

SEAI NEWSLETTER

May 2010



Structural Engineers Association of Idaho

P.O. Box 8733, Boise, ID 83707

www.seaidaho.org

SEAI Mission Statement:

"To promote and enhance the Structural Engineering profession in Idaho by educating the public about the activities of Structural Engineers and their benefit to society and by providing professional development and support to SEAI members that is relevant, reliable, and inspirational to modern engineering practices."

BOARD OF DIRECTORS & AND COMMITTEE CHAIRS

President

Scott Soule – Core Engineering
scott.soule@core-engineering.net 386-9170

Vice-President

Heather Strong – RedBuilt
hstrong@redbuilt.com 364-1334

Treasurer

Wilson Antoniuk – RedBuilt
wantoniuk@redbuilt.com 395-2458

Secretary

Ash Hobbs – Power Engineers
ash.hobbs@powereng.com 288-6384

QBS Representative

Scott Soule – Core Engineering
scott.soule@core-engineering.net 386-9170

Past President

Kent Soelberg – CH2M Hill
Kent.soelberg@ch2m.com 383-6349

Building Code Chair

Mike Brown – Core Engineering
mike.brown@core-engineering.net 386-9170

INSIDE THIS ISSUE

Board & Committee Contact List	1
SEAI Meeting — May 20 th	2
Announcements	3-5
A Word from the SEAI Board	3
Event Calendar	6
Structural Engineering Links <i>(New Featured Link each month)</i>	7

Program/Seminar Chair

Soren Jensen – RedBuilt
sjensen@redbuilt.com

Membership Chair

Ash Hobbs – Power Engineers
ash.hobbs@powereng.com 288-6384

Newsletter Editor

David Sansotta – Core Engineering
david.sansotta@core-engineering.net 386-9170

Website Editor

Tyler Haney - WHPacific
thaney@whpacific.com 342-5400

Technical & Education Chair

David Nelson – iLevel by Weyerhaeuser
david.nelson3@weyerhaeuser.com 364-3639

Directors

Bruce Hess – Hess Engineering
Bruce_hess@msn.com 841-8856
Sarah McClendon – McClendon Engineering
sarah@mcclendonengineering.com 342-2919

SEAI MEETING — MAY 20TH — THURSDAY



Please RSVP to Soren Jensen at sjensen@redbuilt.com by noon the Monday before the meeting with your entrée selection. We will turn no one away at the door, but if we do not receive your RSVP on time we cannot guarantee that there will be any food for you to eat! Please note that, regardless of whether you eat or not, you will still need to pay meeting fees, so get those RSVP's in! **Also, if you RSVP and decided not to show, Murphy's will still charge SEAI for your lunch and SEAI will politely pass this charge on to you.**

Meeting Location:

Murphy's Seafood & Steakhouse
1555 Broadway Ave.
Boise, ID 83706
www.primedime.com

Food Entrées:

- 1) Chicken Caesar Salad
- 2) Whiskey Chicken
- 3) Beef Chop Burger
- 4) Chicken Stir-Fry w/ Noodles

Meeting Focus:

Building Collapse & Haiti
Earthquake

Speaker:

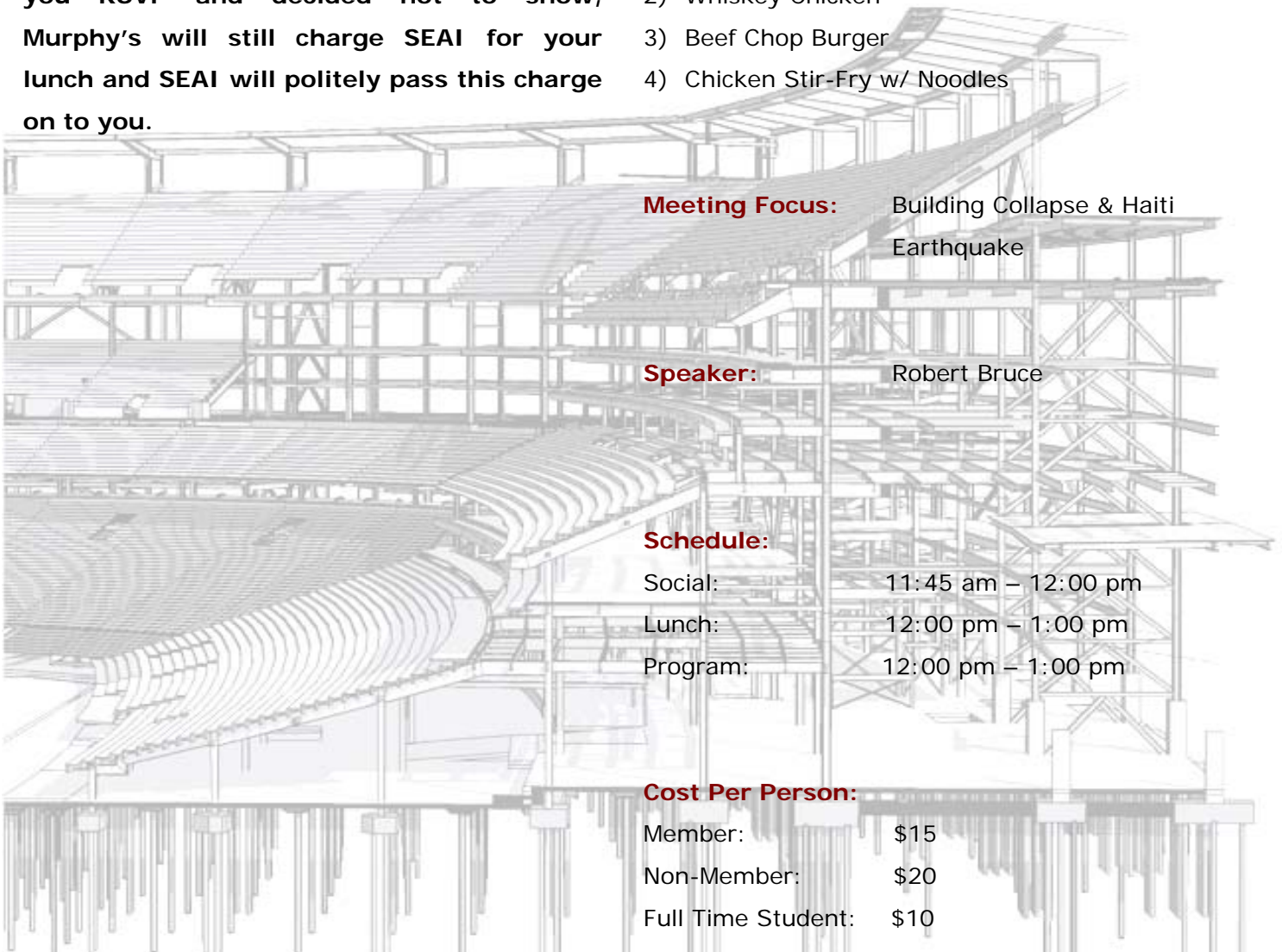
Robert Bruce

Schedule:

Social:	11:45 am – 12:00 pm
Lunch:	12:00 pm – 1:00 pm
Program:	12:00 pm – 1:00 pm

Cost Per Person:

Member:	\$15
Non-Member:	\$20
Full Time Student:	\$10



Announcements:

SEAI LUNCHEON PRESENTATION

Robert Bruce

Robert will be discussing building collapse and his recent experience in Haiti after the earthquake.

OPEN SEAI CHAIR POSITIONS

We are in need of a new Program/Seminar Chair as Soren Jensen will be exiting this position. This job is crucial in regards to the success of our monthly luncheons; by acquiring good speakers with interesting and beneficial topics we will ensure that there will be continued interest and attendance from the SEAI membership. Also, if anyone is interested in the Newsletter Editor position please contact anyone on the board for further information. David Sansotta has been in this position for over 3 years now and is looking forward to trying his hand at a different position.

If you or anyone you know is, or might be, interested in these chair positions, please contact any of the board members for more information.

ATC TRAINING: MAY 20TH

SEAI and the Idaho Bureau of Homeland Security are hosting ATC 20 training – Post Earthquake Safety Evaluations of Buildings. Training will be provided at no cost to attendees, and is open to engineers, architects, building officials, etc. Space is limited so make sure to RSVP early for both the SEAI luncheon and the ATC 20 Training.

For additional information please see the attached PDF flyer, or contact Sarah McClendon at sarah@McClendonEngineering.com or 208-342-2919.

A WORD FROM THE SEAI BOARD

We have enjoyed the 2009-2010 SEAI year with all of you, please enjoy the summer months and come back in the fall for another exciting year! If you have even the slightest interest in any SEAI position, please get a hold of one of the board members for more information, or just to ask them some general questions. Being a part of the SEAI board is not only beneficial to the membership as a whole, but is also beneficial to the individual by making new contacts and showcasing your ability and willingness to get involved. The people you will meet and interact with are often the ones like yourself that are motivated and hardworking, and will be the people you may need to rely on in the future for anything from getting another educated perspective on that design problem you can't seem to grasp, to getting your name out there when looking for a job.

IDAHO IS EARTHQUAKE COUNTRY

Sarah McClendon, PE, SE, LEED AP

"Idaho is Earthquake Country" according to the Idaho Bureau of Homeland Security and the Idaho Geological Survey; yet, when you ask the average person on the street if Idaho gets earthquakes they will most likely say "no". This puts us Structural Engineers in a conundrum of trying to answer the shaky question of do we or don't we design buildings to withstand earthquakes? Our clients want us to build the cheapest structure, contractors accuse of us of "over engineering", and insurance agents remind us of our liability. So, what do we do? What do we do before an earthquake and what can we do after?

Before the Earthquake:

The building code gives us minimum design guidelines, which of course we must abide by, but is

there a gap between what the building code recommends and what risk actually exists? The only way to fill that gap is by knowledge. First we make sure we, as Structural Engineers, understand the risk; then we educate our clients.

The Idaho Geological Survey ranks Idaho “fifth highest in the nation for earthquake hazard. Only California, Nevada, Utah, and Alaska have a greater overall hazard. Idaho has experienced [one of the largest] earthquakes in the contiguous United States in the last thirty years- the 1983 Borah Peak earthquake (Magnitude 7.3).” (www.idahogeology.org/Services/GeologicHazards/Earthquakes) Idaho also experienced thousands of smaller earthquakes during the 2005 earthquake swarm near Donnelly. Hundreds of these earthquakes were felt by residents of the area or caused structural damage and at least five events were of a magnitude 4.

Another important fact to remember is that earthquakes don't follow political boundaries. All of our neighboring states are listed in the top 10 highest risk for earthquake hazard. This is to remind us that just because the earthquake was located in a different state that doesn't mean that Idaho ground won't be susceptible to shaking. For example, Wells, Nevada had a magnitude 6.0 earthquake in 2008 and Yellowstone (Hebgen Lake) had a magnitude 7.5 earthquake in 1959, both of which were felt in Idaho. Also, it's important to note that Yellowstone has been experiencing a number of recent earthquake swarms that they are labeling as “unusual” and geologists are watching these carefully to see if these smaller earthquakes are leading up to a larger event.

After the Earthquake:

From a Structural Engineering standpoint there are two sides to the earthquake hazard: designing structures to resist earthquakes before the event happens and assessing the damage that has occurred to structures after the earthquake happened. Hopefully, we have learned how to do the first, which is to design structures with a continuous load path from the roof to the foundation that is capable of withstanding lateral and vertical loads from earthquake forces while in school. However, it's a little more difficult to get the training required to assess structures after the earthquake. This training usually requires experience from the field which unfortunately means we have to wait for an event to occur so that we can learn from it. Recently, Mother Nature has been giving us plenty of lessons!

After the devastating earthquake in Haiti earlier this year, NCSEA (National Council of Structural Engineer Associations) asked all the states to submit a list of Structural Engineers that have had ATC-20 training and that would be willing to volunteer their time to go to Haiti and assist with the building assessments. ATC-20 is the most common methodology used to perform post-damage safety evaluations of earthquake-damaged buildings (of all types) to determine if they can be safely occupied. I am proud to say that Idaho had eight people who promptly signed up to volunteer their time to the cause! Unfortunately, not one of them had ATC 20 training.

The Board of Directors for SEAI found this unacceptable. In the months that followed the Haiti earthquake SEAI formed a new committee: Structural Engineer Emergency Response (SEER) Committee which is modelled after the NCSEA committee with the same name. The SEER Committee set to work and teamed up with the Idaho Bureau of Homeland Security (BHS) to discuss

the current situation. The task that was given top priority was to provide ATC 20 training and to maintain a list of Structural Engineers that are trained and willing to help when needed. This training will happen in Boise on May 20, 2010 and again in Idaho Falls in September 2010.

I want to thank those eight people who initially signed up to volunteer. They not only got the ball rolling, so to speak, but they proved that they were willing to use their speciality of Structural Engineering knowledge to help people in their time of need. It was with these eight names on a piece of paper that the SEER Committee could show the need for the ATC 20 training and ultimately led to the BHS sponsoring not only the speaker but also the manuals at no cost to SEAI members. When the training was announced in last month's newsletter it sold out within days and a waiting list was started. That's an incredible response!

I was asked once how Structural Engineers can give back to their communities; this is certainly one way to do it. We provide the initial safety to the structures that we work in, live in, and drive on. We can also help in the recovery after a disaster. We can help reassure people that their structure is safe. We can help identify which structures aren't safe to protect people from getting hurt. Ultimately, we can use our unique skills and knowledge to help rebuild the communities where people live. Hopefully we will never have to do this in our own community, but if the need occurs we will now be better prepared.

**GET INVOLVED WITH
YOUR NEWSLETTER!**

The SEAI Newsletter is a monthly publication. Newsletter submissions are encouraged from the SEAI community. If you have a suggestion, feature, link, product review or anything else that may be of interest to the newsletter readers, please email them to our newsletter editor, David Sansotta, at david.sansotta@core-engineering.net

LET YOUR MEMBERSHIP WORK FOR YOU!

We are looking for more speakers for our SEAI luncheon meetings. If you have any suggestions for future speakers, items of discussion or anything else that you think would be beneficial to the structural engineers attending SEAI meetings, please send your comments and ideas to Soren Jensen at sjensen@redbuilt.com.

STRUCTURES MAGAZINE!

As part of your SEAI membership you should be receiving **STRUCTURE® magazine** in the mail every month. If you are not, please verify that you have paid your SEAI dues this year and then send your name and mailing address to Sarah McClendon at sarah@mcclendonengineering.com

EVENT CALENDAR

May 20, 2010 Robert Bruce, Building Collapse, Haiti Earthquake

PAST EVENTS

Apr. 15, 2010 Casey Goade, Solid Earth Solutions
Mar. 18, 2010 Brad Moyes, NCSEA
Feb. 18, 2010 Bob Warner, Cold Formed Steel Truss Design & Mfr.
Jan. 21, 2010 Dave Jackson, Seismic Retrofits
Nov. 19, 2009 Sarah McClendon, SEA Conferences
Oct. 15, 2009 Tony Peterson, PNA Construction Technologies
Sept. 17, 2009 Joel Levenberg, Structural Group – Strengthening Div.
May 21, 2009 Larry Boyer, Vulcraft, Steel Joists
Apr. 16, 2009 Eric Pugmire, Simpson Strong-Tie, New Products



**WISH TO PLACE AN AD
IN THE NEWSLETTER?**

If so, please contact our Treasurer, Wilson Antoniuk, at wantoniuk@redbuilt.com or at 395-2458.

Monthly Rates for Advertising

Standard Business Card.....\$50
 Quarter Page.....\$90
 Half Page.....\$120
 Full Page.....\$150

10% discount for ads running multiple months

STRUCTURAL ENGINEERING LINKS

FEATURED LINK: *High-Profile Failures Raise Worry*

http://www.boston.com/news/local/massachusetts/articles/2010/05/10/failures_raise_questions_about_quality_of_big_projects/?page=full

Applied Technology Council - <http://www.atcouncil.org>

Idaho Board of Professional Engineers and Land Surveyors - <http://www2.state.id.us/ipels/>

City of Boise Sp. Insp. Checklist – http://www.cityofboise.org/pds/applications/Building/Special_Inspections.pdf

Design Build Magazine (McGraw-Hill) - <http://www.designbuildmag.com/>

Engineering & (Bi-Weekly Newsletter) - <http://www.engineeringand.com>

Engineering Forum - <http://www.eng-tips.com/>

Structural Engineers Association International - <http://www.seaint.org/>

Structural Engineers Association of Utah - <http://www.seau.org/>

Structural Engineers Association of Washington - <http://www.seaw.org/>

Structural Engineers of Oregon - <http://www.seao.org/main.htm>

Structural Engineers of Idaho - <http://www.seaidaho.org>

Design Load Guidelines – <http://www.idabo.org/loads.htm>

