

DYNAMIC COLUMNS

THE NEWSLETTER OF THE STRUCTURAL ENGINEERS ASSOCIATION OF ALABAMA

July 2014

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Word From Our President

I like hard work. There's a satisfaction you get at the end of the day when you're worn out and beat down but you've actually accomplished something. I have to say, "WOW!" because our members and board members have been working hard this year. And I think you'll see in these pages just how hard folks have been working. Jeff Hillman and Andrew Marlin visited with students at Auburn University and Jason Partain visited the University of Alabama. SEAoAL Members are sharing our profession and helping shed light on the question you get when you tell people you're a structural engineer, "Oh – you mean you're an architect?" The work our past board members have done over the years have allowed us to not only "form" a Scholarship Committee but also actually award scholarships - we are giving out our first three this year – huge accomplishment and thanks to the Jim Delahay Foundation for their support in this effort as well. Our SEER committee sent delegates down to the 1st Governors' Preparedness Conference in Montgomery and also teamed up with AIA Disaster Relief to sponsor the ATC-45 training back in June. And with some help from board members, general members and our Executive Director, we bring you our 4th Annual State Conference and EXPO – Post Tension Design, Construction and Repair.



I like seeing our members get involved and share their time and talents – special thanks to Hal Cain for helping with the annual conference this year. Through all this hard work, we're building great relationships between our members and our community. Keep up the good work everyone! I hope to see you all at the conference in August. – Michael Kingsmore

ANNUAL SEAoAL EXPO

The SEAoAL Annual State Conference & Expo is here again. This year, our fourth, the theme will be Post-Tension Design, Construction & Repair. The venue will be the beautiful Botanical Gardens at 2612 Park Lane Road in Birmingham. The event will take place on Thursday August 28th and those attending will earn 7 hours toward their professional development requirements.



The morning session will include a presentation on what you need to know for design or investigation of a post-tensioned floor system or beam frames. This will be followed by a step-by-step design of a column-supported post-tensioned floor. You will learn how ACI 318-14 affects your post-tensioning designs and become familiar with commercially available software for post-tensioning design. The afternoon session will cover post-tensioning installation and durability considerations. We will discuss requirements for encapsulated P-T systems, sheathing repairs and cathodic protection. We will discuss designing P-T repairs, root cause, repair plans, inspection, testing, and safety. See the application registration form at the following link for more information.

To register online for the Expo and Conference please visit:
<http://www.seaoal.com>

INCREASE YOUR LIBRARY

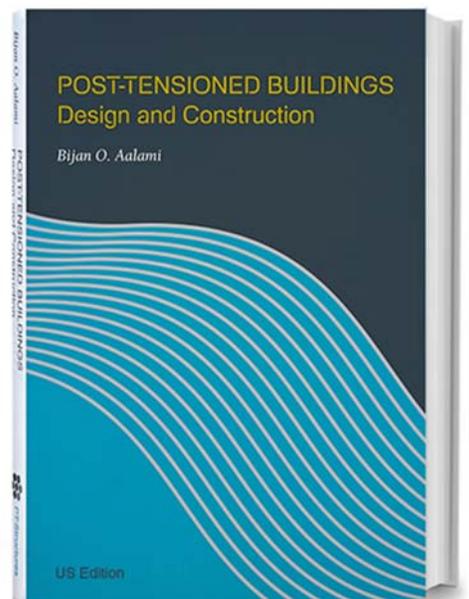
In connection with the Expo we are making available the book POST-TENSIONED BUILDING – Design and Construction, at a special price and a special offer from the author. The book is sold at \$125. We will offer it to the Conference and Expo participants at \$98.00 per copy, if purchased at the conference, of which \$38 will be contributed to SEAoAL and the balance \$60 to the author. In addition to the conference discount on the list price, the participants save the shipping cost.

The contribution from the book sales this is going to SEAoAL will be earmarked for 2015 scholarships.

Here is what Greg Chaco, the former director of the Post-Tensioning Institute had to say about the book.

"I just finished reading your new book and I want you to know I consider it to be the best of its class. (I really did read every page, I always do, and I go through the entire book before I study parts of particular interest to me.) The organization is easy to follow, and the side-by-side presentation of ACI and EC2 requirements is a brilliant addition to PT literature. Congratulations."

Get your copy at the expo in August



EXPO INSTRUCTORS' BIOS

Bijan Aalami, PhD, SE, is Emeritus Professor of San Francisco State University, founder and principal of ADAPT Corporation, a structural engineering and software company specializing in analysis and design of concrete structures, with specific reference to post-tensioning. Dr. Aalami, a legend of the Post-tensioning Institute and co-recipient of the ACI design award, has been actively engaged in the design for 33 years in construction of numerous notable post-tensioned buildings, bridges and special structures worldwide. He is recipient of American Concrete Institute's Design award. His extensive educational seminars and publications have enriched the practice of many design engineers worldwide. His recent book on "Design of Post-Tensioned Buildings," provides a comprehensive and practical account of post-tensioning design and construction of building structures.

Clyde Ellis, is a Vice President with VSL/Structural Technologies who provides leadership to their transportation repair and strengthening division. Based in the Springfield, VA branch office, Mr. Ellis brings 15 years of experience with a focus on forensics, force protection, structural strengthening, and corrosion protection systems. He has a Bachelor of Science degree in Architectural Engineering from North Carolina A&T State University and Master of Science degree in Civil Engineering from Lehigh University. Mr. Ellis is a past President and Board Member of ACI National Capital Chapter in Washington, DC. He is a member of PTI and a voting committee member for DC-35 Pre-stressed Rock and Soil Anchor Committee and DC-80 Repair, Rehabilitation and Strengthening Committee.



SCHOLARSHIPS

Announcing 2014 SEAoAL Scholarship Winners! We are thrilled to announce the following winners, who will be presented their scholarships at the Expo in August:

- Garret Hurst - \$1000 attending UA
- Krista Schoonveld - \$1000 attending UA
- Jamieson Matthews \$5000 (\$2000 from SEAoAL and \$3000 from the James Delahay Foundation).

Linda Delahay will present the scholarship to Jamieson.

Exhibitors at the Expo event include:

- Simpson Strong-Tie
- Parrot Structural Services
- Fabreka International
- ITW Building Components Group
- AFS
- HalfenMiTek Builder Products, USP Structural Connectors, Hardy Frame-Z4

STORM SHELTER DESIGNERS

Have you or anyone from your firm completed the course work and obtained a certificate of completion for FEMA 361 and ICC 500 Design and Construction Guidance for Safe Rooms? We are compiling a database of professionals who have received this training. Please respond with the names of the architects or engineers who have completed this coursework.

We are also gauging the interest in a 7-hour course for FEMA 361 and ICC/NSSA 500 in Birmingham taught by URS Corporation for a cost of \$150. A brief course description follows.

Design and Construction of Safe Rooms for Architects and Engineers (FEMA 361/320)

Time: 1 day - This intensive one day training course discusses design and construction of residential and community safe rooms. The training discusses hazard identification, design and construction guidance criteria (specific to tornado, hurricane, and combined hazards), and the minimum requirements of the ICC/NSSA-500 Standard for the Design and Construction of Storm Shelters. Specific guidance and design criteria are provided where the ICC-500 Standard does not address operational or emergency management issues. The presentation will also cover the elements of the wind and flood design criteria in FEMA 361 that remain more restrictive than those developed for the ICC-500 Standard. The latter is important as FEMA 361 is the basis of the technical design criteria used for FEMA grant programs that fund the design and construction of hurricane and tornado safe rooms.



Please respond by sending an email to Rhea Williams the SEAoAL Executive Director at rhea@karmamanagementinc.com.

ALABAMA TASK FORCE ONE

The Structures Specialist oversees, inspects, and assesses structures that have been impacted by an act of nature, such as hurricanes, tornadoes, floods, and even earthquakes, as well as fire damage, and acts of terrorism. Based upon their assessment, the Structures Specialist makes appropriate recommendations to the Search and Rescue Teams as to the type of mitigation of the structural hazard needed for safe entry into the impacted structure. The Structures Specialist also assists in other operations associated with the incident, as needed.

If you are interested in discussing the possibility of your becoming a member of Alabama Task Force One as a Structures Specialist, a position held on every federal and state Type One US&R Team, you may contact me, as follows:

Jack McDuff, PE, Advanced Structures Specialist

By mail: 2471 Chuchura Road, Birmingham, AL 35244-3254

By e-mail: jackiemacduff@bellsouth.net

Telephone: 205-988-0609

Pics from the Blast Seminar at the Alabama Sports Hall of Fame

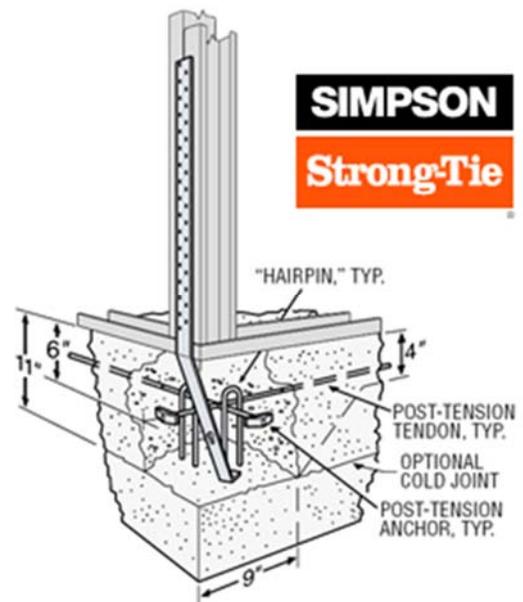


SEMINAR IDEAS

If any of the members of SEAoAL have ideas on what we could do at a future seminar, or wishes on what you would like to see us organize for a future seminar, we welcome your input. Maybe there is a topic that we have not yet concentrated on, or a particular part of a topic you would like to revisit, or even a topic you would like to see us cover again, or a speaker you would like to have, maybe that speaker is you... please let us know. We want to make our Structural Engineers Association responsive to your needs.

Any of the members of the Structural Engineers Association of Alabama who are interested are always welcome to attend an SEAoAL board meetings. The meetings usually take place at 109 Richard Arrington Jr. Blvd. S. in Birmingham. If you are interested, please call beforehand to confirm the location and so we can make any necessary arrangements. (205) 601-2345. We are also in need of filling at least one board position in 2015; if you are interested or know anyone who might be, please let us know.

OUR SPONSORS



SEER

The SEER (Structural Engineering Emergency Response) committee has been busy these past few months. We have partnered with AIA to increase our visibility and create awareness among building officials, jurisdiction heads, fire/police departments, and city mayors of our great State. We had several of our SEAoAL members work the booth in these events. In early April we attended the Governor's Preparedness Conference in Montgomery. Later in May we were at the Alabama League of Municipalities in Mobile and the Building Officials Conference Exhibition in Orange Beach. Thank you to Hal Cain and James Russell for volunteering. And a big thank you to Kim McMurray, AIA for scheduling these events for both organizations.

In an effort to provide more training for assistance during natural disasters we also hosted an ATC-20 and ATC-45 training session on June 5th. This was also done in conjunction with AIA. The training session was held in Birmingham at the old Alabama Power Building on 6th Ave N. Attendees received a Building Evaluator license from the state of California – the famous CALEMA certification.

UNIVERSITY OUTREACH

On April 22 Jeff Hillman and Andrew Marlin spoke to a group of students and faculty at Auburn University. There were approximately 20 AU ASCE Student members in attendance as well as two faculty members. Both Andrew and Jeff discussed case studies of recent projects that their firms designed. Each spoke for approximately 30 minutes with questions being asked throughout their presentations. A final question/answer time was held at the end of both presentations. The students were very engaged during our presentation and the questions were excellent. The students were genuinely interested in how engineers go about their business in the real world.



Young Member Leaders and Delegates,

The NCSEA Young Member Support Committee wants to make sure you are aware of the scholarship opportunities being offered by NCSEA for young members to attend the 2014 Annual Conference. See below for more information. Applications are due July 11.

In addition to the scholarships, NCSEA is offering a reduced registration fee of \$250 for Young Members.

Please forward this information along to your local Young Member Chapters and members. We look forward to seeing you in New Orleans.

Join NCSEA in New Orleans

Scholarships available for Young Members!

NCSEA will again be offering scholarships to the 2014 NCSEA Structural Engineering Summit, September 17-20 in New Orleans. The application deadline is July 11.



The scholarships are available to young engineers who are under 36 years of age and a current member of an NCSEA Member Organization. This year, there will be two levels of scholarships offered:

Option One

is open to all new scholarship applicants. The scholarship covers registration to the Summit, which includes 3 breakfasts, 2 lunches, 2 receptions, refreshment breaks, trade show access, all educational sessions, and the NCSEA Awards Banquet, as well as a \$500 stipend that may be used toward transportation and hotel costs.

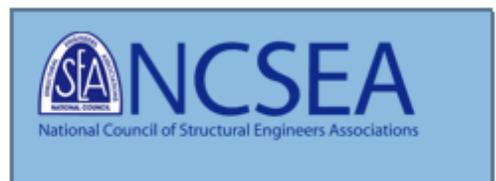
Option Two

is open to those who have previously been awarded an NCSEA Young Member Scholarship. The scholarship covers registration to the conference, which includes 3 breakfasts, 2 lunches, 2 receptions, refreshment breaks, trade show access, all educational sessions, and the NCSEA Awards Banquet.

The Summit will also offer the following features for Young Members:

- > Special Young Member registration rate of \$250.
- > An evening mixer on Wednesday, September 17.
- > Resource Sheets providing topic background information on Summit presentations, for post-conference education.
- > A LinkedIn forum for Young Member attendees, for post-Summit discussions and networking.

More details on the scholarships, and an application, can be found [here](#).



2014 Board of Directors 2014

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