



STRUCTURAL ENGINEERS ASSOCIATION OF TEXAS

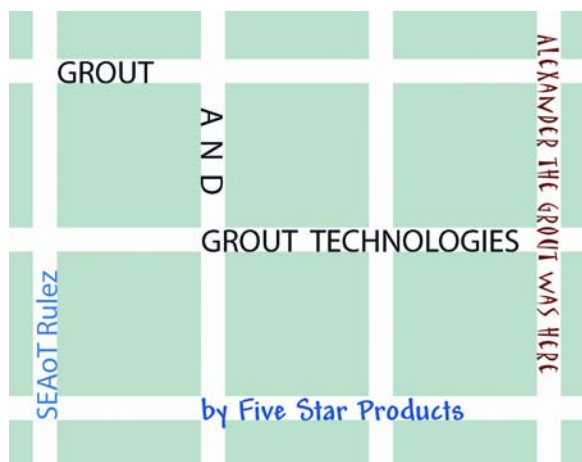
www.seaot.org

Austin Chapter

Post Office Box 1452 • Austin, Texas 78767-1452

NEWSLETTER

May 2003



Topics will include an overview of cementitious, resinous, and epoxy grouts and a summary of concrete repair and restoration products.

Location: MCC Building

The Microelectronics and Computer Technology Corporation Building is located at the southwest corner of Braker Lane at Mopac, across from the main Pickle Research Campus Park anywhere – Use south building entrance)

Date & Time: Thursday, May 22nd, 2003

11:30 AM Lunch (BYOL)
12:00 PM Business Meeting & Program

Recap: April Program

Bill Murrell of Fabric Structures presented “*Tension Fabric Structures in Architecture & Engineering*.” Mr. Murrell discussed both air structures and tension structures. He explained the strength and stress properties of fabric, the shapes that provide excellent tensile capacity and stability, and the design, detailing, and construction processes involved in the production of fabric structures.

We had over forty engineers and architects in attendance including some of the state board members from other parts of Texas.

Look-Ahead: June Program & Beyond

June’s topic is the “*Ins and Outs of Structural Bolting*.” The new RCSC *Specification for Structural Joints Using ASTM A325 or A490 Bolts* has been simplified, clarified, and improved to offer better guidance to all who are concerned with the design and construction of bolted structures.

You will learn the major changes that have been made in this 2000 edition of the RCSC *Specification*. The previously separate LRFD and ASD versions have been unified into a single document and commentary information has been added and refined to provide guidance and insight into the background that surrounds a particular Specification provision or requirement.

Michael Donoghue has set-up these upcoming chapter meetings ...



- 6/26 In and Outs of Structural Bolting
- 7/24 Precast Arch Bridges
- 8/28 Vapor Barriers under Slabs-on-grade
- 9/25 Basics of Anchorage to Concrete
- 10/23 Blast Design of Windows
- 12/4 Steel Castings

President’s Message

Through comments received so far, the Fabric Structures dinner seminar at Sholtz’s was a success. We plan to continue the pattern of two dinner seminars per year, with varying topics and locations. As always, feel free to call or email any of the officers with comments on past or future meetings.

The CANstruction event that SEAoT members participated in was also a success. Michael Brack is investigating other educational programs where SEAoT could lend a hand. Details on such other events, including opportunities for member input, will be announced as this formulates.

I teased you with the notion that our web page will be dramatically revised. This will soon be a reality as the state board decided to proceed with changes presented at the last board meeting. The final web design will take some time. In the meantime, our chapter continues to maintain the current web site.

Richard Martin, P.E.

Engineer-of-Record: William Jenney

While invention of the modern tall office building cannot be credited to any one man, the inspired technical innovations of engineer and architect William LeBaron Jenney (1832–1907) have led him to be widely remembered as the father of the American skyscraper.

After completing his technical education in Paris, where he was a classmate of Gustav Eiffel, Jenney served as an engineer in the Union army during the American Civil War. After the war, he settled in Chicago, establishing his own design practice in 1867.




Eighteen years later, Jenney's landmark work, the ten-story Home Insurance Company Building, was the first of its kind to carry its weight entirely on a skeletal metal frame without relying on masonry bearing walls.

Employing bolt-together cast-iron columns joined by wrought iron and steel beams to support the exterior masonry façade as well as interior floors, Jenney developed a revolutionary structural system that paved the way for modern curtain-wall skyscraper construction. Moreover, the Home Insurance Company Building further marked the maiden use of rolled Bessemer steel I-beams—first produced by Carnegie Steel while the building was under construction in 1885. Later, using a similar skeleton frame in 1889, Jenney's Manhattan Building became the first to reach sixteen stories, ushering in a new era of soaring urban office towers and firmly

establishing Jenney's reputation as a structural pioneer.

Visit the SEAOt website for a more in-depth article about William LeBaron Jenney at:

<http://www.seaot.org/chapters/austin/eor/jenney/>

 Erik Haden, Contributing Author

CANstruction

The SEAOt-mentored CANstruction team wins!

The Society for Design Administration helped the Jewish Community Center Day School stage the event, which featured participation from 24 students in grades 4 through 8. SEAOt, along with the AIA and ASCE, assisted by providing professionals to serve as mentors for the teams.

Michael Brack and Richard Martin served as mentors to guide a team of six boys toward the planning and building of a hydro-prop speed boat (these are 8 and 9 year old boys). We were



somewhat embarrassed that an architect's team won the "structural innovation" design award but the theme "Leave Hunger in our Wake" inspired our team to race to the forefront to claim the overall "Best of Show" grand prize. The design featured over 1300 cans of tomatoes, green beans, hominy, tuna, and salmon and measured 7 feet long, and 42" tall.

One of the entries collapsed at the end of the awards ceremony. Fortunately, there were no fatalities.

In all, the event raised over 7000 pounds of food for the Capital Area Food Bank—quite a haul. We

modestly estimate that the students gained an average of 20 IQ points from our instruction.

SEAO T Sponsorships

Through modest contributions, firms can support our non-profit operation to offset costs of the lunch and evening programs. Acknowledgement will be noted in the monthly newsletter.

Contact Todd Speck, Sponsorship Committee Chair, if you would like to be a sponsor.

Monthly Meeting Schedule

The Austin Chapter of SEAO T has a standing meeting scheduled for the fourth Thursday of every month from 12 PM to 1:15 PM. Since the Thanksgiving and Christmas holidays typically conflict with this schedule, the November and December meetings are merged into one meeting – this year on, Thursday, December 4, 2003.

The room is also available from 11:30 AM to 12:00 PM for those who wish to arrive early and have lunch, get settled, or just meet with fellow members. All meetings will be held at the MCC Building unless otherwise noted. Please mark your calendars in advance for all future meetings.

2003 Austin Chapter Officers & Directors

Michael Brack	Past President	469-9490
Richard Martin	President	472-2111
Michael Donoghue	Vice-President	326-3232
Brian Johnson	Secretary	472-2111
Karim Helmi	Treasurer	445-2090
Bill Kelm	Director (Seminars)	345-5538
Brad Shuey	Director (Members)	349-0700
Bob Tieman	State Director	472-6721
Joe Luke	State Director	445-2090

2003 Austin Chapter Committees

Brian Johnson	Web Page	472-2111
Tom Kam	PALL	219-1574
Todd Speck	Sponsorship	329-8342

Contribute

The submission of announcements, articles, letters, or other items of interest to the central Texas structural engineering community for publication in this newsletter is welcome. Such items should be faxed to 472-2122, "Attn: Brian Johnson" or emailed to bjohnson@aecollab.com no later than the second Monday of the month of publication.

