



March 2022

# Alaska Chapter Newsletter Hot Gas Bypass

## ASHRAE Monthly Meeting Information

### Presentation:

Holistic Thinking for Multidisciplinary Design Solutions

By: Erin McConahey

Date:  
Tuesday, March 24, 2022

Time:  
12:00 pm

Cost:  
Free

Location:  
GoTo Meeting Online

<https://www.gotomeet.me/ashraek>

Phone: 1-872-240-3412  
Access Code: 264-465-621

## Alaska Chapter Officers and Chairs

[Sam Ratnasigamani](#), President  
[samr@rsa-ak.com](mailto:samr@rsa-ak.com)

[Philip Hayes](#), President-elect  
[Philip.Hayes.2@outlook.com](mailto:Philip.Hayes.2@outlook.com)

[Nathan Lang](#), Secretary  
[Nathan.Lang@victaulic.com](mailto:Nathan.Lang@victaulic.com)

[James Boggs](#), Treasure  
[jboggs@amc-engineers.com](mailto:jboggs@amc-engineers.com)

[Blake Burley](#), Fairbanks Section President  
[blake@designalaska.com](mailto:blake@designalaska.com)

[Jeff Hurd](#), Grassroots Gov. Advocacy  
[Jeff.hurd@awwu.biz](mailto:Jeff.hurd@awwu.biz)

[Greg Jernstrom](#), Membership Promotion  
[greg@jernstromengineering.com](mailto:greg@jernstromengineering.com)

[Elena Hartford](#), YEA, Student Activities  
[ehartford@mechanicalsales.com](mailto:ehartford@mechanicalsales.com)

[Zach Keller](#), CTTC Chair  
[zkeller@stinebaugh.com](mailto:zkeller@stinebaugh.com)

[Cheyenne Alabanzas](#), Research Promotion  
[calabanzas@rsa-ak.com](mailto:calabanzas@rsa-ak.com)

[Jan Van Den Top](#), Historian  
[janvndtop@acsalaska.net](mailto:janvndtop@acsalaska.net)

Alaska ASHRAE Chapter  
PO Box 244503  
Anchorage, AK 99524

## President's Message:

Hello ASHRAE Alaska Members,

Happy March!

Equation of the month is, Stefan-Boltzmann Equation for Ice Rinks Radiant Heat Load,

$Q_r = A_c \times F_{ci} \times \sigma \times (T_c^4 - T_i^4)$  where  $Q_r$  is the radiant heat load in BTU/HR,  $A_c$  is the ceiling area in SF,  $F_{ci}$  is gray body configuration factor,  $\sigma$  is the Stefan – Boltzmann constant =  $0.1712 \times 10^{-8}$  BTU/HR. FT<sup>2</sup> X R<sup>4</sup>. (Josef Stefan 1879, Ludwig Boltzmann 1884). Indoor ice rinks create a unique condition where a cold plane (ice sheet) is maintained beneath an equally warm plane (ceiling). The ceiling is warmed by conductive heat flow from the outdoors and by normal stratification of arena air. Around 40% of the heat comes from the radiant sources. Considering this the ceiling radiant load can be lowered by using aluminum paint or materials with low emissivity over the exposed structural members. (Reference 2018 ASHRAE Handbook for Refrigeration)

Moving on to meeting on **Thursday March 24** at Noon via go to meeting, Our speaker for March is ASHRAE Distinguished Lecturer Erin McConahey speaking on **Holistic Thinking for Multidisciplinary Design Solutions**. The presentation covers understanding the perspectives of our partners and articulate our own technical parameters in a way that looks at synergy without strife by exploring case studies involving the interface and coordination between architectural, structural, civil, MEP, façade, acoustics, fire, and sustainability disciplines working in the building design context. We just sent out the board elections email. If you would like to volunteer, please let any of us know. Engineering Week 2022 was completed. The banquet was held virtually with awards to best projects and Engineers. Scholarships were also issued to the outstanding students. Thanks for your support. We are also planning on doing the RP shootout in the first week of May. More information to follow. CRC is coming up in May as well. It will be held in person this year.

We are also in preparation for the upcoming Cold Climate Conference in 2023 partnered with Scanvac. Thanks for attending the February YEA Bootcamp series with our speaker Scott Bohne, AIA. Our next speaker in March will be Tom Fischer with Aaron Plumbing and Heating. Stay tuned for more info. Please encourage engineers in your firm to attend the YEA Bootcamp series.

Thanks to all the volunteers, members, and pioneers!

Sincerely,

Sam Ratnasigamani,  
President 2021-2022  
Alaska Chapter ASHRAE  
[samr@rsa-ak.com](mailto:samr@rsa-ak.com)





March 2022

## Program Announcement

### March Meeting:

**Meeting:**  
**Presentation:**  
Holistic Thinking for  
Multidisciplinary Design Solutions

**Date:**  
Tuesday,  
March 24, 2022

**Time:**  
12:00–1:30pm

**Location:**  
<https://www.gotomeet.me/ashraeak>

**Dial in:** 1-872-240-3412  
**Access Code:** 264-465-621

**Cost:** Free

### Holistic Thinking for Multidisciplinary Design Solutions

**Summary:**

Designers of building HVAC systems do not act in a void but rather in a community of design and construction professionals who are all dedicated to the success of a given project. We can better contribute to this success when we understand the perspectives of our partners and can articulate our own technical parameters in a way that looks for synergy without strife. This session will draw on the speaker's two decades of experience as a design leader of teams with up to a dozen different analytical disciplines. The talk starts by introducing the idea of unconscious bias built into our professional world view by our academic and specialist training and then turns to tips for transcending that bias to develop design empathy and proactive working relationships. By exploring a series of short case studies involving interface and coordination between architectural, structural, civil, MEP, façade, acoustics, fire and sustainability disciplines working in the building design context, the audience will be able to better recognize the needs and design sensibilities of our partners outside of the HVAC field.



**Speaker's Bio**

Erin McConahey is a Principal in Mechanical Engineering with Arup, an employee-owned global engineering, advisory and planning consulting firm. During her 26 years with Arup, she has worked internationally and now leads multidisciplinary design teams in Los Angeles on a wide variety of project types.

Erin's passion for finding integrated design solutions through a collaborative design process began with a Bachelor's degree in Mechanical Engineering and a Master's degree in Structural Engineering from the University of California at Berkeley. As she rose in leadership within her firm, she served on Arup's global Trustee Board, was named an Arup Fellow for her technical excellence, spearheaded the Americas Region Diversity and Inclusion Initiative, and served on the leadership teams for a number of training programs. These service opportunities, coupled with growing concern over climate change, led her to a second Master's degree in Ethical Leadership from Claremont Lincoln University.

Erin is a Professional Engineer in California and Colorado, a LEED accredited professional (BD+C specialty), an ASHRAE accredited High Performance Building Design Professional, and a Fellow of the American Society of Heating, Refrigeration, and Air-conditioning Engineers. She is co-author of the ASHRAE Natural Ventilation Design Guide and writes semi-annually for the Engineer's Notebook column in ASHRAE Journal. In the latter capacity, she has emphasized the link between mechanical engineers' "skills for this decade" to the wider global trends around the carbon economy, healthy materials, and sustainable development.

ASHRAE YEA

# Hockey/Broomball Game and Happy Hour



**Friday, March 18, 2022**  
**6:00p.m.-8:00p.m.**

Westchester Lagoon, Anchorage

**Here is our second attempt to get outside and play!**

We still have a little planning to do.

We will either play a game of hockey or broomball depending on what everyone is up for, and then we will retire to a brewery for some drinks.

Feel free to join in the fun at any point.

Of-age friends and significant others are welcome to join in the game and post-game festivities.

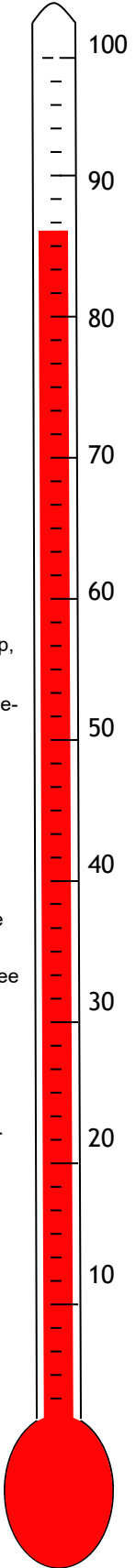
**Remember to bring a head lamp, hand/foot warmers, and warm clothing.**



Research Promotion:

**2021-2022 Research Investors, ASHRAE Alaska Chapter**

<u>Organizations</u>	<u>Individuals</u>
<p><b><u>ASHRAE Associate</u></b> (\$2,500 - \$4,999) Stinebaugh &amp; Company</p> <p><b><u>Major Donor - Silver</u></b> (\$1,000 - \$2,499)</p> <p><b><u>Major Donor - Bronze</u></b> (\$500 - \$999) JP Sheldon Trane Co. UA Local 367</p> <p><b><u>Chapter Recognized Donor</u></b> (\$150 - \$499) Aaron Plumbing &amp; Heating Co.</p>	<p><b><u>Major Donor</u></b> (\$250 - \$2,499) Jan Van Den Top</p> <p><b><u>Honor Roll Donor</u></b> (\$150 - \$249) Mack W. Bergstedt Nathan Zeigler Samuel Ratnasigamani Phil Hayes Nathan Lang James Boggs Cheyenne A. Alabanzas Tracy L. McKeon Douglas B. LeCren</p>



Fellow ASHRAE Members,

**Through your generosity our chapter has currently raised more than \$8,000 for ASHRAE RP so far this year!** Keep it up, your generous contributions will pay back in countless ways to our local and broader industry as a whole!

It is through the funds generated for RP that all ASHRAE codes, standards and design guides are researched, written and implemented into the built environment where we live and work. Thank you for your generous support, it is only through your donations and involvement that we can continue to advance the knowledge, quality and standards for our built environment.

I have often heard the question, "How are my RP donations used?" and "What benefit do RP donations have for Alaska?"

- ASHRAE RP funds are pooled at the society level, then with the entire society's resource potential the funds are redistributed in order to achieve the highest potential output.
- 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.
- RP funds return to Alaska in various forms such as university research grants, scholarships, and technical committee funding.

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.ashrae.org/RP> and scroll down the page to select the "ONLINE CONTRIBUTION FORM" link.
- You can mail a check made out to "ASHRAE Research" please put "Alaska Chapter" in the memo line and mail to: ASHRAE RP; 180 Technology Parkway; Peachtree Corners, GA 30092.
- You can also donate when you renew your membership on line. After you have made your selections for renewal the next page is for donations to ASHRAE funded items. About 3/4 of the way down the page you will see Research Promotion. Click "Add to Cart".

If you have already made a donation, your name should appear at the top of this page, if not, please let me know and I will update the page for next month. Please feel free to contact me with any questions about ASHRAE Research Promotion; the ASHRAE Foundation; or the ASHRAE Learning Center.

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

Sincerely,  
Cheyenne A. Alabanzas  
Alaska Chapter Research Promotion Chair, [calabanzas@rsa-ak.com](mailto:calabanzas@rsa-ak.com)



## Chapter Sponsors:

## 2021-2022 ASHRAE Alaska Chapter Sponsors

**Gold Chapter Sponsor: (\$5,000)**

**STINEBAUGH**  
**& COMPANY**  
 ENGINEERED HVAC SOLUTIONS

**Forget-Me-Not Chapter Sponsor: (\$2,500)****Chapter Meeting Sponsor: (\$1,000)****Chapter Web Sponsor: (\$350)**

In the past couple of years, the Alaska Chapter introduced chapter sponsorship levels to help recognize those who have steadfastly supported the Alaska Chapter over the years. Included with these sponsorship levels are various 'chapter benefits' as a way of thanking and honoring the generosity of our loyal supporters.

Portions of the sponsorships are utilized to help fund the Alaska Chapter operations as well as donated to ASHRAE Research Promotion in the sponsor's name.

Below is a list of the sponsorship levels along with the 'chapter benefits' for each level of donation.

**Corporate Donations:**

Corporate donations to the Alaska ASHRAE Chapter are recognized in five tiers:

**• Gold Sponsorship: \$5,000 & Above**

• (1) Foursome team for annual golf tournament • (1) Hole sponsorship for golf tournament • (1) Seat for every chapter meeting -OR- (1) Range Sponsorship during Annual RP Shoot out • Announcement of your sponsorship during all meeting introductions and events. • Logo on website • Business card advertisement in newsletter (September – May) • Job postings on the ASHRAE Alaska website and on the newsletter • RP Donor Level - ASHRAE Associate: (Gold Commemorative Coin & Plaque, Listed in the annual Investor Honor Roll)

**• Forget-Me-Not Chapter Sponsorship: \$2,500 - \$4,999**

• (1) Range Sponsorship during Annual RP Shoot out • (1) Hole Sponsorship during Annual Golf Tournament • Announcement of your sponsorship during all meeting introductions and events. • Logo on website • Business card advertisement in newsletter (September – May) • Job postings on the ASHRAE Alaska website and up to (2) on the newsletter • RP Donor Level - Major Donor – Silver: (Silver Commemorative Coin & Plaque, Listed in the annual Investor Honor Roll)

**• Chapter Meeting Sponsor: \$1,000**

• Sponsor's table available with display and literature prior to meeting (A website link and a hole or range sponsorship will be made available as an alternative for a virtual meeting sponsorship) • Logo on welcome message during monthly chapter meetings • Announcement of your sponsorship during the meeting introduction • Logo on website • Business card advertisement in newsletter (September – May) • RP Donor Level - Major Donor – Bronze: (Bronze Commemorative Coin & Plaque, Listed in the annual Investor Honor Roll)

**• Web Sponsorship Package: \$350**

• Logo on website • Business card advertisement in newsletter (September – May) • RP Donor Level – Honor Roll (Individuals only): (Receive blue desktop coin holder, Listed in the annual Investor Honor Roll)

**• Newsletter Sponsorship: \$150**

• Business card advertisement in newsletter (September – May)



## ASHRAE Alaska & AMCA 2022 RP SHOOTOUT



### SAVE THE DATE!

Date: Friday, May 6th

Where: Birchwood Recreation & Shooting Park

Time: 12:30 - 4:00 PM

All proceeds go towards ASHRAE Research Promotion.

More details coming soon!

“Big shots are only little shots who keep shooting”  
Christopher Morley

“Aim Small Miss Small”  
Mel Gibson,  
The Patriot

ASHRAE Research Promotion



# Membership Report

Welcome new ASHRAE members since the last Membership Promotion article! Please be sure to extend a warm welcome to the individuals below:

**Kohl Keil**  
**David Chamberlain**  
**Roger Smith**  
**William Fraser**  
**Chandler Kemp**

This brings us to **201 members** strong in the Alaska chapter. Remember it takes everyone to help grow our local chapter, so look around and invite a coworker or friend to attend this month's meeting.

## ***Why You Should Be an ASHRAE Member:***

*It's really quite simple. You can benefit from all of the resources ASHRAE provides as the world's leading organization of HVAC&R and built environment professionals. Consulting engineers, property owners and managers, designers, installers and maintenance and repair professionals all benefit from ASHRAE, including these member-benefit highlights:*

*ASHRAE Handbook — the indispensable, industry-wide resource for all HVAC&R professionals. Each volume is updated every four years. And members can subscribe to ASHRAE Handbook Online for immediate online access to the complete Handbook series.*

*ASHRAE Journal — this monthly resource is the most trusted publication in HVAC&R engineering.*

*High Performing Buildings — the quarterly magazine for innovation and measured performance in efficient and sustainable buildings.*

*ASHRAE Technology Portal*

*HVAC&R Industry — a weekly news resource keeping ASHRAE members abreast of the latest industry news and information.*

*Access to more than 300 technical publications.*

*Access to education, courses and webcasts.*

*Professional certification*

Please feel free to contact me about your membership renewal or associated benefits.

Sincerely,  
Gregory Jernstrom  
ASHRAE Alaska Chapter Membership Promotion Chair  
907.522.1070





Tom Fisher  
President

Email: tomfisher@aaronak.com

2143 Standard Avenue  
Fairbanks, Alaska 99701  
website: www.aaronak.com

Phone: 907-452-3463  
Mobile: 907-378-2804  
Fax: 907-456-1315

The Northwest's Exclusive Cleaver-Brooks® Manufacturers Representative

**Specializing in Boiler**

Rentals | Repair | Parts | Sales | Service | Training

New & Used Inventory | Rental Equipment | 24/7 Emergency Services  
Factory-Trained Boiler/Burner Technicians | Extensive Parts Inventory



CLEAVER-BROOKS® CLEARFIRE & OTHER MODELS | CLEAVER-BROOKS® PRO-FIRE  
STACKS | BLOWDOWN EQUIPMENT | WATER HEATERS | CONDENSATE SYSTEMS | ECONOMIZERS



**AMC Engineers**  
High Performance Building Solutions  
Mechanical, Electrical and Plumbing (MEP) Systems



Anchorage, Alaska | Bellingham, Washington | 907.257.9100 | www.amc-engineers.com



Glenn Evans  
BRANCH MANAGER

Email: gevens@chchydronics.com  
Direct: 907.268.2061  
Cell: 907.312.6046  
CHCHYDRO.COM

907 E DOWLING RD, UNIT 14, ANCHORAGE, AK 99518

**SERVING THE NORTHWEST SINCE 1964**  
WASHINGTON | OREGON | IDAHO | ALASKA



(800) 627-2653 | COLEINDUST.COM



**Civil • Mechanical • Electrical • Structural • Geotechnical  
Environmental • Land Surveying • Planning**

Bright People. Powerful Solutions. Building Alaska.

Anchorage | Palmer  
907.562.3252 (p) | 907.561.2273 (f)  
www.crweng.com

**Arctic Trace® Freeze Protection System**  
Submersible Heat Trace "Inside the Pipe or Vessel"  
Installs into existing lines No excavation required  
Water Supply—Water Well—Septic Tank & Sewer Line



**dn Alaska**  
www.arctictrace.com  
(907) 522-3004



Certified to NSF/ANSI #1  
Available upon request



**JERNSTROM ENGINEERING**  
CONSULTING MECHANICAL ENGINEERS

*Simplify...*  
Find all of your Architecture, Engineering, and Survey services in one place



mail@designalaska.com www.designalaska.com  
1-800-668-8919 1-907-452-1241



**Rick Loewen**  
201 East 54th Avenue  
Suite 100  
Anchorage, AK 99518

**Andrew Lee**  
phone (907) 561-4747  
fax (907) 562-7473  
www.jpsheldon.com

www.LONG.com | (907) 561.3044



**LONG®**  
Long live your building!

BUILDING AUTOMATION - SECURITY SYSTEMS  
ACCESS CONTROL & CCTV - HVAC SERVICE - PARTS





# MBA Consulting Engineers, Inc.

Dedicated to providing mechanical and electrical designs for safe, comfortable, and convenient building systems, within budget, and with minimum operating and maintenance costs.



3812 Spenard Road, Suite 200 - Anchorage, AK 99517  
Tel: 907.274.2622 - Fax: 907.274.0914  
Email: brads@mba-consulting.net

*We enjoy and embrace any opportunity to solve an engineering problem!*



**NORCOAST MECHANICAL, INC.**  
ENGINEERING & CONTRACTING

Main (907) 562-2125  
Fax (907) 561-2461

6136 MacKay Street  
Anchorage, Alaska 99518  
www.norcoastmechanical.com

# RSA Engineering, Inc.

MECHANICAL AND ELECTRICAL CONSULTING ENGINEERS



RSA has proudly provided Electrical and Mechanical design services in Alaska for more than 30 years.

907-276-0521  
670 W. Fireweed Lane, Suite 200  
www.rsa-ak.com



# STINEBAUGH & COMPANY

**Zach Keller**  
Sales Engineer

5730 B Street • Anchorage, AK 99518  
phone: 907.345.8021 • direct: 907-264-6004  
www.stinebaugh.com • zkeller@stinebaugh.com

**Engineered HVAC Solutions**



**Elena Hartford**  
Sales Engineer

907.202.0395 Mobile  
907.562.6940 Office

EHartford@mechanicalsales.com

**Mechanical Sales, INC.**



# YOUR INTEGRATED SOLUTIONS PARTNER

COMMUNITY DESIGN SOLUTIONS  
DATA & TECHNOLOGY  
ENERGY | FACILITIES | MINING  
TRANSPORTATION  
WATER & ENVIRONMENT

2700 Gambell St. Ste 500 Anchorage, Alaska 99503  
**907.743.3200 // RESPEC.COM**

# STINEBAUGH & COMPANY

**Doug Franklin**  
President / CEO

5730 B Street • Anchorage, AK 99518  
phone: 907.345.8021 • cell: 907.306.2939  
www.stinebaugh.com • dfranklin@stinebaugh.com

**Engineered HVAC Solutions**

# STINEBAUGH & COMPANY

**George Hearin**  
Sales Engineer

5730 B Street • Anchorage, AK 99518  
phone: 907.345.8021 • fax: 907.345.8022  
www.stinebaugh.com • ghearin@stinebaugh.com

**Engineered HVAC Solutions**



**NEIL SANCHEZ**  
Sales Engineer

Office: (907) 562-2608  
Cell: (907) 290-9875

Email: nsanchez@GoPSi.com

9210 Vanguard Drive  
Suite 2  
Anchorage, AK 99507

www.GoPSi.com



**MICAELA PETERSEN**  
Sales Representative

Office: (907) 562-2608

Email: mpetersen@GoPSi.com

9210 Vanguard Drive  
Suite 2  
Anchorage, AK 99507

www.GoPSi.com



Hot Gas Bypass



Nathan Lang  
Alaska Territory Manager

Email: [nathan.lang@victaulic.com](mailto:nathan.lang@victaulic.com) Cell: 907-205-9445

This page will be continually updated. Please get your business card in for the year of 2021-2022. Business cards run from Sept 2021 to May 2022. For sponsorship opportunities and costs, please contact [Nathan.Lang@Victaulic.com](mailto:Nathan.Lang@Victaulic.com)