

Association of Engineering Geologists

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NEWSLETTER-August 1994

Southern California Section

Dinner Meeting -Tuesday, August 9

Program

Characteristics of the 1992 Fault Rupture Adjacent to
Distressed Structures, Landers, CA

by

Diane Murbach, Murbach Geotech

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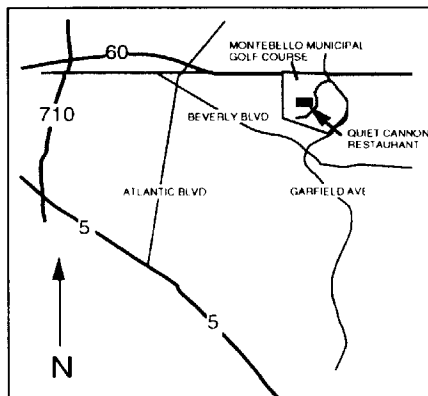
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- The Quiet Cannon Restaurants
901 North Via San Clemente
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- Cost - \$20.00 (Full-Time Students - \$5.00)
- Make reservations by Friday August 5
Geosoils (818) 785-2158
(Leave Your Name & Number of People in Your Party)
- 5:30 Social Hour
- 6:45 Dinner
- 8:00 Program

Map to Meeting



August Program

Topic: Characteristics of the 1992 Fault Rupture Adjacent of Distressed Structures, Landers, CA

Speaker: Diane Murbach, Murbach Geotech

Surface rupture associated with the 1992 Landers earthquake (Mw 7.3) damaged structures in the Landers, California area. This research project excavated six trenches through and adjacent to three structures, two condemned single family residence and one steel transmission tower, that were damaged by direct fault displacement. The intent of the investigation was to document the surface and subsurface fault rupture geometry and describe how ground movements resulting from fault rupture affected the structures. The surface pattern of rupture consisted of left stepping right-lateral displacements with local vertical components within zones of shearing that contained narrower shear zones. The trenches generally exposed poorly stratified granular material in which faults that were mapped on the surface were difficult to recognize in the trench. A strong correlation was found between the geometry of faulting and the pattern of slab deformation. Ms. Murbach will present the investigation methods used and the field findings, then discuss several conclusions that can be drawn from their observations.

Diane Murbach was selected as the EERI/FEMA 1994 NEHRP Professional Fellow designed to give a practitioner the opportunity to gain greater skills and broader expertise in earthquake hazards reduction. Murbach's proposed research brought together data from geologic and engineering fault studies working with Professor T.K. Rockwell (Geology/Neotectonics), San Diego State University, and Professor J. Brery (Geotechnical Engineering), UC Berkeley. Ms. Murbach received her B.S. in Geology from Eastern Washington University and is scheduled to complete her M.S. in Geology from San Diego State University in December 1994. She is a Certified Engineering Geologist in California, a Registered Geologist in Oregon and Arizona, past President of the San Diego Association of Geologists, and currently President of South Coast Geological Society.



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Section News et. al.

Certification of Hydrogeologists will be effective September 17, 1994. The first exam will be given in March 1995.

Senate Concurrent Resolution 45 (SCR 45), which addresses the employment of uncertified Engineering Geologists by the State, passed out of the Assembly Consumer Protection, Government Efficiency and Economic Development Committee on July 6, 1994, with a 7-0 bipartisan vote. Those voting for and supporting SCR 45 were assembly members Katz, Goldsmith, Honeycutt, Bronshvag, Bowen, Knight and Sher. SCR 45 now goes to the Assembly Ways and Means Committee, to the floor of the Assembly in August, and back to the Senate for Concurrence. No problems are expected with this process, but it will be followed closely by AEG. Judy Wolen was invaluable in assisting AEG with the bureaucratic maze involved with this process. Letters from the membership were also important.

SB 2036 (the bill which requires a report from the Board of Registration for Geologists and Geophysicists to a Joint Legislative Sunset Review Committee) will be heard in August 1994.

The Board of Registration for Professional Engineers and Land Surveyors (BORPELS) met on June 17. Their proposed "Cite and Fine" regulation, similar to that voted on by the Geology Board at their last meeting, was amended to require approval by board members of any fines or citations recommended by the executive officer. The board felt this necessary since the BORPELS' executive officer is not a Registered Professional Engineer.

Job Opportunity

The Utah Geological Survey seeks applicants for an Engineering Geologist III (minimum starting salary: \$29,929/year) to perform paleoseismic, landslide, radon, and other engineering-geologic studies; Quaternary-geologic and geologic-hazards mapping; site investigations; and report reviews. Preference given for experience in earthquake ground shaking and strong-motion instrumentation. Minimum qualifications are a B.S. in geology or related field and four years experience in engineering geology, or an equivalent combination of education and experience.

The closing date is August 17, 1994. For a job announcement and application, contact DNR Human Resource, 1636 W. North Temple, Salt Lake City, Utah 84116; (801) 538-7210. For more information on the position, contact Gary E. Christenson, Utah Geological Survey, (801) 467-7970. The State of Utah is an equal opportunity employer.

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Association of Engineering Geologists, Southern California Section

- Blake, T., and Larson, R.A., Eds., 1991, Engineering Geology along the Simi-Santa Rosa fault system and adjacent areas, Simi Valley to Camarillo, Ventura County, California: Guidebook for the Southern California Section of the Association of Engineering Geologists Annual Field Trip, August 24, 1991, Volumes 1 and 2, 383 pgs., 4 map sheets. **\$30.00 PRICE REDUCED**
- Buckley, C.I., and Larson, R.A., Eds., 1990, Geology and Engineering Geology of the western Soledad Basin, Los Angeles County, California: Guidebook for the Southern California Section of the Association of Engineering Geologists Annual Field Trip, November 3, 1990, 185 pgs., 2 map sheets. \$25.00
- City of Los Angeles, 1982, Geologic Maps of the Santa Monica Mountains, Los Angeles, California: 333 map sheets at 1" = 400', compiled by the Bureau of Engineering, Department of Public Works, City of Los Angeles, reprinted by the Southern California Section of the Association of Engineering Geologists, 342 pgs. \$26.00
- Leighton, Beach F., 1992, Mitigation of Geotechnical Litigation in California, Munson Books. \$44.00
- Shlemon, R. J. Applications of Soil Stratigraphy to Engineering and Environmental Geology, Association of Engineering Geology, Southern California Section Short Course Notes, June 5, 1993. \$35.00
- Sieh, K.E. and Matti, J.C., October 3-4, 1992, Earthquake Geology San Andreas Fault System Palm Springs to Palmdale, 35th Annual AEG Meeting, Guidebook and Reprint Volume. \$25.00
- Ehlig, P.L. and Steiner, E.A. Editors, October 2-9, 1992, Engineering Geology field Trips: Orange County, Santa Monica Mountains and Malibu. 35th Annual AEG Meeting, \$25.00 **Optional Map and Cross Section of Big Rock Mesa \$15.00
- Stout, M. L., Editor, 1992, Association of Engineering Geologists, Proceedings for the 35th Annual Meeting, October 2-9, 1992, Los Angeles, California. \$40.00
- Scullin, M.C., 1983, Excavation and Grading Code Administration, Instruction, and Enforcement, Prentice-Hall, Inc. \$25.00
- Stirbys, Anthony F., et. al., October 2-9, 1992, Los Angeles Metro Rail System Field Trip Guidebook, AEG 35th Annual Meeting, Long Beach, California; \$25.00
- Stout, M.L., 1976, Geologic Guide to the San Bernardino Mountains, Southern California. Guidebook for the Southern California Section of the Association of Engineering Geologists Annual Field Trip, May 22, 1976; 115 pages \$11.00
- Shurman, G. and Slosson, James, 1992, Forensic Engineering, Environmental Case Histories for Civil Engineers and Geologists, Academic Press, Inc. \$49.95
- Pipkin, B.W. and Proctor, R.J., Editors, 1992, Engineering Geology Practice in Southern California, Star Publishing, 779 pages, \$79.95 plus a special charge of \$5.00 shipping and handling.

Books are available from: Bill LaChapelle, Publications Chairman, AEG Southern California Section. c/o Cal-Geo Corporation, 380 Thorpe Circle, Thousand Oaks, California 91360. Telephone (805) 374-9721; FAX (805) 496-5244. Make checks payable to AEG Southern California Section. **Please add 8.25% sales tax and the following postage/handling charges:** \$2.50 for the first book and \$0.50 for each additional book.

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Call For Papers:

Robert Larson's proposal for a Geological Society of America, Engineering Geology Division, Reviews in Engineering Geology Volume addressing the effects of the 1993 storms on the Southwest Cordillera has been accepted. If you are interested in providing a paper, please contact Rob at (818) 458-4923 or talk with him at the next meeting.

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The Dr. Martin L. Stout/AEG-SCS Scholarship Fund is now in place with \$12,025. The first year's scholarship will be approximately \$450. On behalf of Marty and the Section thank you for your contributions. Contributors are listed below, in no particular order. Thanks Again!!

Mike W. Hart
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Seminars/Meetings/Field Trips etc.

August 4, 1994

**Board of Registration, Professional Affairs
Committee Meeting**, LAX Marriot Hotel, 10AM,
call Board to confirm location and time.

August 9, 1994

AEG Dinner Meeting, Quiet Cannon,
Montebello. "Characterization of Fault Rupture
Adjacent to Distressed Structures, Landers,
California" by Diane Murbach

August 26, 1994

Board of Registration Meeting, Sacramento

Section Committee Chairs

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Bob Hollingsworth (818) 889-0844

Public Relations:

Wendy Schell (310) 595-9100

Legislative Affairs:

Hugh Robertson (818) 373-0057

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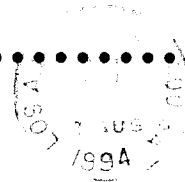
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