

DYNAMIC COLUMNS

THE eNEWSLETTER OF THE STRUCTURAL ENGINEERS ASSOCIATION OF ALABAMA

Summer 2015

www.seaoal.com

This eNewsletter is published for the members of the SEAoAL. For information about news or article submissions, or advertising, please contact Rhea Williams at (205) 601-2345.



Contents

- Message from the 2015 President
- Advocacy
- Continuing Education Opportunities
- Looking for a Structural Engineer
- 5th Annual State Conference & Expo
- Scholarship Announcement
- Conference & Expo Registration Form
- Our Sponsors
- Call for Volunteers
- Young Professionals
- Fighting for the Profession
- UAB's Master's Degree Online
- 2015 Board of Directors

Rhea Williams
Executive Director

PO Box 660584
Birmingham, Alabama 35266
(205) 601-2345
rhea@karmamanagementinc.com

SEAoAL is on Facebook!

Please visit our page and "like" us for up to date news on our association

www.facebook.com/seaoal



ALABAMA STATE HOUSE IN MONTGOMERY

Message From the 2015 President



In our last issue of Dynamic Columns, I wrote about collaboration and expressed a desire to "increase our collaboration efforts with our fellow industry organizations". Be careful what you wish for. I had the opportunity to work closely with Renée Casillas of American Council of Engineering Companies of Alabama (ACEC/Alabama) and Larry Vinson of Alabama Council of the American Institute of Architects (AIA Alabama) in our efforts to oppose state legislation detrimental to our profession. I would like to take this opportunity to thank them for their knowledge and guidance as I dove head first into the unfamiliar waters of state politics.

In addition to fighting for our profession on the legislative front, your Board of Directors has been busy awarding scholarships, speaking to student groups, and planning our annual state conference. This event is an excellent opportunity for continuing education and networking with vendors. We will also have our annual membership meeting to elect new officers and announce next year's scholarship recipients.

Looking forward, the National Council of Structural Engineers Associations (NCSEA) national conference is coming up. Plans are in the works for face-to-face meeting of the Southeastern Coalition of Structural Engineer's Association (SECSEA). In recent years, the president-elect has served as our NCSEA delegate, resulting in a new delegate each year. In an effort to provide some continuity and keep our membership better informed, the Board has decided to appoint a separate NCSEA delegate to serve a longer term. More information about the national conference can be found on the NCSEA website.

I look forward to seeing you at our state conference in August!

Cheryl Eatman May, PE

Storm Shelter Design, Case Studies, & XPO

We are finalizing the 5th Annual State Conference & XPO. Save the date, August 27th, Rosewood Hall in Homewood AL. This is in City Hall building, parking deck underneath (free). Bill Coulbourne is our speaker and will be followed by case studies with Mike Jackson, Crow Friedman -Risk Management, Group. All breaks will be taken in the expo hall to see what new products and materials are available.

Advocacy

On April 14, 2015, Jeff Hillman and Andrew Marlin spoke to Auburn University's ASCE Student Chapter. SEAoAL is continuing to reach out to engineering students at campuses across our state in an attempt to create interest in Structural Engineering as well as answer any questions students may have about our field. We spoke to approximately 30 students and two faculty members during their regular monthly meeting.

Jeff did a case study of a complex structural retrofit project that his firm is involved with. His discussion gave the students a good idea of how structural engineers work on a wide variety of projects that are not always new construction.



Andrew's discussion was focused on the various structural systems that engineers specify. Items that were discussed included the many factors involved in selecting the appropriate structural system based on a variety of different parameters.



During the question answer period a common question concerned technical writing and communication in the field of Structural Engineering. Jeff and Andrew both stressed the importance of detailed, clear communications. There was particular interest and discussion about email communications.

SEAoAL will continue to spend time talking to students on our state's college campuses. We are planning to speak to students at UAB, UAH and South Alabama later this year.

Andrew T. Marlin, PE

Looking for a STRUCTURAL ENGINEER to....

SEAoAL board is looking for someone interested in serving and growing the SEAoAL member organization. We hold 4 board meetings per year and communicate thru emails on any items that come up between board meetings. We are growing and making a difference in the profession. Let us know if you are interested in making a difference in the profession. Get involved!!!

SEAoAL Awards \$3000 in Scholarships

The scholarship review committee has selected the 2015 SEAoAL scholarships. Congratulations to Eric Gross \$1000 and Jamieson Matthews \$2000, both attending Auburn University. GO TIGERS! We will present the awards at the August 2015 State Conference and XPO.



Continuing Education Opportunities

Need CEUs? Are you looking to brush-up on topics in engineering?

We all are blasted with opportunities to earn continuing education credits. They come by email and through websites and magazines. Some of these opportunities are undoubtedly good, but some are questionable. Some offerings can be expensive, and some are very reasonable. It can be difficult to decide which are worth your time.

It is possible to obtain these required credits from within your own association. The SEAoAL organizes several opportunities each year for its members to obtain continuing education, without having to leave Alabama. We usually offer a course in the spring, one in the fall, and the Seminar and Expo in August. We try to vary the subjects so they don't get stale, and the Seminar and Expo in August is centered on a theme.

For instance, this year's theme is generally about designing for protection in the face of disasters (see the description and registration form on the following page or visit our website to register online). And we invite companies whose products match this theme, to exhibit their products and answer any questions you may have. These seminars are good networking opportunities for our members, and we receive positive feedback from those who attend.

Other NCSEA member organizations, and the NCSEA itself offer many opportunities for learning as well. Webinars are a particularly good way for busy engineers to stay current because of the low cost in time and money. You can access these opportunities by visiting the NCSEA website and browsing under the Education tab, or by calling up the individual member organization websites under the Members tab.

And for continuing education where you have direct face to face interaction with the presenter and other attendees, there is no better way to learn than attending seminars put on by our own member organization, the SEAoAL. The cost in money as well as time is comparable to the best webinar offerings and, as a member, we welcome your ideas concerning future subjects, venues, and methods. If you have ideas, please contact one of your board members or our Executive Director, Rhea Williams.

Bart W. Berneche, PE



SEAoAL 5th Annual State Conference & Expo Safe Room Design, Tornado Design, & Flood Loads

THURSDAY, AUGUST 27, 2015

TOTAL OF 7 PDHS (APPROVED IN AL & FL)

8:00 a.m.— 8:30 a.m.	Registration & Morning Expo
8:30 a.m.— 9:45 a.m.	Bill Coulbourne, Safe Room Design
9:45 a.m.— 10:15 a.m.	Break & Technology Expo
10:15 a.m.— 11:45 a.m.	Bill Coulbourne, Tornado Design Examples
11:45 a.m.—12:00 p.m.	SEAoAL Business Meeting & Scholarship Awards
12:00 p.m.— 1:00p.m.	Buffet Lunch & Technology Expo
1:00p.m.— 2:00p.m.	Mike Jackson, Case Study
2:00p.m.— 2:30p.m.	Break & Technology Expo
2:30p.m.— 3:45 p.m.	Bill Coulbourne, Flood Loads Using ASCE 7 & ASCE 24
3:45p.m.— 4:00 p.m.	Break & Technology Expo
4:00p.m.— 5:00 p.m.	Bill Coulbourne, Flood Loads Using ASCE 7 & ASCE 24

Safe Room Design

This session will explore the current ICC 500 Standard design methodology and how proposed ASCE changes for 2016 might affect the design methods and results. The design methods will be illustrated with examples of wood, masonry and concrete safe rooms. The ICC 500 coverage of tornado-generated debris and missiles will be discussed, given there are no current numerical methods to determine damage or failure caused by these high speed missiles.

Tornado Design Examples

This seminar will explore the current ICC 500 Standard design methodology and how proposed ASCE changes for 2016 might affect the design methods and results. The design methods will be illustrated with examples of masonry and concrete designs for safe rooms as well as improved building performance for lower wind speed tornadoes.

Flood Loads

Using ASCE 7 and ASCE 24 to Determine Flood Loads—This seminar will cover the flood loads that must be considered when designing buildings in flood plains. The flood loads will be those currently covered in ASCE 7, and it will discuss how to use ASCE 24 in flood plain design. The flood load design information will be used to develop example foundation designs adequate to resist flood loads.

Seminar Instructor—William Coulbourne, P.E., SECB, has a BS in Civil Engineering from Virginia Tech and a Masters in Structural Engineering from the University of Virginia. He is a national expert in wind and flood mitigation and has been involved in FEMA Mitigation Assessment Teams for over 15 years. Having been involved in every major hurricane and flood disaster since 1995, Bill has investigated failures and mitigation design techniques for thousands of buildings, including residential structures, schools used as shelters, hospitals, and other critical facilities.

Mike Jackson is a Senior Vice President and A/E Specialist for one of the largest professional liability insurance agencies in the Southeast, Crow Friedman Group. He has been serving as a Risk Manager for over 20 years and has over two hundred clients, most of which are Architects and Engineers. Mike has graduated from countless professional liability courses and continues to reinforce his knowledge by attending professional liability conferences & workshops that focus on claims management, client selection, project selection and contract negotiations. He has been instrumental in reviewing and revising, state and local municipal contracts. He reviews more than one hundred design professional related contracts per year and has had a tremendous amount of success in negotiating contracts with owners.

REGISTRATION FORM

Please print legibly. Companies with multiple attendees, please fill out a form for each person.

Name	Company	
Address	City	Zip
Email	Phone	Cell

Registration received by Thursday, August 21, 2015

- SEA Member \$ 195 X ____ = \$ ____
- Non Member \$ 235 X ____ = \$ ____
- Exhibitor \$ 130 X ____ = \$ ____



Late Registration: August 21 - August 27, 2015

- SEA Member \$ 205 X ____ = \$ ____
- Non Member \$ 250 X ____ = \$ ____
- Exhibitor \$ 155 X ____ = \$ ____

Registration includes breakfast, lunch, snacks, coffee bar and expo hall.

To join SEAoAL

SEAoAL Membership Registration

- Professional \$ 85 X ____ = \$ ____
- Associate \$ 40 X ____ = \$ ____
- Student \$ 15 X ____ = \$ ____
- Affiliate \$150 X ____ = \$ ____

TOTAL: \$ ____

SEAoAL membership is open to all structural engineers and companies affiliated with the structural engineering profession. For more information about SEAoAL membership: professional, associate, student, retired or affiliate, please contact Rhea Williams, Executive Director, 205-601-2345 or email: rhea@karmamanagementinc.com

If paying by check, make checks payable to:

SEAoAL

Mail check and registration form to:

Structural Engineers Association of Alabama
P.O. Box 660584
Birmingham, AL 35266-0584

Email registrations to:

rhea@karmamanagementinc.com

Rhea Williams
Executive Director, SEAoAL

Birmingham Hotels

Aloft Hotel

1309 19th St. South 35209
205-874-8055

EMBASSY SUITES

2300 WOODCREST PL.
HOMEWOOD, AL 35209
844-726-7564

SEMINAR LOCATION

ROSEWOOD HALL
2850 19TH ST. S.
Homewood, AL 35209
205-414-3950

Our Sponsors

Take the time to thank our sponsors when you see them at one of our events. We really appreciate the support they give us. Their sponsorship makes it possible for us to plan some of our events with more confidence and eliminates some of the uncertainty associated in planning where costs are a big factor. You can reach our sponsors at the following web addresses:

<http://redbuilt.com/>

<http://www.strongtie.com/>

<http://www.alabamafoundationrepair.com/>

<http://parrotss.com/>



Call for Volunteers

The Alabama Board of Licensure for Professional Engineers and Land Surveyors is in desperate need of structural engineer technical advisors. Structural Tech Advisors provide technical expertise to the Board when a complaint is filed against an engineer that involves the practice of structural engineering. While it may appear at first glance that your work as a technical advisor would involve reviewing the work or actions of other structural engineers, in the overwhelming majority of the reviews that I am aware of, it's the work of engineers who are not structural engineers, but think they are.

What you can expect if you volunteer is to review the documentation that supports or counters the complaint. Your findings will be presented to the Investigative Committee of the Board who will decide whether or not there is probable cause to bring the matter before the Board for a hearing. If there is, the Investigative Committee will usually offer the licensee a consent order. The consent order is tantamount to a plea bargain. If it is accepted, your name is never known by the subject of the complaint. This is how the overwhelming majority of complaints are resolved. If the consent order is not accepted, the matter will be heard by the Board. You will be asked to testify. The procedure is similar to a court appearance, but more relaxed. The attorney(s), assuming the licensee brings one, will ask you questions about your findings. Additionally, the Board is free to ask questions. Should the licensee not accept the Board's decision, the matter is appealed to Montgomery Circuit Court and in all likelihood you will be called as witness. Appeals to the courts are very rare and are not likely to occur unless a license was revoked and the Board does not revoke licenses except in the most severe of cases.

While all of this may appear to be a lot for a volunteer, it's what is necessary to protect the public, and therefore it's what we have to do as responsible professionals. It is important that all structural firms with several engineers or more allow at least one of their senior engineers to assist the Board of Licensure. The only way we can expect to protect the public from "fools and rascals" is if we all put a little skin in the game and help out. The more volunteers we have, the less work it will be for any one. Work on any complaint is with your agreement. Prior to accepting an assignment, you can consider your schedule, your expertise, and the geographic location of the licensee who is the subject of the complaint.

Please give this request serious consideration. I will be happy to answer any questions you might have. If you would like to offer your services, please forward your resume to me and I will pass it along to the Board. mbarter@barterse.com. Thanks for considering this request.

Marc S. Barter, P.E., S.E., SECB

(Marc Barter is on the board for The Alabama Board of Licensure for Professional Engineers and Land Surveyors)

Young Professionals

We completed the life cycle project series with a site visit to the Grand View Hospital. Prior to the site visit, presentations were given on the structural, architectural, financial and ended with the contractor. It was a learning experience by each profession. Kind of crazy to think the hospital is 10 years old and will finally start seeing patients in October 2015!

More programs coming soon for the young professionals. Stay tuned.



Fighting for the Profession



SEAOAL had a busy legislative spring thanks to Senator Trip Pittman trying to get a clause into a bill (SB363) that, in our opinion, would not have been good for structural engineers and the general public. The bill would also have made it more difficult for the SEAOAL membership to do their jobs. Our association mobilized to prevent this legislation from passing. A second attempt was made to include the language in SB76. Senator Pittman's efforts may have been for the purpose of saving the taxpayers money; but we do not believe this would have been the result. The objectionable language was removed and the bill was sent to Governor Bentley on a vote of 32 to 1. Thanks to all of you for making phone calls, sending emails and traveling to Montgomery to stop the bill as presented.

The 2015 regular session of the Alabama Legislature ended, and for now we can breathe easier; but we have to be on alert for these sorts of threats in the future.

UAB's Online Master's Degree in Structural Engineering

COMPLETE A MASTER'S DEGREE IN STRUCTURAL ENGINEERING ONLINE IN JUST 19 MONTHS

If you are seeking a Master's Degree in Civil Engineering with a structural engineering emphasis, a UAB MEng Degree in Structural Engineering may be what you have been looking for. The MEng Degree is fully online and is specifically designed for busy working professionals like you.

All credit hours earned towards the MEng degree may also be applied to a Master of Science Civil Engineering Degree.

PROGRAM HIGHLIGHTS:

- 30 Credit Hours (10 courses).
- A typical student will complete the degree fully online over five twelve-week terms.
- The curriculum provides 7 core structural engineering courses and 3 electives from the highly acclaimed Construction Engineering Management curriculum.
- UAB utilizes the latest technology in online education in a highly interactive learning community.
- All credit hours may be credited towards a Master of Science Civil Engineering Degree
- Students seeking a Master of Science degree must complete thesis or non-thesis research requirements and defend a rigorous technical paper or thesis.

WHO SHOULD APPLY?

- Civil Engineers looking for an advanced degree with a structural engineering emphasis.
- Structural work inspectors



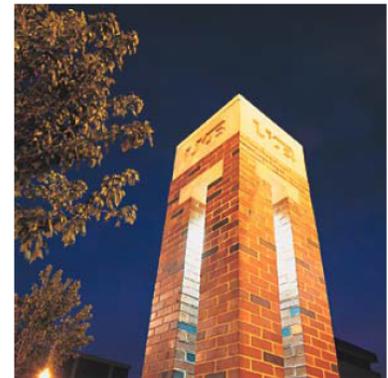
Dr. Fouad Fouad (CCEE Chair), Dr. Chris Waldron (Structures Curriculum Mgr.), Ms. Dianne Gilmer (Assistant Director Online MEng), and Dr. Bill Hitchcock (Director of Online Education for CCEE)

- Civil Engineering project managers
- Structural materials and design innovators

ADMISSIONS REQUIREMENTS:

- A Bachelor's Degree in Civil or Mechanical Engineering from an ABET accredited U.S. College or University
- Undergraduate prerequisite course requirements include:
 - * Structural Analysis
 - * Reinforced Concrete Design
 - * Principles of Steel Design
 - * Note: Required prerequisite courses are available online as part of this learning opportunity
- Original transcripts from all colleges and universities attended
- NO GRE/GMAT REQUIRED from students with qualifying degrees from a U.S. College or University who are seeking the MEng Degree
- Students seeking a Master of Science degree must submit a GRE score.
- International students who do not have a degree from an accredited U.S. institution are required to submit GRE and TOEFL scores.
- Proper computer equipment and high speed internet direct access

UAB SCHOOL OF ENGINEERING
DEPARTMENT OF CIVIL, CONSTRUCTION AND ENVIRONMENTAL ENGINEERING



DEPARTMENT OF CIVIL, CONSTRUCTION AND ENVIRONMENTAL ENGINEERING

For More Information contact:
Dianne Gilmer
Email: digilmer@uab.edu
Phone: 205-975-5848

2015 Board of Directors 2015

Cheryl E. May, P.E. (President)

Robert Whyte, P.E., S.E. (President Elect)
LBVD, Inc.

Michael Kingsmore, P.E. (Past President)
MAK Engineering, LLC

Joslyn Daniels, P.E.
Blackburn Daniels O'Barr

Jeff Hillman, P.E., SECB
Advanced Structural Design, Inc

Bart W. Berneche, P.E.
IAPMO Uniform Evaluation Service

Jason A. Partain, P.E.
Conestoga-Rovers & Associates (CRA)

Andrew T. Marlin, P.E.
MBA Engineers, Inc.

Jonathan Livingston, P.E.
Sherlock Smith & Adams, Inc.