



Newsletter

Inland Empire Chapter News

Southern California Section, Association of Environmental and Engineering Geologists

Editor: Rick Gundry rick.gundry@verizon.net (951) 924-6756

Apr 2, 2007

Vol. 3, No.4

-- Call for Nominations, Officer Candidates for Election 2007-2008 --

“Issues in Interacting strike-slip faults”

Wednesday 18-April-2007

5:00 - 6:15 Geologist Orientation Lounge
6:30 - 7:15 Dinner/Meeting Banquet Room
7:30 - 8:30 Presentation Banquet Room

Marie Calenders Family Restaurant, Temecula

(Meeting Cost \$22 - 25, Order from Banquet Menu)

(includes tax/tip/gratuity)

(Fund-raising donation suggested is \$5.00, or more)

(RSVP/Directions below)

Meeting Details at right (or see inside)
RSVP Due by c.o.b. 25-Apr-07 e-mail at
rick.gundry@verizon.net or call above No.

Chapter Officers

Chapter President
Rick Gundry
Inland Geologic
(see above e-mail, phone no.)

Vice President North
Mike Cook
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Mcook@kleinfelder.com

Vice President South
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Doug Cook
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Dcook@rmagr.com

Secretary
David Gaddie
Riverside County
Dgaddie@rctlma.org

This Month's Speaker :

*Dr. David Oglesby, Associate Professor of Geophysics,
Department of Earth Sciences, University of California,
Riverside, Riverside, California*

Abstract

One of the pressing issues in seismic hazard analysis is the probability of earthquake rupture jumping between fault segments, resulting in a large cascading event. Researchers (e.g., Wesnousky, 2006) have conducted observational surveys to determine the maximum width of stepover that rupture may jump in strike-slip systems, and other researchers (e.g., Harris *et al.*, 1991; Kase and Kuge, 1998; Harris and Day, 1999) have used numerical methods to study the dynamics of such systems. Both methods imply that ruptures have difficulty propagating across stepovers with widths greater than 3-4 km, with possible differences between compressional and dilational stepovers. The present study extends the numerical modeling work above to address some remaining questions, such as 1) How does the method of rupture termination on the primary segment affect the ability of rupture to jump to the secondary segment? and 2) How do assumptions about the normal stress

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Rick Gundry (see above)

Webmaster
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Cato Geosciences
w/ David Gaddie
w/ Rick Gundry

Membership Chair
Richard Orr
Leighton Group
w/ Rick Gundry

Field Trip Chair
Mark Spykerman
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w/ Doug Cook
w/ Rick Gundry

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w/ Frank Jordan
w/ Rick Gundry

Fund-raising Chair *ad hoc*
Speakers/Facilities Chair *ad hoc*
Rick Gundry

CCGO Liaison *volunteer*
Rick Gundry

Past Presidents
Frank Jordan 2005
Gary Wallace 2006

The AEG Inland Empire Chapter
Newsletter is a monthly publication of the
Inland Empire Chapter of the Southern
California Section, Association of
Environmental and Engineering Geologists
(AEG). For more information visit
websites shown in News head (top of page
1)

Submittals: Deadline is 28th of the month.
Employment notices of job position
vacancy announcements are at no cost.
(See notice inside this *Newsletter*)

Address changes: please submit to e-Mail
address at Newshead on page 1.

Advertisements: *Newsletter* circu-
lation is about 170 or more in greater
inland areas of southern California, and
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would be later recognized in list of
donors.

dependence of friction affect the dynamics of such systems? The results may have implications for seismic hazard near multi-segment strike-slip systems.

References cited

- Harris, R. A., R. J. Archuleta, and S. M. Day (1991). Fault Steps and the Dynamic Rupture Process - 2-D Numerical Simulations of a Spontaneously Propagating Shear Fracture, *Geophysical Research Letters* **18**, 893-896.
- Harris, R. A., and S. M. Day (1999). Dynamic 3D simulations of earthquakes on en echelon faults, *Geophysical Research Letters* **26**, 2089-2092.
- Kase, Y., and K. Kuge (1998). Numerical simulation of spontaneous rupture processes on two non-coplanar faults: the effect of geometry on fault interaction, *Geophysical Journal International* **135**, 911-922.
- Wesnousky, S. G. (2006). Predicting the endpoints of earthquake ruptures, *Nature* **444**, doi:1038/nature05275.

Speaker Biography

Dr. Oglesby received his BA in Physics from Carleton College, Minnesota, in 1990, and then received his MA in Physics from UC Santa Barbara in 1993. After deciding to switch from radio astronomy to seismology, Dr. Oglesby switched departments, and received his Ph.D. in Geological Sciences from UC Santa Barbara in 1999. After a one-year post-doc at San Diego State University, he took a faculty position at UC Riverside in 2000 as Assistant Professor, since then becoming tenured as Associate Professor. Dr. Oglesby's research focuses on the physics of the earthquake process. Specifically, Dr. Oglesby is interested in why faults slip like they do, and thus produce the ground motion we record during earthquakes

Message from the President

A call for Nominations for Chapter Officers is made, for serving 2007-2008. An Election will be held early Summer 2007. If you are interested in serving as one of the Officers, please contact Mike Cook, Chairman, Nomination Committee. We have already had some inquiries. Nominations will close before a Ballot is announced and distributed before the June Meeting. Officer Elections will occur at the July Meeting, and New Officers will be announced at the August Meeting, as we will not have a Chapter Meeting in September (AEG 2007 Annual Meeting, 50th-year Anniversary, September).



Thanks

Thanks to the 32 Professionals and students attending the March Meeting in Ontario, California, as follows:

Dr. Kenneth W. Hudnut, USGS, Pasadena (CalTech); **Dr. Kerry Cato**, Cato Geoscience, Temecula; **Dr. Tom Perina**, CH2MHill, Riverside; **Dr. Anthony Martin**, Geovision Geophysical Consultants, Corona; **Dr. Sally McGill**, California State University, San Bernardino; **Mandy Sanders**, CSUSB, San Bernardino; **Kenny Lauter**, CSUSB, San Bernardino; two other students for speaker presentation, CSUSB, San Bernardino; **Mark Spykerman**, Earth Systems Southwest, Rancho Cucamonga; **Joe Montgomery**, independent consulting geologist; **Rick Gundry**, Inland Geologic; Moreno Valley; **Mike Cook**, Kleinfelder Inc., Redlands; **Frank Jordan**, J. R. Byerly and Associates; Bloomington; **Doug Cook**, RMA Geosciences, Chino; **Dave Gaddie**, Riverside County, Riverside; **Janis Hernandez**, California Geological Survey, Los Angeles; **Pat McNamarra**, Leighton Consulting, Temecula; **Mark Doerschlag**, independent consulting geologist; **Tonia Johnson**, LGC Geotechnical, Murrietta; **David Jones**, Riverside County, Riverside; **Dale Hamelhele**, Kleinfelder Inc., Temecula; **Lisa Battiato**, Kleinfelder Inc., Temecula; **Bob Riha**, Leighton Consulting, Temecula; **Barham Karimi**, CALTRANS, San Bernardino; **Scott Richmyer**, Leighton Consulting, Temecula; **Mitch Bornyaz**, Leighton & Associates, Rancho Cucamonga; **Gary Rasmussen**, Gary Rasmussen and Associates, San Bernardino; **Scott Mathis**, Leighton Consulting, Temecula; **Jim Larwood**, Petra Geotechnical, Murrietta; **Sara Holter**, LGC Geotechnical, Murrietta; **John KcKeown**, CHJ Inc., Colton.

Meeting Details and Location

Advance RSVP is required.

Location. The meeting site is located in the City of Temecula on Rancho California Road, just east of the I-15 Freeway:

Marie Calenders Family Restaurant
29363 Rancho California Road
Temecula, CA 92591-5201
(951) 699-9338



Directions to Meeting. From the I-15 freeway in City of Temecula, EXIT Rancho California Road to TURN East. On Rancho California Road east from the I-15 proceed east 0.2?-mile and turn RIGHT (South) and park. Ynez road ?

Banquet Meal Menu Selection. Select from the following basic items:

Country Steak Dinner
Roasted Turkey Dinner
Meatloaf Dinner
Top Sirloin Steak
Fresh Lemon-Pepper Salmon
Artichoke Mushroom Chicken

All Dinners include Caesar salad, cornbread and fountain drinks, iced tea or coffee. Also includes slice of Apple, Chocolate Cream or Lemon Meringue Pie.

*No Host Bar: Drinks, etc., additional

Future AEG Meetings

MAY Weds. May 16, 2007, San Bernardino, CA
AEG/GSA 2007 Jahns Distinguished Lecturer
-- "Site Characterization for the Design of Effective Groundwater Remediation Projects"
John Moylan, R.G., independent consulting Geologist

JUN Wed. June 20, 2007, Temecula, CA
-- "Municipal Landfills and Groundwater Contamination in southern California"
Dr. Jim Finegan, CHG, Senior Hydrogeologist, Geosyntec Consulting, Pasadena, California

JUL Wednesday July 18, 2007, Redlands, CA
-- 'Overview of VOC and Perchlorate Contamination Case Histories'
Gerard J. Thibeault, Executive Officer, Santa Ana Regional Water Quality Control Board, Riverside CA

AUG Wednesday June 20, 2007, Temecula
-- "Issues in Interacting strike-slip faults"
Dr. David Oglesby, Associate Professor of Geophysics,

Department of Earth Sciences, University of California, Riverside.

SEP Mon-Fri Sep. 24-28, 2007, Los Angeles, CA
Golden Anniversary in the Golden State
50th Annual Meeting Association of
Environmental and Engineering Geologists
Special Anniversary Meeting in Southern California
— AEG founded in Southern California —

OCT Wednesday, October 17, 200, Temecula
-- 'Alquist-Priolo, and potential changes'
Steve Testa, Executive Officer, California State
Mining and Geology Board, Sacramento

NOV Weds. Nov. 14, 2007, Cal State San Bernardino
- CSUSB Geology Club & AEG Joint Meeting -
-- "Latest Pleistocene slip rate of the San
Bernardino strand of the San Andreas fault"
Dr. Sally McGill, Professor of Geology, Geology
Department, Cal. State Univ., San Bernardino, CA

Other Future Meetings

MAY May 15, 2007 San Bernardino, CA
SME/IGS CSUSB Geology Club Joint Meeting
-- "125 years of mining at California
Portland Cement"
Brian Fortelka, Mine Engineer, California Portland
Cement, Colton, California
-- "Underground Mapping course , Broken
Hill, Australia"
Dr. Eric Melchiorre and Students, CSUSB
-- 'Texas BBQ ', CSU, San Bernardino, CA

FIELD TRIPS

Field Trip Saturday MAR/APR (tba)
- 'Emerson Fault, Landers Earthquake'

Field Trip Saturday JUN/JUL (tba)
- 'Mass Wasting, Transverse Ranges, CA'

CONTINUING EDUCATION COURSES

APR Fri-Sat, April 27-28, 2007, Riverside, CA
-- 'Paleoseismology in Seismic Hazards
Assessment; and, Distinguishing Active Faults
from Neotectonic Features that Look Like Them
(with Field Trip to Ridgetop Spreading sites)'

(AEG-approved course) \$325 Members, \$400 Non-
Members; Students apply may receive financial
assistance

UC-Riverside, Extension Center, Riverside, CA

MAY Saturday, May 12, 2007, Riverside, CA
Geology Continuing Education Series
-- "Earthquake Hazards and Fault Evaluation"
Co-Sponsored by Inland Geological Society and AEG
Inland Empire Chapter: \$70 Members, \$75 Non-Members
UC-Riverside, Extension Center, Riverside, CA

Continuing Education Ongoing Short Course
"An Introduction to Landslides or Mass Wasting"
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AIPG Accredited (3.5 CEU's)
rgfont@geosciencedm.com,
slbishop@geosciencedm.com
www.geodm.com Robert Font, Ph.D.

Inland Empire Chapter, Section and Association Contact Information

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<http://www.aegsc.org/chapters/inlandempire>

AEG Southern California Section Web-site

<http://www.aegsc.org/>

Association of Environmental and Engineering Geologists
(Headquarters)

<http://www.aegweb.org>

Connecting . . .

Professionals

Practice,

And the Public



