



AMERICAN SOCIETY OF CIVIL ENGINEERS

SAN BERNARDINO & RIVERSIDE COUNTIES BRANCH

LOS ANGELES SECTION , REGION 9-SINCE 1953



PRESIDENT'S MESSAGE

January 2012

President Message

Greetings! I hope everyone experienced a joyful holiday season. It is unbelievable how quickly another year came to an end. I guess, it is time once again to reflect back and resolute to achieve greater goals in this New Year!

For the month of January our general lunch meeting will be on Wednesday, January 18, 2012 at EL Torito in Upland. Lt. Col

Steven Sigloch, Deputy Commander from Los Angeles District, U.S. Army Corps of Engineers will give a presentation on construction opportunities for both Military and Civilian in the Los Angeles area. Save the day and come and join us!!

Also in January our branch secretary Steven Ledbetter will have the opportunity to participate in the 2012 workshop for section and Branch Leaders, conference that will be held in Portland, Oregon.

February is a very important month for the American Society of Civil Engineers. We will be celebrating the “Engineers Week” during the week of February 19 –25. Every year The San Bernardino and Riverside Counties Branch, coordinates a group of volunteers (Civil Engineers like you) to visit different High Schools in the Inland Empire area, to inform

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NEWSLETTER



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CIVIL ENGINEER

Visit us on the web at: <http://www.asce-sbri.org/>

THIS MONTH IN ENGINEERING

PANAMA CANAL

A familiar geopolitical icon in the Central American Republic of Panama, the Panama Canal has had a long history spanning parts of three centuries. The American Society of Civil Engineers has included the Canal in its list of "Seven Wonders of the Modern World".

The concept of a canal across the Isthmus dates to the early 16th Century. Initial construction of a sea-level version was started by a French contractor on **January 1, 1880** but was abandoned after 21,600 workers died, largely from disease (malaria and yellow fever) and from landslides.

The political route to U.S. construction of the Canal was tortuous, beginning primarily with the signing of the **Hay-Herran Treaty** with Columbia on **January 2, 1903**. Panama achieved independence from Columbia later that same year. After extensive political and military maneuvering, including a Columbian military invasion thwarted by U.S. forces, construction began in earnest in 1904. **Joseph Bucklin Bishop**, a close associate of President Theodore Roosevelt, was the first Secretary of the Isthmian Canal Commission, charged not only with overseeing day-to-day operations in the Canal Zone, but also with ensuring public support for the project through aggressive public relations effort. Army Corps of Engineers Colonel **George Goethals** was the project superintendent during this time, and he oversaw astonishing progress. **John Frank Stevens** was Chief Engineer of the project from 1905 to 1907, when he resigned and was replaced by Colonel Goethals. Construction of the canal was completed in 1914, two years ahead of schedule. The first ship to pass through was the merchant ship SS Ancon, on August 15 of that year.

The project was not without casualties. Although advances in sanitation and hygiene resulted in greatly improved conditions over those experienced 30 years earlier by the French, there were still an additional 5,600 fatalities, resulting in a total death toll of around 27,000.

Expansion of the Canal is currently under way, with construction of a third set of locks to accommodate much larger ships. Completion is expected in 2015. By that time, the original locks will be 100 years old; the new locks will allow the old locks to be taken out of service for much-needed maintenance and repairs. By 2025, the expanded system will have almost doubled the capacity of the present canal, carried in ships up to 1,200 feet long, 160 feet wide and with 50' drafts.

Interesting facts regarding canal tolls (which are based upon theoretical tonnage). The largest toll paid to date was \$331,200, charged on May 16, 2008 to the cruise ship **Disney Magic**. The smallest toll was 36 cents, charged to American adventurer **Richard Halliburton**, who swam through the canal in 1928.



SS Kroonland, 1915

USS Missouri, BB63, during WWII





TUESDAY
JANUARY 31, 2012

5:30 - 8:00 PM
Cost: FREE

Location:
Caltrans District 7
100 S. Main St.
Los Angeles, CA
90012

Conference Room
01.040 A&B
(on the first floor)

Refreshments will be
served from
5:30 - 6:00 PM

RSVP online at
www.mlab-ymf.org
or via email to
jinny.c.huang@mwhglobal.com

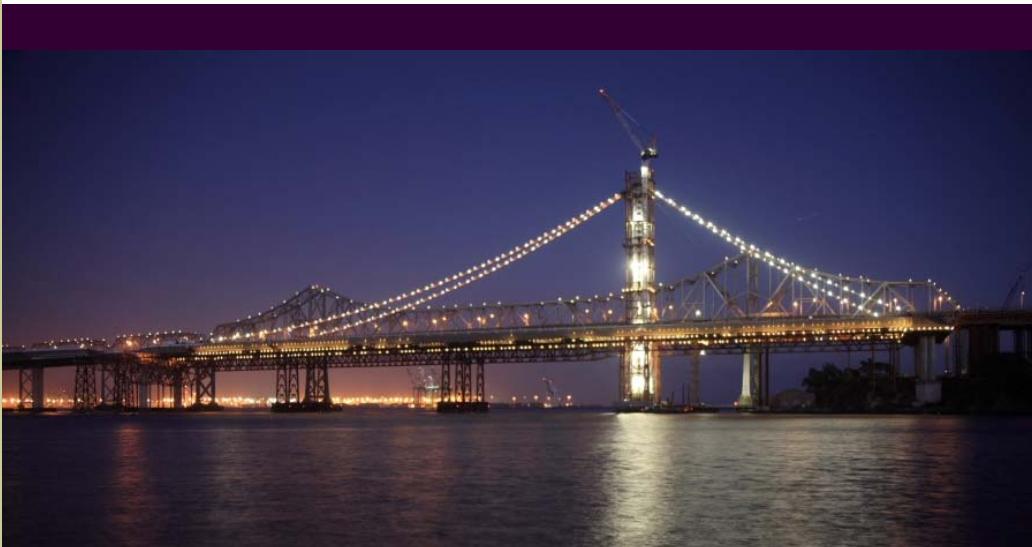
Presenters by:

HNTB



ASCE MLAB & LA YMF Presents:

San Francisco-Oakland Bay Bridge Project TECHNICAL PRESENTATION



The Self-Anchored Suspension Bridge Segment of the San Francisco-Oakland Bay Bridge (SFOBB) East Spans of the Seismic Safety Project continues to advance their work of steel erection in Oakland as they have received all major fabricated steel components from China. **Dr. Brian Maroney** and **Karen Wang** will present the uniqueness of this bridge with the design elements and the complex nature of the construction and steel fabrication involved. They will discuss how quality is driven as a main element throughout the entire steel fabrication and erection process. This will be further demonstrated by Smith-Emery Company Lead Inspector, **Leonard Cross**, who will discuss and show the technology currently used on the bridge during weld inspections. They will also present the current status of the project as they strive towards a bridge opening of 2013. For more information related to the Bay Bridge, visit <http://baybridgeinfo.org/>.



Dr. Brian Maroney is a Civil PE with over 25 years experience in Bridge Design, Earthquake Engineering, Construction and Project Management. He is employed by Caltrans and currently the Principal Bridge Engineer & Deputy Toll Bridge PM overseeing all aspects of the design for the Toll Bridge Program.

Karen Wang is a Civil PE with over 10 years at HNTB, and a member of HNTB's Program Management Team on the East Span of the SFOBB Project. She is currently working on the Self-Anchored Suspension Bridge involving management of all issues related to the orthotropic box girders, and is bringing together an expert seismic safety peer review panel and expert welding panel and leading them through an oversight process of the steel fabrication completed in China.

Leonard Cross is the Lead Inspector for Smith-Emery Company, a sub to American Bridge/Fluor JV on the Bay Bridge Project. Smith-Emery Company performs the inspection and testing for structural steel of the SFOBB SAS project. He will present a demonstration on two types of non-destructive testing performed on welds similar to those placed on the SAS steel structure. These include Magnetic Particle Testing and Ultrasonic Testing.

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NEWSLETTER**

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breyes@rbf.com or call at
909.974.4967

Advertising cost apply

President's Message continued

and educate general students with the great field of Civil Engineering. We definitely need volunteers from different disciplines of civil engineering to participate during this E-Week. If you are available and interested to participate, please email Edwin Quinonez our Branch Vice President at equinonez@rcflood.org

Finally our February General Meeting will be a joint meeting with the Inland Empire Council of Engineers and Scientist, IECES. Please go to our Calendar section of our website for more information.

2011 is behind us and we have a wonderful year ahead. And in order for it to be wonderful, we need to resolute to make it so, and follow through with our actions.

Sincerely,

Rita Escobar

January Lunch Meeitng

U.S. ARMY CORPS OF ENGINEERS

Lieutenant Colonel Steve Sigloch is from Houston, Texas. He graduated from Texas A&M University in 1993 with a Bachelor of Science Degree in Construction Management. He holds a Master of Science Degree in Engineering Management from University of Missouri at Rolla, and a Masters Degree in National Security and Strategic Studies from the Naval War College.

Lieutenant Colonel Sigloch has served in the 1st Infantry Division in Germany and the 25th Infantry Division at Schofield Barracks, Hawaii. He has been a platoon leader, company executive officer, battalion adjutant, company commander, battalion operations officer, and battalion executive officer.

Lieutenant Colonel Sigloch has also served as a small group instructor for the Engineer Captains Career Course at Ft. Leonard Wood, Missouri, and Aide de Camp to MG Randal Castro, Commanding General, U.S. Army Engineer School and Maneuver Support Center, Ft. Leonard Wood, Missouri.

Lieutenant Colonel Sigloch's awards and decorations include the Bronze Star Medal (with Oak Leaf Cluster), the Meritorious Service Medal (with 2 OLC), the Army Commendation Medal (with OLC), the Army Achievement Medal (with 2 OLC), the Combat Action Badge and the Parachutist Badge and the Bronze Order of the de Fleury Medal

Lieutenant Colonel Sigloch and his Wife Dara have two daughters, Andrea and Emily.



Date: Wednesday, January 18, 2012
Time: 11:30am to 1:00pm
Location: El Torito
335 South Mountain Avenue
Upland, Ca 91786
Cost: \$25 members w/ RSVP
\$30 non-members or no RSVP
\$15 students
Deadline: 01/11/12
Additional Info: Steven Ledbetter sledbetter@tkeengineering.com (951) 680-0440

NEWSLETTER INFORMATION

Publisher:

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Identification Statement:

ASCE San Bernardino & Riverside Counties Branch
Newsletter is published monthly by the
ASCE San Bernardino & Riverside Counties Branch.
Subscription rate: \$45 (included in section dues).

Advertising Rates

Approximate number of mailings: 800 / mo.

Professional Directory	\$250
Per Business Card (10 issues)	
Display Ads	
Full Page (per issue)	\$235
1/2 Page (per issue)	\$125
1/4 Page (per issue)	\$75

Advertising Information:

To place ads, contact the editor.

Payments are due 30 days from the date of publication. Copies must be received by the Editor by the third Thursday of the month prior to publishing.

For Billing information contact:

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Geotechnical Committee February 8, 2011 Dinner Meeting

Sponsor Presentation: By Tim Avery

Grouting, Ground improvement, Structural Support, Earth Retention.

These are just some of the services Hayward Baker provides. Their experience in design and construction of geotechnical construction services spans more than six decades. The Hayward Baker suite of techniques, equipment, and experience is comprehensive and is packaged to create the most effective and economical solution.

Informational Presentation:

Upcoming Regional Geotechnical Conferences

By Bill Kitch, PhD, PE, Assoc. Professor at Cal Poly Pomona

Bill Kitch will present information about the upcoming GEO-CONGRESS in Oakland and the Queen Mary Event in Long Beach. These will be very significant events in the professional development of geotechnical engineers.

Technical Presentation:

Overview of Geophysics Used for Design of Natural Gas Pipelines and for Detection of Subsurface Voids at an Underground Gas Storage Facility

Jeffrey R Keaton, PhD, PE, PG, D.GE, Senior Principal Engineering Geologist, AMEC

Near surface geophysical measurements are becoming more readily available to the geotechnical engineering field and are powerful tools for subsurface characterization. However, many practitioners are unfamiliar with the use of these tools. This overview of geophysics is designed to demonstrate how these tools are being used in practice today. The presentation will discuss two types of projects: design of natural gas pipelines and surveys of an underground gas storage site that had integrity failure of a gas injection/withdrawal well. Seismic methods used for natural gas pipeline projects consisted of seismic refraction surveys for evaluation of rock excavation requirements and detecting the depth to ground water in alluvial sediments, and refraction-microtremor surveys for estimating shear-wave velocity profiles for liquefaction analyses. Electrical methods and seismic methods used for void detection at the gas storage facility consisted of electrical resistivity and shear-wave reflection surveys. Downhole compression- and shear-wave velocity profiling was performed in a bore hole to allow a translation of two-way travel time of seismic energy into depth below the ground surface for interpreting the reflection results.

AMERICAN SOCIETY OF CIVIL ENGINEERS

Date: February 8, 2011

Time: 6:00 - 6:30 PM Registration and socializing

6:30 - 7:00 PM, Dinner

6:45 – 7:00 PM, Sponsor presentation

7:00 – 7:15 PM Informational presentation

7:30 – 8:30 PM Technical presentation

Location: Zendejas Mexican Grill,

8106 Milliken Avenue, Rancho Cucamonga

Cost: \$30 members w/ RSVP

\$35 non-members or no RSVP

\$10 students

Registration and Additional Info: RSVP by February 6, 2012 to Maihan at: mnoorzay@gmail.com



AMERICAN SOCIETY OF CIVIL ENGINEERS ORANGE COUNTY AND METRO LOS ANGELES BRANCH **ASCE** YOUNGER MEMBER FORUM

VOLUNTEERS NEEDED

What: ASCE YMF 18th Annual Popsicle Stick Bridge Contest!

Where: California State University Long Beach
1250 Bellflower Boulevard
Long Beach, CA 90840

When: Friday, February 17th, 2012
8am- 5pm

Cost: Mostly Free! (\$8 parking if you drive)

Questions: Andrew Pham (Volunteer Coordinator):
apham@ci.irvine.ca.us
Cell – 714-369-7228

Website: **TBA**



Event Description:

This year MLAB and OC YMF join up once again to host ASCE's Annual Popsicle Stick Bridge Contest. Over 200 high school students from the greater Los Angeles area will gather to compete in this annual event to learn about our profession and ASCE (and for a little healthy competition). This year's event will be held on the Friday leading into National Engineers Week, February 17, 2011 and will be hosted by the California State University Long Beach Student ASCE chapter.

With one of the biggest turnouts in Popsicle Stick Bridge history we need many volunteers to help facilitate the event so that we can ensure a great day for all participants. Volunteers will assist with registration; bridge testing; judging bridges, presentation, and posters; scoring; facilitating various portions of the day; and much more. Every year students, teachers, and volunteers alike enjoy all the day has to offer. Come join in the fun!



JOB OPORTUNITIES

The City of San Luis Obispo is advertising for two positions, one in Construction Inspection, the other for a P.E. to lead the City's Construction Management and Inspection staff. Contact Barbara Lynch, Deputy Director of Public Works at 805-781-7191 or go to www.slocity.org.

Gary Davis Group in Tahoe City, California, is advertising for a professional-level position in Tahoe City. Contact Cathy Wenke at cwencke@garydavisgroup.com or call her at 530-583-9222.

ASCE SMART BRIEF

You can receive a daily e-mail brief from ASCE containing links to major news stories on Civil Engineering subjects worldwide. Links to national and international news articles, sustainable development, professional and Society issues, technology, job openings and related subjects are all presented in a brief and lively format.

Sign-up is free at <https://www.smartbrief.com/asce/index.jsp>, and requires only an e-mail address.

YOUNGER MEMBER FORUM SOCCER TOURNAMENT

By: Julianna Gonzalez

Major League Soccer has competition in the Southland. Four teams of young Engineers from Los Angeles, San Diego and San Bernardino / Riverside met at Whittier Narrows Regional Park on November 5 in a hotly contested tournament that saw some of the competitors playing up to five games in a single day, with only the briefest of rest periods, amply demonstrating their ability to respond to the call when pushed to the limit. Some of the Youjnger Members do need occasional reinforcement of the concept that they may not be as young as they once were.

The Riverside / San Bernardino team dominated in their first two games, against one of the two L.A. teams and against San Diego. Their third game was less succesful, as the day's efforts started to take their toll.

Entering the first playoff round, Riverside / San Bernardino knew they had big shoes to fill, having won the tournament in three of the last four years. Earning the top seed wasn't enough to overcome a very strong Los Angeles team, which was helped by three new starters with fresh legs (rumors that they were stringers from the L.A. Galaxy reserve team had not been confirmed at press time, although the reported sightings of David Beckham and Landon Donovan look-alikes in the Park at the same time did raise suspicion in some quarters).

In the last game of the day, the Los Angeles team moved on to defeat San Diego and take home the Trophy – for now, at least. Riverside / San Bernardino will be looking forward next year to bringing it back to its rightful home in the Inland Empire.

Many thanks to all of the players who enjoyed a great day of sportsmanship in the World's Greatest Game; particular thanks to Transtech of Walnut, California for supplying drinks and snacks throughout the day.

January

Jan. 13 -15

YMF Western Regional Conference, in conjunction with ASCE Training Session for Board Members, Portland, Oregon.

January Branch Meeting: January 18, 2012. Lt. Col Steven Sigloch, Deputy Commander, Los Angeles District, U.S.Army Corps of Engineers speaking on construction opportunities, both Military and Civilian, in the Los Angeles area.

Membership Information

Type of Membership and Annual Dues (National)

Students: Free

Associate Member: \$50 year of baccalaureate Degree and first year after, then incremental increases to \$205 over five years.

Member: \$205 annually

Affiliate: \$205 annually

Section

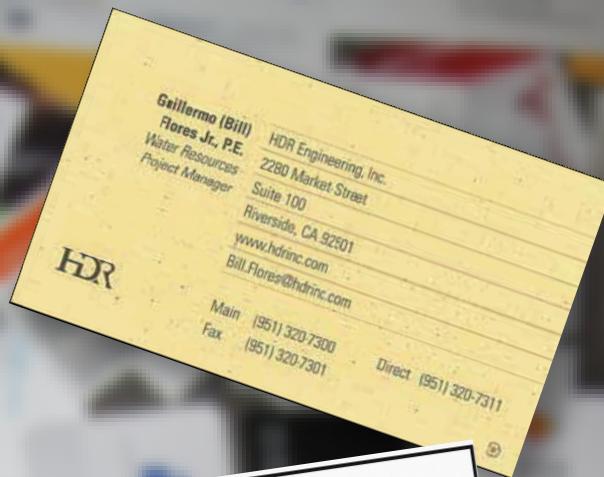
(Branch) Dues: \$45/year

1. National ASCE Student Membership is now FREE! Those who have chapters or clubs still must be a member of them before joining National. Log onto <https://www.asce.org/online/> fill out the short application and instantly become a member of ASCE or call 1-800-548-ASCE (2723)

2. Online Membership renewal available, go to <https://www.asce.org/renewal/inforenewal.cfm>. You need your membership number, all payments must be made with a major credit card. An e-receipt is transmitted to the member upon completion of the transaction.

Over the summer your ASCE San Bernardino – Riverside Branch will be contacting you for a business card advertisement in your monthly newsletter. The proceeds from the business card ads defray the costs of newsletter so that the Branch funds can be used for purposes of providing student scholarships, Engineer's Week in February where the Branch volunteers make presentations to the local high schools to generate interest in the field of engineering, and other community programs. The cost of the newsletter advertisement is \$250 for a one-year subscription of 10 issues. Included with the Business Card advertisement is a business spotlight in the monthly newsletter where one or two businesses are highlighted. If you would like to reserve your spot early for next years newsletter please contact your Treasurer for next year – Brandon Reyes 909.974.4967

and let him know which month you would like your Business Spotlight (1st in line gets first choice).



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business card displayed
here.



REMINDER

Jan. 18 Branch Luncheon
Lt. Col Steven Sigloch
U.S. Army Corps of Engineers.



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