



Central Oklahoma Chapter

ISSUE 4—December
2020-2021 EDITION

www.ashrae.org
www.ashraecok.org



Table of Contents

President's Message: Chapter Update	2
CTTC Update: January 2021 Chapter Meeting Presenter	3
Government Affairs Update	4-5
Historian's Article: 125th Anniversary Celebration!	6-9
Honors/Awards & Diversity in ASHRAE	10
Sustainability / Community Service Projects	11
ASHRAE COK—December Chapter Meeting Minutes	12
Upcoming Chapter Schedule	13
ASHRAE COK Chapter Contact List	14

UPCOMING EVENTS

- January Chapter Meeting
December 6th, 11:30am Meeting
Virtual Meeting
Speaker: Douglas Reindl
Topic: Refrigerant Safety— Inside & Outside the Machinery Room
- January Board of Governors Meeting
January 20th, 11:30 AM Meeting
Engineered Equipment Inc.
4601 N Sante Fe Ave
Oklahoma City, OK, 73118
- Diversity in ASHRAE Event
January 2020 (Final Date, TBA)
Location & Time: TBA

President's Message***December Chapter Update***

By: Chris Dolan
December 2020

Hello ASHRAEcok Family!

I have never been happier to be done with a year as I am with 2020! This has definitely been a challenging year but I am proud of how this chapter has come together to still make it a successful year. A special thanks goes out to all of the committee chairs! Their jobs have been extra difficult due to Covid but they are still achieving success. I hope everyone had a Merry Christmas and has a great new year. I look forward to meeting again in person in 2021!

-Chris Dolan



Chris Dolan
2020-2021
COK Chapter President

Chapter Technology Transfer

January Chapter Meeting Presenter

By: Heather Martin

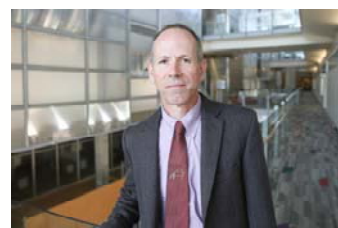
December 2020

Please join on Wednesday, January 6th for our first Chapter Meeting of 2021! In light of the recent increases of COVID-19, we will be having a virtual meeting. As opposed to the normal Chapter Meeting Charge, we will only be charging ASHRAE members \$10 to virtually attend this meeting. More details will be sent out to our chapter as the meeting date approaches.

Speaker: Douglas Reindl

Topic: Refrigerant Safety– Inside and Outside the Machinery Room

Douglas Reindl is a professor in the Department of Mechanical Engineering at the University of Wisconsin-Madison and director of their Industrial Refrigeration Consortium at the UW. He has worked in the field of industrial refrigeration for more than twenty-five years. Doug is actively involved in a number of professional organizations including ASHRAE, IIAR, and IIR. He is a past chair and currently a member of the ASHRAE 15 committee. He is an ASHRAE Fellow and Distinguished Lecturer.



Plan to attend all Central Oklahoma ASHRAE meetings??? If so, save by prepaying for all meetings. For prepaying you get one meal free and you don't have to worry about forgetting to signup for the Early Bird rate. Contact our Treasurer, Stephanie Thomas, at stthomas@moxifyllc.com for invoicing.

Government Affairs

Oklahoma Building Code Progress

By: Jeff Forman

December 2020

On 12/9/20, several stakeholders including myself, Byron Hughes and Damon McClure (ASHRAE Region VIII GAC Regional Vice Chair), ASHRAE COK / NEOK members, consulting engineers from our state and others participated in a WebEx meeting with the OUBCC committee members. Prior to this actual WebEx, the same team collaborated several times together with Bryan Holland, the Senior Field Representative from NEMA, who created and then led the presentation to OUBCC. Chad Smith from ONEOK and the previous GAC Regional Vice Chair continues to assist with GAC leadership and direction in our efforts to get an updated IECC code adopted in Oklahoma. The presentation to the OUBCC committee outlined which version of the IECC code we would like to see adopted and why. The outline is below:



Jeff Forman
2020-2021
Govt Affairs Chair



Byron Hughes
2020-2021
Govt Affairs Chair

Presentation Outline

- ✓ **Energy Cost Savings 2009-2018 IECC**
- ✓ **Residential Construction**
 - Total Cost of Construction 2012-2018 IECC
 - Total Energy Cost Savings 2012-2018 IECC
- ✓ **Commercial Construction**
 - Annual Cost Savings 2012-2018 IECC
 - Added Construction Costs 2012-2018 IECC
 - Life-Cycle Cost Savings 2012-2018 IECC
 - Simple Payback 2012-2018 IECC
- ✓ **Other Considerations**
- ✓ **Significant Improvements to the IECC**



The most significant impacts to construction costs would occur with the adoption of the 2012 IECC edition for residential and commercial, while the adoption of 2015 and 2018 has only incremental cost impacts. If we are successful in adopting IECC 2018, the following savings impacts would be expected:

(See Next Page)

Government Affairs

Oklahoma Building Code Progress (Cont.)

By: Jeff Forman

December 2020

Energy Cost Savings

Residential (over 2009 IECC)

- 2012 edition = 24%
- 2015 edition = 25%
- 2018 edition = 27%

Code Edition	2012 IECC	2015 IECC	2018 IECC
National Average Energy Cost Savings over Previous Edition	23.9%	0.73%	1.97%

Commercial (over 2006 IECC)

- 2009 edition = 8%
- 2012 edition = 18%
- 2015 edition = 30%
- 2018 edition = 35%

IECC Edition	2009 IECC	2012 IECC	2015 IECC	2018 IECC
Energy Cost Savings over Previous Edition	7.7%	10.4%	11.5%	5.3%

Each article, Byron and I will remind you to plan to join your fellow ASHRAE COK members for our 2021 Government Outreach Day (formerly Day on the Hill).

If you have any questions or would like additional information, please contact me at jforman@mechsales.com, 405-368-8883 or Byron at bhughes@rbakins.com

Jeff Forman
Government Activities Chair

Byron Hughes
Government Activities Co-Chair

Historian's Article

125th Anniversary Celebration

By: Dusty Stoabs

December 2020

In early 2018, the ASHRAE Historical Committee proposed multiple projects in celebration of ASHRAE's 125th anniversary. Many suggestions were made as to the coverage, format, and possible authors for the work; and, these projects eventually included writing articles for the ASHRAE Journal, creating a historic calendar, and compiling biographical information on men and women who had made substantive contributions to the art and science of the industry that ASHRAE serves. ASHRAE even created a lapel pin for members who wanted to join in the celebration (**right**). Society President Chuck Gullidge, in the 2020-2021 PAOE categories, create two Presidential Initiatives to celebrate the 125th Year Celebration. This article is one way to achieve these points. I hope you enjoy it.



Dusty Stoabs
2020-2021
Historian Chair



ASHRAE and Industry History – The Beginning

Until about 1890, the science of heating and ventilation was not well understood. Most of the work was done by Contractors and very few of them were educated or had any formal training in engineering. Installations of heating and ventilating systems were based upon the ancient rule of thumb and relied heavily on calculations related to data in fan manufacturers' catalogues. Stewart A. Jellett (**right**), a charter member and the second president of The American Society of Heating and Ventilating Engineers (ASHVE) believed "the general public was getting poor return for its money" with the installation of some of the heating and ventilation systems being applied. He stated that many of the heating and ventilating engineers were generally ignorant on the subject, with 75 percent of them fakers, who had patented schemes who designed the heating systems with thoughts on fuel expense. The results were systems that were unsatisfactory and were not favorable for business for legitimate businessmen. "It was the stress of competition, the commercial side of the business, that finally forced the recognition of the necessity for more scientific consideration, both in regard to the manufacture of the apparatus and in its application for regular work".



The Master Steam and Hot Water Fitters Association was formed in 1889 to protect the interests of the contractors. About this time more sophisticated scientific approaches to heating and ventilation were being imported from Europe and particularly from England. Some members were interested in learning more about these scientific approaches and so a few technical papers were presented at the Association's meetings. However, since the majority of the association's members were business and sales men, they were not particularly interested in the arts and sciences of heating and ventilation and only primarily wanted to discuss business matters.



(Continued on Next Page)

Historian's Article

125th Anniversary Celebration

By: Dusty Stoabs
December 2020

During the Association's 1894 National Convention, three technical papers were scheduled to be presented by David M. Nesbit, of London, England; Edward P. Bates, of Syracuse (**right**), was ASHVE's first President), New York; and Arthur Walworth, of Boston, Massachusetts. The attendance and discussion on these papers was considered disgusting; and, at the end there was a resolution passed that, in the future, papers must only take ten minutes to read.

Hugh J. Barron, a member at the time, wrote a critical article about the situation and submitted it to a Mr. Louis H. Hart (**right**), who was the business manager of Heating and Ventilation. After it was published in the July 15, 1894 issue, a meeting to discuss the article's publication discussed the possibility of forming a society to consider engineering matters connected with heating and ventilation only. After many more discussions and getting positive feedback from fifty to seventy-five engineers known to be interested in this chosen line of work, it was determined that an organization should be formed.



As a result, 25 invitations were sent to engineers in New York City to attend a meeting at the offices of Heating and Ventilation on Thursday, August 2, 1894. Sixteen people attended and they became known as the Committee of Sixteen. This initial group formed a Committee on Organization who worked over several weeks and eventually sent out invitations, and circulars explaining the necessary qualifications, to 157 engineers to become a charter member of the new organization. A Mr. Fred P. Smith was elected temporary chairman to run the meeting, and Mr. Louis Hart was elected temporary secretary. The Committee worked on drafting a constitution and by-laws, and held the first regular meeting, which was purely a business meeting, at 3:00 p.m. on September 10, 1894 at the Broadway Central Hotel, in New York, New York. There were seventy-five people who accepted the invitation and became charter members. Mr. Smith chaired the meeting, and Mr. Hart was secretary.

In his opening remarks, Mr. Smith defined the objects, advantages and policy of this proposed society. He spoke about the importance of good fellowship to the society's success, especially with respect to discontinuing the practice of discrediting another engineer's work when presenting a competitive bid. "It is only through the united efforts of the members of the society that we may expect to attain that improvement for which we are looking," said Mr. Smith. "There is no reason in the world why the society cannot, if properly managed, aid us in raising a high standard of work, and regulate the price we ought to get for our work."

(Continued on Next Page)

Historian's Article

125th Anniversary Celebration

By: Dusty Stoabs
December 2020

The first order of business was to choose a name for this new society. The debate that followed was long and spirited. Discussions included whether to stay just in America or to include "International" in the name since foreign engineers had been invited to become members. It was finally decided that the heating and ventilating engineering required in America alone would be a sufficient task for the society for many years. It was decided to call the society be called **"The American Society of Heating and Ventilating Engineers (ASHVE)."**



Much more discussion occurred on the proposed Constitution and By-Laws section by section. Section 4 in Article 1 of the Constitution clearly stated eight objects of the Society that would guide its work in years to come:

- The promotion of the arts and sciences connected with heating and ventilation, and to encourage good fellowship among its members.
- Improvement in the mechanical construction of the various apparatus used for heating and ventilation.
- The maintenance of a high professional standard among heating and ventilating engineers.
- To establish a clearly defined minimum standard of heating and ventilation for all classes of buildings.
- To favor legislation compelling the ventilation of all public buildings in accordance with the standard of this society.
- To encourage legislation favorable to improvement in the arts of heating and ventilation, and to oppose legislation inimical to the business of the engineer.
- The reading, discussion, and publication of professional papers, and the interchange of knowledge and experience among its members.
- To establish a uniform scale of prices for all professional services.

The final order of business was to elect officers to serve until the annual meeting. The Constitution and By-Laws stated that the affairs of the Society would be managed by a Board of Managers and a Council that would review membership applications.

The Society was incorporated in the state of New York on January 24, 1895. To comply with the laws of this state, the date of the annual meeting was specified in the Constitution as the last week in January. Accordingly, the charter members agreed to have their first annual meeting in January 1895, at which time papers on heating and ventilation topics would be read and discussed. The Constitution also specified that the Society would have a Semi-Annual meeting as well, though the first one would not occur until 1897. The dates of January 22-24, 1895 were confirmed for the first Annual Meeting, and President E.P. Bates called the meeting to order at 10:50 a.m. on January 22, 1895 in the hall of the American Society of Mechanical Engineers (ASME), 12 West 31st Street, New York.

(Continued on Next Page)

Historian's Article

125th Anniversary Celebration

By: Dusty Stoabs
December 2020

Secretary Hart reported that the Society had seventy-five members, and it was reported that since its founding, the Society had received \$750.00 and had expended \$256.82 for a total of \$493.18 cash on hand. The Constitution and By-Laws established four levels of membership: Members, Honorary Members, Associates and Junior. Members and Associates were required to pay an initiation fee of \$15.00 and annual dues of \$10.00. The initiation fee of Junior members was \$10.00, and their dues were \$10.00. A Junior member, being promoted to full membership, paid a further initiation fee of \$5.00. Honorary Members were defined as "distinguished persons elected by the society." Within two years, membership rose from 75 to 109 members.

Please note: Information excerpted from information available from ASHRAE website through the Historical Committee links - "Proclaiming the Truth" – Chapter 1.

Respectfully Submitted,

Randy Schrecengost, Society Historical Committee past-Chair

Dusty Stoabs, PE, CPMP, LEED AP
ASHRAE Central Oklahoma Chapter Historian



www.ashraecok.org

Honors and Awards

Membership Upgrades

By: Tino Mendez
December 2020

Membership upgrades do not cost you anything but not having them could keep you from being eligible for some awards and leadership positions that you may want to seek.

One of the awards that come to mind is the FELLOW membership grade. In addition to all the requirements for excellence in your work that are very important, there is a requirement to be at "full member grade" for at least ten years. I am sure that the reason this was included in the requirements was to prevent a new member from achieving the highest level of membership on day one.

So, please talk to our Membership Chair (Tanner Jones) or go to the ASHRAE Society website and upgrade your ASHRAE BIO and fill out the membership advancement request form. Some day you will be glad you read this and got it done.

-Tino Mendez



Tino Mendez
2020-2021
H&A Chair

Diversity in ASHRAE

By: Madison Schultz
December 2020

Hello ASHRAEcok Family!

I am excited to announce that we will be hosting our first Diversity in ASHRAE event the week of January 18, 2021. We will be discussing what sexism looks like today and ways to react in real time. All genders are invited to attend the workshop. Keep your eyes on your inbox for more information. I look forward to seeing you all then!

Thanks,
Madison



Madison Schultz
2020-2021
Diversity in ASHRAE Chair

Sustainability / Community Service Projects

Upcoming 2021 Projects

By: Craig Yadon
December 2020



Craig Yadon
2020-2021 Sustainability
Chair

Project #2. Habitat for Humanity (Late March 2021)

We will assist in either new home construction for a deserving homeowner or provide critical home repairs (CHR) for low income home owners that struggle to maintain their homes due to limitations related to income, age, disability or other circumstances.

<https://www.cohfh.org/>

Project #3. Rebuilding Together (Late April 2021)

Rebuilding Together is a local organization that “brings volunteers and communities together, improving the homes and lives of senior homeowners here in the Oklahoma City metro area.”

Since 1992, Rebuilding Together OKC has repaired over 3,100 homes, 35 non-profit facilities, and 8 public school buildings with the help of 70,000 volunteers. Total value to the community has been more than \$20 million.

<http://rebuildingtogetherokc.org/>

If you are interested in helping with one or all of these opportunities or if you have any questions, please contact Craig Yadon (cyadon@mechsales.com). Calendar invites and any additional information required will be sent to all current ASHRAE members prior to the event.

ASHRAE COK– December Chapter Meeting Minutes

By: Don Carter

ASHRAE COK Secretary 2020-2021

Meeting Date: 12-2-2020

Meeting Location:

Members: 21 Guests: _____ Students: _____

Chapter Officers:

Chris Dolan – President (*A*)

Caleb Spradlin – President Elect (*P*)

Madison Schultz - Vice President (*P*)

Don Carter – Secretary (*P*)

Stephanie Thomas – Treasurer (*P*)

Board of Governors:

Michelle Lefebvre (*A*)

Aruna Abhayagoonawardhana (*A*)

Alex Roswell (*A*)

Robert Smith (*P*)

This Virtual meeting was called the meeting to order at 11.55 am.

Heather Martin introduced speaker.

Scott Alford and Stirling Boston from Watts Water presented the topic of Legionella Risk Mitigation-A Comprehensive Approach.

Heather Martin adjourned the meeting at 12:55 pm.

Submitted,

Don Carter

ASHRAE COK Secretary 2020-2021

Upcoming Chapter Schedule

Date	Event	Location	Topic	Presenter
1/6/2020	January Chapter Meeting	Virtual Meeting	Refrigerant Safety– Inside & Outside the Machinery Room	Douglas Reindl
Week of January 18th, 2021	Diversity in ASHRAE Event	TBA	Modern Day Sexism in the Workplace	TBA
1/20/2020	December Board of Governors Meeting	Engineered Equipment, Inc. 4601 N Santa Fe Ave, Oklahoma City, OK 73118 11:30 AM	N/A	N/A
January 2020	January YEA Event	TBA	N/A	N/A

2020-2021 COK CHAPTER CONTACT INFORMATION

	Contact	Company	Phone	Email
<u>OFFICERS:</u>				
President	Chris Dolan	Engineering Equipment Inc.	(405) 525.7722	cdolan@eei-ok.com
President-Elect	Caleb Spradlin	HP Engineering, Inc.	(405) 286.9945	cspradlin@hpengineeringinc.com
Secretary	Don Carter	Retired	(405) 413.8089	doncarterconsulting@gmail.com
Treasurer	Stephanie Thomas	Moxify Engineering LLC	(405) 254.5038	stthomas@moxifyllc.com
Vice President	Madison Schultz	OK BeCo.	(405) 412.2686	Madison@okbe.co
<u>BOARD OF GOVERNORS:</u>				
Board of Governors	Aruna Abhayagoona-wardhana	United States Air Force	(405) 734.7222	arunaa@cox.net
Board of Governors	Alex Roswell	PSA Consulting Engineers	(405) 213.7979	aroswell@psaokc.com
Board of Governors	Michele Lefebvre	Hydronic Systems, Inc.	(405) 606.3603	michelel@hsicomfort.com
Board of Governors	Robert Smith	Engineered Equipment Inc.	(405) 421.0053	rsmith@eei-ok.com
<u>COMMITTEE CHAIRS:</u>				
Student Activities and Scholarship	Scott Sanders	Alvine Engineering	(405) 431.5464	ssanders@alvine.com
YEA	Gavin Swenson	PSA Consulting Engineers	(405) 954.7051	gswenson@psaokc.com
Chapter Research Promotion Chair	Chris Dolan	Engineered Equipment Inc.	(405) 525.7722	cdolan@eei-ok.com
Chapter Membership Promotion Chair	Tanner Jones	Engineered Equipment Inc.	(405) 206.6594	tkjones@eei-ok.com
Chapter Technology Transfer Chair	Heather Martin	RB Akins Company	(405) 830.4284	hmartin@rbakins.com
Chapter Grassroots Gov't Advocacy Chair	Jeff Forman	Mechanical Sales Midwest	(405) 368.8883	jforman@mechsales.com
Chapter Refrigeration Chair	Jon Wilmore	RB Akins Company	(405) 640.7482	jwilmore@rbakins.com
Chapter Sustainability Chair	Craig Yadon	Mechanical Sales Midwest	(405) 613.2610	Cyadon@mechsales.com
Chapter Electronic Communications and Web-master	Matt Erickson	CaptiveAire	(605) 470.0254	Matt.erickson@captiveaire.com
Chapter Historian	Dusty Stoabs	Streets, LLC	(405) 388.2271	dstoabs@gmail.com
Special Events Committee	Andy Donehue	Trane	(405) 943.6697	andy.donehue@trane.com
Chapter Honors & Special Awards	Florentino Mendez	Retired	(405) 843.3579	tinomendez@cox.net
Social Media Chair	Kaylee Oliver	Moxify Engineering LLC	(812) 455.3146	Koliver@moxifyllc.com
Scholarship Chair	Robert Smith	Engineered Equipment Inc.	(405) 421.0053	rsmith@eei-ok.com
Diversity in ASHRAE	Madison Schultz	OK BeCo.	(405) 412.2686	Madison@okbe.co
Newsletter	Anson Brady	Engineered Equipment Inc.	(405) 596.0084	abrady@eei-ok.com