



May 2018

Alaska Chapter Newsletter Hot Gas Bypass

Anchorage Meeting Information

Presentation:
Center Bowl Tour & RP Bowling Challenge

Presented By:
Center Bowl

Date:
Friday May 25, 2018 (Anchorage)

Time:
12:45 pm: Check-in
1:00 pm: Tour
2:00 pm—4:00 pm: Bowling Challenge

Location:
Center Bowl
3717 Minnesota Drive
Anchorage, AK 99503

Cost:
Stay Tuned for Event Flyer

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Alaska ASHRAE Chapter
PO Box 244503
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President's Message:

Happy May ASHRAE Members!

We had a successful RP Shootout in April with 6 teams representing. Thank you all for attending and special thanks to our sponsors that help make the event possible! Speaking of events, our annual Golf Tournament is right around the corner, beginning of September. Keep an eye and ear out for further information.

A big thanks to Ron Wilkinson for flying up and presenting topics on Commissioning. The topics were brief and informative. We had a great turnout for both our Fairbanks and Anchorage groups. Thank you all for attending and participating in the Distinguished Lecturer Program that ASHRAE puts forth. This program allows us to bring in individuals that have dedicated themselves to ASHRAE and all that it supports.

As I finish my term as your chapter president, I've had a chance to reflect on the several years of our chapter and the growth personally and professionally ASHRAE has supported. Serving as a board member has been a privilege and an honor and I look forward to continue to serve our chapter as the Research Promotion chair. Thank you all for the opportunities to serve and we'll hope to see you at this month's meeting!

Best Regards,

Craig Rohwer
President, Alaska Chapter ASHRAE
crohwer@trane.com



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Center Bowl Tour & RP
Bowling Challenge

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Location:
Anchorage Center Bowl
3717 Minnesota Drive
Anchorage, AK 99503

Cost:
Stay tuned for event flyer!

RSVP:
Please RSVP to Nathan
Zeigler at:

Nathan.Zeigler@contractor
.conocophillips.com

**By noon on Thursday May
24th.**

Center Bowl Tour and RP Bowling Challenge:

This month we are excited to announce a new RP event: the ASHRAE Bowling Challenge!

What better way to cap the year and kick off summer than an ASHRAE bowling challenge?

We will kick off this event at 1:00 pm with a behind the scenes tour of the Center Bowl bowling alley.

Following the tour, we will begin our bowling challenge. All gear will be provided as a part of the event, but if you have your own lucky gear, you can bring that too. We will have both “dry” and “wet” lanes reserved for participants of all ages and skill level.

This is a “*Save the Date*” announcement for this family friendly ASHRAE event. Please stay tuned for more information on how to participate and/or help Sponsor the event. A flyer and an announcement detailing the event will be sent out in a separate email blast and posted on our Facebook page.

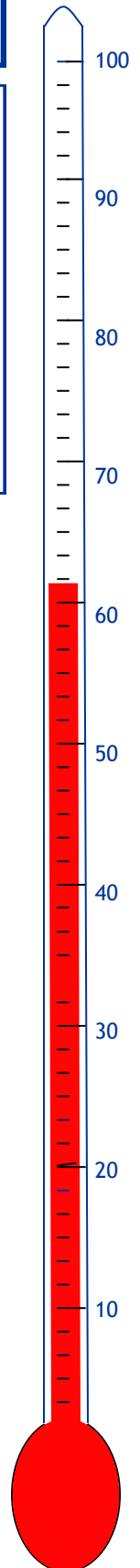
All proceeds will go to ASHRAE Research Promotion (RP). This is a worthy cause and the central mission of all ASHRAE fundraising. It is through the funds generated for RP that all ASHRAE codes and standards are researched, written and implemented into the built environment that we live in. Thank you for your involvement and generous support, it is only through your donations and involvement that we are able to continue to advance the knowledge, quality and standards for our built environment.



Research Promotion (RP):

2017-2018 Research Investors, ASHRAE Alaska Chapter

<u>Organizations</u>	<u>Individuals</u>	<u>\$100-\$249 cont.</u>
<u>\$1000 & Over</u> Alaska Mechanical Contractors Association Inc. (AMCA) Alaska ASHRAE Chapter	<u>\$250—\$999</u> Jan Van den Top Douglas Murray	Jennifer Parkhurst Mack Bergstedt Ruth Armstrong
<u>\$500—\$999</u> Design Alaska	<u>\$100-\$249</u> Nathan Zeigler Tracy McKeon Greg Jernstrom Doug LeCren Mak Kampen Doug Franklin Cheyenne Alabanzas Craig Rowher Mike Stinebaugh	<u>Up to \$99</u> Scott Bell
<u>\$150—\$499</u> Aaron Plumbing & Heating Arctic Foundations		
<u>Up to \$149</u> AK Winter, Inc.		



Fellow ASHRAE Members,
 Thank you to all that attended the RP Shootout last month. It was a lot of fun and raised a significant amount of money for ASHRAE RP. The following sponsors helped make this happen:

- RSA Engineering, Inc.
- Coffman Engineers, Inc.
- Meridian Systems
- Stinebaugh and Company
- Siemens
- Engineered Equipment Company
- CRW Engineering Group LLC
- Trane

We are still not at our goal for the year for Research Promotion. If you or your company are looking for a good cause to donate to please consider ASHRAE RP. See below for further details.

If you are interested in donating towards the future of HVAC&R industry standards and practices please follow one of these three donation options:

- Go to <http://www.ashraerp.com> and click on “donate”.
- You can mail a check made out to “ASHRAE Research” please put “Alaska Chapter” in the memo line and mail to: ASHRAE Research 1791 Tullie Circle, NE, Atlanta, GA 30329.
- You can donate when you renew your membership on line. After you have made your selections for renewal the next page is for you to donate to ASHRAE funded items. About 3/4 of the way down the page you will see Research Promotion. Click “Add to Cart”

Thank you very much for all of your support and dedication to your local ASHRAE Chapter.

Sincerely,

Mak Kampen, P.E.
 Alaska Chapter Research Promotion Chair
Matthew.kampen@conocophillips.com



Hot Gas Bypass

2018 ASHRAE Alaska Chapter RP Shootout



Chapter Technology Transfer Committee (CTTC):

What Is CTTC?

A brief summary is included here for those who may not be familiar with the role of CTTC in Chapter operations. The prime mission of the CTTC is to facilitate the interchange of technical information between members. Secondary functions include coordination of meeting presentations, speaker evaluations, and Chapter coordination point for submission of various ASHRAE Awards, both general and refrigeration related. Additionally, CTTC includes the refrigeration segment of ASHRAE and efforts are made to address this segment of the Chapter membership.



CTTC recognizes that ASHRAE offers many learning opportunities, both web based and “in-person” training and distributes and tracks information regarding the availability of these programs to the Chapter. For members interested in pursuing and/or need more information on one of the ASHRAE available certifications (BEAP, BEMP, CPMP, HFDP, HBDP, and OPMP) please let the CTTC Committee know. If you have already earned one of the ASHRAE certifications, please let a Committee member know so we can acknowledge your achievement.

What’s New?

First, we would like to thank and offer our appreciation to Jeff Hurd for volunteering and taking on the role of CTTC Chair for the last year! The incoming CTTC Chair will be Craig Rohwer. This year’s Committee also includes Tracy McKeon and Craig Fredeen. If you would like to join the committee, please notify a committee member.

We are going into our summer down time, during this period the CTTC committee will be meeting and working to organize programs, lecturers, continuing education seminars, panel discussions, and technical talks for the Fall/Winter meetings. Some of the items in the works include joint meetings and webinars with other Societies and Organizations, technical seminars and talks.

We are looking to our membership to find out what topics you want to see presented and/or will be of value to your organization. Also, we are currently looking for members (6 to 8) to present a brief (15 min) tech talk at the beginning of our monthly Chapter meetings. Possible topics could include, ASHRAE Standards, Indoor Air Quality, Refrigeration, Commissioning, BacNet/ Communications Protocol, Project Summaries, and/or Challenges in Design, Construction, and Maintenance facing our community. Also, if we have any UAA or UAF students looking to present a senior project or research they are working on please let a committee member know.

We’ll be sending out a survey with topic ideas to poll you, our members, on topics you would like to hear and learn more about. That should be going out in early June, so please be on the **lookout** for it!

This fall/winter we are looking to have a seminar available to our members on applying and using ASHRAE 90.1. We will be posting upcoming Webinars through ASHRAE as well as other Societies that maybe of interest to our members on our Facebook page throughout the year. Follow us on Facebook at <https://www.facebook.com/AlaskaASHRAE/> for current events and updates.

If you have any questions or need additional information please email our incoming CTTC Committee Chair, Craig Rohwer at crohwer@trane.com.

Region XI Chapters Regional Conference (CRC) 2018 Wrap Up:



CRC 2018

The Region XI Chapters Regional Conference 2018 was hosted by the Vancouver Island Chapter in Victoria, British Columbia from May 3 to May 5, 2018. They welcomed representatives from the 12 Chapters of our Region, which include Manitoba, Saskatoon, Regina, Northern Alberta, Southern Alberta, British Columbia, Alaska, Puget Sound, Inland Empire, Mid-Columbia, Oregon and, of course, Victoria. Alaska was represented by seven members including Nathan Ziegler, Tracy McKeon, Ruth Armstrong, Greg Jernstrom, Doug LeCren, Jeff Hurd, and Ron Thompson. Also in attendance was Society President Bjarne Olesen from Kongens Lyngby, Denmark, Society Vice President Ginger Scoggins from Raleigh, North Carolina and Society Staff Craig Wright from Atlanta, Georgia.

The conference included Caucus Sessions to nominate future leaders of ASHRAE, Business and Chapter Operation Sessions, as well as Workshops for the Chapter Committees and a specialized Young Engineers in ASHRAE (YEA)/Student Activities (SA) Program. Social and networking activities included a Welcome Gala that was held at the Royal British Museum, Presidents Lunch, and Awards Dinner. The conference ended with a Wrap-Up Party on the Saturday night that started out at a local restaurant and ended at the Victoria Escape Room.

Congratulations to the Award Recipients from the Alaska Chapter!

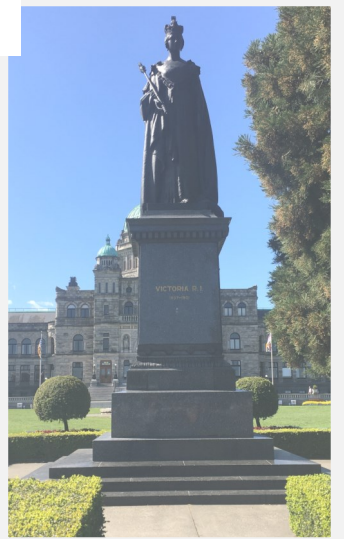
2016-2017 Presidential Award of Excellence (PAOE) Award Full Circle Chevron: Jennifer Parkhurst

Chapter Service Award: Ruth Armstrong

Regional Award of Merit: Ruth Armstrong

Alaska will be the Host Chapter for the 2019 Region XI CRC. Mark your calendars now to attend the May 2019 CRC Regional XI which will be held on an 8-day Alaskan Cruise (May 6- 14, 2019). Updates for registration, CRC website, and more information to follow.

Region XI 2018 CRC



Alaska Chapter Archives and History:

INTERVIEW WITH A FICTIONAL MECHANICAL ENGINEER in 1968

Mr. History, how is business?

It is very cyclical. We have four main sources of work; the Federal Government, the local governments with their school districts, the State of Alaska and the private sector. The Federal Government has been spending the most on the Dew Line, Ft. Wainwright, Eielson A.F.B, Ft. Greely, Ft. Richardson, Elmendorf A.F.B., Shemya A.F.B., Adak Naval Base, Amchitka test Facility, Galena A.F.B. and King Salmon A.F.B. The local governments do mostly school construction and occasionally a special purpose building. The State of Alaska does a few bush schools most years and also an occasional special purpose building. The private sector seems to go in spurts; some periods it is shopping centers, others are for office buildings; right now with the oil discovery on the north slope there seems to be plans for everything, but no real action yet.

Mr. History, is there a lot of competition in the Mechanical Design Field and who are the players?

In Anchorage we have as the major players: Crews, MacInnes & Hoffman, also Hunsuck & Associates, Ralf Stephano & Associates, Jan Hansen, David Peterson & Associates. When business in Seattle is down we get some competition from there too.

Mr. History, how do you find new jobs; what is solicitation process like?

Most of our jobs come from architects. Those we work with we regularly ask them if they have new work coming up. We also maintain contact with those that we are not currently working with to keep the door open for future projects. Occasionally we analyze an existing system for a building owner. When an architect gets a new project he usually sends a request for proposal to the consultants that he thinks are best suited to the project. Usually the fee is not part of this as it normally is a percentage of the project's estimated cost.

Mr. History, what kind of education and training do you have?

I and most of us have a BSc. in Mechanical Engineering. However, most colleges teach very little about Plumbing and H.V.A.C. We learned a lot more about engines than about H.V.A.C. Both the Trane Company and Carrier have published a great textbook and provide training in the subject. The A.S.H.R.A.E handbooks are the best resource for design information and we all have a copy in house. Unfortunately, we don't have an A.S.H.R.A.E. chapter in Anchorage yet as we don't have enough potential members. (It takes 25, I believe)

Mr. History, how are contractors selected for the projects?

The architect usually solicits bids from general contractors on behalf of the owner and hold a formal bid opening at a predetermined time and place. Sometimes a list of subcontractors is required with the bids, but often the mechanical subcontractor is not required to be disclosed until the preconstruction conference. There has been talk about a bid depository, but that has not happened here yet. In the lower 48

Alaska Chapter Archives and History:

some owners have selected their general contractors based on their reputation and provided them with detailed project descriptions and then charged the selected contractor with the project design as well. They call it: Design/Build.

Mr. History, how do you size the equipment and what references do you use?

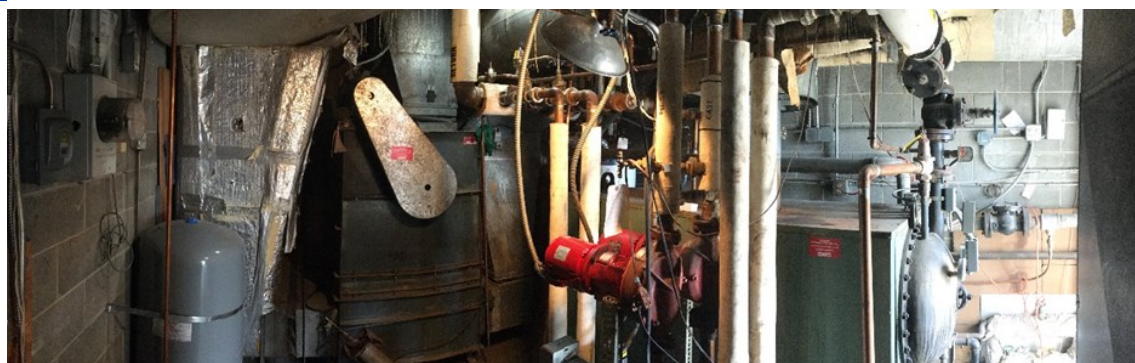
We do detailed load calculations and have developed standardized forms for that. Additions are done with an adding machine and multiplications with a slide rule. The new electronic calculators can perform both of these functions. The process is in accordance with the methods detailed in the A.S.H.R.A.E. and other handbooks, mentioned before. I understand that in the lower 48 big companies are beginning to develop computer programs for this. Then we select the equipment using the local manufacturer representatives that have provided us catalogs with detailed performance information of the equipment their manufacturers produce. They visit us regularly and update the catalogs to include new products, discard obsolete information, take our key designers to lunch and occasionally invite us to visit one of the manufacturers they represent.

Mr. History, what are the current, hot, new developments in the H.V. A.C. field?

Most of us have strong opinions of what works and what doesn't. We don't want to try out new systems because our clients could be disappointed. The common system is a hydronic baseboard heating system with two cast iron boilers. A constant volume ventilation system with economizer. Air conditioning is seldom used, only where operable windows are undesirable, and the heat gain is extraordinary. The best temperature control systems are pneumatic because they modulate well, are very reliable and larger systems are less expensive than modulating electrical systems. In Alaska, we always specify heating valves that fail fully open. The compressor is a critical piece of equipment, so we specify duplex units.

Mr. History, tell us a bit about your production methods; how do you produce construction documents?

With a new project we receive preliminary drawings from the architect and we start with tracing the floorplan outlines for our backgrounds. Sometimes these are provided by the architect or drawn by us on the back of the Mylar, so we can erase parts of the system without losing the background. We don't want to start too soon as in the beginning the backgrounds can change frequently. Then the load calculations are



(Continued Page 6)

Alaska Chapter Archives and History:

performed, and the engineer starts the system lay-out. He can do this either on blue prints and have a draftsman transfer the information neatly to the Mylar or in a small office the engineer does his own drafting. The final drawings are often done in ink, so they last longer. All drawings are done on transparent paper and are copied with ammonia blueprint machines that use a photographic process. Ammonia is the developer fluid. A pile of recently reproduced drawings can have a strong ammonia odor. It clears the engineer's lungs they say. Specifications are typed. The modern I.B.M. typewrites have a memory, so paragraphs can be typed automatically. Now we have a Xerox copy machine. Before that we typed on stencils. After completion these were stretched on ink rolls to make inked prints by rolling plain paper through those rolls.

Mr. History, could you tell us a bit about the construction process, the bid process and the inspections?

When the drawings and specifications are completed and stamped by the architect and engineer, the architect reproduces several copies and provides them to the contractors that are interested in providing a bid. Usually they pay a deposit, which is refunded when they return the documents after the bid opening. The returned sets are given to the contractor for use as construction documents. At the bid opening the bids are read and the apparent low bidder is announced. Normally the successful contractor must provide proof of qualifications before a contract between him and the owner is signed, then a pre-construction conference is scheduled by the architect. At that time the major subcontractors have been selected and invited to attend. The purpose is to clarify issues and to establish a chain of command. We usually attend the preconstruction conference and answer questions as needed. The actual inspections during construction depend on the fee arrangement. We are usually at least invited to participate in the final inspection. A larger office sometimes has an engineer on staff who specializes in inspection, but in other cases the design engineer prefers to do it himself.



JOB OPPORTUNITIES

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Upcoming Opportunities:

The local Chapter of the Association for Learning Environments will be offering periodic webinars available to members and non-members starting this Summer.

The first one on Heat Recovery is planned for June. Please be on the lookout for updates for the event including location and times on our Facebook page later this month.

Website Updates:



There are *exciting* new developments concerning communications within our Chapter. Maile Guieb has kindly volunteered and taken on the role of Webmaster for our ASHRAE Alaska Chapter website. As a result of her efforts, the existing website has been updated: <https://ashraealaska.wordpress.com/>

The site will also be undergoing a major overhaul this summer. We anticipate rolling out the new site by August of this year, so keep your eyes out for the upcoming announcement.



Find us on
Facebook

ASHRAE Alaska Chapter is now on Facebook!
For updates through the Summer follow us at:
<https://www.facebook.com/AlaskaASHRAE/>



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This page will be continually updated. Please get your business card in for the year of 2017-2018. Business cards run from Sept to Sept for \$100.00 per year. Please send your photo-ready card to tmckeon@crweng.com



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