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##### **Newsletter Editor**

Gretchen Mora  
Ninyo & Moore  
510-633-5640  
aegnews@visto.com

## **Next AEG SF Section Meeting on Tuesday, June 13, 2000, 6 pm, Sinbad's Restaurant, Embarcadero, San Francisco**

This meeting is the 2<sup>nd</sup> Tuesday of the month and will be at Sinbad's Restaurant south of the Ferry Building on the Embarcadero in San Francisco. Dinner and meeting cost \$28 for members, ½ price for student members who call Dr. John Williams (408-924-5050) by noon, June 9. **Please make all reservations by noon, Friday, June 9.**

### **Program: GEOLOGY OF SUNOL VALLEY, AS DETERMINED FROM A SITING STUDY FOR A NEW WATER TREATMENT PLANT, by Charles M. Kissick, Sigma Prime Geosciences, Inc.**

The San Francisco Water Department (SFWD) plans to increase their water treatment capabilities in Sunol Valley, California, which is a main hub for water collection, storage, and distribution. To increase the capacity, the SFWD recently evaluated four sites in southern Sunol Valley (south of Highway 680) as potential sites for a new water treatment plant that would treat about 280 million gallons of water per day. Two potential sites are on the east side of Sunol Valley, where the active Calaveras fault is known to exist. The other two potential sites are on the west side of Sunol Valley, where some published maps show a fault known as the Sinbad fault. In addition, the SFWD plans on modifying the Hetch Hetchy Aqueduct system, with some improvements in Sunol Valley.

Mr. Kissick recently completed Geologic/Geotechnical studies for both projects. The scope of the treatment plant project is such that millions of yards of soil would be moved, with steep cuts up to 540 feet high and fills up to 200 feet thick.

Drilling, geophysics, and fault trenching were performed to evaluate all the proposed construction sites, and to evaluate the Calaveras fault and the Sinbad fault. The Sinbad fault was trenched at two sites, with one trench about 22 feet deep, but no evidence of this fault was found. The Calaveras fault was also trenched and located at various locations. One site bisects a large Quaternary landslide. The age of the landslide was estimated from carbon dating of organic debris. The organics were in a soil sample retrieved from what was believed to be the pre-slide ground surface, about 85 feet below the existing ground surface.

Because of the extreme nature of the engineering requirements of this project, it is a good example of a large-scale project where detailed site characterization (last month's topic) was essential. In fact, this project represented an instance when engineers had an unusually keen interest in an engineering geologist's conclusions and recommendations.

**(See Page 2 for Speaker's Biography)**

## SPEAKER'S BIOGRAPHY

Charles Kissick earned Bachelor's degrees in Geology and Environmental Studies at the University of California, Santa Barbara, and later went on to earn a Master's degree in Engineering Geology at the Royal School of Mines at Imperial College of Science and Technology in London, England. His Master's Thesis was on the mechanics and prediction of debris flows, using data from two large debris flows on the flanks of Mount Snowdon in North Wales. He is a Registered Geologist, Certified Engineering Geologist, and Certified Hydrogeologist in the State of California. He is also an Engineer-in-Training in California.

Mr. Kissick began his professional career at the US Geological Survey, where he worked on earthquake prediction research in Parkfield and the Antelope Valley. He later worked at Dames and Moore in San Francisco, Earth Sciences Associates in Palo Alto, and AGS, Inc. in San Francisco. While at these companies, he has worked on projects for water treatment plants, dams, tunnels, and levees throughout California.

Mr. Kissick recently co-founded Sigma Prime Geosciences, Inc. in Half Moon Bay, California, where he is currently busy trying to build the business.

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## MEETING DETAILS – June 13, Sinbad's Restaurant, Embarcadero, San Francisco

6pm: No-host bar, sign-in and dinner payments  
7pm: Dinner and announcements  
8pm: Technical program  
Costs: \$28 per person for members and spouses  
\$14 for student members who call Dr. John Williams at 408-924-5050 before noon, June 9<sup>th</sup>.  
\$30 for non-members

Check or cash due at the door. Please do not mail payment. Please fax or mail the reservation form on the back page to Treasurer Dennis Maslonkowski, to arrive by noon, **Friday, June 9.**

Fax: 510-233-3204  
Mail: c/o ARCADIS, Geraghty & Miller, 1050 Marina Way South, Richmond, CA 94804.

*Please make a reservation if you plan on attending.*

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The AEG San Francisco Section Newsletter is a monthly publication of the San Francisco Section of the Association of Engineering Geologists. Submittal deadline is the 20<sup>th</sup> of each month for the following issue. Contact Gretchen Mora by email (aegnews@visto.com) or by phone (510-633-5640) for submittal. Job announcements are free if brief.

*Address changes:* Please submit to Section Secretary Corinne Stewart  
By phone (408-629-7801).

*Advertisements:* The newsletter's circulation is about 360 within northern California. Use these low rates to expand your market:

	<u>Yearly</u>	<u>Monthly</u>
Business card	\$ 110	\$ 10
1/4 page	\$ 350	\$ 40
1/2 page	\$ 600	\$ 70

## CHAIR'S MESSAGE

The AEG 2000 meeting planning is moving along well. We have reviewed the abstracts sent in for the various sessions, and found more than we have speaker's slots for. The meeting looks like it will be very successful. More sponsors are needed for the various portions of the meeting. The biggest (relatively) ticket item for the meeting appears to be the cost of coffee. Maybe we can get a local coffee company to sponsor the costs of the meeting. It would be good advertising for them, especially since some geologists seem to run on the stuff (and make bee-lines for the nearest available outlets).

The section officers will be in transition at the time of the meeting. We are currently looking for nominations for all positions, although Jason Preece has indicated that he may be interested in the chair's position. A lot of the officers are doing volunteer work on the AEG 2000 meeting, and may need a break after September. Please send your nominations to Betsy Mathieson.

Gretchen, our newsletter editor, is putting together a web page. She will be looking for suggestions for items to include on the page. The page will be listed under [www.aegsf.org](http://www.aegsf.org), and will be linked to AEG HQ, [www.aegweb.org](http://www.aegweb.org).

We are also looking for a field trip chair. Brian has gotten too busy with work, living in Monterey area, and other things called family to be able to handle the field trip committee. If you're interested, please contact me and I can fill in the details.

GARY PISCHKE

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## CHAIRS OF AEG SF SECTION COMMITTEES

### Legislative Chair

Elizabeth Mathieson  
Exponent Failure Analysis Associates  
650-688-6755  
[emathieson@exponent.com](mailto:emathieson@exponent.com)

### Short Course Chair

Ernie Solomon  
650-948-3528  
[esolo@earthlink.net](mailto:esolo@earthlink.net)

### Field Trip Chair

Open for volunteers!!

### *Get Involved in AEG!*

Nominations are being accepted for all officer positions for the 2000-2001 year. Submit your name or someone else's (with their permission!) to Betsy Mathieson at [emathieson@exponent.com](mailto:emathieson@exponent.com)

## MAY SECTION MEETING NOTES

The May Section Meeting was held at the Happy Valley Seafood Restaurant in San Francisco. The program, "Site Characterization," was presented by Dr. Allen Hatheway, Emeritus Professor of Geology, Missouri School of Mines (Rolla).

Dr. Hatheway defines site characterization as, "the engineering geologic exploration process by which locations for engineering works, mitigation of geologic constraints, conduct of mineral resource extraction, or environmental remediation are defined in terms of three dimensional subsurface conditions." Site characterization is "pulled-off" by best geologic judgment and one must locate and delineate engineering geologic units and contacts, discontinuities, groundwater surfaces, top of rock, and generic cases of weathering and alteration. Fatal geologic flaws or pitfalls include: geomorphic "holidays" and pathways, irregular bedrock surfaces, ignorance of land use history, and paleochannels.

Dr. Hatheway stressed the importance of engineering geophysics. Geophysics fills in between anchor borings and detects critical surfaces. He also stressed using the correct U.S. EPA terminology for groundwater and avoiding use of the term "water table".

Dr. Hatheway summed up his presentation with a reminder of the importance of classical geologic input: "Relevant site characterization cannot be accomplished without direct and constant application of the principles of classical geologic knowledge and competence. To apply less is to off-balance the objectives (full disclosure) with increased assumption of risk on the part of the client." Dr. Hatheway also stated that we (geologists) are indispensable!

CORINNE STEWART

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## UPCOMING MEETINGS

Talks scheduled for later this year include "Activity of the Mussel Rock Fault" by Scott Keiffer, and "Remediation/Contamination of Mine Tailing Waste in Permafrost Regions" by Joey Meldrum.

If you are interested in speaking at an upcoming Section Meeting, or know someone who would give a great talk, please call Jason Preece, Section Vice-Chair, at 925-933-2900.

***Thanks to our Corporate Sponsors!***

**Applied Geomechanics – Santa Cruz  
Exponent Failure Analysis – Menlo Park  
Geo Test Unlimited – Nevada City  
Gregg Drilling – Martinez  
Upp Geotechnology – San Jose**

## NEWS FROM THE AEG•GRA 2000 TEAM

AEG•GRA 2000 is shaping up to be an Annual Meeting that you will not want to miss. All of the available 232 traditional spoken presentation slots are filled, plus at least a dozen poster session slots. Ten symposia are included in the technical paper presentations and they cover a wide range of traditional and cutting-edge topics. The meeting time frame is September 19-26 overall, with technical sessions on September 22-24.

Eight world-class field trips are ready to go, and the field trip guidebook will be a valued reference for years to come. Four short courses will introduce you to state-of-the-art technology and provide real-world experience under the guidance of experts. At press time, 31 exhibitors were signed up, including all of the major vendors and suppliers. The Annual Meeting is your chance to spend some quality time with these experts and see what new technology is headed your way.

For many San Francisco and Sacramento Section members, this can be a commuter meeting and you can save considerable \$ in hotel bills. Take advantage of this bargain learning and networking opportunity.

Read all about it in the June AEG NEWS. The Program with Abstracts volume will be in your hands in July as the July issue of the AEG NEWS. Both issues will carry the registration form, hotel information, and a full meeting program description. Please note that the hotel room block is limited, so make your hotel reservations early to take advantage of the special block rate. Double-take note: register as an AEG or GRA member by August 20 and you will receive both the early registration discount and the member discount. You can register for the meeting and also reserve a hotel room at the AEG web site, [www.aegweb.org](http://www.aegweb.org), or send in hard copy or fax.

ROBERT TEPEL

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## CLAIRE P. HOLDREDGE PUBLICATION AWARD WINNER ANNOUNCED

Dr. Fred G. Bell has been awarded the AEG Claire P. Holdredge Publication Award for his 1999 book, "Geological Hazards: Their Assessment, Avoidance and Mitigation." This award is given for a publication within the last five years that is an outstanding contribution to engineering geology. The Chair of the AEG 2000 Annual Meeting, Bob Tepel, has inquired into Dr. Bell's availability to attend the annual meeting Icebreaker for a book signing session!

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## SPONSORS SOUGHT

Sponsors are still needed for the publication of "Engineering Geology Practice in Northern California." Please contact Dennis Maslonkowski (510-233-3200) to donate to this excellent volume.

## STUDENT ASSISTANTS NEEDED FOR AEG\*GRA JOINT ANNUAL MEETING

The AEG\*GRA Joint Annual Meeting to be held September 19-26 in San Jose needs students throughout the meeting to help the Planning Committee Staff make the meeting run smoothly. The meeting activities include:

- Technical sessions focusing on classical engineering geology, earthquake, seismic, and geologic hazards and remediation, landslides and slope stability, tunneling, environmental investigation and clean-up, groundwater investigation and modeling, and case histories.
- Ten Symposia
- Eight Pre- and Post-meeting Field Trips
- Five Short Courses
- Special events daily – Luncheons, Awards Banquets, etc.

Student Assistants are needed to provide assistance in audio-visual operation for technical sessions and symposia, and assistance as needed for short courses. In return for 8 hours of assistance (hours do not all have to be on one day), students will receive FREE meeting registration and priority in the drawing for the Take-A-Student-To-Dinner Annual Banquet tickets (a \$60 value).

This is a great opportunity to meet fellow geologists, hydrogeologists, and engineering geologists, to learn more about the industry and new techniques being developed, to network with potential employers, to meet students from other universities, and most importantly – *to have fun!*

If you are interested in volunteering to be a Student Assistant, please contact Corinne Stewart at (408)-629-7801 or by email at [Cstewart@geosun.sjsu.edu](mailto:Cstewart@geosun.sjsu.edu).

## FALL COURSE OFFERINGS AT SFSU

San Francisco State University Department of Geosciences  
Fall 2000 Graduate Course: Geol 475/775 - Hydrogeology (MT 1710-1825; T 1410-1700). For other course info go to:  
<http://tornado.sfsu.edu/geosciences/geosciences.html>

Fall 2000 Instructor(s) needed! Geol 101- Intro to Geology Lab (W 1410-1700), Geol/Metr 103- Intro to Oceanography Lab (M 1410-1700). Contact Angelica Fausto ([afausto@sfsu.edu](mailto:afausto@sfsu.edu); 415-338-2061).

**GEOTECHNICAL GROUTING**

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**Edward D. Graf**

182 Lumahai Street  
Honolulu, HI 96825

Tel: 808-396-9451  
Fax: 808-396-2075

## CONTOURING SHORT COURSE OFFERED

Dr. Sands Figuers will teach a short course in subsurface contouring. The course will cover the basics of geologically based contouring techniques and will include:

- Effect of conceptual models (how to use them and how to abuse them);
- The mechanical process (how to, as well as do's and don'ts), and
- Computer-based methods (kreiging and other unpronounceable methods).

Examples and work problems will be liberally supplied. Sandy says, "Subsurface contours are used to depict the size, location, and shape of the geologic variable(s) being mapped. As such, each contour represents a prediction by the interpreter about that variable. To make effective predictions, the interpreter must have some geologic model in mind. Without a model, contouring is simply an exercise in connecting the dots."

The course will be held Saturday, July 29, 2000 at the LFR Levine Fricke offices, 1900 Powell St. in Emeryville. Registration at 0830, class will start at 0900 hours and take about four (4) hours. The charge will be \$25 for AEG members, \$30 for non-members, and \$5 for students.

Please use the following enrollment form to sign up for the course! Submit it to Ernie by fax, snail mail or email (see below).

### ENROLLMENT FORM for CONTOURING SHORT COURSE

Date: July 29, 2000  
 Time: (registration) 0830, (class) 0900-1300  
 Location: LFR Levine Fricke  
 1900 Powell St.  
 Emeryville, CA 94608

Contact: Ernest Solomon  
 Phone: 650-948-3528  
 E-mail: [esolo@earthlink.net](mailto:esolo@earthlink.net)  
 Fax: 415-522-5220 (c/o Olivia Chen Consultants)  
 Snail mail: 27500 Elena Road, Los Altos Hills, CA 94022  
 Fee: (pay at the door) Member \$25  
 Non-AEG member \$30  
 Student \$ 5

Please make reservations as soon as possible. Class size is limited!

Name: \_\_\_\_\_

Status: \_\_\_\_\_  
(AEG member, non-member, student)

Phone No.: \_\_\_\_\_

## OUR LIST OF SPONSORS GROWS!

The list of sponsors for the AEG Annual Meeting events is growing! We'd like to start early in thanking all those who have donated time and materials in sponsorship towards the success of our annual meeting. If your firm would like to learn more about sponsorship opportunities at the meeting, please contact Gretchen Mora, Sponsorship and Publicity Manager, at 510-633-5640, or [aegnews@visto.com](mailto:aegnews@visto.com). Here is a list of our sponsors to date:

AGRA Earth & Environmental, Inc.  
Brugg Cable  
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GEOCON, Incorporated  
Harza Engineering Company  
HEW Drilling Company  
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Roscoe Moss Company  
Spectrum Exploration, Inc.  
Upp Geotechnology, Inc.  
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## ANNOUNCEMENTS

Dr. Ed Medley, PE, CEG of the Menlo Park, CA office of Exponent Failure Analysis has been promoted to Principal Engineer, Peter Mesard, PE, CEG of the Oakland, CA office promoted to Senior Managing Engineer, and Dana Willis, RG, AIA has been promoted to Senior Geologist and is relocating from Menlo Park to the firm's Bellevue, WA office.

Ed, Peter and Dana are members of the Geo3 (GeoCubed) Group within the Civil Engineering Practice of Exponent. Exponent is an internationally respected consultancy specializing in the solution of complex engineering and science problems. The firm has a staff of about 700 people in 25 offices, representing over 50 engineering and science disciplines. Geo3 is composed of geologists, geotechnical and geo-environmental engineers, who specialize in forensic investigation of failures of natural terrain and engineered structures.

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***The AEG SF Section Website is now being designed! We hope to have the site up and running by the middle or end of June. Stay tuned for more details about the release date.***

## ASSOCIATION MEETINGS

June 6-11, 2000: NAT 2000 Tunneling Conference.

June 28, 2000: North Coast Geologic Society Meeting at the Masonic Auditorium in Orinda. The topic of the talk is "Geologic and Tectonic Significance of the Pleistocene Irvington Gravels, East Bay Area Foothills," by Keil Albert. Contact Randy Kirby at [rkirby.geosci@usa.net](mailto:rkirby.geosci@usa.net) for more information.

July 31-August 3, 2000: Fourth North American Rock Mechanics Symposium.

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## FIELD TRIPS

June 24, 2000: The North Coast Geologic Society is sponsoring a field trip titled, "Constraints on the Distribution of Slip and the Evolution of the Northern San Andreas Fault System." Scott Dickerman and John Wakabayashi will lead the field trip. The field trip will examine several outcrops that constitute ties across the strands of the northern San Andreas fault system in a scenic loop that starts in the Berkeley Hills, goes as far north as the Russian River area, and visits Point Reyes before returning home. This trip is an opportunity to see a wide variety of geology with interesting tectonic implications as well as to simply enjoy nice scenery. It should be emphasized that this is a long trip, so an early departure is essential. However, because the stops are along the road, walking time is negligible, and we should be able to spend a plenty of time at the outcrops.

Departure: Rockridge BART Station Parking Lot – 7:30am!  
Cost: \$25 for NCGS Members, \$35 for Non-members. Includes guidebook, transportation, pastries, lunch and beverages.

Please contact Tridib Guha at 925-363-1999 for a registration form or more information.

**Volunteer(s) needed to be the  
Field Trip Chair(s) for the AEG  
San Francisco Section!  
Contact Gary Pischke if interested  
at [pishbert@ix.netcom.com](mailto:pishbert@ix.netcom.com).**

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*Please help us keep our membership roles up to date and accurate. Contact our Membership Chair, Chris Hundemer, if any of your personal information changes! Send an email to Chris at: [rockman8@pacbell.net](mailto:rockman8@pacbell.net).*

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Extra AEG Salt Lake City Meeting bags for sale! See Gary Pischke at the June meeting to purchase one!

Gretchen Mora – Newsletter Editor  
37192 Oak Street  
Fremont, California 94536

AEG June Newsletter  
June 13 - AEG Meeting  
Sinbad's Restaurant  
Embarcadero, San Francisco

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**RESERVATION FORM – June 13, 2000 AEG Dinner Meeting, 6pm**

**Sinbad's Restaurant, Embarcadero, San Francisco**

**Please Fax or Mail your reservation to arrive before noon, Friday, June 9**

Fax to Dennis Maslonkowski, c/o ARCADIS, Geraghty & Miller (510) 233-3204 - Pay at the door – Do not send payment.

Dinner and Meeting Cost: \$28 – members or spouses    \$14 – student members    \$30 – others

NAME \_\_\_\_\_ COMPANY \_\_\_\_\_

TELEPHONE NO. \_\_\_\_\_ NO. OF PEOPLE \_\_\_\_\_

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***PERMANENT RESERVATION FORM***

AEG San Francisco Section Monthly Dinner Meetings are usually but not always on the 2<sup>nd</sup> Tuesday of each month.

I will attend and make payment for each meeting. If I am unable to attend I will fax or mail a cancellation notice to  
Dennis Maslonkowski (fax: 510-233-3204) by noon, the Friday before the meeting.

NAME \_\_\_\_\_ TELEPHONE NO. \_\_\_\_\_

BILLING ADDRESS \_\_\_\_\_

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

Dinner Costs are normally but not always: \$28 – members or spouses    \$14 – student members    \$30 - others

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