



JULY GENERAL MEETING

Schedule

Mark Your Calendar
(2006)

General Membership Meetings

(Breakfast 7:30 a.m.)
January 26
March 16
May 18
July 27
September 21

Business Practice Committee Meetings

(Breakfast 7:30 a.m.)
February 9
April 13
June 8
August 10
October 12

SEAC Board of Directors Meetings

(7:30 a.m.)
January 5
February 2
April 6
June 1
August 3
October 5

Annual Dinner Meeting

November 2
6 - 9 p.m.

“Structural Condition Assessment of Existing Buildings and Structures with NDE Technologies”

Larry D. Olson, P.E., Principal Engineer of Olson Engineering, Inc. and Olson Instruments, Inc., of Wheat Ridge, Colorado will discuss current and recent developments in structural NDE Technologies in the SEAC breakfast meeting on July 27th. Following a brief overview of the structural condition assessment process, the presentation will focus on the use of nondestructive evaluation (NDE) techniques for condition assessment of existing buildings and other structures for rehabilitation/renovation/repair projects. Discussions will include an overview of the methods used as well as on case histories of actual projects where the conditions and material properties of concrete, masonry, steel and wood structures needed to be determined such as reinforcement size and spacing, geometry, strength, support conditions, corrosion, cracking, flaws, etc. The NDE methods to be discussed will include Impact Echo Scanning, Ultrasonic Pulse Velocity, Ultrasonic Tomography, Slab

Impulse Response, Corrosion Rate evaluations, Spectral Analysis of Surface waves, Ground Penetrating Radar, Sonic Echo/Impulse Response, Parallel Seismic, and Infrared Thermography. The case histories to be presented include a foundation/structural evaluations of buildings with ground penetrating radar and stress wave methods, evaluation and repair of post tensioned (PT) duct voids in bridges, the QA evaluation of repairs done to a freeway overpass impacted by a vehicle, tests done on concrete structures with internal void/honeycomb/cracking/corrosion damage, integrity/length testing of drilled shafts in expansive soils locally, as well as special evaluation projects performed on both old and historic structures such as the Lincoln and Jefferson Memorials and the Great Pyramid of Egypt (the Cheops Pyramid at Giza).

Don't Miss Out - July General Meeting

Date: Thurs. July, 27, 2006

Speaker(s): Larry D. Olson, P.E.

Location: Renaissance Denver Hotel
3801 Quebec Street (south of the I-70 and Quebec intersection)

Please e-mail your reservations to Caryn Bauer at: seac@martinmartin.com.

Reservations MUST be made By 12:00 noon - Friday, July 21, 2006.

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

Caryn L. Bauer

SEAC Executive Assistant

President's Message

A few years ago my younger Brother-in-law was boasting to me with regards to his recent survival of layoffs at his company. He worked in oversea sales of agricultural products. He was pleased with the fact that at the mere age of 30 he had become the best salesman in the company and was surviving cutbacks of fellow employees with three times his years of experience. I was surprised by his comments and reflected on how different our industry is from his. I explained that in Structural Engineering you can't really call yourself a "Master" of your trade with less than 10 to 15 years of experience and your value as an engineer grows with each new project you see and each advancing year of experience.

Our industry truly is one that takes substantial time and dedication to master. I recall early in my career the frustration of not knowing the very best way to design something and always having to refer to my "gray-haired" mentor with the question: "OK, I can design it 3 different ways, but how do they really want to build it"?

My closing comment to my Brother-in-law was the one that really shook him up and gave me a sense of comfort. I told him "I may not have been the very best in my industry at age 30, but I also will not be the 55 year old that is replaced by a 30 year old". You could see his countenance change as he realized that one day the table may turn on him.

We should all be grateful for the wisdom and instruction we are provided by our

"grey haired" mentors. I am encouraged by the manner that SEAC allows a neutral forum to exchange ideas and help all of us become better at our trade. SEAC continues to provide very good learning opportunities and the forums to share our experience with others. Young engineers should take every advantage of these opportunities to advance their own knowledge and our "grey haired" mentors should be encouraging their involvement in all aspects of our work. Our upcoming breakfast meetings and fall seminar will present excellent opportunities for continued education and the sharing of ideas. I look forward to seeing you all in attendance. Good luck in the second half of this year.



REMINDER

The July SEAC meeting has changed to Thursday, July 27, 2006 - Please update your calendars

Questions & Answers

Q:What is the required loading on an elevator rail support beam and where is this information found?

A:ASME A17.1 Section 2.23.5 addresses the allowable deflection for guide rails. Unfortunately it is a common occurrence that guide rails are rated for spans less than our finish floor heights. This requires supplemental framing. If we are designing the miscellaneous framing for guide rail support we should confirm the guide rail loading with the elevator supplier and use the deflection criteria limit provided in Section 2.23.5.

New Question

For a summer break, no technical question this month. Of our practicing membership, who has the lowest P.E. number? We will provide a prize to the lowest number response at a upcoming breakfast meeting. But, you have to respond to be eligible!

In The Spotlight

The SEAC Board would like to limit any project highlight articles to a brief synopsis of the project with the focus of the article being a technical challenge and its solution. All submissions will be subject to review and editing by **SEAC's Board of Directors** and the **Newsletter Editor**.

*Submit Articles to SEAC President at
jr@sci-denver.com*



GUIDE: RECOMMENDED STANDARD OF PRACTICE

Price: \$15 (members) and \$20 (non-members)

1999 Seminar Proceedings:

SUGGESTED LOCAL STANDARD OF PRACTICE IN THE PRECAST AND STEEL INDUSTRIES

Price: \$15

2001 Seminar Proceedings:

PRE-ENGINEERED TRUSSES: WHAT THE DESIGNER NEEDS TO KNOW AND SHOW

Price \$15

Contact Caryn Bauer at seac@martinmartin.com if you would like to purchase one of these publications.

GENERAL NOTES - *Keep them CLASSIFIED!*

Structural Engineers Association of Colorado Newsletter Classified Section
& Other General Announcements

REDWINE ENGINEERS

Redwine Engineers Inc. is a 17-person structural engineering firm, which has been providing services to the commercial, institutional and residential sectors for over 23 years. The main office is located in downtown Denver, with a second mountain office in Avon, near Vail, Colorado.

The Denver office is growing, and currently seeking candidates for Design Engineer, Project Engineer and Project Manager or Senior Project Manager. The Senior Project Management position has unlimited opportunities for the right person. The Avon office is currently seeking candidates for Design Engineer and Project Engineer. Qualified Design Engineers require 0-4 years of experience; Project Engineers 4-8 years; Project Managers 8-20 years. Candidates must have a BSCE or BSAE degree with an MSCE preferred.

Engineers at REI perform structural analysis and design, including gravity, lateral, and connections and work in all structural materials, including wood, steel, concrete and masonry. Our clients are typically architectural firms, and we work closely with contractors during the construction phase.

Fax Resume to: 303.575.9515

Classified Adds Policy Statement

Last year the SEAC board of directors approved the inclusion of classified advertisements in the SEAC newsletter. Since it's approval, many firms have taken advantage of this opportunity. The adds provided in this month's newsletter are being included unedited as they have been written by the participating firms. The SEAC board of directors will be discussing this topic in the January Board of Directors meeting. We will be adopting content and size limitations for these advertisements. These limitations will be published to our membership prior to our next newsletter publication.



Become a member of SEAC
Access the Membership Application from our web site.
www.seacolorado.org or contact Jerry Maly at 720-962-8688.

Share our newsletter with a colleague. Bring a guest to a Breakfast Meeting.

Look for forthcoming information on SEAC's Fall Seminar

COMMITTEE REPORTS

Architectural Liaison (Chair: Julian Lineham)

The committee has formed a task force that includes architects and other construction industry representatives and has begun working on the development of a post mortem report to evaluate the performance of the structural engineer following the design and construction phases of a project.

Building Department Survey (Chair: Henry Lopez)

Data entry for the new building department survey is ongoing. The committee is planning a fall 2006 publication date.

Computers/Website (Chair: Richard Huddleston)

The committee is working with the board of directors to redesign and expand SEAC's website.

Snow Loads (Chair: Dick Cunningham)

Data collection and analysis is ongoing. SEAC has hired an intern with a background in statistical analysis for the summer to complete the data analysis. A presentation is planned for this fall, with publication of the report to follow shortly thereafter.

Steel Liaison (Chair: Bruce Wolfe)

The committee has completed its study of the steel shop drawing process and will soon be publishing a report titled, "Suggestions for Improving the Steel Shop Drawing Process." Bruce Wolfe made a presentation on the report to AISC's Standard of Practice committee in Chicago. The steel committee has begun work on its next topic, which is floor levelness in steel buildings. The committee is looking for new members from the steel detailing community.

If you would like to have news of your committee activities published in this column, please forward the information to Caryn Bauer or Street Schellhase.

Vendors Corner

For future newsletters we need the help of our engineering membership and our vendor members to provide us with additional helpful tips on products. Again we reiterate, this is not to provide a forum of advertisement, but to share new ideas or products we encounter. We encourage all of our membership to share ideas. Your ideas should be sent directly to the SEAC president at jr@scidenver. Thank you.

