



Alaska Chapter

April 2022

Alaska Chapter Newsletter Hot Gas Bypass

ASHRAE Monthly Meeting Information

Presentation:

Lessons Learned in Arctic Engineering

By: Brad Sordahl, Dave Shumway, Mark Frischkorn

Date: Thursday, April 21, 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

Philip Hayes, President-elect
Philip.Hayes.2@outlook.com

Nathan Lang, Secretary
Nathan.Lang@victaulic.com

James Boggs, Treasure
jboggs@amc-engineers.com

Blake Burley, Fairbanks Section President
blake@designalaska.com

Jeff Hurd, Grassroots Gov. Advocacy
Jeff.hurd@awwu.biz

Greg Jernstrom, Membership Promotion
greg@jernstromengineering.com

Elena Hartford, YEA, Student Activities
ehartford@mechanicalsales.com

Zach Keller, CTTC Chair
zkeller@stinebaugh.com

Chevenne Alabanzas, Research Promotion
calabanzas@rsa-ak.com

Jan Van Den Top, Historian
janvndtop@acsalaska.net

Alaska ASHRAE Chapter
PO Box 244503
Anchorage, AK 99524

President's Message:

Hello ASHRAE Alaska Members,

Happy April!

Spring is here and days are getting longer.

Equation of the month is, Solar Declination, $A = 23.45 \sin [360 * (284+N/365)]$, where N is the day of the year. The axis at which the Earth rotates is tilted at an angle of 23.45 Degrees to the Earth's orbital plane and the sun's equator. The Earth's tilted axis results in day-by-day variation of the angle between the Earth Sun Line and the Earth's equatorial plane. This variation in angle is called Solar Declination, A. (Reference 2019 ASHRAE Hand Book HVAC Applications, Chapter 36, Solar Energy Use). Solar Energy can be used to supplement conventional energy sources. The panels are automatically adjusted daily based on the Solar Declination angle and the Latitude and the Sun's position.

Moving on to meeting on **Thursday April 21** at Noon via go to meeting, We have a "Lessons Learned in Arctic Engineering Panel presented by our very own Chapter ASHRAE Members and Principal Engineers". Our speaker's for the Panel are Mark Frischkorn P.E., Vice President RSA Engineering, Dave Schumway P.E., Vice President AMC Engineers, Brad Sordhal P.E. Principal Chief Engineer, MBA Engineers. Each Panelist will do a presentation and answer audience questions covering a wide variety of topics based on their Arctic Engineering Experience. Please tune in as we explore the challenges faced in the 60 Degree North and possible solutions.

Next we have the RP shootout coming up on May 6th. Please join us for an afternoon of fun. We are looking for Sponsors (Range/Shotgun/ Ammunition). Thanks for supporting ASHRAE Research. We are also getting ready for the Chapters Region Conference held in person this year in Regina for Region XI.

We are also in preparation for the upcoming Cold Climate Conference in 2023 partnered with SCANVAC. Thanks for attending the March YEA Bootcamp series with our speaker Tom Fisher, President Aaron Plumbing and Heating. Our next session will be in May will two presentations. 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





April 2022

Alaska Chapter Newsletter
Hot Gas Bypass

April Meeting:

Meeting:
Presentation:
Lessons Learned in Arctic
Engineering Panel

Date:
Thursday,
April 21, 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

Lessons Learned in Arctic Engineering Panel

This month we are pleased to have our very own Principal Engineers and ASHRAE Alaska Chapter members present on their experiences on the lessons learned in Arctic Engineering, with challenges faced and possible solutions.

Speaker's Bio's



Mark Frischkorn, P.E. Vice President, Principal Mechanical Engineer, RSA Engineering Inc. Mark has worked in more than 100 Alaskan communities for more than 30 years and holds professional licenses in two states. Mark is an active ASHRAE member since 1993 and involved in NFPA and International Code council. Mark serves in the UAA college of Engineering advisory board and supports instruction of UAA's Northern Design course. Mark has practiced design and maintenance of facilities in northern climates to construct sustainable, energy efficient buildings for the unique needs of northern inhabitants. In his free time Mark enjoys the great Alaska outdoors and is an avid runner.



Dave Shumway, P.E. Vice President, Principal Mechanical Engineer, AMC Engineers. Dave enjoys troubleshooting complex mechanical engineering problems through the application of fundamental physical principals. Dave has over 10 years of practical experience on nuclear powered propulsion systems. Dave has focused on simple and elegant designs throughout Alaska. Dave has designed mechanical systems for several buildings for UAA and UAF. When Dave is not thinking about designs he enjoys detective / thriller novels and working on home remodel projects.



Brad Sordahl, P.E. Chief Principal Mechanical Engineer, MBA Engineers. Brad has more than 30 years of experience in the Alaska. Brad completed his ME degree from Washington State University and is a principal at MBA Consulting Engineers. Brad has focused his designs on power generation and heat recovery systems. In his free time Brad enjoys Golf and outdoor activities.

Research Promotion:

2021-2022 Research Investors, ASHRAE Alaska Chapter

<u>Organizations</u>	<u>Individuals</u>
<p><u>ASHRAE Associate</u> (\$2,500 - \$4,999) Stinebaugh & Company</p> <p><u>Major Donor - Silver</u> (\$1,000 - \$2,499) Alaska Mechanical Contractors Association</p> <p><u>Major Donor - Bronze</u> (\$500 - \$999) JP Sheldon Trane Co. UA Local 367</p> <p><u>Chapter Recognized Donor</u> (\$150 - \$499) Aaron Plumbing & Heating Co.</p>	<p><u>Major Donor</u> (\$250 - \$2,499) Jan Van Den Top</p> <p><u>Honor Roll Donor</u> (\$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 \$13,000 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.

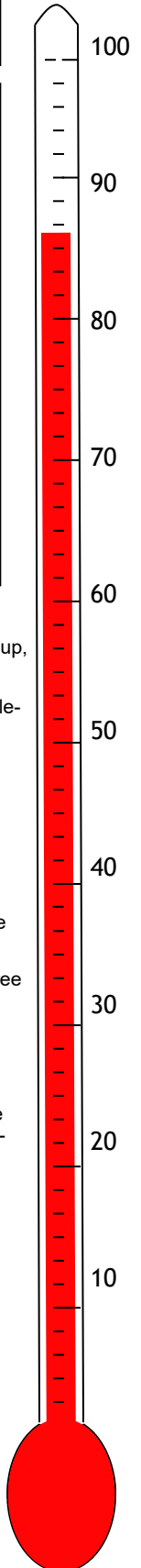
If you are interested in donating towards the future of HVAC&R industry standards and practices please follow one of these three donation options:

- 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



Chapter Sponsors:

2021-2022 ASHRAE Alaska Chapter Sponsors

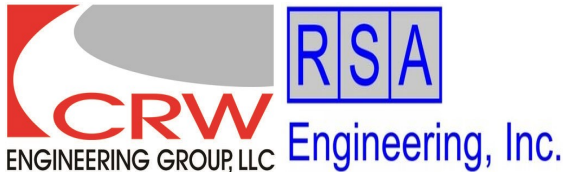
Gold Chapter Sponsor: _____ (\$5,000)

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



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

“Aim Small Miss Small”
Mel Gibson,
The Patriot

Date: Friday, May 6th

Where: Birchwood Recreation & Shooting Park

Time: 12:30 - 4:00 PM

Event:

- 1) 5 member teams will be competing in 2 rounds of Skeet and 2 rounds of Trap.
- 2) Each team member will be provided with 4 boxes of Ammunition (100 rounds).
- 3) Shotgun rentals are included in the event cost, (or bring your own).
- 4) Lunch, Snacks and drinks will be provided.

Cost: \$130 per person/\$650 per team.

Benefit: All proceeds go to ASHRAE Research Promotion.

Additional Info: For additional details and updates see the RP Shootout event page at: ASHRAEAlaska.com/events

Sign-Up: **Please sign-up by Friday, April 29th**

1) _____ 2) _____
 3) _____ 4) _____
 5) _____

Range Sponsor: \$250
 Company Name for Stand: _____

Shotgun Sponsor: \$250
 Company/Individual Name: _____

Ammunition Sponsor: \$500
 Company/Individual Name: _____

Payment Method (please circle): Check Invoice
 For check payments, please make payable to: “ASHRAE Alaska Chapter”
 For invoiced payments, please provide an e-mail to receive the invoice at.

Contact Phone Number: _____

Contact e-mail Address: _____

ASHRAE Research Promotion



Please fill out form and send to:
 Cheyenne A. Alabanzas, Alaska Chapter RP Chair
 E-mail: calabanzas@rsa-ak.com
 Phone: (907) 865-0581



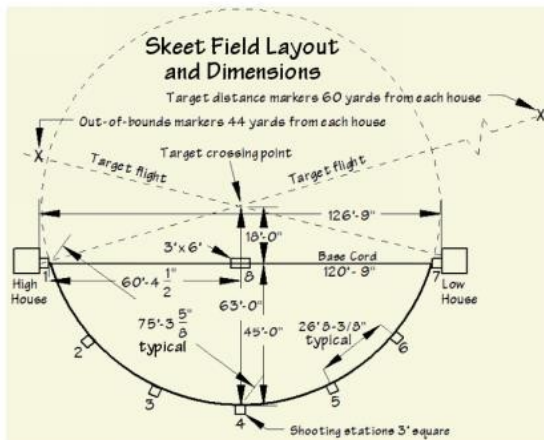


ASHRAE Alaska & AMCA 2021 RP SHOOTOUT

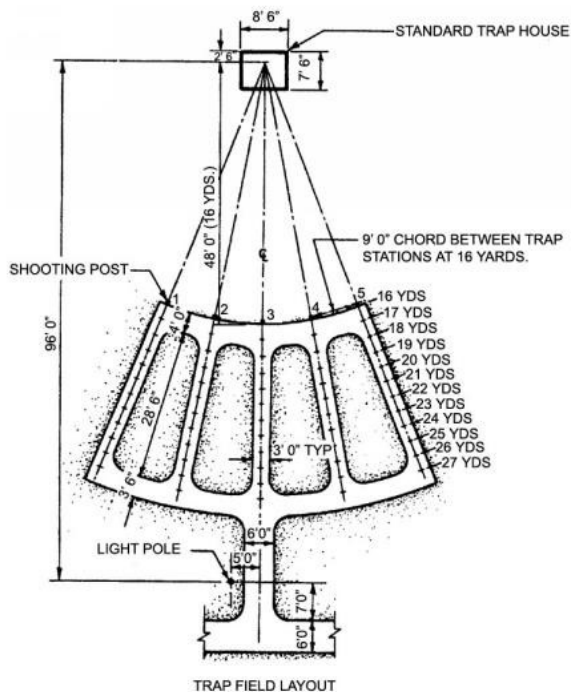


“Big shots are only little shots who keep shooting”
Christopher Morley

“Aim Small Miss Small”
Mel Gibson,
The Patriot



Trap Field Layout



ASHRAE Research Promotion



Please fill out form and send to:
Cheyenne A. Alabanzas, Alaska Chapter RP Chair
E-mail: calabanzas@rsa-ak.com
Phone: (907) 865-0581





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




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



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

www.GoPSi.com

NEIL SANCHEZ
Sales Engineer

Email: nsanchez@GoPSi.com

9210 Vanguard Drive
Suite 2
Anchorage, AK 99507



Office: (907) 562-2608

www.GoPSi.com

MICAELA PETERSEN
Sales Representative

Email: mpetersen@GoPSi.com

9210 Vanguard Drive
Suite 2
Anchorage, AK 99507



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



Hot Gas Bypass



Nathan Lang
Alaska Territory Manager

Email: 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