

Structural Engineers Association of Colorado Newsletter

JULY GENERAL MEETING

DECONSTRUCTING HOTEL MONTANA

Schedule

Mark Your Calendar (2010)

General
Membership
Meetings
(Breakfast 7:30 a.m.)
January 21
March 18
May 20
July 15
September 16

Business
Management
Committee
Meetings
(Breakfast 7:30 a.m.)
February 11
April 8
June 10
August 12
October 14

SEAC Board of Directors Meetings (7:30 a.m.) January 7 February 4 April 1 June 3 August 5

October 7

Fall Seminar
October 21

Annual Dinner Banquet November 18 6 - 9 p.m. At 1653 on 12 January 2010 a 7.3 earthquake rocked the country of Haiti. Over 250,000 people lost their lives and many loved ones were missing. On 16 January, Bil Hawkins, P.E. of Knott Laboratory, LLC headed a team of US Army Corps of Engineers Structural Specialists, Structural Engineers trained in Urban Search and Rescue techniques, to go to Haiti to help with the international response. The team immediately began to assist the four FEMA teams and 35 International teams to rescue live victims and perform structural assessment of hospitals and schools.

BUT...While with the US Army Corps of Engineers in May 2003 during Operation Iraqi Freedom, Mr. Hawkins assisted with the recovery of 175 bodies during the Bingol, Turkey earthquake. That collapsed 4-story school structure was a concrete post and beam very similar to the 5-story palatial Hotel Montana in Petionville, Haiti which had 69 bodies entombed beneath it. Based on his previous experience, the US Army volunteered Mr. Hawkins to be in command of the United Nations' recovery operation.

Buried in the rubble were 17 Americans including four Lynn University students and two of their professors, four Civil Engineers helping rebuild Haiti and a US Air Force Major. Utilizing heavy equipment and nearly 170 personnel consisting of Search and Rescue teams from France, Mexico, Columbia and Canada, the teams carefully recovered over 60 souls in 30 days and the remaining 9 in an additional two weeks. None of the bodies were damaged by the recovery operation and no rescuers were hurt.

Mr. Hawkins will provide insight into the construction methods of Haiti and the living conditions prior to the earthquake. He will discuss the structural assessment and building triage methods used by the Search & Rescue Teams. He will then detail the procedures used to carefully take apart the thick concrete slabs, beams and columns, cut through the steel reinforcement and recover the victims with respect and dignity so that their families could have peace and closure.

Bil Hawkins is a native of northern New Mexico. He enlisted in the US Marine Corps at 17 and became a combat engineer specializing in destroying existing, and laying down new bridges. After four years he left and did construction on the Navajo and Papago Indian reservations for nearly 8 years laying out community sites, installing infrastructure and framing new houses. He then went to work for a developer for 7years building custom homes and creating golf course communities in Northern New Mexico.



At the age of 37 Mr. Hawkins graduated from the University of New Mexico with a BS in Civil Engineering and went to work for a small structural engineering firm that was eventually eaten up by HDR specializing in large Department of Energy projects. At this time Mr. Hawkins also became involved with the FEMA Urban Search and Rescue Program and was a member of New Mexico Task Force 1 when they deployed to the Pentagon during 911. With two small children, Mr. Hawkins decided to take advantage of the US Government's vacation time and joined the US Army Corps of Engineers.

After two tours in Iraq, he moved on to work for the Department of the Interior working on anti-terrorism force protection for Bureau of Reclamation's dams and power plants. In 2008 Mr. Hawkins was offered a position at Knott Laboratory to run the structural forensic department. He has continued to work as a contractor for the US Army, training structural engineers how to perform assessment tasks in an urban search and rescue environment.

Officers & Board Members



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Information for inclusion in the newsletter must be received one month prior to the next general meeting.

Caryn L. Bauer
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President's Message

Thave been commuting 55 miles daily for close to 18 years. I live in Windsor, a smallish town up north between Loveland, Fort Collins, and Greeley. Windsor has a population of about 17,000 and we do not currently have a Walmart or Burger King, although we have five Walmart's within a 12 mile radius, so we are doing okay.

I thought this might be a good time to share some of the ways I have found to make my commute easier to deal with. During the close to 500,000 miles I've spent on I-25 over the years I have had to become creative. Sure, I sometimes just listen to the radio or even just turn it off and zone out but I have also been able to be productive at different times

In the past I could of course do business on my phone, but I have agreed not to use my phone for anything when the car is on and moving - so that's out. I understand this was actually Oprah's idea for what that's worth.

Years ago, I was into books on tape and I really do mean tape. I would go to the library each weekend and try and find a book that would last 5 days and no more. I didn't like to have a story carry over into the next week. For a few years I was really pretty well "read". But like everything I do too much of, eventually I became bored with this and turned back to the radio or just silence.

Recently, I decided that instead of just listening to 5am rock and roll and sports talk stations I could make some productive use of my time once again. For the past few months I have been concentrating on learning to speak German. I'm actually starting to pick up a few phrases and feel confident that I will be able to tell people in Germany that I would like to drink or eat something, that I need to buy t-shirts for my friends in America, and that at some point in time we should have a glass of wine or beer. Wine and beer are dominant themes in the language series I am studying. I am not sure if this is a comment on the German

culture or if it actually says more about the people who wrote the lesson.

Fortunately, there are others in SEAC that are making much better use of their time than I am. The Architectural Liaison Committee has been meeting to analyze and evaluate the results of the survey of architectural firms they put together this spring, and will make a condensed presentation of some highlights to us this month.

The Snow Load Committee has also been getting together to see how they can update and improve the excellent tools they have produced for us over the years.

The formation of a new committee has just been approved by the Board of Directors. We would like to claim this as our idea but it actually came out of a Business Management meeting. Wayne Muir and Paul Hause are co-chairing the Code Committee Joint Task Force. This new group is looking at being more involved with local code officials and hopes to encourage Colorado building departments to move to a five or six year code adoption cycle, which is in alignment with the NCSEA vision.

Also, our Education Committee is hard at work on the fall seminar. Be on the lookout for an announcement coming up. They have a very interesting and diverse program planned for us.

So try and make good use of your time and plan on attending this month's meeting. Please do not call the doctors if I come up to you and say "Möchten Sie Kaffee mit mir trinken?" I'm just asking you if you would like to drink coffee with me. (I think)

Next month, a review of the book "The Existential Pleasures of Engineering" by Samuel C. Florman, unless I can come up with something better in the meantime.

R. Hedrick

GENERAL NOTES - SPONSORS

JULY SPONSOR THANK YOU



Concrete Reinforcing Steel Institute

Through its network of region managers, CRSI supports SEAC and structural engineering associations nationwide with documents and educational programs. Publications are available through your region manager and at crsi.org. Contact your region manager to arrange a presentation in your office, tailored to meet the needs of your personnel.







CRSI Design Handbook

A design reference for cast-in-place reinforced concrete construction, the CRSI Design Handbook provides one information for design and analysis of common reinforced concrete structural elements such as, pile caps, retaining walls, columns, beams, footings, and floor systems.

CRSI Reinforcement, Anchorages and Splices

The definitive source for information on development and splicing of reinforcing bars. Features technical data on mechanical splices including load tests for Type 1 and Type 2 splices. Includes extensive tables of development and lap splice lengths for Grade 60 reinforcing bars with 3,000 to 10,000 psi concrete compressive strengths, and development and lap splice tables for epoxy-coated reinforcing bars, including development length tables. Also includes expanded information on headed bars. Based on ACI 318-08 and AASHTO bridge specifications.

CRSI Manual of Standard Practice

The Manual of Standard Practice has been presenting the standards of the reinforcing steel industry since 1927. New content is specific to ACI 318-08. Every architect, engineering firm, construction company, and inspection agency that is involved with reinforced concrete should own a copy.



Greater Southwestern Region John B. Turner, CSP PE Region Manager Office: (214) 281-8830 Cell: (214) 862-6615 Email: jturner@crsi.org

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GENERAL NOTES - SPOTLIGHT



July General Meeting - RSVP

General Meeting: Thurs. July 15, 2010

Speaker(s): Bil Hawkins

Location: Renaissance Denver Hotel

3801 Quebec Street

(South of the I-70 Quebec Intersection)

Time: 7:30 a.m.

Please e-mail your reservation to Caryn at: seac@martinmartin.com Reservations MUST be made By Friday July 9, 2010.



The SEAC Fall Seminar will be held on Thursday, October 21, 2010. Please save the date. More information will be released soon!

Welcome

Please welcome our newest members to SEAC:

Pamela S. Burns (Professional Member)

Paul J. Bennett (Professional Member) Knott Laboratory, LLC

Kenneth A. Iannaccone (Professional Member) Structural Resources, Inc.



GENERAL NOTES - General Announcements

If you have a change of address, phone, fax, or e-mail. Please e-mail Caryn Bauer at **seac@martinmartin.com**



May General Meeting - Another Record Attendance



May Speaker, Michael Schuller, P.E.

SNOW LOAD COMMITTEE UPDATE

The SEAC Snow Load Committee is working on adjusting the values in the 2007 Colorado Ground Snow Load Report for elevation, creating a tool to make the report easier to use, and promoting the map and report as the basis for design in Colorado.

When the snow load map was created, the contours were based on latitude and longitude. Elevation was not considered. Omitting elevation caused some locations at lower elevations to have artificially high snow loads. The committee is currently reevaluating ground snow loads in the Grand Junction area to see if values need to be adjusted in an addendum to the 2007 report.

The committee is also exploring the development of an electronic tool similar to Montana's ground snow load finder. This tool would account for elevation and would make it easier to determine ground snow load where contours on the map are tightly spaced.

The second focus of the committee is outreach. The Committee plans to publish an article in the ASCE Journal of Structural Engineering about the development of the map and report and is working to get the report cited in the next version of ASCE 7. Local outreach efforts will be focused on jurisdictions whose adopted ground snow loads conflict significantly with those published in the 2007 report

Please contact Jeannette Torrents (<u>jtorrents@jvajva.com</u>) if you would like to be involved with the Snow Committee.

You are welcome to join us at our next meeting: Friday, July 16th, 3p.m. at Wiss, Janney, Elstner 3609 South Wadsworth Boulevard, Suite 400, Lakewood.