

EQUILIBRIUM

March 2018

Newsletter of the Seattle Chapter Structural Engineers Association of Washington

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Seattle Chapter March Dinner Meeting



SEAW & ASCE Joint Meeting Sound Transit Northgate Link Extension Tuesday, March 13, 2018

5:30 pm to 8:00 pm

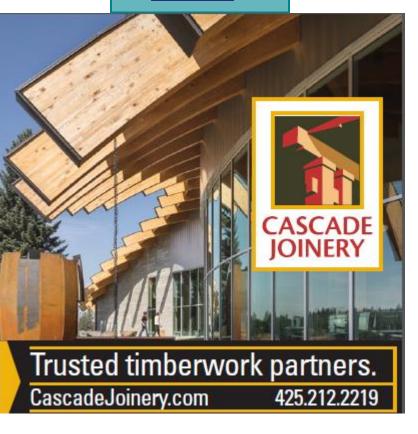
Mirabella, 116 Fairview Ave N, Seattle, WA 98109



Robert Nichols has over 30 years of

experience in the design and construction of public and private sector projects delivered through both conventional design-bid-

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build and alternative project delivery methods. As Corridor Design Manager, Robert was responsible for the completion of final design and the management of Design Support During Construction (DSDC) for the Northgate Link Extension. Beginning in 2018, Robert transitioned to Sound Transit's Federal Way Link extension and, as Corridor Design Manager, is managing the advanced preliminary engineering. Prior to joining Sound Transit in 2006, Mr. Nichols directed the final design of the stations for the initial segment of the Phoenix light rail project.

Dinner will be a buffet that includes 2 entrees, 1 vegetable, 1 starch, 1 salad, dinner rolls and dessert.

There is parking available on the street or in nearby parking lots (no parking available at Mirabella). There is construction happening in the area, so parking options are more limited. This parking map from SDOT may help you plan your trip. Special accommodations for meals are available upon request. If you have any food allergies or require special accommodations, please contact Katie Sultani-Wright, Marieta Marieta Mar

Attendees must preregister; there will be no on-site registration. Contact the House and Hospitality Committee to make other payment arrangements.

Schedule:

5:30–6:00 PM: Social Hour 6:00–6:30 PM: Dinner 6:20–8:00 PM: Program

Registration Fees:

\$55 - Non-Member (\$50 early-bird) \$45 - ASCE Member (\$40 early-bird)

\$25 - Students (\$20 early-bird)

\$35 - Government Employee - ASCE Member (\$30 early-bird)

Registration closes Sunday, March 11.

Register Now!

February Seattle Chapter Dinner Meeting Recap

By Marcus Freeman, YMG President

"70 percent of RFIs are not major design changes they are simply, how, what, and where?" This quote came from Kyle Richardson of OAC Services and the moderator for February's

dinner meeting and is the motivation for February's dinner meeting with ACI.

Three panelists, Cary Kopczynski (CKC), Jason Collins (PCS), and Jack Avery (Sellen) were brought together to share their experiences with construction administration. This panel discussion was motivated by the exploding trend of RFIs that swarm today's projects and plague the efficiency of our industry. Read More

SEAW Announcements

Check out the new SEAW website!

Structures Congress 2018



Fort Worth, Texas, April 19–21 2018 Early Bird rates until 2/14/2018 Advanced rates until 3/21/2018 On-Site rates begin 3/22/2018

This year, ASCE SEI is putting on Structures Congress 2018 in Fort Worth Texas, April 19–21. Attendees will listen to keynote speakers Guillermo Trotti and Dr. Dava Newman open the event on Thursday as they present on *Designing Advanced Structures for Human Space Exploration*. Keynote Ashraf Habibullah presents Friday on *Next Generation Structural Engineering*, and keynote Greg Fenves closes the event Saturday presenting on *Engineering and Leadership*. Between plenary keynote sessions, there will be opportunities to attend presentations on more than12 different tracks, including, Bridges, Buildings, Natural Disasters, and Professional

Time to Renew your Membership

We would be thrilled to have you back! It's not too late to remain a part of SEAW, and we'll do our best to get you back on board.

As a member of SEAW, you enjoy many important benefits, including:

- Member pricing for SEAW dinner meetings and seminars
- Access to members-only resources on the SEAW website
- Advance notice of activities, technical updates, job opportunities, and member news through the chapter newsletters and the website
- Complimentary subscription to Structure magazine
- Discounts on the purchase of ICC publications

Renew your membership

Save the Date: ATC 20/45 and Cal OES SAP Class in Seattle

By Joyce Lem, Chair, Disaster Prep & Response Committee A class on ATC 20/45 and the Cal OES Safety Assessment Program (SAP) will be held on **April 27** in Seattle. This eight-hour training on Post-Disaster Building Safety Evaluation Procedures will help participants develop the skills to properly assess buildings for occupancy following a major earthquake, flood, or wind event. The training will be based on the California Office of Emergency Services (Cal OES) Safety Assessment Program (SAP), incorporating material from ATC-20 (Post-Earthquake Safety Evaluation of Buildings) and ATC-45 (Safety Evaluation of Buildings after Windstorms and Floods).

Practice. There's a session for just about any specialty. Last, but not least, attendees will have opportunities throughout the Congress to meet and mingle with structural colleagues from the U.S. and abroad at the exhibit hall, fun receptions, and throughout the whole event.

For more information, explore the preliminary program.

Register Today!

ASCE Geotechnical Seminar

Spring Seminar 2018: Waterfront Engineering and Construction

Topics covered: Analytical methods and numerical modeling, Lateral spreading, Lateral Pile Design, Site Response, Case Histories

Speakers: Steve Dickinson; Mike Beaty; Kevin Franke Port of Seattle (TBD); local geotechnical and structural engineering consultants (TBD); local contractors (TBD)

When: April 14, 2018, 8 AM - 5 PM

Where: Kane Hall, University of Washington

Short Course: April 13, 2018, on Lateral Pile Design at the

Columbia Tower Club

We are pleased to announce our 35th annual Spring Seminar will be focused on waterfront engineering and construction. This topic was last presented by our group back in 2003 and since then a number of major waterfront projects have been designed and built in Seattle and the greater Puget Sound area. The same challenges exist but we have new methods to use in design and new technology to use in construction. Our region also has unique seismic demands that have evolved over the years that affect waterfront projects. It's a great time to talk about waterfront engineering in Seattle!

Additional course information and registration details coming soon.

Support SEFW Outreach!

By Angela Gottula Twining

The Structural Engineers Foundation of Washington is excited about the outreach opportunities that are happening this time of year.

Stay tuned for more details and registration-soon!

Save the Date – Joint Meeting with SEAW Seattle and Southwest Chapters



Alaskan Way Tunnel Project with Carl Neagory

Date: Tuesday, April 24, 2018

Location: Galliano's SeaTac | 16435 Military Rd S.

|SeaTac, WA

Note: Carl was our guide for the SEAW Tour last year.

Additional information and registration details coming soon.

Southwest Chapter News



By Owen Bower, SEAW Southwest

Chapter President

First, SEFW was able to participate in two high school STEM events last month.

On the west side of the state, SEFW and the SEAW outreach committee contributed to the ASCE Popsicle Stick Bridge competition, held at the Museum of Flight on February 10. SEFW made a donation toward the costs of the event. On the day of the competition, SEAW Outreach Committee chair Pete Opsahl was able to say a few words to promote structural engineering to the 100+ students who participated. The competition—the 23rd annual event—served school districts and ACE teams in the Puget Sound area. Read More

State and Chapter Committee Reports

Contact the committee chair if you are interested in working and learning on a committee.

- NCSEA Delegate Chun Lau
- <u>Earthquake Engineering Committee</u> Kai Ki Mow
 The EEC upcoming meeting dates are May 8, 2018.
 One of the current main focus and an important topic that
 the committee hopes to address in the upcoming year is
 the Increased Seismic Load in the newly published
 ASCE 7-16.

Members interested in EEC can find additional information regarding the meeting on the <u>SEAW website</u> calendar or can contact the committee chair.

- Outreach Committee Pete Opsahl
 To sign up to volunteer or to mentor, <u>visit the SEFW page</u>.
- Sustainability Committee Kyle Steuck
- Refresher Committee Mark Whiteley
- Public Information Committee Darrell Staaleson
- Disaster Preparation/Response Committee Joyce Lem
- WABO Liaison Committee Charlie Griffes
 The SEAW/WABO Liaison committee is now available
 for questions from SEAW or WABO members. These
 questions can be about subjects addressed in the white
 papers already issued or general questions in the realm
 of structural engineering practice as it relates to
 interaction with the various building departments.
 Comments or questions can be emailed
 to charlie@ctengineering.com.

 White Paper 6b 2017 on Deferred Submittals
- Wind Engineering Committee Scott Douglas
- Technology Taskforce Morgan Wiese

Have you ever found yourself in need of a 205 foot-long precast girder?

The Southwest chapter upcoming March meeting (Wednesday, 3/21 at 3 PM) will provide SEAW members that chance to tour the Concrete Technology Corporation facility at the Port of Tacoma. In 1951 Concrete Technology was the home of the first prestressing factory in the country and to this day is one of the country's premier prestressed concrete fabricators. Come tour their 150,000 -square-foot enclosed production facilities and state-of-the-art batch plant, to see where the state's largest prestressed girders are made. Learn more about their projects and capabilities at www.concretetech.com.

Watch your email and <u>SEAW.org</u> for registration information in the coming weeks. The Southwest chapter is working to coordinate several other meetings this spring. We hope to see you there.

Spokane Chapter News

Look for Spokane Chapter News in the future.

South Central Chapter News

Look for South Central Chapter News in the future.

YMG Corner

By Sean Augustino



- Membership Task Group Jill Shuttleworth
- Continuing Education Committee Adam Ailvers
- Scholarship Committee Kevin Solberg

Public Information Committee Report

By Darrell Staaleson, Chair

I will be stepping down as Chair of P.I.C. and Equilibrium Editor as of June 2018 in order to focus on my duties as Seattle Chapter President. This is an opportunity for you to step up and make a contribution to our association and the structural engineering profession. I will help/mentor as needed or wanted, but I encourage you to take it and make it your own.

Many people say to me that they don't have any time. Having studied Dale Carnegie and Steven Covey, I know that no one has time. I don't. You don't have time. We make time for the things that are important to us.

I'm currently reading Theodore Roosevelt on Leadership: Executive Lessons from the Bully Pulpit by James M. Strock. I make time to read because as William James said, "Don't be a mental loafer." (Loafer = a person who idles time away: an idler lay about · good-for-nothing · lounger · shirker · sluggard; but for the synonym-challenged, not a leather shoe shaped like a moccasin, with a low flat heel.)

Anyway, of late, I am always asking myself, "What would TR (Teddy Roosevelt) do?" Well, TR said, "Do what you can with what you have, where you are." So, I leave you with a picture of TR showing what editing and writing the Equilibrium is like. It'll be fun!



On February 3, the Puget Sound Engineering Council (PSEC) held its annual awards banquet at the Museum of Flight in Seattle. The evening kicked off with a keynote speech by Dale Thompson of the Museum of Flight, who is overseeing the restoration of their B-17F and B-29 bombers. Dale described the history of these planes, their key features, and the restoration they are doing, particularly to interior components. These planes are housed at the museum and visible to the public. Read More

Wind Engineering Committee

By Scott Douglas

Next meeting: **Thursday, March 8, noon- 1 PM** at MKA, 1301 5th Avenue #3200, downtown Seattle.

March meeting's agenda will include the following topics: (1) Continued discussion on a CFSEI Tech note regarding C&C wind loads on wall studs combined with axial loads to address a conflict between ANSI AISI S240-15 Section B1.1.2 and ASCE 7-16 and 2018 IBC Load Combinations, (2) Discussions on review comments by SEAOC and ICC on the five design examples SEAW WEC members are authoring in cooperation with the SEAOC Wind Committee for the SEAOC Wind Design Manual scheduled for publication this spring, and (3) development of a Kzt map for the City of Bellevue.

All members are encouraged to participate either in person or via <u>Go-to-Meeting</u>: **Phone** (224) 501-3412 **Access Code**: 472-607-325

Please contact the WEC chair, Scott
Douglas sdouglasscott@gmail.com, to join the SEAW WEC and to receive information and announcements on committee activities and actions.

From the Editor

By Darrell Staaleson

Employment Opportunities

Mid-level Structural Engineer - Morrison-Maierle Sr. Project Manager - Seattle Structural PS Inc. Mid-level Design Engineer - Seattle Structural PS Inc.

Structural Engineer - Complete Design Structural Engineer - WRK Engineers

Structural Staff Engineer - LSB Consulting Engineer

Structural Engineer - Fast + Epp

Structural Engineer - Integrus Architecture Structural Engineer - MLA Engineering, PLLC BIM Manager/Revit - MLA Engineering, PLLC Structural Engineer - Integrus Architecture Structural Project Manager - Dibble Engineers

Structural Project Manager - Dibble Engineers

Learn More

Membership Postings

In accordance with SEAW bylaws, membership applications are vetted by the executive director, granted probationary status by the chapter board, and posted for membership comment. Membership is considered accepted 30 days after posting if current year dues are paid and no member objections have been received. Read more

Upcoming Events

March 13: Seattle Chapter Dinner Meeting

March 15: Post-Disaster Building Safety Evaluation Training -

Spokane

March 16: Post-Disaster Building Safety Evaluation Training -Kennewick

March 17: Spring 2018 SEAW Seminar: Foundation and

Shoring Design

March 21: Southwest Chapter Meeting

April 24: Seattle and Southwest Chapter Meeting

April 27: Post-Disaster Building Safety Evaluation Training -

Seattle



Equilibrium publication Team:

Darrell Staaleson, Editor Katie Olleman Zohrah Ali

Allison Tran - Grammar, spelling, and watching out for you'llnever-believe-how-they-spelled-that!

All members are welcome to submit articles to Equilibrium. To help you with your writer's block, here are a few topics: Write engineer's notes from afield; summarize an interesting technical design you worked on; write about how you have been successful and increased productivity with an accounting procedure or marketing technique; write about your experiences in community services; or share some construction site photos, and talk about lessons learned.

"A Picture and a Paragraph," and please use the Article Submittal Form provided. Please note that when I say, "picture" I mean an actual "picture", and not a blank space where the "picture" should be. The picture needs a caption along with the names of the people in the photo.

Please submit your articles in Word format using the Article Template.

CORRECTIONS:

None that I can remember.

March Puzzle:

In this story, a young man grows up on another planet and is rescued and brought back to Earth. He finds he is the heir to a vast fortune. He brings back with him the philosophy of the aliens who raised him and the ability to make bad things, and bad people, "go away." What novel tells this story? Who is the author? And what is the name of the central teaching of the alien philosophy and what does it translate to in English?

Clue: Read on.

"With my cross-bow, I shot the albatross.

'Twas right, said they, such birds to slay, That bring the fog and mist.

Day after day, day after day, We stuck, nor breath nor motion; As idle as a painted ship Upon a painted ocean.

The first SEAW member to respond on our SEAW Facebook page or at the next dinner meeting – <u>with a correct and full answer</u> - will get coffee and a Danish pastry.

February Puzzle:

In this story, reality is altered by one young man's dreams. What word triggers his dreams? What novel tells this story? And who is the author?

Clue: "That horrid little Frenchman! You know, the detective!"

No winner this time. Even John Gunn, a guy with the Starship Enterprise on his Facebook page, was stumped.

Answer: The word that triggers his effective dream is "Antwerp." The novel is "The Lathe of Heaven." And the author is "Ursula K Le Guin."



Ursula K Le Guin is another one of my favorite authors. She passed away on January 22, 2018. I was reminded of "The Lathe of Heaven" on hearing of her passing on a particularly rainy day. One of my favorite scenes sees George Orr (the young man with effective dreams) entering his psychiatrist's

office for another session to help cure him. He enters the building in the perpetual downpour of rain and on awakening finds the sun is shining and people are talking about how Oregon has always been "The Sunshine State."

Want to know more? Check out her <u>official site</u>. You can also check out the interview with Ursula K Le Guin by Bill Moyers. It's as great an interview as the many with Joseph Campbell.