



## Letter from the President

By Gretchen Coleman

Well folks, it is hard to believe 2009 is half over. Time flies when you are busy, and it seems our industry has not been hit as hard as others in this economic crisis.

So, what has been up so far this year?

### WEBSITE

We launched our website, and it is gorgeous! A huge thanks to Rob Strickler of Reynolds Construction, the NCC member spearheading the website project; and Joanne Spittler of Joiafly, our website designer. Please take a look at [http://www.bcxa.org/national\\_capital/](http://www.bcxa.org/national_capital/). If you have an event to post let Rob know.

### EVENTS

This newsletter is focused on events, past, eminent, and future. Look for the NCC Spring Meet and Greet which was held in March in DC; the articles on the Seattle 2009 National Conference on Building Commissioning (and extra-curricular activities); and the announcement of the summer event on June 30<sup>th</sup> in Philly; and an announcement of this year's October 18<sup>th</sup> BCA Expo in Columbus, Ohio.

In addition to those events, we are looking into a tour of the Washington National's baseball stadium followed by a home game for our chapter Fall event. We are shooting for a home game against the Phillies in September. While the stadium holds public tours, we are hoping for a private tour led by the commissioning authority that assisted the project in earning a LEED Silver Certification. The Nationals Stadium, designed by HOK, is the first major league stadium to be LEED certified. Chillers, dogs and beer, what more could you ask for?!

As of yet, our Winter event is unscheduled. If you want to sponsor and organize an event in your area, please contact us. We would love to help you organize it and one or more board members will attend. Possibilities include a joint meeting with the local AIA chapter in Roanoke or another event at George Mason University in Arlington, or both, who knows.

Stay involved, become involved – the chapter is what you make of it.

### Table of Contents

Letter from the President	1	Commission to Save Energy	2	NCC Spring Meet & Greet	2
Seattle National BCA Conference	3	October BCA Expo in Ohio	3	Extra-Curricular Activities	4
July 30th BCA in Philadelphia	5	2009 NCC BCA Board	6	Sponsorship Requests	6

## Commissioning to Save Energy

by Wayne T. Williams, P.E.

BRINJAC Engineering - Commissioning Agent

The world recently observed another Earth Day. People around the world acknowledged that sustainable design and lifestyles are a priority. However, with the current economic downturn, their attention has increasingly focused on simply making ends meet. This includes just trying to pay the utility bills. High utility bills often indicate that building energy-consuming systems are not functioning to their full potential. Typical building issues that waste energy in non-commissioned projects include:

- Air flow or water flow issues.
- Variable frequency drive issues (pump and fan motors)
- Control System or Equipment Controls issues.
- Lighting and equipment controls not functioning properly.
- Cooling and heating sequences that are not functioning properly.
- Malfunctioning fresh air economizers
- Improperly installed, defective or missing controls or sensors

Commissioning the building energy-consuming systems (while the building is constructed or in order to bring the building operations back on-line to their original condition) can mitigate these issues.

The commissioning agent independently reports on the status of the commissioning process to the owner and documents commissioning issues discerned during the commissioning of the facility. During the commissioning process - issues must be resolved. Successful resolution of commissioning issues often involves efforts from members of the commissioning team; intermittent efforts from the design team, construction managers or owner's representatives. Efforts are often required from members of the construction team; electrical, mechanical and controls contractors, equipment manufacturers, and test and balance contractors.

Successful resolution of a facilities commissioning issues will result in a building with energy-consuming systems and controls which have been installed, coordinated and function properly. People will benefit from optimum comfort and increased energy savings.

On the 26th of March the BCA National Capital Chapter met for **the 2009 Spring Meet and Greet**. The event was held at the Capitol City Brewing Company in downtown DC. A significant number of members attended and plenty of time was spent discussing the latest developments in commissioning and the increased interest by owners in the commissioning process.

Gretchen Coleman (President) presented a summary of the past years events highlighting the National Capital Chapter's participation at this year's BCA Annual Meeting in Louisiana. Also mentioned was the July 30th Commissioning Program in Philadelphia and the proposed topics for the program. Tony DiLeonardo (board member) requested that members provide help to extend the reach of the BCA by providing contact information for owners and facility managers that would allow the BCA to send out invitations to future BCA events to a larger audience.

Also in attendance were representatives from a couple of building and facility owners. One owner's representative brought up as an important discussion point regarding the large variability of services and hence fees between various firms offering commissioning versus the more traditional MEP design services. An open invitation to owners is extended for all events and active participation encouraged to help bring such questions to the table and allow the BCA to evolve and meet the needs of building owners.

Reported by Philip Wright, P.E. - BRINJAC Engineering - Commissioning Agent



<http://blog.usa.gov>

---

Commissioning new and existing facilities is an investment that typically pays for itself in one to three years.

It often reduces energy use by 15 percent (or more).

---

## 2009 NCBC Conference

by Gretchen Coleman, BCA NCC President

The National Conference on Building Commissioning was held June 3<sup>rd</sup> through June 5<sup>th</sup> in Seattle, WA. June is typically a rainy month for Seattle, but it was sunny and gorgeous!

The conference was one of the best in recent years. There were a lot of first time attendees and the conference had sessions for those folks and the seasoned attendee. Additionally, it was the first time in 10 years that the first elected Board of Directors of the BCA were mostly in attendance! Bruce Jones was the only missing member.

This year's conference focused on Marketing Strategies, Persistence, Standardization, New Energy Economy, Communication and Advanced Technical. There were also two pre-conference workshops;

**Analog Lessons for a Digital World, and**

**Commissioning LEED NC  
for New Construction Projects.**

For more information about the proceedings see [http://www.peci.org/ncbc/2009/ncbc09\\_proceedings.htm](http://www.peci.org/ncbc/2009/ncbc09_proceedings.htm)

As great as the conference was, perhaps the highlight was the BCA Reception sponsored by McKinstry at their Seattle headquarters. After the wild teacup ride from the hotel to their offices, the wine bar and beer cooler were very welcome sites. I wish I had taken pictures of their office because it was beautiful. Great layout, nice colors, a full gym with weights, cardio, and full size basketball court (yes, Emmillee Hogan, Gretchen Coleman and Laurie Catey (Central Chapter) shot a few tipsy hoops!), and the piece de la resistance, a driving range on the roof with outdoor kitchen and radiant heat!! Unfortunately, Team Liberty (the above mentioned hoopsters and Dave Tootle) did not win the golf contest, but we were the best dressed team.

The next NCBC location is still in the works. We will let you know as soon as a decision has been made.

Start planning your attendance at the **BCA Expo October 18-19, 2009.** The event will be held in Columbus, OH.

We were fortunate to book Helen Kessler as the keynote speaker. If you have not heard Helen speak, she is not to be missed. Helen is a USGBC Board Member and has been a commissioning advocate for many years. More information about this event is forthcoming.



Space Needle as seen from West Seattle



Seattle as seen from the Bainbridge Island Ferry



Craig Hawkins, Pete Keithly, Kent Barber, Rick Casault, Gretchen Coleman, and Karl Stum



Boats being lowered in the Chittenden Locks

For more information about the Chittenden Locks see

[http://en.wikipedia.org/wiki/Chittenden\\_Locks](http://en.wikipedia.org/wiki/Chittenden_Locks)



The Fish Ladder



The falls on June 6, 2009  
Flowing 10,770 cubic-feet / second!

### Extra-curricular activities after the BCA Conference:

By Gretchen Coleman – Liberty Engineering Commissioning Agent

#### HIRAM M. CHITTENDEN LOCKS AND FISH LADDER

The locks can elevate a 760-foot (230 m) by 80-foot (24 m) wide vessel 26 feet (7.9 m), from the level of Puget Sound at a very low tide to the level of freshwater Salmon Bay, in 10–15 minutes. The locks handle both pleasure boats and commercial vessels, ranging from kayaks to fishing boats returning from the Bering Sea to cargo ships. Over 1 million tons of cargo, fuel, building materials, and seafood products pass through the locks each year.

The fish ladder at the Chittenden locks is unusual—materials published by the federal government say "unique"—in being located where salt and fresh water meet. Normally, fish ladders are located entirely within fresh water. Visitors to the locks can observe the salmon's progress through windows along their route. Although the viewing area is open year-round, the "peak" viewing time is during spawning season, from about the beginning of July through mid-August. We hit the fish ladder opening weekend and did see the first of the spawners.

Snoqualmie Falls outside of Seattle is another engineering marvel. Well, the falls are nature's marvel, but the power plant underneath the falls is an engineering marvel. Built by civil engineer Charles Baker in 1898, the power plant was the world's first completely underground power plant. It is located 270 feet below the surface at the base of the falls and the original generators are still functioning today. The plant today is operated by Puget Sound Energy and provides about 1% of their sales. This, and another plant built downstream in 1910, provide 41,990 kilowatts of electricity. The 1898 plant was designated an ASCE Civil Engineering Landmark in 1981.



[http://upload.wikimedia.org/wikipedia/commons/f/fe/Snoqualmie\\_Falls\\_in\\_June\\_2008.JPG](http://upload.wikimedia.org/wikipedia/commons/f/fe/Snoqualmie_Falls_in_June_2008.JPG)

For more information about Snoqualmie Falls see [http://en.wikipedia.org/wiki/Snoqualmie\\_Falls](http://en.wikipedia.org/wiki/Snoqualmie_Falls)

# SAVE THE DATE!!!

The National Chapter of the  
Building Commissioning Association  
presents:



**The 1st BCA Commissioning Program held in Philadelphia!  
July 30th, 2009 at the National Constitution Center**

sponsored by:

WFW

Butler Balancing Co., Inc



**Program**

9:00 AM.....Registration  
10:00 AM.....*Building Commissioning 101*  
Noon.....Lunch (provided)  
1:30 PM.....*Existing Building Commissioning*  
2:45 PM.....End

For More Information, log onto  
[www.bxca.org/national\\_capital/](http://www.bxca.org/national_capital/)  
or  
contact Tony DiLeonardo  
215-627-0200 ; [dileonardo@wfweng.com](mailto:dileonardo@wfweng.com)

Fee:  
Members.....\$50  
Non-Members.....\$60

This event will be at the **National Constitution Center** <http://constitutioncenter.org/>

The **program will cover the building commissioning process** for new and existing buildings. It will include the documents and details of a commissioning plan, the benefits of commissioning, preparing a request for proposal and scope clarification. This will be an educational event geared ESPECIALLY for owners, developers, operations personnel and providers. It will address LEED commissioning services, the prerequisite and credit and how commissioning CAN reduce energy USAGE in buildings. And, for those who want to stick around from 3:00PM to 5:00PM, you can get a taste of history there for all to savor. Your registration fee includes access to the National Constitution Center's Permanent Exhibits.

So join us for an **Educational Program from the Building Commissioning Association!**

## **Congratulations and Thanks to BCA National Capital 2009 Chapter Board Members**

The BCA National Capital Chapter held board member elections at the December Board Meeting and tallied votes for three positions. Congratulations to

Ray Smith, GHT Limited  
BCA NCC Board Member

<http://www.ghltd.com/>

Tony DiLeonardo, WFW Engineering.  
BCA NCC Vice-President  
And Membership Committee

<http://www.wfweng.com/>

Open Board Position  
BCA-NCC Secretary

These individuals remained on the Board

Gretchen Coleman  
BCA NCC President  
Gretchen Coleman Commissioning  
Group, LLC

Mike Bilecky of Brinjac  
BCA NCC Board Member  
<http://www.brinjac.com/>

Ken Hahn of RMF Engineering  
BCA NCC Treasurer  
<http://www.rmfm.com/>

Emmillee Hogan of Liberty Engineering  
BCA NCC Regional Representative

### **SPONSORSHIP Request**

Our chapter has several sponsors! Brinjac Engineering and Wick Fisher White are Corporate Sponsors as well as event sponsors. Butler Balancing Company and Tristate are helping sponsor the upcoming Philadelphia Event to be held July 30<sup>th</sup> (see elsewhere in this newsletter for more on that event). Our chapter can use your sponsorship...and they can use mine. Send off a check to our treasurer, Ken Hahn, to become a Corporate Sponsor. Join GCCxG, LLC and our above mentioned sponsors in supporting this chapter! Please send your checks made out to the National Capital Chapter of the BCA to:

Ken Hahn, NCC Treasurer  
RMF Engineering Inc.  
5520 Research Park Drive  
Baltimore, Maryland 21228

## **Sponsor an Event or Serve on the NCC BCA Board and Have your Logo Placed Here!**

### **RMF ENGINEERING, INC.**



#### **SPECIALIZED SERVICES**

- + Systems Commissioning
- + Utilities Master Planning
- + Peer Review
- + Engineering Studies
- + Inspection Services

#### **GHT Limited**

