ASHRAE Puget Sound Chapter

Volume 49, No. 2 February 2014

Punch List

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President's Message

Happy February!

Well 2014 has already started off with a bang for the chapter! We had a great meeting in January, although we had ASHRAE president Bill Bahnfleth booked, he couldn't make it out due to all the flight cancellations caused by the winter weather, so instead we featured a presentation on Architecture 2030 and the 2030 district (http:// www.2030district.org/). (We will try and have the president back for a meeting probably iust before the summer conference!). We have appointed longtime ASHRAE member Cliff Chamberlain as a liaison from our chapter to the 2030 district.

This year we have some exciting programs for you, including an energy modeling software course on the 18th. Our recent tour of the Fred **Hutch Cancer Research Center** on February 12th was a huge success. The web site now has a History Timeline, a Jobs Board so be sure to send in your job openings to jobs@ pugetsoundashrae.org.

The chapter has also officially endorsed and has dedicated funding toward the local Sustainability Project selected for the summer conference. which will be to provide a suitable HVAC System for the Seattle Nativity School which leases space from a church in an old school building.

It is exciting that a lot is already happening this year in the chapter and there's going to be even more! We have a great group between the BOG, committee chairs and Region XI representatives but we could always use more support from the members, so if you would like to get involved please contact me or anyone on the BOG or committee chairs.

Cheers!

Alan Burt



Student Activities

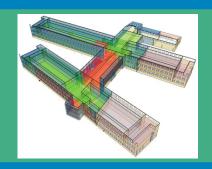
Technical Activities CommitteeFebruary Meeting - Capstone Course:

Energy Modeling Best Practices & Applications

This ASHRAE Learning sponsored course describes the fundamentals of modeling and explains how modeling is used in a modern office building to guide design decisions. Course participants will acquire the knowledge and vocabulary to integrate modeling into the design process, from the programming stage through postoccupancy and measurement and verification. The modeling fundamentals portion covers engineering principles that drive energy use in buildings and how these principles are modeled. Additionally, best practices in developing energy models will be addressed, as

well as how to assure quality control of the models. Using case studies, real-life examples discuss how calibrating models after occupancy are especially useful in understanding the relationship of models to actual building energy use. Case studies are also used to de-mystify Life Cycle Cost (LCC) analysis. The course will demonstrate the use of modeling with LCC to arrive at consensus decisions with different project stakeholders. Links to valuable modeling resources are also included.

For questions or more information, email: tac@pugetsoundashrae.org



Tuesday, February 18th 9:00 AM - 4:00 PM Seattle Central Library Price: \$200, Lunch Provided



http://bpt.me/570670 or Search ASHRAE

Instructor Bios

Joesph J. Deringer, AIA, LEED® AP

Mr. Deringer is Executive Director of the Institute for



the Sustainable Performance of Buildings (SuPerB). Mr. Deringer has over 35 years' experience in the design, analysis and simulation of sustainable, energyefficient buildings worldwide. His work has focused especially on energy codes, design assistance, training and the development of interactive online design and training tools. He has over 20

years' involvement in developing energy codes for buildings, and has helped 7 countries develop 1st generation energy codes. Mr. Deringer has served on ASHRAE's Standard 90.1 committee for 15 years and chaired its envelope subcommittee for 10 years. He is also active as international energy and environmental consultant to the World Bank, UNDP, and USAID, consulting on projects in over a dozen countries in Southeast Asia, the Caribbean, Latin America, the Middle East, and Eastern Europe. He is a member of IBPSA-USA, AIA, IES, ASHRAE, and USGBC.

Dr. Drury B. Crawley, Ph.D.

Dr. Crawley is a team leader at Bentley Systems, developing a new generation of building performance software for energy and sustainability. Before joining Bentley in 2010, Dr. Crawley led development of the US Department of Energy's



EnergyPlus simulation program and Commercial Buildings Initiative (now Better Buildings), working to create low- and zero-energy buildings.

Dr. Crawley has more than 35 years experience in building energy efficiency, renewable energy and sustainability. He received his PhD in Mechanical Engineering from University of Strathclyde in Glasgow, Scotland and a Bachelor of Architecture from University of Tennessee.

A registered architect, Dr. Crawley is an ASHRAE Fellow and Distinguished Lecturer. He is a recipient of the Distinguished Service Award, Research Administration Committee's Service to ASHRAE Research Award, BEMP certification, and Exceptional Service Award.

ASHRAE Puget Sound - Punch List



2014 Annual Conference: Seattle Update

MARK YOUR CALENDARS!

June 28 through July 2, this coming summer are the official dates for the Annual/Summer Conference held here in Seattle – hosted at the downtown Sheraton.

We've had a great deal of progress behind the scenes to date!

Information/Publicity Subcommittee

Chair Rick Peters, P.E. with TBS Engineering, has done a fantastic job spreading the word about our conference to the Winter Meeting attendees and initial indicators show a big number of attendees this summer.

Hospitality Subcommittee

Chair Bill Neudorfer with Neudorfer Engineers continues his pre-planning for duties that ramp in May.

Entertainment Subcommittee

Chair Brandon Oyer, P.E. with Seattle Steam and his subcommittee invested a lot of time considering numerous venues, and decided Bell Harbor was the best option for our Welcome Party on the Saturday evening preceding the Conference.

Tours Subcommittee

Chair Jill Connell, P.E. with CDi Engineers and her group have done some quality research and work to prepare a mix of general and technical tours scattered around the conference that does a great job of "showing off" the Puget Sound area to our willing participants.

Sessions Subcommittee

Chair Todd Rowe with Siemens and his group are busy filling in a spreadsheet of volunteer

Monitors for a morning or afternoon stint. These are coveted positions as Society waives registration fees for these volunteers. There is a limit, so if this of interest to you, I suggest you reach out to Mr. Rowe as soon as possible. He can be contacted here: todd.rowe@siemens.com

One last update for this month concerns our pro bono project that ASHRAE funds with a generous grant. After an extended search and contemplation, Society and the Puget Sound Chapter agreed with our Host Committee that a non-profit middle school located in South Seattle (the **Seattle Nativity School**) will be receiving a brand new heating and ventilation system for their students and faculty.

Beside Society, the Puget Sound Chapter has made a healthy donation along with many equipment manufacturers and Merit Mechanical, all of which I will detail in a future update. Thank you all for your support of our Host Committee!

Pat O'Donnell
General Chair
2014 Annual Conference
Email: summer2014@
pugetsoundashrae.org

Outstanding Items

See What Else Happening in our Chapter and at Society



ASHRAE Technology Award Applications Deadline: March 14th, 2014

The ASHRAE Technology Awards recognize outstanding achievements by members who have successfully applied innovative building design in the areas of occupant comfort, indoor air quality and energy conservation.

Chapter Awards applications are now being accepted. Please contact Technical Activities Chair Brice Kosnik at **tac@pugetsoundashrae.org**.



ASHRAE Puget Sound Jobs Board

Have you noticed all those cranes in our skyline? Our local HVAC & R firms have and are seeking qualified candidates to fill various positions.

If you're looking for a job, check out our Jobs board at www.pugetsoundashrae.org/jobs

If you're an employer looking to post an opening, please email a description of your position(s) and a company logo to jobs@pugetsoundashrae.org.



YEA Spring Leadership Conference

March 28-30, 2014, in Portland, Oregon!

Are you interested in expanding your knowledge, meeting fellow engineers and having some fun along the way? Look no further than YEA Leadership Weekend! YEA Leadership Weekend is an opportunity for you—the future leaders of ASHRAE—to learn more about Society, develop soft skills and network with other young professionals. Over 300 YEA members have already taken advantage of this great opportunity...will you be next? To apply contact Rhiannon Loomis at **rloomis@ashrae.org**.



Buildings in Balance: IEQ and Energy Efficiency

Free Webcast: April 17, 2014

1:00 PM - 4:00 PM EDT

This webcast will feature industry experts who will identify the link between energy efficiency and Indoor Environmental Quality (IEQ) through the integrated design process. Viewers will be able to recognize the importance of the four cornerstones of IEQ and how system selection can benefit both energy efficiency and IEQ.

Registration starts March 17th.



Region XI Chapters Regional Conference

May 8 - 10, 2014

Red Lion Hotel, Richland, WA

The Mid-Columbia Chapter CRC Planning Committee is very close to finalizing plans for the Region XI 2014 Chapters Regional Conference in Richland, WA. You can access information about the CRC at www.midcolumbia.ashraechapters.org. They have a great Technical Program, Golf Outing, and of course – CRC Schedule put together so start making plans now to attend. Please encourage your chapter leadership to start planning now.



Can you tell us when you got started in this field, and what lead you to go in that direction.

I got started as a young boy. My dad worked in airside in North Dakota. He had his own business, installing furnaces in various places around the city and in the farms. I worked in a sheet metal shop building ductwork when I was about 10 years old. But then my father died, and my brother started a plumbing and heating firm, so I started working with him. Of course I was in school then. I started in plumbing installations in 1956. Both my older brothers were plumbers. I used to work with them installing water systems and all kinds of plumbing.

Were you doing mostly Single Family or Commercial?

Both commercial and a lot of residential. There was an airbase out there too, so that started all kinds of new construction, mostly for apartment buildings.

You have some hands on experience?

Yeah, I don't have any burns yet. I got a lot of cuts. Seems like sheet metal workers always had cuts. I had band-

ASHRAE Memories:

An Interview with Charlie de Montigny, Past President Puget Sound Chapter

by Historian Seth Pike

aids all over my fingers.

But you got all your fingers.

Yep, still got em.

At some point, I would imagine you decided to get paper cuts instead of sheet metal cuts?

Well, I wanted to get my degree, so I kept working in the industry and going to college. I thought that if I had my degree as a Mechanical Engineer I could make big money. I should've stayed a plumber.

But anyway, I worked as an engineer. Actually I went to the Army for four years after I got out of college.

After the Army, what types of systems were you doing at that time?

I worked at Boeing in Electronic packaging. Electrical engineers would design systems they wanted to use. We had to put them into consoles that would fit in the planes. I had to dig out old plans for B52 bombers and find out what goes where, what the finishes were, all that stuff.

After the big layoffs in the 70's, I got a job in Oakland and got back into HVAC design. I was there for 4 years. I did jobs in Australia, mostly around the CA area.

I didn't like it there. When I moved back up here I looked around for jobs. The owner of Stern and Associates, Dick Stern, happened to be from UND, he saw that on my resume. Dick was also a Past President of ASHRAE. He just passed away a couple years ago. Anyhow, I came back here and I worked for Dick for 4 years. The

economy was pretty good, but I thought I'd strike out on my own, so I started a company in Kent in 1978.

When you started your own firm, what type of projects did you pursue?

Mostly commercial. I did a lot of schools, small offices buildings, multifamily housing. We designed a lot of restaurant chains. Seagalley – I don't think they exist anymore – we did jobs all around the country for them.

What type of HVAC and Plumbing systems would you typically install in chain restaurants?

On the airside, depended on the part of the country we were in. That's why they hired my firm, because you had to do the calculations and know what was required in different areas. For example Florida is a lot different than Washington's climate. The humidity is a lot different, and the kinds of fuel that they use. Some places in Florida they don't even bother heating, it's just cooling. We did a lot of evap cooling, especially down in Arizona; it's good for that there.

Then I started consulting for another firm here in Seattle, they had a job in Riyad, Saudi Arabia. They were spending a lot of money on developing the city. They didn't have much in the way of electrical power plants, so we had to design diesel powered generators, and they turned to my firm to design the ventilation and exhaust systems for the generators and the fuel systems, and anything else that was involved in the plumbing.

Sounds like you have some national

and Global experience. If you were to focus on the Seattle area, what would you say some of the more interesting projects you worked on in this area?

We did some work over at the sewage treatment plant. I was a registered engineer in Ketchikan, Alaska. At one time I was registered in 5 different states. We did a hotel in Ketchikan.

Quite a diverse range of projects from multi-family to wastewater facilities, what other types of projects were you involved with?

Also medical. We did the west wing of Harborview as a sub to another big firm. And I knew all these people, because I was active in ASHRAE and they asked me to help out.

How did you get started with ASHRAE?

When I worked in California the owner wanted everyone to belong to ASHRAE. We went to meetings in San Francisco in the Hong Kong Bank building. That's how I got started there. When I got here, I kept it up.

I got active in the chapter and code committees. ASHRAE Standard 90 came out, and our committee decided we would try to sell this, so we put on a road show where we would go out to various groups, libraries, whoever wanted to listen to us tell them about this new standard and what it could mean. I was still in Sterns office, around 1977.

Did you find that jurisdictions were embracing these guidelines?

No.

Why not?

I don't know, they were interested in listening. I suppose they saw it as additional work for their building department, as far as enforcement. And the fact the state first came out with the Energy Code, various jurisdictions didn't want to enforce it themselves.

They required a registered engineer to monitor it. At that time and I got appointed to the State Building Code Council by the Governor. I chaired the committee that wrote the state energy code. We had a state energy code, but it applied only to residential. Some groups wanted it expanded into non-residential area, and they wrote a few things. It didn't work out very well. About 1991 or '92, they wanted to rewrite everything to make it a comprehensive code to include residential and non-residential. This code I was involved with required all jurisdictions within the state to enforce the code.

So you spent time working through the Codes, working with ASHRAE trying to demonstrate the usefulness of Standard 90. At the same time, you still had your firm?

It took a lot of my time to handling the building code council business, and ASHRAE too.

When were you president?

1993 – 1994, gee that's 20 years ago!

So you've been involved since the beginning of Standard 90. How did the WA Energy Code align with 90.1 when you were beginning?

I don't know who pushed this, but some group put it through the legislature that directed the SBCC to write the energy code as part of the building code and was to be based on Standard 90. But we didn't just reference Standard 90, we had to write it. We didn't just copy the standard; we put it in our own words. Of course in the back, we had reference to Standard 90.

What was the political environment when that was taking place, in terms of the ME community, the architects?

I wouldn't say it was groovy. There were a lot of objections. We had to have public hearings. A lot of nice words, and not-so-nice words came out of these hearings. We had this directive from the state legislature, which was signed by the governor. The first year that we got it through, approved by the committee and SBCC, brought it up to the council to approve.



One organization threatened to sue if the SBCC passed the code. I even got served papers at home. I later found out everyone on the council had been served. Of course the State Attorney General took the case, and they backed off once they came to the council's side. This had something to do with the windows going from single pane to double pane. The small window manufacturers complained, said it would put them out of business, because these windows had to be certified. The certification would cost X\$, Y\$, \$, they didn't have that kind of money. The big manufacturers who already had the certification could spread out the cost per unit, so they objected to the small business exemption. They finally backed out because it's still in there.

Given all your experience and history, how do you see the landscape and how we're approaching design?

I think we're going in the right direction, at least for our side of the industry. We are ones that are quick to adapt to different forms of energy and use the best possible for the least cost for the owners. I see nothing but good things coming for this industry in the future.