

THE HOT AIR DIFFUSER

Chapter Newsletter

December 2018



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JANUARY CHAPTER MEETING

Presentation

Achieve peak building performance by engaging building owners and operators through the Commissioning and Retro-commissioning processes

One of the most prevalent issues in engineering/construction industry is the disconnect that can exist between the design, construction, and operational phases of a facility. There are a handful of key points during a project that can have long lasting impact on the performance of a facility. Project leaders who build these critical process into their work can realize substantial financial savings for the organizations they work for.

Please Register online at:

www.idahoashrae.com

Speaker

Jesse Barnum, Building Services Manager St. Luke's Meridian Medical Center

Jesse thought he knew what he wanted to be when he grew up, so he earned a B.A in Philosophy from Boise State University along with German, Latin, and History minors. He didn't realize that philosophy majors were notoriously unemployable, so he decided to earn M.S. in Technology from Purdue University. Philosophy and Technology degrees may seem like an odd mix, but it's worked out better than expected and he has learned to develop dynamic solutions to the unique problems faced in the health care physical environment. Jesse is also a Certified Healthcare Facility Manager.

Jesse is now the manager for the Building Services Department at St. Luke's Meridian Medical Center, where the nuts and bolts of building operations really matter to the patients he's working for. He is passionate about elevating the quality of patient care by pursuing better ways to design and manage health care facilities.

Jesse and his wife Corey keep busy by raising their three kids, Arthur (6yo), Edmund (2yo), and Edith (newborn). They enjoy cooking and baking, they are avid gardeners, and are working toward having a small farm someday.

WHEN: January 9th, 2018 | 11:45am to 1:00pm MST

WHERE: Idaho Power | 1221 W. Idaho St. | Boise, ID 83702

GET ASHRAE CERTIFIED → <https://www.ashrae.org/education-certification/certification>

ASHRAE, founded in 1894, is an international organization of some 50,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.

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PRESIDENT'S MESSAGE



Daniel C. Russell, PE, HFDP

Happy New Year fellow ASHRAE Idaho Members! My goal was to release this message with the first issue of the chapter newsletter prior to Christmas, but alas that deadline came and went. My kids will tell you (especially the older ones) that I really do not make a very good Santa...or Tooth Fairy...or Easter Bunny...or...you get the idea. Truth be told we are about 3 months delinquent in releasing the first issue of the chapter newsletter so my sincere apologies go out to all of you who have been left to wonder why the Newsletter Fairy has made no deliveries yet this chapter year, causing you to

question whether such a fairy really even exists. Never fear, your newsletter and accompanying president's message is here! So go ahead my friend, read on and be of good cheer!

As finished up 2018 and now hit the start of 2019 I want to take a look at what the chapter has accomplished thus far and then set our eyes forward on what is to come with the New Year. In the opening chapter meeting of the year I put forth three major initiatives that I believed would benefit and challenge the chapter:

Leadership Development: financial support and encourage to chapter leaders, students and young engineers (YEA) through scholarships and leadership training.

Deeper Involvement with ASHRAE at all levels: active chapter committees, participation on society technical & standards committees and increased event attendance.

Rich Chapter Educational Opportunities: utilization of ASHRAE's Distinguished Lecturers program, offering more workshops & tech sessions and taking programs to members in Eastern Idaho.

In view of these initiatives our chapter has risen to the challenge in a number of ways:

1. In November the Board of Governors approved an allocation of \$25,000 from the chapter's savings accounts for the purpose of funding a Scholarship Endowment through Boise State University for Junior and Senior level Mechanical Engineers. The scholarship will be awarded annually in the amount of \$1,000.
2. Our CTTC committee has pulled together two Distinguished Lecturer visits with add-on technical workshops and a chapter meeting in Idaho Falls. With three more DL visits, more workshop opportunities and at least one more Eastern Idaho chapter meeting planned, there is a lot more to come!
3. Lastly, we have seen a number of chapter members indicate interest in a variety of Leadership training opportunities provided by ASHRAE and the Board of Governors will be issuing budgeted financial support to help some of these members get to the spring-time training that suits them best.

Thank you all for your support through chapter event attendance, Research & Promotion contributions and volunteerism. The chapter continues to thrive on member participation and we are always looking for more people to help with various committees, recruitment to meetings, and special events. If you have any interest at all, please let one of the chapter leaders know you would like to help.

Merry Christmas and Happy New Year!



HISTORY LESSON

December 2018

Five Years Ago

The chapter president was Dennis Fox. The meeting was held on December 11, 2013, at the Idaho Power building. The program was a presentation on NetZero buildings presented by Gaylen Atkinson and Tony Sutton of Atkinson Electronics.

Ten Years Ago

The chapter president was Jeff Fulcher. The meeting was held on December 12, 2008, at Idaho Power. The program was seeing how liquid nitrogen can instantly make ice cream. And samples were had by all.

Fifteen Years Ago

The chapter president was Matthew May. The meeting was held on December 11, 2003, at the Doubletree Riverside. Mike Purcell, manager of the Building Commissioning Program with the Idaho Energy Division, gave a presentation on results from case studies on buildings in southwestern Idaho that have recently undergone the commissioning process.

Twenty Years Ago

The chapter president was Brent Robertson. The meeting was held on December 11, 1998, at the Doubletree Riverside. Bill Hawkes and Craig Gappamayer, Yamas Controls, gave a presentation on the Y2K computer date problem and the possible effects on the HVAC industry and building control systems.

Twenty Five Years Ago

The chapter president was Roger Albers. The meeting was held on December 10, 1993, at Edwards Restaurant. A pre-meeting video was shown titled "ASHRAE Standard 90.1-1989 Reducing Energy & Increasing Quality: Applying Standard 90.1". The meeting program was a slide show "ASHRAE 62: A Protocol For Indoor Air Quality".

Thirty Years Ago

The chapter president was Pat House. The meeting was held on Friday, December 9, 1988, at the Kings Table Restaurant. Harlan summers, Public Information Department at Idaho National Engineering Laboratory, gave a presentation on INEL.



Pieces of ASHRAE and HVAC&R History

Ronald Howell, Fellow

I am planning on presenting a series of synopses of developments in heating, ventilating, “air conditioning” and refrigerating. I plan on one per issue of the Newsletter this year. The information will be extracted from “Principles of HVAC” published by ASHRAE and written by myself. You will find some references in there if you want to look further. Also, ASHRAE Publications has available on DVD “The History of ASHRAE. It covers the 100 years of engineering for human comfort. I have a copy if you would like to listen to it.

Knowing something of the past helps in understanding current design criteria and trends. As in other fields of technology, the accomplishments and failures of the past affect current and future design concepts.

Obviously, the earliest form of heating was the open fire. The addition of a chimney to carry away combustion byproducts was the first important step in the evolution of heating systems. By the time of the Romans, there was sufficient knowledge of ventilation to allow for the installation of ventilating and panel heating in baths. Leonardo da Vinci had invented a ventilating fan by the end of the 15th century. Robert Boyle’s law was established in 1659; John Dalton’s in 1800. In 1775, Dr. William Cullen made ice by pumping a vacuum in a vessel of water. A few years later, Benjamin Franklin wrote his treatise on Pennsylvania fireplaces, detailing their construction, installation, and operation.

Although warming and ventilating techniques had greatly improved by the 19th century, manufacturers were unable to exploit these techniques because:

- Data available on such subjects as transmission coefficients, air and water friction in pipes, and brine and ammonia properties were sparse and unreliable.
- Neither set design conditions nor reliable psychrometric charts existed.
- A definitive rational theory that would permit performance calculation and prediction of results had not yet been developed.
- Little was known about physical, thermodynamic, and fluid dynamic properties of air, water, brines, and refrigerants.
- No authoritative information existed on heat transmission involving combustion, conduction, convection, radiation, evaporation, and condensation.
- No credible performance information for manufactured equipment was available.

Thanks to Thomas Edison, the first electric power plant opened in New York in 1882, making it possible for the first time to have an inexpensive source of energy for residential and commercial buildings.



Government Affairs News

International Climate Negotiations Conclude in Poland

Representatives from about 200 countries gathered in Poland during the 24th meeting of the conference of parties (COP) to the 1992 Framework Convention on Climate Change. The talks focused on developing rules for how countries would measure and report on emissions reductions and financial commitments agreed to in Paris. The end result was a 156-page “rulebook” for the Paris agreement.

Secretary of Interior Resigns

President Trump announced via Twitter that Interior Secretary Ryan Zinke submitted his resignation to the White house on December 15. This follows several ethics investigations for which Zinke has denied any wrongdoing.

U.S. DOE Proposes New Process for Grid Security Information

On October 29, the U.S. Department of Energy published a proposal to "pre-designate" security-sensitive information about the electric grid that would make certain information immediately protected from Freedom of Information Act requests. The agency is taking comments on the proposal through December 28.

[View the full proposal here.](#)

NIAC Publishes a Report on Power Outages

The President’s National Infrastructure Advisory Council (NIAC) put out a report titled [“Surviving a Catastrophic Power Outage: How to Strengthen the Capabilities of the Nation”](#) earlier this month. Parts of the report focus on grid security, power outages, and infrastructure.

Congress Works to Avoid Partial Government Shutdown

Congress continues to negotiate a funding bill to avoid a partial government shutdown. Although budget bills have already been approved to fund 75% of the government, funding is set to expire on December 21 for several departments and agencies, including: Homeland Security, Transportation, Commerce, Interior, Agriculture, Housing and Urban Development, Justice, NASA, and the Environmental Protection Agency.

House Energy Hearing on ESPCs and UESCs

The House’s Energy and Commerce Subcommittee on Energy held a hearing on December 12 at 10:15 AM titled “Public Private Partnerships for Federal Energy Management.” The hearing focused on Energy Savings Performance Contracts (ESPCs) and Utility Energy Service Contracts (UESCs). Officials from the Department of Energy, the Department of the Army, the General Services Administration and the Department of Veterans Affairs testified.

[You can watch and read the hearing testimony here.](#)

Congress Passes Farm Bill

Congress has passed a five-year reauthorization of the Farm Bill that supplies nearly \$900 million for agriculture programs. The bill also has a few energy provisions including funding for the Rural Energy for America Program (REAP) which provides financial assistance for recipients to “purchase, install, and construct renewable energy systems, make energy efficiency improvements to non-residential buildings and facilities, use renewable technologies.” President Trump is expected to sign the bill later this week.



U.S. Senate Confirms FERC Commissioner

On December 6, the U.S. Senate confirmed on a 50-49 party-line vote Bernard McNamee as a commissioner at the Federal Energy Regulatory Commission (FERC). The close vote was due to McNamee's previous statements strongly supporting fossil fuels, and negative comments regarding renewable energy. Some lawmakers have called on McNamee to recuse himself from any matters that address the grid security issues he dealt with as head of the DOE Office of Policy.

Senate Minority Leader Chuck Schumer's Op-Ed on a Green Infrastructure

Senate Minority Leader Chuck Schumer (D-NY) published an op-ed in the The Washington Post on the possibility of passing an infrastructure bill next Congress. With Democrats set to takeover the House in January, he stressed the importance of investing in infrastructure that tackles the issue of climate change. Some of his ideas include permanent tax credits for clean-energy production and storage, electric vehicles, and energy-efficient homes in addition to making the electric grid more resilient.

[Click here to read the full op-ed.](#)

U.S. Climate Alliance Releases Clean Energy and Resiliency Resources

The U.S. Climate Alliance, a bipartisan coalition of 17 U.S. governors committed to upholding the targets of the Paris Agreement, is releasing three clean energy and resilience "playbooks" that will serve as implementation resources for states in deploying solar energy, spurring electric grid modernization, and enhancing resilience in the face of climate impacts and natural hazards. These three resources are:

- The Solar Deployment Guidebook – developed in collaboration with the National Association of State Energy Officials (NASEO), the Guidebook helps states and municipalities accelerate solar adoption.
- The Non-Wires Solutions Implementation Playbook – developed in collaboration with the Rocky Mountain Institute, this resource highlights how electric utilities increasingly can reduce infrastructure investments and save customers money by employing non-wires solutions such as solar PV, energy storage, energy efficiency and demand response which help meet growing energy needs in a cost-effective manner.

The New Governors' Resilience Handbook – created for the nation's 21 new Governors who take office in January 2019, this document provides direction on how to minimize climate risk, maximize clean economic growth opportunities and reduce future costs from extreme weather and climate variability.

[Click here for more information.](#)

Washington State Governor Announces Energy Plan

Governor Jay Inslee (D) of Washington State recently announced a plan to reduce the state's greenhouse gas emissions over the next 15 years. The proposal accelerates steps that have already been taken to transition to 100% clean energy, construct ultra-efficient buildings, establish a clean fuel standard, electrify the state's transportation system and phase down super-pollutants in certain products. Combined, the policies would reduce greenhouse gas emissions in Washington state to 25 percent below 1990 levels by 2035. This is expected to be a top legislative priority in the coming legislative session, which begins early in 2019.

[Click here for more information and to see the full plan.](#)



Government Affairs News

Legionnaires' Disease Cases Confirmed in California and Wisconsin

Twenty-two cases of Legionnaires' Disease have been confirmed at Disneyland Park in California. The likely source of the outbreak is a cooling tower. While the outbreak was just confirmed in recent weeks, the exposure happened in Fall 2017. Disneyland is contesting the charges. [Click here for more information.](#)

Additionally, 14 cases of Legionnaires' Disease have been confirmed at the University of Wisconsin Hospital. Three of those patients died. Local media outlets report that the hospital took steps to treat the hot water system with hyperchlorination to remove the bacteria. [Click here for more information on this story.](#)

Up to 18,000 Americans become ill annually because of Legionella growing in building water systems such as cooling towers. ASHRAE's response is Standard 188, the first standard to specify minimum legionellosis risk management requirements.^[1] [Click here for useful resources from ASHRAE and allied associations on reducing the risk of legionellosis.](#)

[1] ASHRAE Journal. Atlanta, GA. October 2015.

State Legislative Updates

California – the California legislature convened the 2019-2020 biennial session on December 3. Incoming Governor Gavin Newsom (D) will be sworn in on January 7, 2019, succeeding Governor Jerry Brown (D) who was term limited.



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Professional Development Hours are now available at

ASHRAE monthly meetings!



ATTENTION: ASHRAE MEMBERS

**The Chapter is now accepting advertisements
in the monthly newsletter.**

Sponsorship Rates are as follows:

	Der Issue	Annual (9⁶ issues)
Business Card	\$10.00	\$50.00
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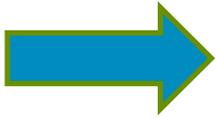
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- For quarter, half, or full page job advertisements see above for pricing

Issues registering for monthly meetings?



Please contact Brian Emtman
brianemtman@ctagroup.com

Interested in becoming more involved with your local ASHRAE Chapter? Please contact Dan Russell @

dan@norbryhn.com
for more information.



