



**EARTHQUAKE ENGINEERING  
RESEARCH INSTITUTE  
NEWSLETTER**

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**News of the Institute**

**William Petak Named EERI's Distinguished  
Lecturer for 2003**

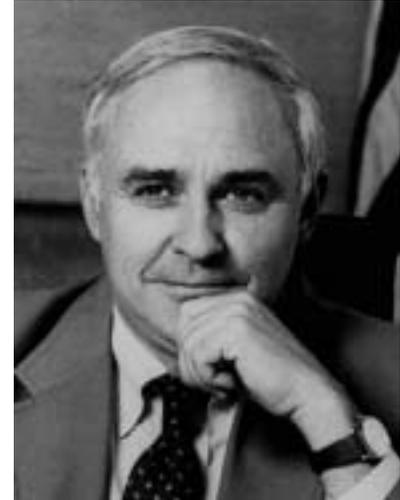
William J. Petak, professor in the School of Policy, Planning and Development at the University of Southern California, has been chosen to give EERI's 2003 Distinguished Lecture.

An EERI member since 1983, Petak was nominated by the Honors Committee in recognition of his tireless support of the implementation of new and improved natural hazard reduction public policies, especially building codes and land use policies.

His research interests involve an interdisciplinary approach to the management of technology, with special emphasis on reducing the risks associated with new technologies and natural hazards.

He received a B.S. in engineering from the University of Pittsburgh, and an M.B.A. and Ph.D. in public administration from the University of Southern California.

He has been a member of many committees associated with the mitigation of earthquake risk, including several National Research Council committees. He was chair of the National Committee on Property Insurance's Earthquake Project



*William Petak*

Mitigation Committee, chair of the Financial Services Subcommittee of the city of Los Angeles Mayor's Blue Ribbon Panel on Seismic Hazard Reduction, and a member of the Policy Board of the Southern California Earthquake Preparedness Project.

As a member of MCEER's research team, Petak is currently participating in a project to examine the barriers to implementation of the state of California's Alfred E. Alquist Hospital Facilities Safety Act of 1983. He

*continued on page 3*

**News of the Institute**

**New Benefit for EERI Student Chapters**

At its latest meeting in Boston during the 7<sup>th</sup> U.S. National Conference on Earthquake Engineering in July, the EERI Student Activities Committee recommended that all student chapters receive, as a benefit, complimentary copies of EERI's earthquake reconnaissance CD-ROMs and videos. Because not all chapters have the same access to guest speakers, briefings, and seminars, having these CDs and videos would enable them to make their own presentations, supplement program events, or share information, without requiring guest speakers. Chapter advisors will be receiving these audiovisual resources in the near future, so student chapters can include them in their plans for the current academic year.



## NIST Investigation of WTC Disaster

On August 21, 2002, the National Institute of Standards and Technology (NIST) detailed its \$16 million 24-month federal building and fire safety investigation to study the structural failure and subsequent collapse of several World Trade Center (WTC) buildings following the terrorist attacks of September 11, 2001. The study of WTC Buildings 1 and 2 (the "Twin Towers") and WTC Building 7 will focus on building construction, materials used, and all of the technical conditions that contributed to the outcome of the WTC disaster.

The objectives of the NIST investigation are to determine technically why and how WTC Buildings 1, 2, and 7 collapsed following the initial impact of the aircraft; why the injuries and fatalities were so low or high, depending on location (by studying all technical aspects of fire protection, occupant behavior, evacuation, and emergency response); what procedures and practices were used in the design, construction, operation, and maintenance of the WTC buildings; and which building and fire codes, and standards and practices are still in use but warrant revision.

NIST expects to derive lessons from the investigation in several different areas, including structural fire protection, life safety, and engineering practice. For example, NIST expects to improve understanding of the following:

- the dynamics of building fires and

- the collapse vulnerability of buildings to fires;
- methods for fire-safety design and retrofit of structures;
- the behavior of fireproofing materials, connections, weldments, and open-web steel trusses;
- collapse mechanisms and the role of pivotal components such as transfer girders and floor diaphragms;
- firefighting and evacuation technologies and practices for tall buildings;
- controlling fire spread in buildings with large, open floor plans;
- command, control, and communication systems for fire service responders;
- technical evaluation, processes, and practices used to assure safety when innovative systems are planned; and
- margin of safety to accommodate abnormal loads.

NIST expects to complete its investigation and issue a final report within an estimated 24 months from the start of the program. For details of the NIST WTC investigation plan, fact sheets, downloadable visuals, and other information relevant to the project, go to <http://wtc.nist.gov>.

## First NEES Sites Up and Running

The University of Nevada at Reno (UNR), Oregon State University in Corvallis (OSU), and Rensselaer Polytechnic Institute (RPI) in Troy, NY are the first recipients of NEES-Points of Presence (NEESpops) on the integrated network that will support the National Science Foundation's George E. Brown, Jr., Network for Earthquake Engineering Simulation (NEES) project. Called NEESgrid, this infrastructure will soon link earthquake engineering sites across the country, provide data storage facilities and repositories, and offer access to high-performance computing applications used for conducting simulations. The National Center

for Supercomputing Applications (NCSA) at the University of Illinois at Urbana-Champaign (UIUC) leads the NEESgrid effort.

The three early adopter sites will test capabilities of the NEESgrid as they are developed and will help NEESgrid researchers create a common infrastructure that can be used across sites and for all NEES applications. The sites were chosen because they are home to the three main types of equipment used in earthquake engineering experiments: centrifuges (RPI), shake tables (UNR), and tsunami wave tanks (OSU). The sites are connected to each other as well as to NCSA and other labs through Internet2's Abilene backbone network, at 155 megabits per second.

The early adopter sites will test collaboration tools, local storage systems and data repositories, streaming data and video services, and tele-operations of experimental equipment. Additional NEES equipment sites, called "shadow sites," will be able to follow the experiments remotely using the NEES software client configuration. The shadow sites also will provide feedback on the usefulness of NEESgrid applications and services.

By 2004, the NEESgrid will support virtual collaborations among a minimum of 15 sites across the country. The NEESgrid system is being carefully coordinated to allow linkage to the NSF's TeraGrid network, a system that will offer the world's largest distributed computing infrastructure for open scientific research. Once the NEESgrid is fully operational, users will be able to conduct experiments with colleagues around the country using distributed experimental equipment, operate experimental equipment remotely, run computer simulations on remote high-performance computers, and access repositories of earthquake engineering data. For more information on NEESgrid, see [www.neesgrid.org](http://www.neesgrid.org).

## News of the Institute

### Annual Meeting Travel Scholarships

Planning is in full swing for the 2003 EERI Annual Meeting at the Marriott Downtown in Portland, Oregon, scheduled for February 5-8. In exploring the unique tectonic setting of Oregon and the Pacific Northwest, the program will highlight measures that have been taken to mitigate the impacts of a seismic event, and the challenges of raising public awareness and implementing earthquake safety measures.

As in years past, several scholarships are available to encourage student members and younger EERI members (out of school no more than three years) to attend the Annual Meeting, thanks to support from FEMA. The financial support will be contingent upon the applicant's participation in the poster sessions, either through his or her own research project, or as a representative of a student chapter depicting the chapter's activities (see article below for poster abstract specifications). 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, 2002**, to the Student Activities Committee in care of EERI Administrative Secretary Valarie Austin at [valarie@eeri.org](mailto:valarie@eeri.org). Applicants should describe their current involvement in earthquake engineering or a related field and their status as students or professionals.

### Annual Meeting: Call for Poster Abstracts

Individuals interested in participating in one of the Annual Meeting poster sessions are invited to submit abstracts to the organizing committee. The abstracts for posters accepted for presentation will be included in

the Annual Meeting notebook, and therefore must be submitted in final form. They will be reproduced as submitted. All abstracts should be prepared with one-inch margins on all sides, single-spaced in a Times Roman or equivalent font (11 points or larger). Text should be flush left. The title of the poster presentation should be centered at the top of the page and capitalized. Presenters should be identified by name, title, and organizational affiliation. Abstracts should not exceed two pages in length. They should be e-mailed **by December 1, 2002**, to EERI Administrative Secretary Valarie Austin at [valarie@eeri.org](mailto:valarie@eeri.org). Presenters will be notified in early January of acceptance.

## News of the Institute

### Northern CA EERI Chapter Update

EERI's Northern California Chapter is finishing up its first year by releasing results of a survey of local government earthquake safety policies and presentations about both the vulnerability of soft-story apartments and lending practices.

EERI-NC's Government Committee, in collaboration with the Association of Bay Area Governments' (ABAG's) Earthquake Programs Manager Jeanne Perkins, has developed a survey of 87 cities and counties. The purpose of the survey is to measure the progress of municipalities in developing earthquake mitigation programs. Questions address risk awareness, building and infrastructure vulnerability assessments, retrofit standards and incentives, business resumption, and disaster planning. The chapter and ABAG are completing the survey and expect the results to be ready for release to the public on October 17.

EERI-NC's Residential Committee responded to a request from the city

of San Leandro to present information about the risks of collapse in apartments and condominiums with soft stories. David Bonowitz made the presentation on behalf of the committee.

At the chapter's meeting on September 9, Kevin Kleen, a commercial mortgage underwriter, explained the loan industry's risk management practices. Lenders are typically not highly concerned about earthquake losses, because after recent moderate earthquakes, they have been effectively insulated from losses by both owners and government disaster-assistance programs. Enlightened lenders such as Fannie Mae do encourage soft-story retrofits or require earthquake insurance as conditions for some loans.

This is a sample of the EERI-NC Chapter activities within its Quake '06 campaign, which hopes to encourage greater awareness and reductions in earthquake risk by the centennial of the 1906 earthquake. The chapter needs more volunteers to make a difference, so please e-mail [volunteer@Quake06.org](mailto:volunteer@Quake06.org) to find out how you can help in Northern California.

### 2003 Distinguished Lecturer

*continued from page 1*

is the author of many papers and presentations on earthquake hazard mitigation and public policy, and is co-author of three books: *Natural Risk Assessment and Public Policy* (1982); *Politics and Economics of Earthquake Hazard Mitigation* (1986); and *Disabled Persons and Earthquake Hazards* (1988).

In February 2003, Petak will present his lecture for the first time at EERI's 55<sup>th</sup> Annual Meeting in Portland, Oregon. Groups interested in having him present the lecture subsequently should contact the EERI office.

## Meet the Candidates

### For Director A



### Sarah K. Nathe

Sarah K. Nathe coordinates the Disaster-Resistant University Project at the University of California, Berkeley, which she joined in 1999 after ten years of experience as a senior planner at the Coastal Region Earthquake Program of the California Office of Emergency Services. The project is part of the larger SAFER Program, UCB's multifaceted effort to reduce its earthquake vulnerability. She is particularly involved in activities to increase nonstructural hazard mitigation, to develop the complex business resumption plan, and to improve risk communication with all segments of the campus community.

Nathe is a member of EERI's Publications Policy Committee and the Social Science Committee of the Learning from Earthquakes Program. Additionally, as associate editor of the *Newsletter*, she edits the special earthquake report inserts produced by the reconnaissance teams that investigate significant earthquakes around the world. While at California OES, she worked with EERI on a number of collaborative projects including development of the special publication, *Incentives and Impediments to Improving the*

*Seismic Performance of Buildings*. As a member of the program committee for EERI's Golden Anniversary Annual Meeting in 1998, she was induced to script and direct a musical show, "Your Structural Hit Parade: A Musical and Dramatic Review of the Last 50 Years." In that extravaganza, a number of EERI notables sang, danced, played, and declaimed their way into a fairly localized fame. She followed that hit in 2001 with the Monterey production of "Acceptable Risk: The Parallel Program," which featured some of the usual suspects as well as exciting new faces in unforgettable displays of musical exuberance.

Nathe's career in hazards education began at the University of Colorado many years ago. When the Natural Hazards Research and Applications Information Center (NHRAIC) was founded at CU, she was appointed as one of the editors of the *Natural Hazards Observer*, and edited many of the Center's other publications designed to improve communications among hazards researchers and practitioners. After being a hazards generalist for 12 years, she moved to California in the late 80s to specialize in earthquake hazard mitigation for the Bay Area Regional Earthquake Preparedness Project. Her responsibilities for BAREPP included writing and editing the newsletter, and creating numerous public education materials and planning guidelines.

Nathe was involved in frequent cooperative risk communication projects with FEMA, the USGS, the California Geological Survey, the Association of Bay Area Governments, the Red Cross, and many academic and private sector research organizations. With representatives of 15 state and national organizations, she coordinated the development of the *California Post-Earthquake Information Clearinghouse Plan*, which provides for California professionals to work together for efficient and effective reconnaissance. Recently, she was lead author on *Public Education for*

*Earthquake Hazards*, a survey of the science and art of communicating risk to the general public, published by the NHRAIC in the *Natural Hazards Informer* series.

### Vision

EERI communicates well with its members to advance the issues of concern to the earthquake community. It works well with other professional organizations to achieve mutual goals. Likewise, it has played a major role in promoting earthquake loss reduction strategies among policy makers at all governmental levels, in this country and abroad. But I think the time is ripe for EERI to take information to general populations in search of specific advice on reducing their earthquake risk. Because of its strong, multidisciplinary membership and its experience in policy-related advocacy, it is uniquely qualified to add public education to its various hazard mitigation initiatives. We have among our members international authorities in optimal risk communication practices; we have the technological wherewithal to use most communications channels; we have an experienced media liaison; and we certainly have learned a great deal about earthquake losses and ways to cut them. The burgeoning collection of LFE reports and studies, hitherto targeted at members and a few specialized audiences, could be distilled or reframed for use by a much larger, public audience. The newly created EERI Mitigation Center—in its democratic online existence—will be a resource for a very diverse audience and we should give them information that they can use.

Such a new focus would not require EERI to stop any of its traditional and successful activities. Rather, it is a natural outgrowth of those activities. EERI's capabilities, accomplishments, and credibility make it the perfect organization to fill the current need for public information on reducing losses in earthquakes.

## Meet the Candidates

### For Director A



### Robert B. Olshansky

Robert B. Olshansky is associate professor in the Department of Urban and Regional Planning at the University of Illinois at Urbana-Champaign, where he teaches courses in land use and environmental planning. Prior to joining UIUC in 1990, he was a principal in a geotechnical engineering firm in northern California. He has a B.S. in geology from the California Institute of Technology, and MCP and Ph.D. degrees in city and environmental planning from U.C. Berkeley.

His recent publications examine land use planning for seismic safety and the use of earthquake hazard maps. He has also published extensively on seismic policy in the central United States and landslide hazard planning. Olshansky has been involved with the Mid-America Earthquake Center since its inception, both as a member of its initial leadership team and as a researcher. His work also includes non-academic publications for wider audiences, such as *Promoting the Adoption and Enforcement of Seismic Building Codes* (FEMA 313), *Planning for Hillside Development*, and *Reducing Earthquake Hazards in the Central*

*U.S.* (series of nine booklets distributed by CUSEC).

Olshansky has been a member of EERI for 15 years, and has been chair of the Public Policy Advisory Committee since 1995. He has served on the Nominating Committee and Professional Fellowship Committee. He has also been a member of review panels for the USGS and FEMA, and has served in committee positions for the American Planning Association, the Institute of Business and Home Safety, and the Illinois Governor's Office. Olshansky is currently completing a five-year term as book review editor of the *Journal of the American Planning Association*.

#### Vision

I think of EERI as representing a common goal: enhancing seismic safety. I know of no other similar professional organization where the bond is a societal goal rather than the advancement of a profession. EERI works to achieve that goal by all appropriate means, involving researchers and professionals from a wide variety of disciplines. EERI is respected nationally and internationally as the focus for the development and promotion of seismic safety knowledge.

My greatest concern is the challenging climate for fostering seismic safety. We need to ensure that the federal government does not lose interest in supporting earthquake programs. In particular, I am concerned about the sustainability of NEHRP. That it is hard to maintain interest in earthquakes is precisely the reason why NEHRP (and EERI) is needed. Earthquakes are unique among natural hazards. They are infrequent, can devastate large areas, and occur suddenly with no warning. For these reasons, we need strong institutions to ensure that earthquake safety remains on the public agenda and to ensure that appropriate actions are taken before the

next earthquake occurs. I applaud EERI's current efforts to present its vision for seismic safety. This plan should be the first step in developing materials to present our case to Congress, to the NEHRP agencies, and to the public.

I am honored to be nominated as a Director of EERI. If elected, my first priority will be to maintain EERI's current excellent programs and services. It is important to continue our progress in developing electronic information products, and I am particularly intrigued by the potential of the new Mitigation Center. Beyond this, I believe that EERI needs to make a national case for seismic safety, and, in particular, to ensure continued support for an effective NEHRP.

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### Announcements

## Request for Comment on Earthquake Engineering Research

In response to the National Science Foundation's request to review the Network for Earthquake Engineering Simulation (NEES) program and offer recommendations for conducting a long-term research program, the National Research Council assembled an independent panel of experts, the Committee to Develop a Long-Term Research Agenda for NEES.

In order to obtain input from as broad a segment as possible of the multiple stakeholder communities for the NEES program, the committee has issued a Request for Comment. Should you wish to provide comment on any or all of the committee's tasks, please use the form posted on [www7.nationalacademies.org/besrcomment/](http://www7.nationalacademies.org/besrcomment/).

This comment period will end on **October 7, 2002**.

## Meet the Candidates

### For Director B



**Bruce R. Clark**

Bruce Clark recently stepped down after 17 years as president and CEO of Leighton and Associates, Inc., a consulting firm specializing in geological, seismic, and geotechnical hazards and their solutions, based in southern California. Prior to joining Leighton in 1977, he was associate professor of geology at the University of Michigan, where he began his studies on earthquake hazards. He received his bachelor's degree from Yale and his Ph.D. from Stanford, both in geology. He is currently the chair of the California Seismic Safety Commission.

Clark's research studies in seismic hazards began in the mid-1970s, instrumenting active fault zones in southern California, in a search for precursory stress changes for predicting earthquakes. Despite the frustrations of searching for signals that don't exist, he became hooked on earthquake processes and effects. He conducted studies of the nature and causes of earthquake-triggered landslides from the Sylmar and Loma Prieta earthquakes. As Leighton's president, Clark oversaw dozens of field investigations of active faults, numerous updates of

seismic safety elements for city and county general plans, and liquefaction and landslide studies in response to the new California Seismic Hazards Mapping Act. In 1991, Leighton produced the currently used *Safety Element for Los Angeles County*.

Clark chaired the advisory committee for the California Seismic Hazards Mapping Act from 1990 through the early production of the maps, as well as publication of *Special Paper 117*, the *Guidelines* for using the maps in development and construction in California. Clark received the Leadership Award from the California State Mining and Geology Board in 1998.

He serves the earthquake community as a director of the California Earthquake Safety Foundation, which selects the recipients of the Alquist Medal and Alquist Awards that are presented at the EERI Annual Meetings. He is chair of the Advisory Board for the California Integrated Seismic Network (CISN), the regional organization for the Advanced National Seismic System (ANSS). He was a member of the Organizing Committee for the Sixth International Conference on Seismic Zonation, sponsored by EERI, held in Palm Springs in 2000.

In 2000, Clark was appointed by the governor to the California Seismic Safety Commission, where he chaired both the subcommittee that rewrote the research section of the California Loss Reduction Plan (2001) and the Committee on Seismic Retrofit of Hospitals (2001). He was also elected chair of the commission in 2001.

#### Vision

As an active EERI member, I am committed to the goal of reducing losses, both human and economic, from future earthquakes. EERI is addressing it the right way: by learning from recent past earthquakes, communicating with decision makers of all kinds, and helping people pre-

pare for the next earthquake. EERI has led the way in opening communication lines among scientists, engineers, architects, planners, emergency responders, and other professionals who are committed to improving seismic safety. The recent research plan is an excellent example of encouraging the crossing of traditional professional boundaries, to identify the critical questions to answer.

I believe that as earthquake professionals, we will face another important new communications issue after the next major earthquake. After 30 years of intensive studies of earthquake hazards and how to mitigate them, we now must convince the public that our efforts have indeed paid off, in the form of safer communities and lower financial losses. This benefit/cost approach is a different view of our role, but our future success depends on demonstrating that we are effective. EERI should be the leader in this public communication effort.

We also face difficult practical safety decisions in coming years. Should we spend \$10 billion for seismic upgrades to emergency-care hospitals in the western United States? Should we close hundreds of public school buildings constructed to pre-1970 standards? What should be the fate of the remaining unreinforced masonry buildings in our most earthquake-prone cities? Which has the highest priority for scarce retrofit funds?

EERI is where those issues can be debated intelligently, based on a solid technical understanding of what the risks are, and how they can be mitigated. As an EERI director, I would champion that effort.

I thank you for the opportunity to be considered for the EERI Board of Directors.

## Meet the Candidates

### For Director B



### Anthony Shakal

Anthony Shakal joined the California Strong Motion Instrumentation Program (CSMIP) in 1982 and has managed it for the last 18 years. CSMIP, a program in the California Geological Survey, has grown to be one of the largest strong motion programs in the world, applying advances in technology to improved data recovery and service to earthquake engineering users, with a focus on utilization of data to improve building codes and assist postearthquake response.

Shakal received a B.S. and M.S. in engineering at the University of Wisconsin-Milwaukee. After the striking effects of the 1971 San Fernando earthquake, he shifted his focus and obtained a Ph.D. in Seismology at MIT, hoping to contribute more effectively with dual specialization. He has been a member of EERI since 1980, and has participated in several EERI Learning from Earthquakes seminars, reviewing new strong motion data and its implications for engineering. He has participated in SEAOC committees and the Sacramento Section's Seismology Committee. He is chair of the Strong Motion Programs Board of

the Consortium of Organizations for Strong Motion Observation Systems (COSMOS).

Since the 1994 Northridge earthquake, CSMIP has been increasingly involved in expanding the use of strong motion data in postearthquake response, in addition to its use in long-term code development. This led to CSMIP's participation in TriNet in southern California, a joint project with Caltech and USGS in Pasadena, sponsored by FEMA. The ShakeMaps of earthquake shaking produced after significant events are the most visible products of the project. TriNet was an important step in combining efforts of strong motion and classic seismic networks, and has expanded to become the California Integrated Seismic Network (CISN), including UC Berkeley and USGS in Menlo Park, with support by the California Governor's Office of Emergency Services.

The Advanced National Seismic System (ANSS) is a national extension of the TriNet model, and CISN is now the California region within ANSS. ANSS will significantly affect national earthquake response and hazard reduction. As a member of the steering committee and the program management group of CISN, Shakal continues to bring the needs of earthquake engineering to bear as seismic network planning unfolds.

#### Vision

Reducing the damaging effects of earthquakes requires a long-term team effort by engineers, architects, and earthquake scientists, with social scientists and government officials forming an interface with public policy decisions. EERI provides a support system for this cooperation, and it must continue this role.

Although EERI is blessed with an active earthquake engineering membership, many civil engineers are not well informed about earthquake

issues. Increasing the profile of these issues in engineering schools is important. Also, in recent years too many good civil engineering candidates have been lost to what appear to be more exciting fields like computer science. However, the technological advances being applied in earthquake-resistant design and structural monitoring provide new opportunities to attract these students. EERI's student chapters are vehicles for young people to see that earthquake engineering can be as exciting as Internet developments. In addition, young people need to be able to see that their efforts can yield the personal satisfaction of having contributed to seismic safety in countries like the United States as well as other areas of the world where earthquakes have been devastating.

On a second front, the use of strong shaking measurements during earthquake response is a new, expanding area. ANSS is moving toward accomplishing in seismic areas of the United States what was accomplished in California under TriNet. This means earthquake engineers in California and eventually throughout the country will have quantitative measurements of the shaking forces at the time they are responding to an event and evaluating the performance and health of structures. This early availability and use should accelerate the process of learning from earthquakes, relative to what is currently possible with reconnaissance reports. Effective integration and use of the new capabilities will require new techniques and guidelines, and the communication of these to earthquake engineers and emergency responders. EERI has the visible profile and reputation to make important contributions needed in this area.

These ideas are in line with the EERI "Vision and Role," with which I fully agree and would be privileged to support as a member of the Board of Directors.

## News of the Membership

### DesRoches and Filiatrault Earn Awards

Georgia Tech Assistant Professor Reginald DesRoches has received a 2001 Presidential Early Career Award for Scientists and Engineers (PECASE). The five-year \$376,000 award from the National Science Foundation is in recognition of his research on design of bridges for earthquake loads and the application of advanced materials to the repair and strengthening of structures. DesRoches was among 60 scientists from throughout the nation honored by President Bush at a White House ceremony on June 12.

Professor Andre Filiatrault, in the Department of Structural Engineering at the University of California, San Diego, earned the 2002 Moisseiff Award from the American Society of Civil Engineers (ASCE) for his paper *Cyclic Analysis of Wood Shear Walls*. Filiatrault and fellow researcher Bryan Folz from the British Columbia Institute of Technology published this paper in the April 2001 issue of the *Journal of Structural Engineering*. The prize, established by ASCE in 1947, is a memorial in recognition of the accomplishments of Leon S. Moisseiff, a notable contributor to the science and art of structural design.

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## Publications

### *Hazards Review* Completes Third Year

EERI members Dennis Mileti and Jim Beavers are co-editors in chief of the journal, *Natural Hazards Review*, now completing its third year. The journal is published quarterly by the American Society of Civil Engineers and the Natural Hazards Research and Applications Information Center. Mileti, director of the Natural Hazards

Center at the University of Colorado, and Beavers, deputy director of the Mid-America Earthquake Center at the University of Illinois, are dedicated to producing a quality journal that serves as a forum for holistic approaches to natural hazards mitigation. The *Review* is the first cross-disciplinary journal to bring together engineering; the regulatory and policy environments; and the social, behavioral, and physical sciences with the goal of reducing losses from natural hazards and disasters.

The *Natural Hazards Review* offers innovative and practical solutions to the problems and challenges faced by all sectors of the hazards community, including government, academia, the private sector, and nongovernmental organizations. Articles containing detailed studies are complemented by ones reporting original research findings to describe both practical projects and the latest cutting-edge knowledge of significant hazards issues. Mileti and Beavers are enthusiastic about the success of the *Natural Hazards Review* and welcome new submissions. Visit the web site <http://www.pubs.asce.org/journals/nhnews.html> for more information.

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## Publications

### BSSA Special Issue on the Hector Mine Earthquake

The May 2002 (Vol. 92, No. 4) issue of the *Bulletin of the Seismological Society of America* is devoted to the October 16, 1999 Hector Mine earthquake. This special issue contains 35 seismologic, geologic, geophysical, and engineering studies related to the earthquake, its effects, and the regional geologic and tectonic setting. It can be ordered online at [www2.seismosoc.org/special\\_issues/](http://www2.seismosoc.org/special_issues/).

## Publications

### *After the Quake*

Haruki Murakami's new book, *After the Quake: Stories*, is a collection of six short stories about the lives of people affected by the 1995 Kobe earthquake. While none of the characters in the stories personally experienced the earthquake, they are emotionally impacted by the newspaper and television news they received every day.

Charles Matthews of the San Jose Mercury News calls it a "slim but miraculous book of stories." This book of fiction may provide for the earthquake engineering community an interesting perspective on the emotional impacts of a catastrophic earthquake. *After the Quake* (\$21) is published by Knopf.

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## Publications

### *Risk Analysis III*

*Risk Analysis III*, Volume 5 in WIT Press's Management Information Systems book series, features edited versions of more than 70 papers presented at the Third International Conference on Computer Simulation in Risk Analysis and Hazard Mitigation (RISK 2002) that took place in Sintra, Portugal in June 2002.

Covering recent developments and practical implementation, the contributions included are concerned with all aspects of risk analysis and hazard mitigation, ranging from specific assessment of risk to mitigation associated with both natural and anthropogenic hazards.

This book may be ordered by phone 978/667-5841, e-mail: [info@compmech.com](mailto:info@compmech.com) or web site: [www.compmech.com](http://www.compmech.com).

## Call for Abstracts

### 7<sup>th</sup> US-Japan Workshop on Urban Earthquake Hazard Reduction

The EERI Committee on Urban Earthquake Hazard Reduction and the Japan Institute of Social Safety Science (ISSS) are planning the seventh in a series of joint US-Japan workshops that began in 1984. The three-day workshop will be held in Maui, Hawaii in late March 2003. This workshop will provide an opportunity to do the following:

1. Continue to build cooperative research and practice through exchange of information and personnel.
2. Focus on changes in mitigation and emergency management practices resulting from recent disasters.
3. Examine through longitudinal documentation and assessments the reconstruction in Northridge, Kobe, Chi Chi, Kocaeli, Bhuj, and New York City.
4. Explore recent innovations in technology of risk communication, loss estimation, and mapping.
5. Examine lessons learned from recent disasters pertaining to organizational response to catastrophic events.

The workshop will employ a mixture of plenary presentations and small, focused working groups, co-chaired by representatives of both countries. Preliminary plans are being put into place now. Partial funding has been provided by FEMA to begin planning the workshop, and additional funding is being sought from NSF to offset travel expenses. Those interested in participating should submit a 200- to 300-word abstract on one of the following topics. The abstract should pertain to strategies or lessons that have been stimulated by recent urban earthquakes.

1. Real-time damage assessment tools, seismic networks and dis-

semination technologies to support emergency management decision making, including HAZUS, the Advanced National Seismic System, California Integrated Seismic Network, ShakeMap, and GIS.

2. Risk communication, early warning systems, and technologies for public notification of natural, technological, and security emergencies.
3. Long-term recovery and assessment of recovery strategies, including housing restoration, business recovery, and the long-term impacts of disasters on the social and economic fabric of impacted communities.
4. High-tech countermeasures for mitigation and response, including smart buildings and monitoring technologies, robotics, remote sensing, and damage assessment.
5. Organizational structures and interorganizational coordination for response to earthquakes and other natural and technological disasters, including terrorism.
6. Interoperability — Relationship of earthquakes to other urban disasters, including floods, fires, weapons of mass destruction, and terrorist incidents, identifying lessons that can be derived from cross-disaster assessments.
7. Approaches to earthquake and tsunami mitigation — Programs that integrate land-use planning, building construction, civil countermeasures, education, and public awareness to reduce risk to disaster-prone communities.

Abstracts are due at EERI **November 15, 2002**. They may be submitted electronically to [valarie@eeri.org](mailto:valarie@eeri.org) or by fax to 510/451-5411. Authors will be notified of acceptance December 2.

## News of the Profession

### Online Survey on Use and Storage of Geotechnical Data

The participants in the COSMOS/PEER Lifelines 2L02 project on Archiving and Web Dissemination of Geotechnical Data have created a new web site to disseminate information and receive feedback about the project that may be of interest to geoprotectionals (<http://geoinfo.usc.edu/gvdc>). The goal of the project is to develop a pilot web-based Geotechnical Virtual Data Center linking geotechnical data sets of the California Department of Transportation (Caltrans), Pacific Gas and Electric Company (PG&E), the California Geological Survey (CGS), and the U.S. Geological Survey (USGS).

Geoprotectionals are invited to participate in an online survey to help assess how practitioners and researchers currently generate, store, and disseminate geotechnical information ([http://geoinfo.usc.edu/gvdc/user\\_survey.htm](http://geoinfo.usc.edu/gvdc/user_survey.htm)). The primary goals of the survey are to establish a baseline of current practices (e.g., define users and providers, data types, life cycles, and patterns of use), and identify desired functional requirements of a geotechnical information management system (e.g., user interface, method of access, availability of data, and type and format of data). The results of the survey will be used to guide the development of emerging standards, technologies, and web-based public-domain information systems to enable geoprotectionals to identify and access quickly the publicly available geotechnical data generated by government agencies, universities, and other participants. Findings from the results of this survey should be available by April 2003.

## News of the Profession

### Ph.D. Opportunity

**ETH Zurich, Switzerland (<http://seismo.ethz.ch>).** Three-year research project on improving seismic hazard assessment in the near-field of seismogenic faults. Spatio-temporal properties and interactions of stress fields will be examined. The work will focus on modeling the earthquake source, rupture dynamics, and near-source strong motion prediction. Requires an M.Sc. or diploma in geosciences, physics, engineering mechanics, or a related field; analytical skills and some experience in programming, data analysis, and visualization (Matlab, C/C++ and/or Fortran, UNIX shells); a background in statistics and numerical modeling; and oral and written fluency in English. For more information, contact Martin Mai ([martin@seismo.ifg.ethz.ch](mailto:martin@seismo.ifg.ethz.ch)). Send a resume, a statement of research interest, names and addresses of two references, and a list of publications (if applicable) to Dr. M. Mai, Swiss Seismological Service, ETH-Hoenggerberg, HPP P7.1, CH-8093 Zurich, Switzerland.

## Announcements

### New Computer Codes

Poly3D and Poly3DGUI, being developed at Stanford University with support from the U.S. Geological Survey, are now available for distribution. Poly3D calculates the quasi-static linear elastic stress, strain, and displacement fields for mechanically interacting faults with complex 3-D geometry using triangular dislocations and the boundary element method (BEM). Poly3DGUI provides a graphical-user interface for modeling, analysis, and visualization on PCs.

For more information contact David Pollard at [dpollard@pangea.stanford.edu](mailto:dpollard@pangea.stanford.edu).

## Announcements

### Workshop on Earthquakes and Megacities

The Third International Workshop on Earthquakes and Megacities will be held in Shanghai, China from October 31 to November 2, 2002. Four topics related to reducing vulnerability and increasing sustainability of the world's megacities will be discussed: community participation, public policy actions, land-use planning and infrastructure strengthening, and implementation of a culture of prevention.

For registration visit [www.crowdingtherim.org/docs/ctr/workshops.html](http://www.crowdingtherim.org/docs/ctr/workshops.html).

## Announcements

### Consequence-Based Engineering Institute

The Mid-America Earthquake Center is sponsoring a Consequence-Based Engineering (CBE) Institute for graduate students and other interested individuals, to be held at Texas A&M University, College Station, Texas, January 5-11, 2003. The Institute will provide a concentrated earthquake engineering program with both cross-disciplinary and advanced discipline-specific content with more than 45 hours of CBE instruction. To learn more about the Institute or to register, visit the web site at <http://mae.ce.uiuc.edu/Education/CBEInstitute/cbe.html>.

## Call for Abstracts

### Seismic Isolation Conference in Armenia

The 8<sup>th</sup> World Seminar on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures will be held October 6 -10, 2003 in Yerevan, Armenia. Topics covered will include base and floor isolation, passive energy dissipation, and provisional hydraulic coupling and systems formed by devices using shape memory alloys, as well as development and applications of active, semi-active, and hybrid control of seismic and nonseismic vibrations and the critical issues concerning the application of innovative anti-seismic techniques in low and moderate seismic areas.

One-page abstracts are due November 30, 2002. For more information visit [www.aua.am](http://www.aua.am).

### EASEC-9

The Ninth East Asia Pacific Conference on Structural Engineering and Construction (EASEC-9) will be held December 16–18, 2003, in Bali, Indonesia. Topics covered will include analytical and design methods; applications of information technology; case studies and failure investigation; construction engineering and management; durability of structures; geotechnical and foundation engineering; innovation in design and new technology; new construction materials; prefabrication technology; repairs, strengthening and maintenance; safety and reliability; soil-structure interaction; standards and codes of practice; structural and solid mechanics; testing technology; vibration, impact and structural dynamics; and wind and earthquake engineering.

Abstracts of not more than 300 words are due December 2, 2002. For more information visit [www.si.itb.ac.id/easec9](http://www.si.itb.ac.id/easec9).

## 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**.

### 2002

#### OCTOBER

3-6. Hazards 2002 Symposium, Antalya, Turkey. Info: [www.hazards2002.metu.edu.tr](http://www.hazards2002.metu.edu.tr) (5/02)

9-12. Structural Engineers World Congress, Yokohama, Japan. Info: [sewc2002.gr.jp](http://sewc2002.gr.jp) (6/01)

12-16. International Association of Emergency Managers 50th Annual Conference, Columbus, Ohio. Info: [www.iaem.com](http://www.iaem.com) (8/02)

17-18. OECD-NEA Workshop, Istanbul, Turkey. Info: [www.nea.fr/html/nsd/workshops/seismicrelation/index.html](http://www.nea.fr/html/nsd/workshops/seismicrelation/index.html) (4/02)

23-26. Earthquake Loss Estimation and Risk Reduction, Bucharest, Romania. Info: [www.utcb.ro/conferin/conference.html](http://www.utcb.ro/conferin/conference.html) (5/02)

**31-11/2. Third International Workshop on Earthquakes and Megacities**, Shanghai, China. See page 10. (10/02)

#### NOVEMBER

18-26. Activities of the Asian Seismological Commission, Kathmandu, Nepal. Info: [www.nset.org.np/ASC2002](http://www.nset.org.np/ASC2002) (5/02)

#### DECEMBER

16-18. 12th Symposium on Earthquake Engineering, Roorkee, India. Info: [12see@rurkiu.ernet.in](mailto:12see@rurkiu.ernet.in) (5/02)

### 2003

#### JANUARY

**5-11. Consequence-Based Engineering Institute, College Station, Texas**. See page 10. (10/02)

### FEBRUARY

3-6. IMAC Conference and Exposition on Structural Dynamics, Kissimmee, FL. Info: [www.sem.org](http://www.sem.org) (5/02).

5-8. EERI Annual Meeting, Portland Marriott Downtown, Portland, Oregon. Info: [www.eeri.org](http://www.eeri.org). See page 3. (9/02, 10/02).

13-15. Pacific Conference on Earthquake Engineering, Christchurch, NZ. Info: [www.nzsee.org.nz/pcee](http://www.nzsee.org.nz/pcee) (1/02)

### MARCH

**7th US-Japan Workshop on Urban Earthquake Hazard Reduction**, Maui, HI. See page 9. (10/02)

### MAY

12-14. Fourth International Conference on Earthquake Engineering and Seismology, Tehran, Iran. Info: [iiees@dena.iiees.ac.ir](mailto:iiees@dena.iiees.ac.ir) (6/02)

26-30. Fifth National Conference on Earthquake Engineering, Istanbul, Turkey. Info: [www.ins.itu.edu.tr/5udmk](http://www.ins.itu.edu.tr/5udmk) (8/02)

### JUNE

1-4. Ninth North American Masonry Conference, Clemson, South Carolina. Info: [www.masonrysociety.org/Conferences/9NAMCmain.html](http://www.masonrysociety.org/Conferences/9NAMCmain.html) (8/02)

9-12. Fourth International Conference on the Behavior of Steel Structures in Seismic Areas, Naples, Italy. Info: [www.daps.unina.it/stessa/congres.htm](http://www.daps.unina.it/stessa/congres.htm) (6/02)

### JULY

6-9. Ninth International Conference on Applications of Statistics and Probability in Civil Engineering, San Francisco, CA. Info: [icasp9.berkeley.edu](mailto:icasp9.berkeley.edu) (6/02).

### AUGUST

3-6. Extreme Loading Conference, Toronto, Ontario, Canada. Info: [www.extremeloading2003.com](http://www.extremeloading2003.com) (6/02)

10-13. Sixth U.S. Conference and Workshop on Lifeline Earthquake Engineering (TCLEE), Long Beach, CA. (9/02)

### SEPTEMBER

22-24. Fourth International Conference on Earthquake Resistant Engineering Structures, Ancona, Italy. Info: [www.wessex.ac.uk/conferences/2003/eres03/](http://www.wessex.ac.uk/conferences/2003/eres03/) (8/02)

### OCTOBER

**6-10. 8th World Seminar on Seismic Isolation, Energy Dissipation, and Active Vibration Control of Structures**, Yerevan, Armenia. See page 10. (10/02)

### DECEMBER

**16-18 Ninth East Asia Pacific Conference on Structural Engineering and Construction**, Bali, Indonesia. See page 10. (10/02)

### 2004

#### APRIL

13-17. Fifth International Conference on Case Histories in Geotechnical Engineering, New York, NY. Info: [www.umar.edu/~eqconf/5thCHConf](http://www.umar.edu/~eqconf/5thCHConf) (8/02)

21-23. Disaster-Resistant California Conference, San Jose, CA. Info: [www.oes.ca.gov](http://www.oes.ca.gov) (9/02)

#### MAY

22-26. Structures 2004, Nashville, Tennessee. Info: [www.asce.org/conferences/structures2004/](http://www.asce.org/conferences/structures2004/) (8/02)

#### AUGUST

1-6. 13th World Conference on Earthquake Engineering, Vancouver, BC, Canada. Info: [www.13thwcee.com](http://www.13thwcee.com) (7/02)



## Obituary

### Bruce C. Olsen, 1914-2002

EERI honorary member Bruce C. Olsen passed away at home August 31, 2002, at age 88. During his long and distinguished career as a consulting structural engineer, he played a key role in increasing awareness of and interest in earthquake hazards in the Pacific Northwest. His work was instrumental in improving building codes in the Puget Sound area.

While building and maintaining a successful practice, raising a family, and participating in various community activities, Olsen made time to provide exceptional service to several professional organizations. An active and committed member of EERI for 28 years, he served on the Board of Directors from 1980 to 1983. His efforts contributed significantly to the Institute's membership growth in the Northwest.

He was a life member of the American Society of Civil Engineers, serving as president of the Seattle section in 1967. He was an active

participant in projects undertaken by the Applied Technology Council and served on the Board of Directors (1978-82) and as president (1980-81). Olsen was an honorary



*Bruce C. Olsen*

life member of the Structural Engineers Association of Washington and was the first recipient of the SEAW Lifetime Service Award this year. For the Building Seismic Safe-

ty Council, he performed trial designs for the original *NEHRP Recommended Provisions*.

A native of St. Paul, Minnesota, Olsen earned a degree in civil engineering from the University of Washington in 1935 and was commissioned a second lieutenant in the U.S. Army Corps of Engineers. He was in private practice until re-entering active duty between 1942 and 1946, serving in the European theater during World War II with the Pathfinders; he remained active in the Reserve Officers Association, retiring as a lieutenant colonel in 1974.

After retiring from engineering practice in 2000, Olsen was able to focus on his longtime interest in educational reform; he served on the Board of Governors at Shawngan Lake School, British Columbia, which he attended as a boy.

He was preceded in death by his wife of 55 years, Alvena Merle Olsen, and is survived by two children, Peter and Susan; eight grandchildren; 12 great grandchildren; and one great-great grandchild.



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