The Building Commissioning Association’s 20th Anniversary was celebrated at the Annual Conference on Building Commissioning in “Music City” — Nashville, Tennessee.
October 15-17, 2018
Pre-Conference Activities

The annual Michael R. Chelednik Memorial Golf Tournament is held to raise funds for the BCxA Scholarship Foundation. Sponsors for the Tournament at the beautiful Gaylord Springs Golf Links include National Capitol, Northeast, Texas, and Eastern Canada Chapters. …As sometimes happens, weather ruled the day. But nothing could cast a cloud on this bunch — One or two intrepid golfers braved the rain, and everyone enjoyed the morning in spite of the chill.

Revenue from this year’s fundraiser event was over $8,585!

Thank you to all who participated!
Pre-Conference Workshops

Every year we offer one or more pre-conference workshops. This year, David Sellers’ full-day workshop, “Assessing and Optimizing Central Chilled Water Plant Load and kW per Ton Profiles,” included not only the curriculum and lessons learned, but also a walk-through of the building systems at the Gaylord Opryland Resort, serving 3.3 million square feet including over 2,800 Guestrooms, to see equipment at work in a real setting.

Bill McMullen’s half-day workshop, “Testing Adjusting and Balancing (TAB): What Owners, FMs and CxPs Need to Know” focused on tools, processes, and techniques used by TAB professionals, engineers, architects and contractors to achieve a balanced, high performing building.
Annual BCxA Meeting and Dinner

Our Annual Meeting took place in Studio A of the Grand Ole Opry House!

There’s nothing like Southern food to get you ready for an evening of country music! After dinner we all climbed upstairs to enjoy the show, including headliner Craig Morgan, CMA nominees, and country music legend Charlie Daniels.

Special Thanks to EEI and the Texas Chapter for their support!
During dessert, President John Villani and Executive Director Liz Fischer presented awards to founding members and individuals who have gone above and beyond to support the Association.

Founding Members

…Without whom the Building Commissioning Association would not exist and thrive!

From left to right: Karl Stum, Rick Casault, Gretchen Coleman, Kent Barber, and Craig Hawkins

Individual President’s Award

This year, individual awards were presented to (from left to right) John Whitfield of Primary Integration and Tony DiLeonardo of Wick Fisher White, each of whom has spent extraordinary personal time and effort to further the mission of the Association.
Corporate President’s Award – McKinstry

Today, building commissioning is faced with innumerable pressures to do more with less, remove waste from construction and operations, regulate and standardize delivery processes, and train and certify those who practice commissioning. McKinstry, a long-time sponsor and supporter of the BCxA, is committed to the delivery of excellence that depends on the expertise of its team of commissioning providers.

Special Delegation from Japan

We were honored to have twelve members of Japan’s Building Services Commissioning Association (BSCxA) in attendance and presenting at the conference.
Opening Plenary Session

John Villani, BCxA President, opened the conference with a presentation that ties the work and opportunities for building commissioning providers to the future of a resilient and sustainable built environment. His intimate and poignant examples of buildings that work and their effect on individuals, families, communities and nations, inspired us all.

Major General Michael J. Walsh (Retired), Executive Vice President National Programs at Dewberry, presented the Keynote Address: *What Does It Mean to Have a Resilient Infrastructure?* Major General Walsh shared his experience and vision for what “resilience” means in the future context of building performance and security, and how the definition should be expanded to meet unexpected future conditions. He posed a challenge for developing a shared vision of risk, vulnerability and a long-term perspective on standards for a safer and more resilient infrastructure.
Presentation of The Benner Award

In memory of Nancy Benner, the Benner Award recognizes outstanding achievement in promoting excellence and making commissioning "business as usual." Kent Barber is a founding member of the BCxA, International Board member, Best Practices Committee member, and leader of the initial and recently reviewed BCxA Essential Attributes.

Kent Barber was joined in the photo below with previous Benner Award winners.

Benner Award winners left to right: Gerald Kettler, Michael English, Craig Hawkins, Rick Casault, Kent Barber, Karl Stum, David Sellers, and Carl Lundstrom.
Smart Energy Analytics Campaign Recognition

From left: Hannah Kramer and Jerry Burin, Sieben Energy Associates; Hannah Kramer and James Swarthout, Kerry Inc.

From left: Amy Jiron and Mike O’Connor, CBRE | ESI; The DOE SEAC Team and honorees.

The Smart Energy Analytics Campaign (SEAC), with the BCxA as an Organizing Partner, chose this venue to recognize partners for their outstanding efforts. Amy Jiron, Acting Commercial Buildings Integration Program Manager – US Dept. of Energy Building Technologies Office, and Hannah Kramer, PE, LBNL Affiliate – Building Technologies and Urban Systems, highlighted the exemplary work of three building owners and two MBCx providers.

- Sieben Energy Associates
- CBRE | ESI
- Clise Properties, Seattle, WA.
- Stanford University Residence and Dining Enterprises. Stanford, CA.
- Kerry, Inc., Beloit, WI

More detail on these and previous award winners is posted on the Smart Energy Analytics Campaign website.
The Escape Room!

The Opening Plenary was suddenly interrupted by a questionable-looking fellow who took over the podium. He announced that his “building chaos virus,” as part of a plan to spike carbon emissions and global warming, was underway. Only those who could stop the virus would be able to save the planet!

Dozens of participants signed up for the Escape Room, held periodically throughout the conference, to team up with other attendees and solve the mystery. As word got around that the International Board had “escaped,” the game became competitive, fun, and challenging – the kind of problem solving that’s right up their alley!

Ryan Stroupe, PG&E Pacific Energy Center
Posing as the dastardly engineer, Mr. X
Conference Topics — Sample Sessions

What did we talk about this year?
Themes from the Conference included the value of commissioning, building and infrastructure resilience, data analytics, and higher education facility challenges and success. This year also featured a special track, Commissioning Essentials, devoted to the “how-to” of new construction and existing building commissioning from the design phase through occupancy.

Presentations are available online!

Readers may view all presentations under each session on the Conference agenda web pages:

Day 1: https://www.bcxa.org/conference/agenda/#day1
Day 2: https://www.bcxa.org/conference/agenda/#day2

To whet your curiosity, the images below each represent a single slide from a variety of presentations. The annual Conference is an opportunity to expand the knowledge of providers and all stakeholders in the built environment.

You are encouraged to visit https://www.bcxa.org/conference/ to view each presentation in its entirety.

The Value of Commissioning
BCxA and Lawrence Berkeley National Lab (LBNL) collaborated to update the 2009 Evan Mills Study on the value of building commissioning.

Check out the survey results on the BCxA website!

https://www.bcxa.org/knowledge-center/value-of-cx-project/
Making “Smart Buildings” Brilliant

Cybersecurity

Summary

- Cybersecurity starts with people. Companies investing and conducting cybersecurity awareness programs for staff, contractors and partners typically experience less financial loss.
- Security training and awareness on interconnected ISCs is critical as threats and vulnerabilities continue to rise, but continues to be overlooked as most training time & resources are allocated to system functionality and operations.
- Owners, Operators and 3rd Party vendors need to know how to detect, mitigate, and recover from a cyber incident.

Safety and Physical Security

Relationship between: Building Upgrade Cost, Standoff Distance and Risk

Security Level Determined/ Select Security Measures

Network Gateways

3rd Party Controls Integration

Design Phase Commissioning

Cx DESIGN REVIEW – Beyond Best Practices

Step 2: Inventory the Design Package
- Verify all drawing sheets are in the package
- Drawing Index on A-Series 1st sheet
- Verify all the drawings sheets are for your project
  - Check title block lower right-hand corner of each sheet
- Verify specification books/sections (related to Cx Systems)
  - Sections 22 00 60, 23 00 60, 26 00 60, etc.
- Verify you have current OPR & BCD
  - Backcheck date/revision number with Owner
Critical & High-Performance Labs

Considerations During Design Review.

**PRECISION VS ACCURACY**

- Precision vs Accuracy
- Precision vs Accuracy
- Precision vs Accuracy
- Precision vs Accuracy

Data Analytics & MBCx

Analytic Response Group

- **First Responders**
  - Experienced MBCx technicians
  - Interact with site full-time
  - Facilitate misunderstandings and miscommunication

- **Controls Support**
  - Analyze control system programming
  - Identify deficiencies

- **Analytics**
  - Develop energy models
  - Conduct energy simulations

- **Priority and Planning**
  - Prioritize projects
  - Plan and coordinate

Energy Calculations

Heat Recovery Operation

- Verified Calculation
- Use this data to estimate the actual heat recovery effectiveness
- Replace the assumed value in the calculation

Building Enclosure Cx

Barriers Identified for Envelope Technologies

- Cost: uncertainties, high first costs, ROI hurdles
- Supply issues: product fragility, availability, volume
- Installation issues: workforce training, complex systems, quality control
- Decision culture: resistance to new products, risk-averse, code minimum culture
- Information gap: real-world case studies, data on long-term performance, communicating effectively

Engineering Ethics

Understanding the Ethical Decision Making Process

- Gather the facts
- Define the ethical issues
- Identify the affected parties (stakeholders)
- Identify the consequences
- Identify the obligations (principles, rights, justice)
- Consider your character and integrity
- Think creatively about potential actions
- Check your gut
- Decide on the proper ethical action and be prepared to deal with opposing arguments.

Young Professionals Panel

Find Your WHY

**Generational Blend**

1. Satisfaction and pride
2. To make a living
3. Improve the world
4. Help people get what they pay for
5. Personal development
6. Challenging/Problem solving
7. Meet new people

**Millennials**

1. Learning
2. Interesting/Challenging
3. Client satisfaction
4. Sustainable & energy efficient buildings
5. Environment
6. Teamwork
Winning Work

Marketing Department

1. Review for Package Compliance
2. Point of Contact Internal & External
3. Coordinate & Track all Deadlines
4. Assemble Final Package
5. SUBMIT

Tax Incentives

Energy Efficiency Tax Incentive Overview

Special Ruling for Architects, Engineers & Designers

- Architects, Engineers, and/or Designers may take EECB Deduction for designs of publicly owned buildings (§ 179D(c)(4))
- If more than one designer, the public entity may determine the primary designer or allocate the deduction to any and all designers
- Deduction is included in ‘Other Deductions’, Flow to Tax Returns of Individuals for S-Corps/Partnerships
Exhibitor Event

Exhibitors sponsored an evening reception on the night before the Conference opened, followed by a full-day Exhibit Hall, allowing exhibitors to spend more time in discussions and presenting their products and services. Thank You!
The BCxA Conference was brought to you by ...

The 2018 BCxA Conference on Building Commissioning was generously funded by the following, without whom this quality event could not have taken place. We are grateful for their support and recognition of the importance of commissioning as a practice that ensures design, construction and operating performance of commercial buildings.
BCxA Conference 2019

The annual BCxA Conference is scheduled for September 25-27, 2019 in Schaumberg, Illinois.

Annual events will include the BCxA Scholarship Foundation golf tournament, BCxA special workshops, and the always-stimulating BCxA Annual Meeting and Dinner, along with two full days of learning, sharing, teaching, and networking.

Mark your calendars and stay tuned! Call for Presentations starts in February 2019!
Conference Quotes

- The Escape Room was an awesome activity. It definitely reinforced why teamwork and diversity in teams are important. I hope it can be brought back next year and many years thereafter.

- I really like how the conference moves around locations. This was the best one of the 6 or 7 I have attended.

- Major General Walsh was very interesting, entertaining and insightful. Really a very good kick-off presentation.

- Integrated systems – interesting topic, excellent presentation, unique presentation style, very sharp, in depth and to the point responses to audience questions.

- Good range of well-presented sessions, from Cx Essentials to more advanced.

- It was hard to choose which sessions to go to - there were so many good topics. No matter which one I chose, there was another at the same time that I also wanted to attend!

- I like the breakfast breakout sessions, nice touch.

- “Young Professionals” was really fun and we all got engaged in the conversation (this should be an early morning one every year...fun watching a millennial getting up early LOL)