October Meeting

Tuesday, October 09, 2018

Main Meeting:
How Not To Design a Steam System

MEMBERSHIP PROMOTION/YEA/STUDENT ACTIVITY NIGHT

Please see page 3 for more information.

LAST MEETING

MIT Nano Tour

Please register online at www.ashraeboston.org
If you have any questions, you may contact Lucas Rowe or Alex Gilman, Attendance Chair, at ashraebostonattendance@outlook.com.

Thank You

Statements made in this publication are not expressions of the Society or of the Chapter and may not be reproduced without special permission of the Chapter.
Hello Member, fall is here and soon the jackets, sweaters and coats will be coming out of the closet. The MIT Nano tour in September was a big success, we met the 60 people attendee and may have had a bit more people than was expected. Big thanks to Greg Shenstone, lead project design engineer on the job, for the presentation and tour of the facility. Also big thanks to Dennis Grimard, Ph.D. managing Director at MIT Nano for allowing us on the campus and also providing additional information on the tour.

We have a great meeting coming up on October 9th. Joe Singerling from Fulton Steam Solution will be present How NOT to Design a Steam System and Andrew Berthe of Spirax Sarco will present the Fundamentals of Steam Utilization, both presentation should prove to very informative for our members and guest.

It is our Membership Promotion Night, so bring someone along to the meeting who may be interested in joining. Having them attend a meeting may be enough to sway them into signing up for the benefits that ASHRAE provides. In addition to this, October will also be a Student Member night, so we encourage students and their advisors to come by for the educational seminar as well. We are always looking for Young Engineers in ASHRAE (YEA) members to get more involved in our chapter. So we are also kicking off the year with YEA Night, if you are interested in learning more about YEA, please join us at our YEA promotional night.

Wanted to congratulate our member that track their way to the CRC in Jersey City, NJ this pass August, thank you for getting there by bus, car, and trains safely there and back home. We received the Golden Boot Award for members that traveled the furthest to attend the CRC. Wanted to acknowledge the awards also received while we were there,

- Yuka Narisako, Most Improved Runner Up Award
- Lance Brown for Presidential Award of Excellence for Sustainability Chair
- William Tang, Endowment Chevron, High Five Chevron, Full Circle Chevron
- Mike Gilroy Honor Roll 2017, Special Citation

If you are currently not a member but would like to join, please contact William Cunningham at co01mem@ashrae.net. He will be more than happy to assist you with membership information.

Look forward seeing everyone the evening of October 9th!

<table>
<thead>
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<th>Presidential Award of Excellence</th>
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<td><strong>Boston Chapter - 2018-2019</strong></td>
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<td>1052</td>
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Main Section Title of presentation: How Not To Design A Steam System

Presentation Outline:

Focuses on common mistakes made throughout the industry by installing contractors, designers and competitors with steam system design. It highlights common poor practices that have been duplicated from years past and covers good practices in steam system design moving forward. It also covers issues that can arise from improper steam system design. With system design we review steam velocities, near boiler piping, steam header piping, proper header design, impact of condensate on the system, proper condensate system piping and design and proper boiler sizing.

Speaker Bio:

Joe Singerling is currently the Industrial/Commercial Market Manager for Fulton Steam Solutions, a subsidiary of The Fulton Companies in Pulaski, NY. He has worked six years at Johnston Boiler Co. assisting customers with custom boilers, updating pressure vessel and burner designs, and helping to develop new products. He has currently worked at the Fulton Companies for over nine years. Two and a half of those years as a steam applications engineer designing and overseeing manufacturing of complex skid mounted steam systems. He has also spent one and a half years with the service department field troubleshooting system problems in the field. He now provides the in house steam training as well as conducting training, designing steam systems, and troubleshooting system issues in the field.
2018-2019 Officers

Daniel Carington, LEED AP BD+C is an HVAC Engineer at BR+A Consulting Engineers, LLC and has been with the company since 1990. Daniel is a 2001 graduate from Wentworth Institute of Technology with a Bachelor of Science in Design Engineering, earned his LEED Accreditation in 2012. He joined ASHRAE in February of 1994 as an Associate member and became a Member in November of 2002. Daniel is currently 2018-2019 Chapter President, served as President –Elec fiscal year 2017-2018, CTTC Chair, Membership Promotion Chair, Program Manager and Vice President for Chapter fiscal year 2016-2017. Daniel served as the Student Activities Chairman from 2003-2004, Membership Promotion Co-Chair 2013. Membership Promotion Chair 2014-2017, Chapter Secretary for 2015-2016, and on the ASHRAE Boston Chapter Board of Governors 2014-2017.

Mark Leonard, PE, LEED AP BD+C is an Associate at BR+A Consulting Engineers, LLC. Mark is a 2010 graduate of the University of Massachusetts Amherst with a Bachelors Degree in Mechanical Engineering. He joined the Boston ASHRAE Chapter as an Associate member in 2010. Mark has served many roles in the Boston Chapter including Publicity Chair (2013-2015), Program Manager Chair (2015-2017), Board of Governors (2015-2018), Secretary (2016-2017) and most recently as Vice President (2017-2018). Mark will serve as this year’s President-Elect.

Deanna Adkison, Mechanical Project Engineer at Fitzemeyer & Tocci. She became active in ASHRAE in 2015 as the Boston chapter Newsletter editor and has supported the chapter through multiple roles since including Treasurer and WiA (Women in ASHRAE) Chair. She is currently serving as the chapter Vice President, CTTC Chair and WiA chair for the 2018-2019 year and hopes to continue to support the chapter in the upcoming years.

Kevin Doty, sales engineer at Victaulic

Chris Pietrocarlo, HVAC engineering at BR+A Consulting Engineers, LLC
Welcome back to a new year of ASHRAE everyone! I’m excited to be back for my second year as the Membership Promotion Chair. To welcome everyone back, we will be hosting our first Membership Promotion night during our first meeting at the Metro Meeting Centers on 101 Federal St. Boston. If you have any friends, coworkers, or acquaintances that may want to join ASHRAE, please bring them along! If they sign up for ASHRAE that night, both of you will receive a $50 Gift Card from us refunding the cost of the meeting for both of you!

Now that we are returning to the monthly ASHRAE meeting schedule, it would be a good time for everyone to look at updating your ASHRAE member bios online. Any changes to your address or employment should be updated so we can make sure all the ASHRAE newsletters, journals, and product guides can reach you at your new locations.

When you check your bios online, make sure you look into your membership status. Most members will be at the Associate level grade. This membership grade gives you all the benefits that you have been enjoying: subscription to the ASHRAE Journal and quarterly High Performing Buildings (HPB) magazine, an annual revised copy from the four-volume ASHRAE Handbook series, access to the ASHRAE Handbook Online, which provides access to all four Handbook volumes, free online access to the Technology Portal, and Science and Technology for the Built Environment, discounts on publications, courses, standards, and conference registrations, can hold office and vote at Chapter, Regional and Society level.

If you have 12 years of qualifying experience, you can upgrade to the Member level grade for free! There will be no additional fees required at this membership level. At this level, you get all the benefits as an Associate grade level. You can also hold positions within ASHRAE that require the Member grade as a prerequisite. Being the Member grade gives you the ability to use your membership of ASHRAE on your business cards and resumes.

What qualifies as 12 years of experience? It isn’t a cut and dry “12 years of work experience in a HVAC field”. There are many things that qualify for these 12 years of experience including: 1.5 years of credit for every year of education in an approved technical criteria, 1 year of credit for every year of qualifying work experience, and 3 years of credit for having a professional registration or license (i.e. PE). For example, if you graduated from a 4 year college with a Bachelors in Mechanical Engineering, have 3 years of work experience, and passed your PE, then you will qualify for the Member grade level!

To upgrade your membership grade level, you need to update your ASHRAE bio to show that you have reached your 12 years of experience (education, work, and/or professional licensure) and email membership@ashrae.org and ask them that you wish to be considered for grade advancement.

Thank you everyone, and I hope to see you at the monthly meeting in October!
I happened to see two things this summer that really made me stop, and think about the business we are all in, and just how significant HVAC really is.

We went to NYC this past June, and in Central Park was a rather big event going on. There were a lot of historically dressed military people. Horses, and a Medical Wagon out there with cannons and things. Curiosity got the better of me, and I asked one of the military guys what was going on.

He replied this date was marking the 100th anniversary of a big military send-off of troops to the war. I knew he meant WWI.

I asked what he was doing. He told me his unit was a medical unit, and deployed with the troops to France. He noted my curiosity, and asked if I wanted a tour. My eyes lit up. I think what amazed me was the rudimentary medical devices of the time. Heck, they had a pot bellied stove for heat. Mix that with a little bit of Ether to add some spark to your day! No filtration, no cooling. Well, at least they had bandages, and anesthesia. Quite an interesting tour, and these guys were really devoted to accuracy.

Right after the 4th of July parade thru Natick, MA, I happened to stop by another Army medical detachment. These guys had an H1 Humvee that had a tent on the back that rolled out, and self-inflated. It created an instant tented OR suite. Heated, cooled, filtered, sterile, and portable - as much as the Humvee could drive. I got a tour from a Lt. Colonel, (Doctor as well) and talked to him about what I’d seen in NYC.

This was a time warp for me from 1918 - to 2018 in two weeks!
From a medical perspective, and hidden under it all was HVAC taken for granted, but almost as important (maybe more) than all the medical devices. Next time you go to a hospital, be grateful that modern medicine really advanced due to battlefield necessity. You may also thank a veteran this Veterans Day for their contributions.
If you did not know, Nov 11th at 11 AM will be the 100th anniversary of the end to the war to end all wars.
On Tuesday, September 11th, 75 members of Boston ASHRAE were given a tour of MIT Nano - a brand new 216,000 square foot center for nanoscience and nanotechnology that includes clean rooms, prototyping facilities, teaching labs, work areas and science art gallery. Thank you to Managing Director Dennis Grimard and BR+A’s Project Lead Mechanical Engineer, Gregory Shenstone. It was a fascinating and informative night. Boston ASHRAE President Daniel Carington, LEED AP BD+C and President-Elect Mark Leonard, PE, LEED AP BD+C presented to Lance Brown PE, CCP, CEM with the Society’s Presidential Award for his Excellence in leading our local chapter’s efforts in promoting a Sustainable world. Congratulations, Lance! If you could not make it on September 11th, the grand opening of MIT Nano is scheduled for October 4th.

Officer, BOG and Committee Members also met to discuss chapter operations, upcoming meeting, provide updates on different committees, etc.
TIRED OF THE CITY TRAFFIC?
SO WERE WE.

That’s why we opened a brand new office in Braintree, steps from the Red Line and the Commuter Rail. Still want to drive? No problem - parking is free. But the best part is...

WE’RE HIRING.

NVS - formerly RDK Engineers - is a provider of professional engineering and consulting services. At NVS, we are shaping the future. We are problem solvers. We are client champions. We are a team of talented professionals, engineers, and consultants. We are a team of individuals striving to change the future for our communities.

Come work for us at 100 Grossman Drive, 4th Floor, Braintree, MA 02184.

Learn how at www.nv5.com/careers/.

NVS has over 100 offices worldwide, including four in Massachusetts:

- Braintree, MA
- Boston, MA
- Andover, MA
- Hadley, MA

ASHRAE Boston Chapter – Employment Ads

The NorthEastAire is published monthly, September through June. It is posted on the Chapter website at www.ashraeboston.org. A link is sent each month to all members of the Chapter, currently over 1000.

Newsletter Rate*: $200 for 1/4 page, $400 for 1/2 page, $800 for full page

Website Rate*: $300 per calendar month

Discount for Both Newsletter & Website*: $500 - 1/4 page in newsletter and website ad
$700 - 1/2 page in newsletter and website ad
$1,100 - full page in newsletter and website ad

Format: Word format, company logos in .jpg or .gif

Deadline for November Newsletter: October 30, 2018

Any questions, please contact Sophia Scoon, Newsletter Editor at or northeastraie@gmail.com

Sponsors also get to post ads on the newsletter! To learn more please click here

*Prices are subject to change.
Cosentini Associates, a Tetra Tech company, has a reputation for innovation in the building design and construction industry. As part of the Tetra Tech family, we are a leading provider of consulting, engineering, and technical services worldwide.

Cosentini seeks to fill two open positions in its Boston office:

**Mechanical Engineer, Interiors Department**

As a Mechanical Engineer in Cosentini’s Interiors Department, you will have the opportunity to apply your design expertise on exciting and challenging tenant interior projects, including offices, restaurants, and retail spaces. You will have the chance to be mentored by some of the top engineers in the field, gaining additional expertise and building your reputation and career. Candidates should have a B.S. in Mechanical Engineering and 3-5 years of experience in building systems design. A successful candidate must have excellent technical, written, and organizational skills, and be well versed in AutoCAD and Revit. The candidate should have passed the EIT exam; working to obtain PE licensure is preferred. Project management experience is a plus, or a desire to pursue project management in the future.

Apply online: [https://tetratech.taleo.net/careersection/2/jobdetail.ftl?job=15100000140&tz=GMT-04%3A00](https://tetratech.taleo.net/careersection/2/jobdetail.ftl?job=15100000140&tz=GMT-04%3A00)

**Senior Electrical Engineer**

This is an excellent opportunity to perform innovative Power Distribution design on signature building projects, including high-rise residential, office buildings, and institutional projects. Candidates should have a B.S. in Electrical Engineering with a minimum of 8 years of experience in the field of building systems design. A successful candidate must have excellent technical, written, and organizational skills, and be well versed in AutoCAD and Revit. PE preferred, or working towards obtaining PE licensure.

Apply online: [https://tetratech.taleo.net/careersection/2/jobdetail.ftl?job=15100000126&tz=GMT-04%3A00](https://tetratech.taleo.net/careersection/2/jobdetail.ftl?job=15100000126&tz=GMT-04%3A00)

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**Webmaster’s Notes**

*By: Alex Gilman*

Please make sure to add admin@ashraeboston.org to your “safe sender” list to prevent emails from going to your spam folder.

Please feel free to send comments and suggestions to coonweb@ashrae.net

Here are some additions to look forward to for THE ASHRAE Boston Chapter Site in the following weeks.

- Updated monthly pictures of previous from previous ASHRAE meetings
- Schedule of future ASHRAE Events
As I mentioned in last month's article, one of my goals for the Sustainability Committee this year is to hold at least one sustainability-related ASHRAE Boston event this year. The leading candidate at this point is to assist the Codman Farm in Lincoln, MA, with energy upgrades. This initiative was inspired by ASHRAE's Community Sustainability Projects initiative. Codman is a nonprofit farm that is working to upgrade their facilities sustainably with a goal of net zero operations. Please contact me if you are interested in helping to organize something at with Codman or have ideas for other Sustainability events.

Lance Brown
lanceb@bvhis.com

Hi, my name is Willie Teshawn Sin-Li Dawkins-Wong. People usually just stick with Willie. I am this year’s YEA chair of the Boston ASHRAE chapter. I attended Clarkson University as an Engineering & Management Major in Potsdam, NY (aka middle of nowhere New York).

I have been in the HVAC industry for a little over three years right out of school. I had worked at Johnson Controls for two years down in New York City. Last year, I moved to the Boston area to work for HTS engineering, and have been here ever since.

My interests include travelling (10 countries & 3 continents so far), trying to cook new foods, and finding good restaurants to eat at. For physical activities, I enjoy going to the gym, rock climbing, and (recently) golf. I'm looking forward to hosting the YEA events this year!
I am enthused to begin my third year as the Student Activities Chair of the ASHRAE Boston Chapter. In August, I joined my fellow Student Activities Committee Chairs from other chapters in Jersey City at the Region I CRC, where I learned some valuable advice from fellow Student Activities Committee Chairs. At the CRC, those Student Activities Chairs present formulated our goals for this fiscal year and submitted them for review.

Some of the forthcoming highlights to the Student Activities Committee for this upcoming year are the two Student Nights we will hold during our monthly meetings. These Student Nights will give recognition to the student members in attendance and will serve as a great networking opportunity. Additionally, we are looking into hosting our Student Members in an educational tour of a facility in Boston. Stay tuned!

This year, our annual ASHRAE Boston Chapter scholarships will be managed by the society, but the Boston Chapter BOG will still be ultimately responsible for the selection of our recipients. Scholarship information will follow in a later newsletter, so please stay tuned for any student enrolled in an engineering program that may be interested!

The Boston Chapter is incredibly fortunate to have a strong network of experienced, helpful members, as well as student branch advisors who are engaged in their student branches. I look forward to being a helpful resource to more student members, and student branch advisors. I look forward to seeing friendly faces at meetings and of course, the student members we will be bringing in to join our chapter! Please contact me at c001sa@ashrae.net with any questions!
ASHRAE Launches Online Standards Review Database

ATLANTA (September 11, 2018) – ASHRAE has announced the launch of an updated and improved online standards review database that allows members and non-members access to public review drafts for standards, guidelines, and addenda and to submit comments.

“The online standards review database has been updated to provide greater functionality than our previous system,” says Jeff Littleton, ASHRAE Executive Vice President. “The new system improves efficiency for staff and volunteers by providing information in a faster and a more meaningful way. We’re excited to present such a well-integrated database to our standards development community.”

The new system offers a single sign in feature, keeping the user logged in if already logged into ashrae.org, and a new dashboard, to easily access and highlight those items that require attention. The dashboard provides quick links to individual and committee comments, committee responses to comments, continuous maintenance proposals, and outstanding ballots.

Additional features of the improved database include:

• complete letter balloting within the system with downloadable reports that demonstrate procedural compliance with ASHRAE ANSI approved standards development procedures,

• the ability to hold committee votes on motions to approve public review publication interpretations, minutes and any other committee business,

• voting rules that are compliant with ASHRAE procedures, allowing for reduction of errors and minimizing the need for members to maintain excessive documentation,

• automated notifications, warnings and reminders directly from the system, when deadlines are approaching,

• continuous maintenance proposals entirely online, and

• the ability to view proposals online and download proposals to work offline.

“We’re pleased to bring this improved innovative tool to our members and nonmembers alike,” says 2018-19 ASHRAE President Sheila J. Hayter. “This updated database will be an invaluable resource toward ensuring that ASHRAE’s rigorous examination of standards is strengthened.”

To access the new online standards review database, please visit ashrae.org/publicreviews.

About ASHRAE
ASHRAE, founded in 1894, is a global society advancing human well-being through sustainable technology for the built environment. The Society and its more than 56,000 members worldwide focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow’s built environment today. More information can be found at www.ashrae.org/news.
ASHRAE, founded in 1894, is a global society advancing human well-being through sustainable technology for the built environment. The Society and its members focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability within the industry. Through research, standards writing, publishing and continuing education, ASHRAE shapes tomorrow’s built environment today. ASHRAE was formed as the American Society of Heating, Refrigerating and Air-Conditioning Engineers by the merger in 1959 of American Society of Heating and Air-Conditioning Engineers (ASHAE) founded in 1894 and The American Society of Refrigerating Engineers (ASRE) founded in 1904. In 2012, as part of a rebranding, ASHRAE began doing business as “ASHRAE” vs. using its full legal name of the American Society of Heating, Refrigerating and Air-Conditioning Engineers. Use of ASHRAE reflects the Society’s worldwide membership and that services will continue evolving globally.

ASHRAE’s Mission and Vision

**Mission:** To advance the arts and sciences of heating, ventilating, air conditioning and refrigerating to serve humanity and promote a sustainable world.

**Vision:** ASHRAE will be the global leader, the foremost source of technical and educational information, and the primary provider of opportunity for professional growth in the arts and sciences of heating, ventilating, air conditioning and refrigerating.  

Learn More

With more than 56,000 members from over 132 nations, ASHRAE is a diverse organization representing building system design and industrial processes professionals around the world.

BECOME A MEMBER
ASHRAE’s Building Energy Quotient program takes your building on the next step beyond benchmarking. The program provides a quick energy analysis, assists in preparation of an ASHRAE Level 1 Energy Audit, and provides actionable recommendations for improving a building’s energy performance including low-cost, no-cost energy efficiency measures and an Indoor Environmental Quality survey with recorded measurements.

Two different evaluations can be used independently to compare a candidate building to other similar buildings in the same climate zone or together for an assessment of a building’s design potential compared to actual operation:

**In Operation** compares actual building energy use
- Based on actual metered energy use of a building
- Assists in preparation of on-site ASHRAE Level 1 Energy Audit
- Measurements confirm that indoor environmental quality is not compromised for energy savings

**As Designed** compares energy use based on the building’s physical characteristics and systems
- Simulated standardized energy use model
- Independent of operational and occupancy variables

**Benefits:**
- Includes metered energy data exchange from ENERGY STAR® Portfolio Manager
- Median EUI calculation aligned with ENERGY STAR Portfolio Manager
- Details actionable recommendations to improve a building’s performance
- Streamlines and improves the audit process
- Utilizes standard and consistent process for tracking improvement over time
- Creates an opportunity to reassess building performance following implementation of energy efficiency improvements to assess effectiveness (improved performance/rating)
- Provides a Building EQ performance score (efficiency) to benchmark building
- Offers a building label to recognize high performance buildings

For additional information, please visit [ashrae.org/BuildingEQ](http://ashrae.org/BuildingEQ)
ANNUAL CORPORATE SPONSOR PROGRAM

Support the ASHRAE Boston Chapter by becoming a Sponsor and shining the spotlight on your organization!

EVENT BEVERAGE SPONSOR $1500

- Donation of $300 in your company name to ASHRAE Research – Boston Chapter Endowment
- Company name listed in the ASHRAE Insight and earn Honor Roll Corporate Status
- Company name display and recognition on name badges at the sponsored event
- One (1) complimentary tickets to the Annual Sponsor Recognition Event

SILVER LEVEL SPONSOR $2000

- Donation of $1000 in your company name to ASHRAE Research – Boston Chapter Endowment
- Company name listed in the ASHRAE Insight and earn Honor Roll Corporate Status
- Company name display on ASHRAE Boston Chapter website and monthly meetings for one year*
- Full-page ad in the Boston Chapter Roster & Product Guide for one year*
- Recognition on name badges at all events for one year*
- One (1) complimentary tickets to the Annual Sponsor Recognition Event

*ASHRAE Calendar Year – July 1 to June 30 of the following year

GOLD LEVEL SPONSOR $3000

- Donation of $1500 in your company name to ASHRAE Research – Boston Chapter Endowment
- Company name listed in the ASHRAE Insight and earn Honor Roll Corporate Status
- Company name display on ASHRAE Boston Chapter website and monthly meetings for one year*
- Full-page ad in the Boston Chapter Roster & Product Guide and half-page ad in the Boston Chapter newsletter – NortheastAire for one year*
- Recognition on name badges at all events for one year*
- Two (2) complimentary tickets to the Annual Sponsor Recognition Event
- Complimentary hole sponsor sign at the annual ASHRAE Boston Chapter Golf Tournament

PLATINUM LEVEL SPONSOR $5000

- Donation of $2500 in your company name to ASHRAE Research – Boston Chapter Endowment
- Company name listed in the ASHRAE Insight and earn Honor Roll Corporate Status
- Company name display on ASHRAE Boston Chapter website and monthly meetings for one year*
- Full-page ad in the Boston Chapter Roster & Product Guide and the Boston Chapter newsletter – NortheastAire for one year*
- Recognition on name badges at all events for one year*
- Four (4) complimentary tickets to the Annual Sponsor Recognition Event
- Company name on event name badge lanyards for one year*
- Complimentary hole sponsor sign at the annual ASHRAE Boston Chapter Golf Tournament

*ASHRAE Calendar Year – July 1 to June 30 of the following year
COMMITMENT FORM

I would like to become a sponsor for the ASHRAE Boston Chapter!

SPONSORSHIP LEVEL
Please check one
☐ PLATINUM $5000
☐ GOLD $3000
☐ SILVER $2000
☐ EVENT $1500

PAYMENT METHODS
PayPal – http://ashraeboston.org/oursponsors

Check – please mail the completed form and check to:

Chris Pietrocarlo
10 Guest St
4th Floor
Boston, MA 02135

SPONSORSHIP CHECKLIST
Please submit the following when you register to become a sponsor
☐ Sponsorship Commitment Form completed
☐ Company ad in high-resolution ESP or JPG format to be place in the Roster & Product Guide and/or the NortheastAire.
☐ Company logo in high-resolution ESP or JPG format to be place on the pre-meeting presentation and/or the Boston Chapter homepage

Questions? Please contact any of the ASHRAE Boston Chapter Corporate Sponsorship Committee members.

Mark Leonard
c001rp@ashrae.net
Dan Carington
c001@ashrae.net
Deanna Adkison
c001vp@ashrae.net

Bob Persechini
rpersechini@nv5.com
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<td>Tuesday, 11 2018</td>
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<td>Facility Manager Greg Shenstone</td>
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<td>Joe Sterling</td>
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<td>Membership Promotion/ YEA / Student Activity Night</td>
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<td>Main: Applying Needlepoint Cold Plasma In Commercial Applications To Reduce Ventilation Air, Construction /Renovation Costs, Energy And Maintenance</td>
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<td>David Price</td>
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<td>June</td>
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<td>Granite Links 100 Quarry Hill Dr. Quincy, MA 02169</td>
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### OFFICERS

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<tr>
<th>Position</th>
<th>Name</th>
<th>Company</th>
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<tr>
<td>President</td>
<td>Dan Carington</td>
<td>BR+A</td>
<td>617-925-8236</td>
<td><a href="mailto:c001@ashrae.net">c001@ashrae.net</a></td>
</tr>
<tr>
<td>Treasurer</td>
<td>Chris Pietrocarlo</td>
<td>BR+A</td>
<td>617-925-8322</td>
<td><a href="mailto:c001tr@ashrae.net">c001tr@ashrae.net</a></td>
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<tr>
<td>Secretary</td>
<td>Kevin Doty</td>
<td>Victaulic</td>
<td></td>
<td><a href="mailto:c001sec@ashrae.net">c001sec@ashrae.net</a></td>
</tr>
<tr>
<td>Vice President</td>
<td>Deanna Adkison</td>
<td>Fitzemeyer &amp; Tocci</td>
<td>781-285-2262</td>
<td><a href="mailto:c001vp@ashrae.net">c001vp@ashrae.net</a></td>
</tr>
<tr>
<td>President-Elect</td>
<td>Mark Leonard</td>
<td>BR+A</td>
<td>617-925-8322</td>
<td><a href="mailto:c001pe@ashrae.net">c001pe@ashrae.net</a></td>
</tr>
<tr>
<td>Treasurer</td>
<td>Yuka Narisako</td>
<td>BR+A</td>
<td></td>
<td><a href="mailto:c001bog2@ashrae.net">c001bog2@ashrae.net</a></td>
</tr>
<tr>
<td>Secretary</td>
<td>Nick Roth</td>
<td>NE Applied Products</td>
<td></td>
<td><a href="mailto:c001bog5@ashrae.net">c001bog5@ashrae.net</a></td>
</tr>
<tr>
<td>Vice President</td>
<td>Sophia Scoon</td>
<td>Jacobs</td>
<td></td>
<td><a href="mailto:c001bog1@ashrae.net">c001bog1@ashrae.net</a></td>
</tr>
<tr>
<td>Treasurer</td>
<td>Doug Rothmann</td>
<td>Norman Associates</td>
<td></td>
<td><a href="mailto:c001bog3@ashrae.net">c001bog3@ashrae.net</a></td>
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### BOARD OF GOVERNORS

<table>
<thead>
<tr>
<th>Year</th>
<th>Name</th>
<th>Company</th>
<th>Phone</th>
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<tr>
<td>2016-2019</td>
<td>Darcy Carbone</td>
<td>Stebbins Duffy, Inc.</td>
<td>617-957-2567</td>
<td><a href="mailto:c001bog2@ashrae.net">c001bog2@ashrae.net</a></td>
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<tr>
<td></td>
<td>Perla Redfern</td>
<td>Siemens</td>
<td></td>
<td><a href="mailto:c001bog7@ashrae.net">c001bog7@ashrae.net</a></td>
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<tr>
<td></td>
<td>Steve Tafone</td>
<td>Suffolk Construction</td>
<td>978-774-1057</td>
<td><a href="mailto:c001bog10@ashrae.net">c001bog10@ashrae.net</a></td>
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<tr>
<td></td>
<td>Erin Popa</td>
<td>BR+A</td>
<td>617-925-8205</td>
<td><a href="mailto:c001bog4@ashrae.net">c001bog4@ashrae.net</a></td>
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<tr>
<td></td>
<td>Bob Persechini</td>
<td>NV5</td>
<td>617-345-9885</td>
<td><a href="mailto:c001bog2@ashrae.net">c001bog2@ashrae.net</a></td>
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<tr>
<td></td>
<td>Lance Brown</td>
<td>BVH</td>
<td></td>
<td><a href="mailto:c001bog5@ashrae.net">c001bog5@ashrae.net</a></td>
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<tr>
<td></td>
<td>Chris Pietrocarlo</td>
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<tr>
<td></td>
<td>William Tang</td>
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<td>617-254-0016</td>
<td><a href="mailto:c001bog11@ashrae.net">c001bog11@ashrae.net</a></td>
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<td><a href="mailto:c001bog3@ashrae.net">c001bog3@ashrae.net</a></td>
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### COMMITTEES

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<thead>
<tr>
<th>Committee</th>
<th>Chair</th>
<th>Company</th>
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<tr>
<td>Attendance</td>
<td>Lucas Rowe</td>
<td>Accuspec Inc.</td>
<td></td>
<td><a href="mailto:ashraebostonattendance@outlook.com">ashraebostonattendance@outlook.com</a></td>
</tr>
<tr>
<td>Chapter Program</td>
<td>Mark Leonard</td>
<td>BR+A</td>
<td>617-925-8322</td>
<td><a href="mailto:c001cttc@ashrae.net">c001cttc@ashrae.net</a></td>
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<tr>
<td>Chapter Technology Transfer</td>
<td>Mark Lenard</td>
<td>BR+A</td>
<td>617-925-8322</td>
<td><a href="mailto:c001cttc@ashrae.net">c001cttc@ashrae.net</a></td>
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<tr>
<td>CRC Delegate</td>
<td>William Tang</td>
<td>BR+A</td>
<td>617-254-0016</td>
<td><a href="mailto:c001@ashrae.net">c001@ashrae.net</a></td>
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<tr>
<td>Nominating Promotion</td>
<td>Bob Persechini</td>
<td>NV5</td>
<td>617-345-9885</td>
<td><a href="mailto:c001bog8@ashrae.net">c001bog8@ashrae.net</a></td>
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<tr>
<td>Grassroots Government Activities</td>
<td>Chris Pietrocarlo</td>
<td>BR+A</td>
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<tr>
<td>Research Promotion</td>
<td>Mark Leonard</td>
<td>BR+A</td>
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<td><a href="mailto:c001rp@ashrae.net">c001rp@ashrae.net</a></td>
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<td>Historian</td>
<td>Steve Tafone</td>
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<td>978-774-1057</td>
<td><a href="mailto:c001bog10@ashrae.net">c001bog10@ashrae.net</a></td>
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<tr>
<td>Newsletter Editor</td>
<td>Sophia Scoon</td>
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<td><a href="mailto:northeairstire@gmail.com">northeairstire@gmail.com</a></td>
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<tr>
<td>Professional Development</td>
<td>Deanna Adkison</td>
<td>Fitzemeyer &amp; Tocci</td>
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<tr>
<td>Publicity</td>
<td>Liz Desmarais</td>
<td>Trumbull Campbell</td>
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<td><a href="mailto:c001pub@ashrae.net">c001pub@ashrae.net</a></td>
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<tr>
<td>Special Events</td>
<td>Erin Popa</td>
<td>BR+A</td>
<td>617-925-8205</td>
<td><a href="mailto:c001@ashrae.net">c001@ashrae.net</a></td>
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<td>Technical Transfer</td>
<td>Mark Lenard</td>
<td>BR+A</td>
<td>617-925-8322</td>
<td><a href="mailto:c001cttc@ashrae.net">c001cttc@ashrae.net</a></td>
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<td>Student Activities</td>
<td>Yuka Narisako</td>
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<td>BVH</td>
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<td><a href="mailto:c001bog5@ashrae.net">c001bog5@ashrae.net</a></td>
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<tr>
<td>Website</td>
<td>Alex Gilman</td>
<td>BR+A</td>
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<td><a href="mailto:c001web@ashrae.net">c001web@ashrae.net</a></td>
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<td><a href="mailto:c001yea@ashrae.net">c001yea@ashrae.net</a></td>
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</tbody>
</table>
Mail Check (Payable to “ASHRAE Research”) to:

ASHRAE RESEARCH
Mark Leonard
c/o Bard, Rao + Athanas Consulting Engineers
10 Guest St. 4th Floor
Brighton MA 02135

Name:_____________________________________________________________________________________________

Company: __________________________________________________________________________________________

Address: ___________________________________________________________________________________________

TEL: _____________________________________________________

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Other: ____________
Other: ____________

CONTACT Mark Leonard at c001rp@ashrae.net

ASHRAE RESEARCH
ASHRAE Boston Chapter Contributors

NorthEastAire

ASHRAE - BOSTON CHAPTER       www.ashraeboston.org

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(P) 617-2504854 d
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