Chapter Website

www.ashraetnvalley.org

2022-2023 Chapter Officers

President

Alex Ramsey 423-488-0376

President-Elect

Jan Jennings 615-330-7923

Vice-President

Treasurer

Patricia King 423-596-0736

Secretary

Carolyn Ritchie 423-752-3438

Communications Chair

Kay Thrasher 423-855-1184

Research Promotion Chair

Tommy McMasters 423-493-7530

Historian

Scott Harrington 865-583-9309

Student Activities

Vacant

Membership

John Richardson 423-413-6062

Grassroots Gov. Affairs

<u>Scott McKenzie</u> 423-664-1492

Young Engineers in ASHRAE (YEA)

Dillon Grider 423-619-5342

Webmaster

<u>Kay Thrasher</u> 423-280-9815

Chapter Administration

Tommy McMasters 423-493-7530

Chapter Administration

John Richardson 423-413-6062

ADDITIONAL BOARD OF GOVERNORS (Outside of Officers Listed Above)

 David Dinse
 706-820-0711

 Jac Cooper
 423-280-8361

 Joe Runyan
 423-285-2556

BOG meetings are typically held on the 3rd Monday, 12:30-1:30 pm at Council Fire Clubhouse

IN PERSON MEETING NOTICE

Date: Wednesday, April 05, 2022

Time: 11:30 a.m. Lunch served & Chapter Announcements Place: Mountain City Club, 729 Chestnut St., Chattanooga

Cost: \$20 if you're not on the meal plan

\$10 for ASHRAE student members (must be a member)
Now accepting credit cards via smart phone app or online via PayPal

Menu: Vegetarian or low carb meals <u>must</u> be requested early

Reservations: RSVP no later than 4:00pm Tuesday 4/4 via an

Email to *Tricia King*, Patricia.king@rockwellautomation.com

Erich Binder

HVAC Building Pressurization Systems – Lessons Learned

This month's chapter program will give us the opportunity to learn more about HVAC building pressurization systems and lessons learned.

A recent audit of 35 existing buildings have known pressurization's issues including:

- Over Pressure of buildings often to much make up air.
- Under Pressure in building due to leaks, inadequate HVAC, poor construction, on site modifications.
- Improper HVAC Economizers operation (waste heat recovery.)
- Poorly controlled, designed and or constructed relief systems.
- Commissioning and Operation issues.

Pressurization is a critical for maintaining room cleanliness in Labs, Hospitals, Processing, Manufacturing, Control, Computer, MCC, VFD & Electrical Buildings, etc.

Design margins should be incorporated in the pressurization system to allow for building envelope seal degradation.

When pressurization is required for safety or code compliance, make provisions for periodic surveillance & testing.

Critical facilities require a leak test of exterior & interior walls, partitions, doors, and windows between two adjacent areas with different pressurization levels & any building elements between two areas with different pressurization levels.

Erich Binder is an independent engineering consultant with an extensive experience in in the sustainable design of Commercial, Institutional, Industrial, & Cold Climate, Heating Ventilation & Air Conditioning (HVAC), Plumbing, Fire Suppression & Specialty Mechanical Systems engineering. Erich has also a Certified Risk Manager with over 20 years of Process

ASHRAE Government Affairs – Updates - http://www.ashrae.org/advocacy

Local Groups of Interest:

Green Spaces Chattanooga

Chattanooga Engineers Club

<u>Chattanooga - American Institute of</u> Architects

<u>Tennessee Board of Architectural and Engineering Examiners</u>

Geothermal Heat Pump Consortium

Chattanooga Engineers Week

Safety, Loss Prevention, Industrial Hygiene, Health & Safety Engineering and Auditing experience. Including Corporate Emergency Response and Merger and Acquisition Activities Education and certification includes

- Registered Engineering Technologists RET, Alberta Society of Engineering Technologists (ASET)
- Sothern Alberta Polytechnic (SAIT), Air Conditioning Engineering Technology Diploma
- SAIT Polytechnic, Registered Instructor
- Certified Risk Manager CRM, Risk Insurance Management Society (RIMS)
- Refrigeration Service Engineers Society Certificate, HVAC and Building Automation Controls
- Decision & Risk Analysis & Value Engineering Certification

Erich has extensive experience engineering mechanical system for a variety of cold climate applications. These include Oil & Gas projects include developing HVAC standards and engineering for numerous process facilities for Oil Sands, SAGD and Mining Projects, Gas Processing, Metering Compression and Pipeline facilities, Upstream, Mid Stream, Down Stream Facilities. Erich Binder has engineered HVAC systems for various support facilities for various Industrial projects including Control Buildings, E-House, VFD and Data Storage Facilities, Maintenance, Storage and Emergency Response Facilities. He has extensive experience in Power Generation facilities, including Coal, Natural Gas, Waste Heat, Waste Wood, Run of the River and Combined Heat Power systems. Erich specializes in Hazardous spaces and environments, Laboratory, Sampling Stations, Hazardous Environment, Dust, Mist and Fume collection systems, Industrial Hygiene facilities. Erich Binder has worked as a Risk Analyst & Loss Prevention Consultant providing input into corporate insurance placement, managed Boiler Machinery, Construction Project Losses, Claims and Loss Prevention issues. He has provided support to Insurance Brokers and Insurance companies representatives to review and investigate the cause of failures relating to Power, Natural gas Mid-Stream, Compression, Metering and Pipeline machinery and fire explosion related failures. Erich Coordinated Risk and Loss Prevention audits and inspections for all corporate facilities. A key member of corporate Emergency Response Team and key leaders in Responsible Care, ISO9000, merger and acquistion programs.

Professional Development Certificates (1 hour) will be provided after the webinar. The webinar should conclude by 1 pm

ANNOUNCEMENTS:

ASHRAE and Chapter Membership

The following reflects insights that came to mind while working through the Chapter database this month.

From the data:

The Tennessee Valley Chapter has 84 assigned members this year. Hopefully we will not have a "net loss" again this year. We had 88 assigned members in 2019. NOTE - Chapter membership is a very fluid and at times imperfect number. It includes new members, cancellations, and transfers in and out, and also members who should have been assigned to another chapter due to their physical address.. A high-level look at several sections from our member scorecard this month looks as follows:

- Six (6) New Members Walter Coffman, Logan O'Dell, Gage Plotner, Sylas Rehbein, Charles Trower, Wang Pengtao Welcome to all of you.

 If you see any of them at the meeting, make sure they are
 - welcome. If you know them and they are not attending the meetings, invite them. We need active members!
- Six (6) Member Cancellations
 - Four cancellations for "non-payment of dues were recorded
 - Two members have passed away this year Bill Estes and Joe Robbins
- Transfers (-1 net) There have been three (3) members "Transfer in" to the chapter and
 - four (4) members have "Transferred Out". People move.
- Demographics It looks like the "old guys" are beating the "young guys" here as the chapter has nineteen (19) "Life Members" assigned compared to only eleven (11) "YEA Members". This really needs to be reversed as many of us "old guys" are slowing down. BTW, my use of the term "old guys" is nowhere close to being politically correct as our newest chapter Life Member is Kay Thrasher. Congratulations Kay!!!

As one can see, from a data point of view it is easy to develop an interesting visualization.

You, the Chapter, member probably see a completely different perspective through your work, interaction and networking opportunities between each other.

<u>Programs</u> - The Chapter wants to be a benefit to you. Hopefully, you all are being fed program material that is of benefit to you, if not, "SPEAK UP" so we can work toward better meeting your expectations. <u>Participation</u> - Participate and stay active. If no one asks you to help, step forward and volunteer. Participation can help one develop leadership skills that are transferrable to your "day job".

2022-23 Chapter Programs

Good programs are what make the Chapter meetings a success. Last year your participation (attendance) was great. It is directly attributable to the quality of programs. Input is continually needed from everyone (both members and non-members) for topics (and potential presenters) that are of interest. Efforts will be made to address all needs (residential, commercial, nuclear, renewable, etc.), so do not be ashamed to ask.

Contact Kay Thrasher or any current Board member with suggestions.

2022-23 Meeting Dates

Topic

09/07/2022	ETHICS
10/05/2022	Values and Benefits of Home/Commercial Inspections
11/02/2022	Roundtable Discussion
12/07/2022	New Refrigerant Codes
01/04/2023	Indoor Pool Room Design
02/01/2023	Compressed Air Systems
03/01/2023	Hydronic Systems for Decarbonization
04/05/2023	HVAC Building Pressurization Systems
05/03/2023	
5/25/2023	Golf Tournament Fundraiser