Members to Vote on Bylaw Amendments

Later this year EERI members will be asked to approve a number of bylaw changes that will permit electronic voting, extend voting privileges to retired members, allow both full- and part-time college students to join EERI, and generally update the bylaws, making them consistent with current policies and practice.

With an increasingly global membership, the current voting processes—by printed ballot secured in a blank envelope, which is then placed within a signed outer envelope, which is in turn placed in a third envelope to be mailed back to EERI, is cumbersome, to say the least, and discourages participation, which currently averages about 25-30% percent of membership.

The EERI Board of Directors proposes that the Institute amend its bylaws in order to allow the use of electronic voting in the election of Directors to the Board and for future amendments to the Institute’s bylaws. The Board believes that electronic voting will simplify the process and encourage more members to vote. We have identified an electronic voting system that we believe is secure, easy to use, ensures anonymity, and provides an accurate result from every vote.

Reviewing the bylaws to permit online voting brought up a number of other areas in which the current bylaws were hard to justify or no longer reflected current policies or practices. To bring them up to date, the Board has voted to place the following amendments before the membership:

continued on page 6
News of the Institute

EERI Student Chapter Activities

Universidad Nacional Autónoma de México (UNAM)
The UNAM EERI Student Chapter was established in August 2005 and had a productive first year. It has 25 members from three graduate programs: structural engineering, geotechnics, and seismology. Many members attended the XV Congreso Nacional de Ingeniería Sismica in September 2005, where they were introduced to EERI President Craig Cobbold (see page 1 of the November 2005 Newsletter). Later in the year, UNAM’s Institute de Ingeniería (IDI) organized a congress promoting the chapter to the academic community.

In February 2006, Professor Carlos Valdés, director of the Servicio Sismológico Nacional (SSN), gave a lecture on seismic risk to the chapter in SSN’s facilities. This lecture initiated school outreach programs. The following month, a student gave a talk based on Valdés’ lecture to students at High School No. 4 of Mexico City. With support from the Sociedad Mexicana de Ingeniería Sismica (SMIS) and the IDI, the chapter organized a seminar in March presented by Professor Jose M. Roesset of the University of Texas A&M on “Seismic Behavior of Bridges with Isolated Foundations.”

In April, the chapter witnessed the dynamic test of a model building subjected to an earthquake on IDI’s shaking table. The model structure represented a typical precast parking building in Mexico, with the objectives of exposing the deficiencies in Mexico’s building code for precast structures and proposing a better approach for the design of precast flooring systems. Later in April, Professor Haluk Sucuoglu of the Middle East Technical University of Ankara, Turkey, gave two lectures at UNAM and also saw several students present their projects. Two members of the chapter participated in EERI’s student paper competition, and one (Omar A. Pineda Porras) was able to attend the 100th Anniversary Earthquake Conference in San Francisco.

The chapter is cooperating with the EERI Student Chapter at the University of British Columbia on an “Assessment of Confined Masonry Guidelines” project. The goal is to develop a commentary to current guidelines so that designers can meet the requirements to achieve earthquake resistance. The chapter’s website is http://www.ingen.unam.mx/EERI/. Its English version is under construction.

University of British Columbia

Late in 2005, the UBC student chapter hosted the 2005 EERI Distinguished Lecturer, Professor Jack Moehle, professor of civil engineering at the University of California at Berkeley and the director of the Pacific Earthquake Engineering Research Center. His visit included two presentations; the first was the Department of Civil Engineering’s second Noel Nathan Memorial Lecture on Performance-Based Earthquake Engineering (PBEE) that was attended by a broad range of practicing engineers, faculty, and graduate students, followed by a reception. His second talk was the Distinguished Lecture on “Basic Concepts and Practical Application” of PBEE, touching on the technical details of this methodology.

Following the success of the visit by Bill Holmes in 2005, the UBC-EERI Student Chapter once again participated in the EERI Friedman Family Visiting Professional Program, hosting John Hooper of Magnuson Klemencic Associates (MKA) in Seattle, Washington, in March 2006. Hooper presented three lectures to UBC students, faculty, and local professionals dealing with the business side of structural engineering consulting, reinforced concrete high-rise construction in seismic regions, and the seismic upgrade of the North Wing of the Harborview Medical Center.

The UBC chapter has engaged in a number of outreach activities, including an annual E-FEST, which is a multidisciplinary display hosted by the Vancouver Public Library’s Science and Technology Division to celebrate National Engineering and Geoscience Week. Chapter members used the Civil Engineering Departments mini-shaker table to test models built by the public. The chapter has done similar demonstrations for elementary school students and conducted a workshop for top high school seniors. The chapter’s
University of Notre Dame

The EERI student chapter at Notre Dame, known as EERI@UND, has continued its tradition of excellence in outreach activities, helping to make a difference in the lives of young people and spreading earthquake awareness in the greater South Bend, Indiana, area.

Last December, the chapter took its Shakes & Quakes Program (see page 5 of the September 2005 Newsletter) to Stanley Clark School, where forty fifth-grade students participated in the program, forming ten construction companies. Chapter members tested LEGO and K’NEX buildings, designed and constructed by the students, on a small earthquake simulator. They had to follow rules for designing and constructing their buildings that helped them understand the importance of efficiency, cost, strength, appearance, and constructability.

In conjunction with the American Society of Civil Engineers (ASCE) student chapter, the EERI chapter continued the fifth annual high school bridge activity at the High School Math and Engineering Challenge. EERI@UND had previously developed the activity to promote awareness of structural engineering among high school seniors by using concepts of moment area methods to determine the deflections of a simple beam model approximating a simply supported arch bridge. Students from Clay High School came to the UND campus for the two-hour three-phase session in which (1) they were guided through an integration procedure; (2) they used RISA-3D, a structural analysis program, to model a bridge, load it, and record the deflections; and (3) they applied weights to a model and measured its actual displacements. This program continues to evolve as improvements are made each year, enabling students to see an analysis from start to finish.

For the second year, the EERI@UND student chapter exhibited at the 14th Annual Science Alive in February at the St. Joseph County Public Library in South Bend. This event reaches K-8th grade children. More than 4,500 children and adults attended. With a portable shake table and a K’NEX building on hand, young students were able to see how a steel building responds in an earthquake. There were also geo-technical engineering demonstrations on display, including a “Bucket o’Bolts” and Oobleck, which showed how clayey soils can dilate and liquefy.

The chapter’s web site is www.nd.edu/~eeriund.

University of Minnesota

The UMN student chapter conducted shake table demonstrations on four occasions from November 2005 through May 2006 to fourth- through seventh-grade students. The MTS Tabletop Earthquake System was used with recorded ground motions or manually controlled harmonic motions to demonstrate the concepts of earthquake motion and the response of structures to different motion. The students were exposed to related topics such as the natural frequencies of structures of different height, the benefits of bracing, and resonance. Chapter members also introduced undergraduate students at the university to the field, and encouraged them to enroll in structural dynamics and earthquake engineering courses, in which students create their own models with K’NEX, which are then tested to failure.

In November, EERI-UMN members attended the Annual St. Paul Schools Science Fair to judge exhibits. In March, the Department of Civil Engineering held a Structures Mini-Course at Patrick Henry High School, where students were introduced to the basics of structural engineering. Chapter members served as hosts and assisted professors with the lessons.

One chapter member, treasurer Beth Brueggen, attended the 100th Anniversary Earthquake Conference in San Francisco and gave a poster presentation on her research on “Non-Rectangular Shaped Shear Walls.”

The chapter’s web site is http://www.tc.umn.edu/~eeriumn/.
News of the Profession

New USGS Web Site

To help educate the public about the threat of natural hazards, the U.S. Geological Survey (USGS) has launched a new web site and seven easy-to-understand fact sheets on earthquakes, floods, hurricanes, landslides, tsunamis, volcanoes, and wildfires. The site highlights resources and information available from the USGS and provides links to the individual hazards’ web pages for more detailed information. The site and fact sheets can be accessed at http://www.usgs.gov/hazards/.

“At the USGS, it is our goal to provide scientific research and analysis that help the public make informed decisions on where natural hazards occur, how severe they may be, how to react to each hazard, and how to safeguard people and communities,” said USGS Acting Director P. Patrick Leahy. “If we can use our science to help save lives and minimize the damage caused by natural hazards, we have achieved an enormous goal—helping to prevent natural hazards from becoming disasters.”

The USGS has the lead federal responsibility to provide notifications to the public about earthquakes, volcanoes, and landslides. These notifications enhance public safety and reduce losses through effective forecasts and warnings based on the best possible scientific information. The USGS plays a supportive role to other federal agencies for flooding, wildfires, hurricanes, tsunamis, and coastal storms.

AIP Document Delivery Upgrade

The American Institute of Physics (AIP) recently announced the release of the next generation of its Scitation® online document delivery service, DocumentStore, which gives researchers convenient and affordable access to hundreds of thousands of articles from nearly 150 science and engineering publications hosted on AIP’s Scitation online platform.

The expanded site facilitates the purchase of multiple documents in a single transaction. “With the initial launch of DocumentStore in 1998, AIP became one of the first scientific publishers to offer broad-based single-article online purchase and delivery to anyone on the Internet,” said Frank Perugini, AIP’s Director of Online Services. “This current upgrade makes DocumentStore and its formidable archive of science and engineering papers at once a convenient, easy-to-navigate site for researchers and a secure and flexible environment for our Scitation partners.” EERI’s journal Earthquake Spectra is published online on AIP’s platform.

News of the Membership

Blind Prediction Contest Winners

The School of Engineering at the University of California at San Diego (UCSD), the Portland Cement Association (PCA) of Skokie, Illinois, and the NEES Consortium Inc. (NEESInc) announced the winners of their blind prediction contest at the NEES Annual Meeting held in Washington, D.C., in June. The prediction contest compared analytical response “blind predictions” with those measured during experimental shake table testing on a full-scale seven-story concrete building slice (see page 4 of the April Newsletter).

The co-principal investigators for the experimental tests were Jose Restrepo, Joel Conte, and Robert Englekirk. Bob Bachman served as coordinator and convener for the blind prediction contest.

There were a total of 21 entries from teams in eight countries divided into three categories. Each winning team representative received a plaque from Cliff Roblee of NEES and check for $2,500 from Ed Alsamsam of PCA. The winning undergraduate team was from Cal Poly San Luis Obispo represented by Michael Billings; the winning academic and research team was from the University of Ljubljana, Slovenia, represented by Matej Fischinger; and the winning engineering practitioner was Mahmoud Hachem of Wiss, Janney, Elstner in Emeryville, California.

Details regarding the contest rules, the structure, the ground motion, the measured results, and comparison of analytical and measured results can be found at http://nees.ucsd.edu/7Story.html.

(L-R): Mike Mota (PCA), Bob Bachman, Ed Alsamsam, Mahmoud Hachem, Jose Restrepo, Cliff Roblee, Michael Billings, Tetiana Isakovic, (member of the University of Ljubljana team), and Matej Fischinger.
Call for Abstracts

AGU Tsunami Hazards Session

A call for abstracts has been announced for Session T18 on “Seismogenesis and Tsunami Hazards of ‘Aseismic’ Island Arcs” during the American Geophysical Union (AGU) Fall Meeting on December 11-15, 2006, in San Francisco, California. This session aims to assess the current state of knowledge of seismogenesis and tsunami hazards in island arcs, especially those that are not thought to favor the occurrence of giant earthquakes. The tectonic environment of the Nicobar and Andaman Islands section of the 2004 Sumatra-Andaman earthquake rupture zone is not typical of subduction zones that experience giant earthquakes.

Contributions are invited on subduction zone earthquakes, subduction dynamics, island arc tectonics, coastal geomorphology, observational seismology, and geodesy that might help answer such questions as the following: How do we know which island arcs are really aseismic? Can we guarantee that these aseismic subduction zones do not experience large earthquakes with recurrence times much longer than the historical record? What is the importance of various factors such as extensional tectonic stresses, forearc deformation, and serpentinization on the seismogenic characteristics of these zones? How can we improve our knowledge of seismogenesis in island arcs so that we can answer such questions with confidence? How can fundamental science be linked to public information on tsunami hazard and the protection of vulnerable coastal communities? In particular, studies are invited that address the implications of the May 3, 2006, Mw 7.9 Tonga earthquake, which was the largest shallow compressional earthquake ever documented in the Tonga-Kermadec system. For submission information, visit http://www.agu.org/meetings/fm06/.

Call for Papers

Engineering Structures Special Issue

The deadline is November 30, 2006, for submission of manuscripts to the special edition of the journal Engineering Structures on seismic reliability analysis and protection of historic buildings, heritage sites, and other cultural artifacts.

The special issue’s guest editors are Debra F. Laefer (Debra.Laefer@ucd.ie) and Erol Kalkan (Erol.Kalkan@conservation.ca.gov) of EERI’s Heritage and Existing Structures Committee.

Manuscripts can be submitted to http://ees.elsevier.com/engstruct/ by selecting the appropriate special issue under the “select article type” option. Contributions are welcome on all aspects of the subject, which are described on page 4 of the June Newsletter.

Announcements

SEAOC Convention

The main theme of the Structural Engineers Association of California (SEAOC) 75th Annual Convention will be “Structural Engineering Practice under the IBC,” focusing on the day-to-day practice of structural engineers. The conference will be held on September 13-16 at the Hyatt Regency in Long Beach. Papers will be presented on common practice topics. The technical program will include projects designed using the International Building Code or ASCE 7 Seismic Design Provisions, with the goal of highlighting substantial differences between current seismic design procedures and the IBC. This would include “lessons learned” and “things to watch for.” A parallel theme is dedicated to “best design practices” highlighting practical, efficient structural design methods and procedures for the structural design of low- to high-rise buildings and other structures. This includes the rehabilitation and repair of existing structures as well as the design of new buildings. For more information, visit http://www.seaint.org/convention2006/.

COSMOS Technical Session

The Consortium of Organizations for Strong Motion Observation Systems (COSMOS) will hold its Annual Meeting and Technical Session at the Doubletree Hotel in Berkeley, California, on Friday, November 17. The day-long session will focus on “A Comparison and Evaluation of Methods for Selection and Scaling of Ground Motion Time Histories for Building Code and PBEE Applications.” The session is cosponsored by the Pacific Earthquake Engineering Research (PEER) Center.

To provide an objective comparison of the range of nonlinear responses one can obtain with various selection and scaling procedures, the nonlinear dynamic response of ten structural models will be determined by a PEER technical team for a magnitude 7 strike-slip event that is ten kilometers from the site. Presentations will be made on the various selection and scaling procedures as well as on how the nonlinear responses were computed. After making the comparisons, the presenters will serve on a panel that will discuss (along with session participants) their observations regarding the results and any suggestions for improvements in selection and scaling procedures in futures codes and performance-based earthquake engineering guidelines. The deadline for early registration is October 15. For program and registration details, visit www.cosmos-eq.org.
Job Opportunity
Natural Hazards Center

The Natural Hazards Center at the University of Colorado in Boulder invites applications for the position of program associate. The person filling this position will be responsible to the director and program manager for the effective management of the Natural Hazard Center’s special publications editing and Quick Response research program.

The program associate is responsible for the center’s Disaster Research e-newsletter and web site and will solicit proposals, coordinate deployments, and edit publications.

Applicants should send a resume, writing sample, and cover letter to Greg Guibert at greg.guibert@colorado.edu no later than September 1, 2006.

For the complete job description, visit http://www.colorado.edu/hazards/program_associate.pdf.

Announcements
NEES Annual Meeting

The 5th Annual Meeting of the George E. Brown, Jr., Network for Earthquake Engineering Simulation (NEES) is scheduled for June 9-2, 2007, at the Snowbird Resort in Utah.

More than 200 people attended the 2006 NEES Annual Meeting in June in Washington, D.C. with the theme of “Broadening Participation Throughout NEES.” Approximately 75 presentations were made, most of which can be downloaded in both PDF and PowerPoint formats at http://www.nees.org/About_NEES/Announcements/announcement.php?news_id=41. There were presentations on active and new projects as well as many on dealing with advanced tools such as pushing experimental boundaries and hybrid simulation, sensors and instrumentation, and numerical simulations.

Conference on Case Histories in Geotech Engineering

The dates of the previously announced 6th International Conference on Case Histories in Geotechnical Engineering have been changed to August 11-16, 2008, in Washington, D.C.

The deadline for submission of abstracts has been extended to March 15, 2007. For more information, visit http://campus.umr.edu/6icchge/index.html.

Earthquake ABC, A Child’s View of Earthquake Facts and Feelings

Earthquake ABC, A Child’s View of Earthquake Facts and Feelings by EERI member Lucy Jones of the USGS can be downloaded from http://home.earthlink.net/~torg/eqindex.html. It includes a parents’ guide to earthquakes.

A $10 paperback version published by Sirius Productions is also available.

Solution to last month’s puzzle

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1. Amendments to various articles and sections required to make the switch from paper ballots to electronic voting, while retaining the option of paper ballots for those unable or unwilling to vote electronically.

2. Amendments to various articles and sections to provide voting privileges to Retired Members.

3. Amendments to various articles and sections to expand eligibility for Student Membership in EERI from full-time college students to all college students.

4. Amendments to various articles and sections to make the language gender-neutral, add references to the Executive Director, and bring various other sections into compliance with current practice.

Should these amendments be approved, they would go into effect at the February 2007 Annual Business meeting, and the new voting procedures would be implemented for the 2008 election conducted late in 2007.
CALENDAR

Items that have appeared previously are severely abbreviated. The issue containing the first appearance, or the most informative, is indicated at the entry’s end. Items listed for the first time are shown in bold.

SEPTEMBER
3-8. 1st European Conf. on EQ Eng. & Seismology, Geneva, Switzerland. Info: www.ecees.org (1/05, 1/06)
5-6. BETEC Building Science Forum 2006, Syracuse, NY. Info: www.nibs.org (8/06)
10-14. 23rd Ann’l Conf. of the Association of State Dam Safety Officials (ASDSO), Boston, MA. Info: www.damsafety.org (2/06)
10-15. Intl’l Conf. on Infrastructure Development and the Environment (ICIDEN), Abuja, Nigeria. Info: www.iseg.giees.uncc.edu/abuja2006/callabstracts.cfm (8/06)
13-16. SEAOC 75th Annual Convention, Long Beach, CA. See page 5. (9/06)
18-19. UB-NEES Training Workshop, University at Buffalo, NY. Info: www.nees.org/4am/ (5/06)
18-20. 5th Nat’l Seismic Conf. on Bridges and Highways, San Francisco, CA. Info: mceer.buffalo.edu/meetings/5nsc/ (1/06, 6/06)
25-Oct. 7. 8th Wkshp. on 3-D Modeling of Seismic Wave Generation, Propagation, and Inversion, Mira- mare, Italy. Info: agenda.ictp.it/smrm.php?1775 (1/06)
28. CSMIP06 Seminar on Utilization of Strong Motion Data, Oakland, CA. Info: www.consrv.ca.gov/CGS/smip/seminar.htm (7/06)

OCTOBER
6-7. Student Disaster Recovery Research Symp., College Station, TX. Info: http://archone.tamu.edu/conted (7/06)
11-13. 7th Intl’l Cong. on Advances in Civil Eng., Istanbul, Turkey. Info: www.ace2006.yildiz.edu.tr/ (12/05)
12-13. 4th Intl’l Conf. on EQ Eng. (4ICCEE), Taipei, Taiwan. Info: icee2006.ncree.org.tw/ (10/05)
13-17. NEES Annual Meeting, Snowbird, Utah. See page 6. (9/06)
24-28. 4th Intl’l Conf. on EQ Geotech. Eng. (4ICGE), Thessaloniki, Greece. Info: www.secretariat@4icege.org (2/06)
25-28. 4th Int’l Conf. on EQ Geotech. Eng. (4ICCE), Ottawa, Canada. Info: www.9ccee.ca (2/06)

ANNUAL MEETINGS

2007
7-10. EERI Annual Meeting, Los Angeles, CA. See pages 1 and 8. (3/06, 9/06)

MARCH

MAY
14-16. SFSE5 on EQ Risk Reduction in Devel. Countries, Tehran, Iran. Abstract deadline 9/20/06. Info: www.ilees.ac.ir/SEE5 (7/06)

JUNE
19-21. NEES Annual Meeting, Snowbird, Utah. See page 6. (9/06)
25-28. 4th Intl’l Conf. on EQ Geotech. Eng. (4ICGE), Thessaloniki, Greece. Info: www.secretariat@4icege.org (2/06)
26-29. 9th Canadian Conf. on EQ Eng. (9CCEE), Ottawa, Canada. Info: www.9ccee.ca (2/06)

OCTOBER
8-11. Modern Trends in Structural Engineering for Seis. Design, Ariel, Israel. Info: ribakov@yosh.ac.il (8/06)

2008
AUGUST

OCTOBER
12-17. 14th World Conf. on EQ Eng., Beijing, China. Info: www.14wcee.org (12/05)
News of the Institute

Board Nominees Announced

The 2007 EERI Nominating Committee has submitted a slate of candidates for two Director positions that will become open when John Aho and Farzad Naeim complete their terms next January. The nominees are as follows:

For Director A:
- Sharon Wood, professor, University of Texas, Austin, Ferguson Structural Engineering Lab
- Andrew S. Whittaker, professor, Department of Civil, Structural, and Environmental Engineering, SUNY Buffalo, New York

For Director B:
- Stacy Bartoletti, principal, Degenkolb Engineers, Seattle, Washington

Additional nominations may be made by the membership in accordance with Article VII of the EERI Bylaws (Sections 4 and 5), upon submission of a petition with signatures of 25 members. Petitions must be received prior to November 1.

Biographies of the candidates and short vision statements will be published in a future issue of the Newsletter and posted on the EERI website, www.eeri.org.

EERI wishes to thank the Nominating Committee:
- Christopher Rojahn (chair), Applied Technology Council; Mary Comerio, University of California, Berkeley; Nathan Gould, ABS Consulting; John D. Hooper, Magnusson Klemencic Associates; and Kimberley Shoaf, UCLA Center for Public Health and Disasters.

Annual Meeting Travel Scholarships

Several scholarships are available to encourage student members and younger EERI members (out of school no more than three years) to attend the 2007 Annual Meeting, thanks to support from FEMA. The financial support will be contingent upon participation in one of the poster sessions (see page 1), either through the applicant’s own research project, or as a representative of a student chapter depicting the chapter’s activities. Each scholarship will cover registration, lodging at the conference hotel for three nights, and round-trip economy airfare. To apply, send a letter of request by December 1, 2006, to the Student Activities Committee in care of EERI’s Administrative Assistant Valarie Austin at valarie@eeri.org. Applicants should describe their current involvement in earthquake engineering or a related field and their status as students or professionals.