and last name when joining the meeting to help with attendance and sending out PDH certificates.**

FROM THE PRESIDENT

I hope everyone was able to enjoy their Christmas and New Years holiday season. Thank you to everyone who joined us for our December meeting with Chris Willemsen. Chris's presentation was focused on the Application Basics of ECM Technology.

Typically, we would be preparing for our annual Holiday Party, but unfortunately, that is not the case this year. We are hopeful, that we can host a social event later in the year when conditions are appropriate. In place of the party, we have added a technical session on January 11th 2021. Please join us to see Ken Gilbert present on ASHRAE Guideline 36. The presentation will provide an introduction to "High-Performance Sequences of Operation for HVAC Systems" as described in ASHRAE Guideline 36-2018.

Finally, keep in mind that we have our **2021 Golf Outing** scheduled for May 28th at Pipestone Golf Course. We will distribute the event website in the very near future.

Brian Turner - President, Dayton ASHRAE

CHAPTER HISTORY (1995-1996)

Upcoming Events

January 11th

ASHRAE Chapter Mtg.
11:30 AM, Virtual Meeting

January 20th

Board of Governors
8:00 AM, Virtual Meeting

February 8th

ASHRAE Chapter Mtg.
11:30 AM, Virtual Meeting

February 17th

Board of Governors
8:00 AM, Virtual Meeting

March 8th

ASHRAE Chapter Mtg.
11:30 AM, Virtual Meeting

[See Additional](#)

[Events & Volunteer](#)

[Opportunities Here](#)

President:	John Mosgo	Siebe Barber Colman
President Elect:	Dennis Lewis	EG&G Mound
Vice Pres.:	Dave Deger	Air Control Equipment
Secretary:	Dave Patterson	Patterson Equipment Co.
Treasurer:	Jim Hocker	Stan & Assoc.
Historian.:	Phil Van Styn	Heapy Engineering
Education:	Russ Marcks	Sinclair Community Col.
RP:	Mark Steiner	Barge, Waggoner, Sumner, Cannon
Membership:	Joe Ferdelman	Heapy Engineering
News Letter:	John Mosgo	Siebe Barber Colman

Meetings were held at the Dayton Engineers Club.

CRC held in Grand Rapids, MI.

Reginal Director: Eric Schwenker

Plant Tour: DP&L Hutchings Power Station

Committee Chairs

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Board of Governors

Jeremy Fauber

Heapy

Rick Pavlak

Heapy

Lorraine Kapka

Sinclair College

MEMBERSHIP

New Members

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

December

No new Members

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

You can go to http://web.ashrae.org/connect_a_colleague/ 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!

20 Years

Gary Eodice

60 Years

Thomas Kunas



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 Jeremy Fauber at jpfauber@heapy.com. Or by calling 937-224-0861

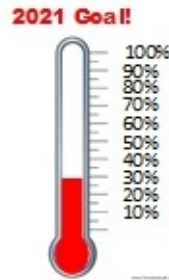
Membership Application Here

ASHRAE RP

Happy New Year to all!! We have hit our target “Calendar Year End goal of 30% of our goal. Thanks so much for your generosity in what has been a very difficult year. As we have pointed out in this section of the Newsletter ASHRAE is out on the front lines working to combat transmission of COVID as well as other airborne and waterborne diseases. ASHRAE Research is a very important component of this and your donations go a long way in funding research aimed at combating disease. ASHRAE Research also helps to finance research aimed at energy efficiency, and innovation in the fields of HVCR, and health.

IMPORTANT: One change that you need to know about: To achieve “Honor Roll” status this year the minimum donation level is **\$150**. Honor Roll means that your name is published in the ASHRAE Journal, and you receive a Commemorative Gold Coin of a Refrigeration or HVAC Pioneer. We appreciate all donations and a donor your name will appear as a donor in our local newsletter. But if you want to keep your “Coin Collection” going and be “Published,” the NEW MINIMUM is \$150.

2021 Goal = \$ 19,680
YTD = \$ 5,500
To go = \$ 14,180



Partner Level

Your Company Here

Honor Roll

Lorraine Kapka
Steve Meier
Tom Mastbaum
Evan Nutt
Trent Hayden
Nathan Lammers
Brian Shenck
Brian Turner
Kyle Schroeder
Jennifer Eller

Honorable Mention

Joseph Ferdelman
Jeff Turner
Jeremy Fauber
Thomas Monnig
Mike Weisman
Matt Dill

Silver Level

Dayton ASHRAE Chapter

Bronze Level

Uptime Solutions, Inc.



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 News

History for 70 year anniversary for Dayton ASHRAE

The 2010s continued the growth and revitalization of the Dayton chapter. Highlights include handing out the first Dayton ASHRAE scholarship after the groundwork had been laid in 2009 and early 2010 by forming a committee and approving bylaws for its operation. Ultimately three recent past presidents, Lorraine Kapka, Jeremy Fauber, and Rick Pavlak, continued their active involvement in the Dayton ASHRAE chapter by beginning to serve as members at large of the Board of governors helping to provide long term stability and carrying institutional memory about past decisions within the chapter. The combination of young individuals accepting leadership roles as well as some Region V financial support the Dayton ASHRAE chapter began to sponsor members of the board to attend Young Engineers of ASHRAE leadership weekends which has benefited the chapter and beginning with Steve Meier led to a string of several Dayton ASHRAE presidents that were all Young Engineers in ASHRAE (YEA). 2016 brought another Chapter Regional Conference to the Dayton Chapter with the past president, Evan Nutt, following up his 17 months as president of the chapter to serve 12 months as the CRC chair. Dayton area scholarships and the scholarship committee improved when two businesses, Rieck Mechanical and Waibel Energy Systems, stepped forward to begin funding their own scholarships so that the Dayton chapter now awards three scholarships per year. The January holiday party has continued to be a hit allowing ASHRAE members to socialize with their spouses and for several years a Bocce Ball Tournament raised some money for the Scholarship fund.

Throughout the 2010 decade the various Dayton ASHRAE Chapter Presidents were beginning in 2010/11 with Rick Pavlak with Heapy Engineering, Steve Meier in 2011/12 with Wat-Kem Mechanical, Jason Gillespie in 2012/13 with Point-to-Point Systems, Kyle Kurtz with Waibel Energy Systems in 2013/14 but resigned by February 2014 and was replaced by Evan Nutt from Waibel Energy Systems for the remainder of Kyle's term and Evan's full term in 2014/15. To round out the decade the remaining presidents were Mike Kennedy with Heapy Engineering in 2015/16, Nathan Lammers with Waibel Energy Systems in 2016/17, Rob Mauro with Danis Construction in 2017/18, Bryan Schenck with Heapy Engineering in 2018/19, who was followed in 2019/20 by Michael Weisman with Habegger Corporation and Elitaire.

Do you have any history for the Dayton ASHRAE chapter that you would like to share for between 1990-2007? If so please email it this month to Jeremy Fauber at jpfauber@heapy.com. Thank you!



\$\$\$ Dayton Chapter ASHRAE Scholarships Available!!! \$\$\$

The Dayton Chapter of ASHRAE is offering 3 scholarships available to current college students (have completed at least 12 hours of instruction) for 2 and 4-year students in a field of study related to the Built Environment. The Keller Scholarship is \$1500 and restricted to a UD student (could be a student transferring into UD). The Rapier Scholarship and Chapter Scholarship are each \$1000 and are available to all. Please note that the applicant must either be a student ASHRAE member or a close relative (spouse, child, grandchild) of a current Dayton ASHRAE member. The ASHREA number for the student or relative sponsor must be included in the application. Funds can be available as early as May 2021 paid directly to the school. All applications are electronic and can be submitted through the Dayton ASHRAE website www.daytonashrae.org.

Applications are due January 31, 2021.



ASHRAE Job Board

Deputy Manager - Production Division Brookhaven National Laboratory; Upton, N.Y.

Commercial HVAC Equipment Estimator Tom Barrow Company Inc.; Atlanta, Ga.

TBC Supply - Outside Sales Tom Barrow Company Inc.; Tampa, Fla.

Supervisor, Corrective Maintenance Massachusetts Institute of Technology (MIT); Cambridge, Mass.

Supervisor, Preventive Maintenance Massachusetts Institute of Technology (MIT); Cambridge, Mass.

Senior Product Engineer Chiller Products Dunham-Bush USA; Homestead, Fla.

[View All](#)

ASHRAE News

Debunking Myths About MERV, Air Filtration

Besides the basic need for good indoor air quality (IAQ), many extremely relevant reasons exist in 2020 to discuss air filters, according to Kathleen Owen, Fellow ASHRAE, member of the ASHRAE Epidemic Task Force, and Carolyn (Gemma) Kerr, Ph.D., Life Member ASHRAE. From common misconceptions to recommended best practices, Owen and Kerr talked with *ASHRAE Journal* about what people need to know about ASHRAE Standard 52.2, *Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size*, and air filters. [Read more](#)

Reviewing Guidelines for Healthcare Facility Ventilation

ANSI/ASHE/ASHRAE Standard 170-2013, *Ventilation of Health Care Facilities*, outlines 886 requirements for ventilation in the healthcare industry. This [study](#) aimed to determine if these requirements were supported by evidence in scientific literature. [Read more](#)

Study: Water-Filled Windows Could Save Energy

A researcher from the U.K.'s Loughborough University has created "water-filled glass" systems that use water to heat and cool structures without an additional energy supply. [Click here](#) to read the research. [Read more](#)

What Is the Most Energy-Efficient State in the United States?

More U.S. states have adopted or advanced new energy-saving targets and rules, but COVID-19 slowed other efficiency efforts, according to the 2020 State Energy Efficiency Scorecard released last week. The 50-state scorecard, which also includes Washington, D.C., ranked California as the most energy-efficient state, edging out second-ranked Massachusetts. [Download the report.](#) [Read more](#)

Geothermal Micro-District Concept Moves Ahead in Massachusetts

Two pilot projects in Massachusetts will attempt to deploy geothermal heating across entire neighborhoods—an innovative model that aims to reduce fossil fuel use while providing an economic transition for gas utilities and their workers. One of the micro-district concept's goals is to help the state reach its goal of achieving net-zero carbon emissions by 2050. [Read more](#)

Report: COVID-19 Pandemic Accelerates Construction Tech Adoption

Three years of construction tech growth and adoption has been compressed into the past nine months, according to JLL's "The State of Construction Tech: 2020" report. The shift to remote work for office-based employees early in the pandemic created an opportunity for construction tech to grow. While many large construction firms already used digital collaboration, smaller local firms were less likely to have an existing system in place prior to the pandemic. To keep projects running, construction tech has been used to enable virtual inspections and connect remote project teams to workers on-site. [Download the report.](#) [Read more](#)

D.C. Proposes New Building Energy Performance Standards and Benchmarking

On December 4, Washington D.C. proposed [Building Energy Performance Standards](#) (BEPS) and updated [benchmarking](#) rules. Both of these proposed regulations are now open for public comment. D.C. is set to become the eighth U.S. jurisdiction to adopt energy-saving standards for common household and commercial products since 2017. The D.C. Council voted unanimously in support of the measure, which will help meet the district's target of cutting greenhouse gas emissions in half by 2032. Additionally, with this regulation, D.C. is first in the nation to set standards for air purifiers. Currently, about 45% of models already meet the new minimum efficiency levels. The new standards will ensure that all air purifiers sold in the District meet those minimum efficiency levels. More information on the Building Energy Performance Standards can be found [here](#), and the benchmarking rules can be found [here](#).

2021 ASHRAE Virtual Winter Conference Registration Is Open

ATLANTA (December 1, 2020) – Registration is now open for the [2021 ASHRAE Virtual Winter Conference](#), February 9-11, 2021. The convenient online format of the conference will allow for global participation with a group of the world's leading presenters delivering timely and useful industry content.

"ASHRAE's Virtual Winter Conference will include three-days packed with learning and live discussions from top experts," said 2020-21 ASHRAE President Charles E. Gullledge III, P.E. "This is the perfect platform and opportunity for built environment professionals to take advantage of the Society's strong technical content. The conference will provide us the opportunity to amplify ASHRAE's important research and resources to address the challenges of the times we're living in."

The conference will feature nearly 98 live and on-demand sessions with updates from Society leaders and virtual networking events. Technical sessions will address building performance, COVID-19, energy conservation, refrigerants, ethics, equipment and standards. Conference registration is now open at ashrae.org/2021winter.

During the weeks leading up to the conference, ASHRAE will also conduct virtual business, committee and technical meetings that are typically held during onsite at the Winter Conference.

The cost to attend the virtual conference is \$249 for ASHRAE members (\$479 for non-members, which includes an ASHRAE membership for one year). For additional pricing, please visit ashrae.org/2021winter.

Registration includes:

Tuesday, February 9 – Thursday, February 11 – Live Event

- More than 35 technical sessions presented live, including sessions scheduled for live participation from attendees in different time zones across the globe.
- Leadership Moments providing updates from Society leaders.
- Keynote presentation hosted by Women in ASHRAE.
- Live 30-minute forum sessions for interactive participation.
- Opportunities to interact with fellow attendees in 30-minute round table discussions and meet-ups.
- Recognition of more than 150 award recipients of ASHRAE's most prestigious society awards.
- Conference proceedings. Download the technical papers, conference papers and extended abstracts.

Post-Conference

- 26 live Q&A chat sessions for on-demand paper session for the opportunity to chat with speakers scheduled on Friday, February 12.
- All sessions presented live will be recorded and available on-demand until August 11, 2022.
- Over 80 additional on-demand sessions accessible on your terms for 18 months.

Excess Energy from Amazon Data Center to Heat Irish City's Buildings

The excess heat from a large data center in the area being run by Amazon Web Services will warm buildings in an Irish city. Tallaght in County Dublin is to become Ireland's first major urban center to use district heating. The district heating network will use excess heat from a recently completed data center to provide low-carbon heat to a mix of public sector, residential and commercial customers. [Read more](#)

Nanomaterials Enable Passive Dual-Mode Heating and Cooling Device

A dual-mode heating and cooling device for building climate control could cut HVAC energy use by nearly 20%, if it is widely deployed, according to Duke University engineers. Depending on conditions, the device's rollers move a sheet back and forth to expose either heat-trapping materials on one half or cooling materials on the other. Designed at the nanoscale, one material absorbs the sun's energy and traps existing heat while the other reflects light and allows heat to escape through the Earth's atmosphere and into space. [Read more](#)

ASHRAE President Sends Letter Supporting Smoke-Free Ordinance in South Fulton, Georgia

A [letter](#) was sent on December 7 from 2020-21 ASHRAE President Charles E. Gullledge III, P.E. to Mayor William Edwards of the City of South Fulton, Georgia and the City Council in support of a proposed smoke-free ordinance, encouraging the City to eliminate smoking in all public buildings and workplaces. ASHRAE holds the position that the only means of avoiding health effects and eliminating indoor environmental tobacco smoke (ETS) exposure is to ban all smoking activity inside and near buildings. The ASHRAE Position Document on Environmental Tobacco Smoke (updated in July 2020) can be found [here](#). The letter, sent in coordination with the ASHRAE Atlanta Chapter, can be found [here](#).

U.N. Holds Virtual Climate Summit

On December 12, more than 70 world leaders participated in the United Nations Climate Summit on the fifth anniversary of the Paris Climate Accord. New emission targets were promised by several countries including China, Argentina, Canada and the U.K. in addition to the European Union. Some highlights include Xi Jinping of China pledging to cut carbon dioxide emissions per unit of GDP by 65% from 2005 levels by 2030 and the EU pledging to cut its emissions by 55% by 2030. Representatives from the United States, Russia, Brazil, Saudi Arabia and Australia did not attend the event.

Congressional Negotiators Agree on Energy Package

Congressional negotiators have released the legislative text for a [comprehensive energy package](#) that includes sections on energy efficiency, energy storage, grid modernization, and carbon management. The 533-page bill would provide energy retrofitting assistance for schools, push for energy efficient data centers, boost the Weatherization Assistance Program, and push for increase energy and water efficiency measures in Federal buildings. The bill is likely to be attached to a \$1.4 trillion omnibus spending measure that would fund government until September 30, 2021.

DOE Assessing Test Procedures for Packaged Terminal Air Conditioners and Heat Pumps

The U.S. Department of Energy (DOE) is undertaking an early assessment on whether to proceed with a rule-making to amend DOE's test procedures for packaged terminal air conditioners (PTACs) and packaged terminal heat pumps (PTHPs). This assessment will be used to determine whether to adopt the most recent procedures referenced in ASHRAE Standard 90.1. Written comments and information will be accepted on or before February 22, 2021. [Click here](#) to learn more.

More Education

DOE's Better Buildings Webinar Schedule

The U.S. Department of Energy has released the schedule for its Better Buildings Webinar Series:

- ◆ [BEYOND ENERGY SAVINGS: QUANTIFYING THE ADDITIONAL BENEFITS FROM ENERGY EFFICIENCY](#) – January 12, 2021 from 11:00 AM - 12:00 PM ET
- ◆ [DAVID & GOLIATH: FINANCING ENERGY RETROFITS FROM THE TINY TO THE GIANT](#) – January 19, 2021 from 3:00 - 4:00 PM ET
- ◆ [RISK ASSESSMENTS: EVALUATING BUILDINGS SITES FOR PORTFOLIO RESILIENCE](#) February 2, 2021 from 3:00 - 4:00 PM ET
- ◆ [PERSPECTIVES ON RESILIENCE: INSURANCE AND CREDIT UNDERWRITING](#) – February 9, 2021 from 3:00 - 4:00 PM ET
- ◆ [SMART TOOLS FOR SMART LABS](#) – March 2, 2021 from 3:00 - 4:00 PM ET
- ◆ [LEVELING THE SLOPE: HELPING STATE AND LOCAL GOVERNMENTS REACH THEIR ENERGY GOALS](#) – March 16, 2021 from 3:00 - 4:00 PM ET
- ◆ [YOU HAVE A DATA CENTER - NOW WHAT? STORIES FROM THE FIELD](#) – April 6, 2021 from 3:00 - 4:00 PM ET

Learn from ASHRAE Experts via Live, Instructor-led Online Training

Registration opens this week for the 2021 online course series. View the scheduled courses, including CoV-2 mitigation topics, at www.ashrae.org/onlinecourses. Individual and group rates are available. Contact edu@ashrae.org to bring a live online course to your Chapter or organization.

New dates are regularly added to the online ASHRAE HVAC Design and Operations training. View the latest training schedule at www.ashrae.org/HVACDesign.

View more ASHRAE courses by topic at www.ashrae.org/ali.



CELEBRATING 125 YEARS