News of the Institute

Last Call: 53rd Annual Meeting Focuses on Acceptable Risk

Should “acceptable risk” be redefined as “acceptable levels of safety”? How has the high tech industry managed risk? How have the various levels of government dealt with it? Beginning on the evening of February 7, earthquake engineers, scientists, planners, architects, and policy makers will tackle these issues for three days at the DoubleTree Hotel in Monterey, California, at EERI’s 53rd Annual Meeting.

The nation’s foremost experts will be in Monterey to discuss a range of issues dealing with seismic risk in the high tech industry, in mission-critical facilities, and in new and existing government buildings. A special session developed by a joint EERI/PARMA (Public Agency Risk Managers Association) committee will suggest various ways in which earthquake engineers can help local governments reduce their seismic risk. Other highlights include roundtables on dilemmas in managing risk in universities and critical facilities, and a debate on whether we currently have the capacity to define “acceptable levels of risk.” The Friday evening banquet will be topped off by a performance starring the Probability Curves (the hottest new girl group since the Dixie Chicks), many of whom were previously members of the unforgettable Hysteretic Loops. They will be joined by amazing solo performers and breathtaking dancers. Professor Reëntrant Körner will be back, reporting on his new research directions.

In addition, Annual Meeting participants will receive the conference notebook, three lunches, and the banquet. All EERI members should have received in the mail the program brochure containing the meeting registration form and hotel information. For your convenience, this Newsletter contains a meeting registration form, which also has information about the many attractions in Monterey that might be of interest to participants’ family members. For more information, contact the EERI office. Online registration is available at the EERI web site at [www.eeri.org](http://www.eeri.org). Don’t delay in making your reservation – this Annual Meeting will be timely, challenging, and memorable. You won’t want to miss it!

Fisherman’s Wharf, Monterey
(© Elliott Scherling, courtesy of Monterey Peninsula Visitors & Convention Bureau)
Publications

Seismic Safety of Hospitals in Italy

The Applied Technology Council (ATC) has announced the availability of the ATC-51 report, U.S.-Italy Collaborative Recommendations for Improving the Seismic Safety of Hospitals in Italy. Funded by the Servizio Sismico Nazionale of Italy (Italian National Seismic Survey), this 154-page report documents the results of a study initiated in 1999 to formulate a set of initial recommendations for improved hospital seismic safety in Italy. The recommendations are based on advice provided by a 10-person Project Engineering Panel, consisting of five specialists each from Italy and the United States, and draw from a number of existing hospital seismic safety documents, regulations, and hospital seismic risk data developed in the two countries, including results from prior ATC projects.

The ATC-51 report includes an overview of hospital seismic risk in Italy, including historical seismicity, seismic zonation, design requirements, inventory, and performance in recent earthquakes; recommended short-term and long-term actions for improving hospital seismic safety in Italy; and supplemental information on current hospital seismic safety regulation in California, requirements for nonstructural components in California and for buildings regulated by the Office of U. S. Foreign Buildings, and current seismic evaluation standards in the United States.

Copies of the ATC-51 report can be obtained from ATC, 555 Twin Dolphin Drive, Suite 550, Redwood City, California 94065 (phone, 650/595-1542; fax, 650/593-2320; e-mail, atc@atcouncil.org; web site, www.atcouncil.org). The cost is $40.00 per copy plus tax and shipping where applicable.

Announcements

2000 IBC Seminars

The International Conference of Building Officials (ICBO) and the National Council of Structural Engineers Associations (NCSEA), in cooperation with S.K. Ghosh Associates, Inc., are presenting a seminar on the structural provisions of the 2000 IBC at the following locations in 2001: February 27 in Los Angeles, CA; February 28 in Sacramento, CA; March 1 in Reno, NV; March 13 in Seattle, WA; March 14 in Portland, OR; March 15 in San Jose, CA; April 10 in Charlotte, NC; April 11 in Atlanta, GA; April 12 in Charleston, SC; May 8 in Houston, TX; May 9 in Philadelphia, PA; May 10 in Pittsburgh, PA; May 22 in Madison, WI; May 23 in Milwaukee, WI; and May 24 in New York City, NY.

This intensive one-day seminar will focus on the following code provisions: seismic, wind, and other design loads; quality assurance, special inspection, and testing programs; soils and foundations; and concrete, masonry, steel, and wood design requirements. The seminar is being presented by the following speakers, who have been directly involved with the development of the 2000 IBC: S.K. Ghosh and Susan Dowty of S.K. Ghosh Associates, Inc., and Gerald Neville of ICBO Seminar Services.

The registration fee is $235 for members of Structural Engineers Associations and ICBO members, and $285 for nonmembers. There will be a $25 discount on registrations received 30 days before the scheduled seminar. For more information and to register for this seminar, see ICBO's website at www.icbo.org or phone 800/423-6587, x3418.

News of the Membership

Panza Receives Gutenberg Medal

The European Geophysical Society has awarded EERI member Giuliano Francesco Panza the Beno Gutenberg Medal. Panza, Professor of Seismology at the University of Trieste and head of the ICTP (International Center for Theoretical Physics) Structure and Non-Linear Dynamics of the Earth (SAND) Program in Trieste, was honored for his scholarly achievements in earthquake modeling, and for advancing international cooperation in earthquake analysis and prediction. The award, established in 1996, is named in honor of the German-born seismologist who is credited with discovering the existence of the Earth’s core in 1913, and in helping to explain the physics of continental drift.

News of the Profession

Examples of Exposed Seismic Resistance

A current research project investigating earthquake architecture requires case studies of buildings that feature a visually exposed seismic-resistant structure. Attractive, interesting, innovative, and architecturally acknowledged examples are particularly sought. Seismically retrofitted buildings are also of interest. The project participants are requesting brief information on buildings, with one or two photos showing the exposed structure.

Information should be sent to: Andrew Charleson, Senior Lecturer, Building Structures, School of Architecture, Victoria University of Wellington, PO Box 600, Wellington, New Zealand; e-mail address: andrew.charleson@vuw.ac.nz.
News of the Institute

EERI/FEMA Professional Fellowship Awarded

Gregory L. Griffin, P.E., Consulting Engineer at OBEC in Eugene, Oregon, has been selected as the 2001 NEHRP Professional Fellow in Earthquake Hazard Reduction, awarded by EERI under a cooperative program funded by the Federal Emergency Management Agency. This activity is undertaken by FEMA as part of the National Earthquake Hazards Reduction Program. The fellowship is designed to provide an opportunity for a practicing professional to gain greater skills and broader expertise in earthquake risk reduction. The Institute extends thanks to the review committee composed of Donald Anderson of CH2M Hill, C. Allin Cornell of Stanford University, and Farzad Naeim of John A. Martin & Associates.

Griffin’s research will focus on developing a response spectrum method (RSM) for earthquake analysis of bridges that accounts for multiple support excitations. His work is an extension of previous studies of the effects of incoherent ground motions on bridges, and will focus on developing a design tool that can be used by practicing engineers. He will develop a finite element analysis approach based on existing work and will conduct parametric studies to account for the differing seismic inputs. He will then apply the multiple support RSM to two different bridge structures, and will validate this method with time history methods. Griffin will carry out his research under the direction of Professor M. “Said” Saidi at the University of Nevada, Reno.

For the past four years, Griffin has worked as a project engineer for OBEC Consulting Engineers in Eugene, Oregon. His current project responsibilities include serving as lead designer for a 30-meter, single-span bridge, numerous retaining walls, and a 550-foot pedestrian bridge crossing Interstate 205 in Washington. He has presented some of this work at professional meetings and published in technical journals.

Griffin earned his BSCE from the University of Idaho, and his MSCE from the University of Nevada, Reno.

The Professional Fellowship, awarded annually, provides a stipend of $30,000 commencing in January 2001, and covers tuition, fees, and relocation and living expenses for a six-month period.

Announcements

Short Course on Soil Dynamics

The University of Missouri-Rolla will host a short course on Soil Dynamics in Engineering Practice on March 26-27, 2001, in San Diego, California, in conjunction with the Fourth International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics. The topics covered include: earthquake loading on geotechnical structures; experimental determination of system properties; soil properties at low and high strains; nonlinear soil behavior; wave propagation techniques; ground response to earthquakes; site amplification; liquefaction; computation modeling; retaining walls and their displacements during earthquakes; response spectra for force-excited systems; design approaches; Eurocode and uniform building codes; pile foundations under dynamic loads; models for analysis of single piles and pile groups; design of piles; and case histories of geotechnical structures under big earthquakes.

The instructors will be Ahmed Elgamal, University of California, San Diego, and Shamsher Prakash, University of Missouri-Rolla. The course fee is $565 (non-conference), $465 (conference). For more information see the website: www.umr.edu/~conted/quake.html or contact Shamsher Prakash (e-mail: prakash@umr.edu; fax: 573/341-6553; phone: 573/341-4489).

Announcements

Employment Opportunities

Geomatrix Consultants, Oakland, CA. Openings for both a staff and a senior seismologist in the Geotechnical Engineering and Earth Sciences Group to work as part of the seismic hazard analysis team. Candidates are expected to have experience with one or more of the following: analysis and relocation of global earthquake catalogs, waveform inversion for source mechanism, simulation of wave propagation in a 3-D basin structure, strong motion seismology, or seismotectonics. Contact: Human Resources, Geomatrix Consultants, 2101 Webster Street, 12th Floor, Oakland, CA 94612; fax: 510/663-6361; e-mail: nsilverman@geomatrix.com.
Summary Minutes of the September 15, 2000, Meeting of the Board of Directors

Preliminaries: In the absence of President Arnold, Vice President Tom O'Rourke called the meeting to order at 9:06 a.m. Directors present included President-Elect Chris Poland, Thalia Anagnos, Mel Green, and Secretary-Treasurer Ron Mayes. Director Somerville arrived in the afternoon. Also present were Executive Director Susan Tubbesing and Administrative Assistant Beth Nelson. Not present were President Chris Arnold, and Directors Dennis Mileti and Norman Abrahamson. Craig Comartin was present in the morning, and Marjorie Greene arrived in the afternoon for a short presentation.

Regional chapter liaison report: Tubbesing reported that the technical seminar request from Minneapolis has led to communication with S.K. Ghosh of the Great Lakes Chapter. It was the consensus of the EERI Board that the seminar, which was proposed by a non-EERI member, should be one rather than two days, and that it must be a Great Lakes Chapter activity. EERI does not sponsor nonmember activities.

Regional chapter development: Poland reported that there is a need to develop a complete set of regional chapters. He sees EERI developing increased influence and outreach into the community. It was agreed that the Technical Seminar and Board Meeting in Los Angeles in December would serve as a testing place for the development of regional chapters.

Earthquake Engineering Certificate proposal: The Board discussed Phil Gould's proposal and agreed that Anagnos will organize and chair an ad hoc committee to consider an Earthquake Engineering Certificate program and plan to introduce the concept at the Annual Meeting.

December Board meeting/strategic planning: The Board discussed the need to reevaluate EERI's core programs. EERI needs to improve coordination with other groups and determine the needs of the professional community. The Board agreed to develop a white paper for a Strategic Planning meeting, to be held as part of the December Board meeting.

Secretary/Treasurer's report: Revenue and Expense Reports: Mayes reviewed the Report of Revenue and Expenses as of July 31, 2000. The combined balance sheet shows the Institute's opening fund balance of $1,013,026 increased by excess revenue over expenses of $57,745. EERI's total liabilities balance of $214,434, combined with the total fund balance, equaled $1,285,205. The Endowment Program's opening fund balance of $799,621 decreased by $62,451 for a balance of $737,170. The Endowment Program's total liabilities of $159,415, combined with the total fund balance, equaled $896,585. All programs combined, including association, technical, and endowment, totaled $1,285,205.

The Investment Funds Report showed $75,138 in the General Administrative Short-Term Fund, $203,542 in the General Administrative Long-Term Fund, and $738,170 in the Endowment Fund. The Innovation Prize Investment Fund totaled $158,915. The Institute's interest-bearing checking account showed a balance of $37,710. The combined invested funds in both General Administrative Funds totaled $278,680. The Grants Status Summary showed that of $976,125 in active grants, $538,989 had been expended as of July 31, 2000.

2001 Dues: The Board approved regular member dues of $165, an increase of 10%. The Board approved a motion that subscribing member dues be doubled to $2000 with a one-time set-up fee of $1000 for new subscribing members. Another motion to add a surcharge to all international members for mailing costs over and above domestic rates was approved. The Board agreed that student membership fees should remain the same.

Investment policy guidelines: Treasurer Mayes explained that it is up to the Board to set investment policy guidelines and define investment ranges; an investment manager then determines the exact strategies. Mayes urged the Board to consider a more aggressive investment strategy for EERI's Endowment Fund. Mayes moved that the allocation of fixed income assets be reduced from the current 35-45% to 20-30%, and that the allocation of growth stocks be increased from the current 45-55% to 60-75%. The motion was passed unanimously.

Office space: The Board discussed EERI's pending rent increase from $2.23 to $4 per square foot. It represents an increase of more than $60K per year. Mayes, Tubbesing, and Finance Manager Hollenbeck will pursue options to purchase or rent new office space and report back to the Executive Committee as soon as possible.

Yountville earthquake response: Tubbesing reported that the earthquake served as a wake-up call of the need to review office procedures for earthquakes. She will be getting a pager from OES for Clearinghouse purposes, so she is alerted in a timely fashion when the next earthquake occurs.

Membership/list server: Tubbesing reported that EERI currently has 2,554 members. All members have...
Publications

Special Issue of Current Science

The Indian Academy of Sciences recently published a special issue of Current Science, titled “Seismology 2000,” guest edited by Kusala Rajendran and C.P. Rajendran. The volume contains 16 contributions by authors from several countries that address seismic hazard and risk, primarily in India and the surrounding area. For further information and orders, contact: M.S. Venugopal, Editorial Office, Current Science, C.V. Raman Avenue, P.B. No. 8001, Sadashivanagar, Bangalore 560080, India; phone: +91-80 3342310; e-mail: currsci@ias.ernet.in; fax: +91-80-3346094. The cost in India is Rs. 200 and in other countries is US$20.

Structural Engineering of Transportation Structures

The 16th Congress of the International Association for Bridge and Structural Engineering (IABSE) was held September 18-21, 2000, in Lucerne, Switzerland. The theme was “Structural Engineering for Meeting Urban Transportation Challenges.” Several topics were presented in parallel sessions, including: aesthetics, sustainability and environment, conservation and assessment of existing structures, and repair and rehabilitation of structures. More than 200 papers were published in the Congress Report. The book contains two-page abstracts and the accompanying CD contains the full six-page papers. For ordering information, contact the IABSE by phone: +41-1-633-2647, fax: +41-1-633-1241, e-mail: secretariat@iabse.ethz.ch, or web site: www.iabse.ethz.ch.
Publications

Dynamics of Structures

*Dynamics of Structures: Theory and Applications to Earthquake Engineering (Second Edition)* by EERI member Anil K. Chopra has recently been published. This is a revised version of a book that first appeared in 1995.

The new features of the second edition include: examples on the dynamics of bridges and their earthquake response; fuller discussion relating the deformations of inelastic and elastic structures; applications of the inelastic design spectrum to structural design for allowable ductility, seismic evaluation of existing structures, and displacement-based structural design; energy dissipation devices to retrofit seismically vulnerable structures; additional descriptions of base-isolation systems and their recent applications to retrofit existing buildings and to design new buildings; earthquake provisions in building codes; frequency-domain method of dynamic analysis; and many new end-of-chapter problems (for a total of 357). For ordering information, see the website: [www.prenhall.com](http://www.prenhall.com).

Seismic Design of California Bridges

The Applied Technology Council (ATC) has recently published the ATC-32-1 report, *Improved Seismic Design Criteria for California Bridges: Resource Document*, on CD-ROM in fully indexed PDF format. Written for practicing design engineers and researchers, this 363-page report is intended to serve as a companion document to the ATC-32 report, *Improved Seismic Design Criteria for California Bridges: Provisional Recommendations*, which was funded by the California Department of Transportation and published by ATC in 1996.

The ATC-32-1 report documents pertinent background and the technical basis for the recommendations provided in ATC-32. Topics include: design concepts; seismic loading; dynamic analysis; foundation design; ductile component design; capacity protected design; reinforcing details; steel bridges; and results from trial designs using the recommendations of ATC-32.

In addition to the CD-ROM, the ATC-32 Report is also available in bound, paper format. Copies can be obtained from ATC, 555 Twin Dolphin Drive, Suite 550, Redwood City, California 94065 (phone, 650/595-1542; fax, 650/593-2320; e-mail, [atc@atcouncil.org](mailto:atc@atcouncil.org); web site, [www.atcouncil.org](http://www.atcouncil.org)). The cost of the CD-ROM is $32.50, and the report is $65.00 plus applicable tax and shipping.

Announcements

SEAW Annual Trade Show and Seminars

The Structural Engineers Association of Washington (SEAW) Southwestern Chapter will be holding its 5th Annual Educational Trade Show and Seminars at the Best Western Executive Inn, Tacoma/Fife, Washington, on Wednesday, January 16, 2001. The afternoon seminars will be held from 2:00 p.m. to 5:00 p.m., followed by the trade show. The seminars and trade show are free for members of SEAW and the American Society of Civil Engineers, and $10 for nonmembers and late reservations. Reservations are required for the complimentary buffet and refreshments. E-mail reservations to [sjporter@worldnet.att.net](mailto:sjporter@worldnet.att.net) or call 253/565-0769. The reservation deadline is January 10, 2001.

Steel Buildings in Seismic Regions

The American Institute of Steel Construction and the Steel Structures Technology Center (SSTC) are conducting a joint two-day seminar on Steel Buildings: Seismic Design, Construction, and Inspection. The seminar will initially be conducted in six west-coast cities, and will be of particular interest to structural and civil engineers, steel fabricators and erectors, testing agencies, inspectors, building officials, and others involved in steel building construction.

The first day of the seminar will focus on the design of welded and bolted connections classified as prequalified under the recently published FEMA 350, *Recommended Seismic Design Criteria for New Steel Moment-Frame Buildings*. The second day will focus on the specifications, welding, bolting, quality control, and quality assurance provisions of FEMA 353, *Recommended Specifications and Quality Assurance Guidelines for Steel Moment-Frame Construction for Seismic Applications*. The documents are the culmination of several years of research effort conducted for FEMA by the SAC Joint Venture.

The following seminars have been scheduled: January 16 and 17, Portland, OR; January 18 and 19, Seattle, WA; January 23 and 24, San Francisco, CA; January 25 and 26, Sacramento, CA; January 30 and 31, Los Angeles (Buena Park), CA; and February 1 and 2, San Diego, CA. Participants may register to attend either one or both days of the seminar. For more information, call the SSTC at 248/344-2910, fax: 248/344-2911, or see the website: [www.steelstructures.com](http://www.steelstructures.com).
CALENDAR

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

2001

JANUARY
7-12. Conference on Computer Methods and Advances in Geomechanics, Tucson, AZ. Info: intermix.engr.arizona.edu/~epd/ #IACMAG (11/99)


9. EERI Technical Seminar on Energy Dissipation Devices, Pasadena, CA. Info: www.eeri.org (12/00)

16. SEA/W Annual Meeting, Tacoma, WA. See page 6. (1/01)

16-17. NEES Meeting, the Clarion Hotel, San Francisco Airport. Info: www.eeri.org/Meetings/ (9/00)

25-26. PEER Annual Meeting, Oakland, CA. See page 8. (1/01)

FEBRUARY
7-10. 2001 EERI Annual Meeting, Monterey, CA. Info: www.eeri.org. See page 1. (2/00, 10/00, 11/00, 12/00, 1/01)


MARCH


26-31. 4th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, San Diego, CA. Info: prakash@umr.edu. See page 3. (6/99, 2/00, 6/00, 1/01)

31-April 1. ASTM Symposium on Performance of Exterior Walls, Phoenix, AZ. Info: pjohnson@dt.smithgroup.com (4/00)

APRIL
16-20. Conf. on Civil Engineering in Asia, Tokyo, Japan. Info: www02.u-page.so-net.jp/tg7/cecar (12/00)


MAY

JUNE
4-6. SEM Annual Conference, Portland, OR. Info: www.sem.org (9/00)

12-14. IABSE Conference on Cable-Supported Bridges, Seoul, Korea. Info: secratariat@iabse.ethz.ch (5/00)

17-22. ICOSSAR 2001, Newport Beach, CA. Info: www.colorado.edu/engineering/ICOSSAR (6/00)

AUGUST
7-10. International Tsunami Symposium, Seattle, WA. Info: www.pmel.noaa.gov/its2001 (7/00)

12-17. SMIRT Conference, Washington, DC. Info: www.engr.ncsu.edu/SMIRT_16 (7/00)

16-19. International Conference on Engineering Materials, San Jose, CA. Info: mccullin@email.sjsu.edu (3/00)

29-31. IABSE Conference on Wooden Structures, Lahti, Finland. Info: www.iabse.ethz.ch (8/00)

SEPTEMBER
4-6. ERES 2001, Malaga, Spain.

News of the Membership

Albright Creates New Professorship in Engineering

Gifford H. Albright, an EERI member since 1985 and founding head and Professor Emeritus of the Department of Architectural Engineering at Pennsylvania State University, has created an endowed professorship in the College of Engineering. Called the "Gifford H. Albright Professor of Architectural Engineering," it will be used to attract and support an outstanding young faculty member in architectural engineering at Penn State. Income from the endowment will allow young faculty to direct their initial energies to the classroom and establish a commitment to teaching; provide initial funding for new areas of research, preliminary investigations, and conceptual development of research ideas; provide equipment funds for teaching and research laboratories; and offer early recognition for outstanding accomplishments.
Announcements

PEER Annual Meeting

The 2001 Annual Meeting of the Pacific Earthquake Engineering Research (PEER) Center will be held January 25-26, 2001, at the Marriott City Center Hotel in Oakland, California. The meeting will include plenary and poster sessions that will showcase the latest results from PEER’s core research program on Performance-Based Earthquake Engineering and PEER’s Lifelines Research Program. The program will cover seismic hazard, ground motion, ground failure, seismic design methods, component behavior, and advanced seismic simulation using the new PEER computer platform.

The meeting will also provide a valuable opportunity for an active exchange of ideas that will help advance the PEER program as well as an opportunity to interact with all the faculty and students working in the program.

Registration for the meeting is free for all participants who register before January 15, 2001. The Annual Meeting program and registration form are available online at the PEER website: www.peer.berkeley.edu, or by contacting holmon@peer.berkeley.edu.

Special Session at 2001 SSA Meeting

A special session will be held during the 2001 meeting of the Seismological Society of America (SSA) this April in San Francisco, California, entitled “Development and Use of Near-Real-Time Seismological Information.” The session is intended to draw contributions both from the developers of these capabilities and the user community. It will include presentations on current developments in rapid earthquake information, from magnitude and location, to the spatial mapping of observed and estimated shaking distribution, and loss estimation. Papers from current and potential users describing the way in which this information will be utilized are also encouraged. The session is intended to bring the user communities together with the developers.


If you plan to submit an abstract to this session, or if you have any questions about the meeting, contact: Lind S. Gee at the Berkeley Seismological Laboratory (lind@seismo.berkeley.edu), or David J. Wald at the USGS (wald@usgs.gov).