



THE SOCIETY OF AMERICAN MILITARY ENGINEERS SACRAMENTO POST NEWSLETTER

www.samesacramento.org

Volume 2, Issue 2

Fall 2011

Upcoming Events:

- **28 September 2011**
General Meeting
Topic: Applications of
Physical Hydraulic and
Computational Fluid
Dynamics Modeling in
Support of Water and
Energy Infrastructure
- **3-6 October 2011**
California Water
Conference
- **17 November 2011**
Young Member's
Forum
- **8 December 2011**
Holiday Mixer

**To be notified by email of
upcoming SAME events
and announcements,
please send a request to
[info@
samesacramento.org](mailto:info@samesacramento.org)**

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2011 SAME Golf Tournament Raises Nearly \$22,000 for Scholarship Fund

By Babette Neal (SAGE)

The 2011 SAME Sacramento Post Annual Scholarship Fund Golf Tournament was a huge success! This year's event at Granite Bay Golf Club raised nearly \$22,000 for the Scholarship Fund. The amenities and hospitality of the new location were exceptional and helped make the event the best we've ever had. Golfing amongst the granite outcroppings, mature oaks, and natural lakes was a great way to spend the day having fun and raising money for future engineers.

As always, the success of this event is attributed to the team work and support provided by company sponsors, member attendance, and a great group of enthusiastic volunteers. There were 126 golfers playing in a 4-person scramble. Martin Brothers Construction provided lunch and participants refueled with refreshments provided by HDR, SAGE, Brown & Caldwell, Arcadis/Malcolm Pirnie, and Lionakis at various locations on the course. After a full day of golf, the first dinner drink was provided by Magnus Pacific and a Mexican Fajita dinner by Kiewit. A slide show presentation of the day on the course was running during dinner with photos of everyone having a great time thanks to Celeste Arvin and Colleen Schaefer at HDR. Finally, the awards and raffle prizes that were generously donated by participating companies were distributed. Many participants left with prizes in their arms and all left with a smile on their face.



Golfers, left to right, Chris Krivanec (HDR), Rick Poeppelman (USACE), Johnnie Mack (HDR), and Vic Duran (HDR)



Golfers lined up and ready to head out to the course



Enthusiastic golfer, winner, volunteer, Martin McIlroy (Taber Consultants)

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The 2011 California Water Conference Offers Technical Information and Networking Opportunities for Everyone

By David Cook, P.E., PMP, Cook Consulting, SAME Sacramento Post Water Conference Co-Chair

Final preparations are underway for the SAME Sacramento Post 2011 California Water Conference. The conference will be held on October 3-6, 2012 at the DoubleTree Hotel in Sacramento CA, and will have technical and networking activities for every SAME member and more.

Technical Sessions

The technical sessions are set with a schedule of 40 speakers in eight technical-track sessions. Speakers will include representatives from the Bureau of Reclamation, DWR, Central Valley Flood Protection Board, local agencies, USACE, private industry, and the legal profession. Tracks 1-4 will be in parallel session in the early afternoon and Tracks 5-8 compete for your attention in the second half of the afternoon. Track 1 will discuss the California Delta and include substantial updates on Delta topics of interest. Track 2 is on Risk Management, and will include several insights and technical challenges in risk-based decision making. Track 3 on Dams and Reservoirs includes insights on modifications and operations. Track 4 will describe important techniques and standards for construction. Track 5 is on the topic of levees. This jam-packed session will discuss the latest information on the levee safety program, levee vegetation, and related topics. Track 6 tackles the subject of restoration, especially in relation to floodplain management. Track 7 is a grouping of projects and planning topics affecting our Central Valley. Track 8 is Sustainability, how to

plan and design for long term viability of our infrastructure.

More information on each topic for each track will be posted on the Post web site (www.samesacramento.org). Each technical session will include substantial time for discussion and Q&A from the audience. If you have questions and/or insights to share on any of the above topics, be sure to register for the conference and attend your technical track of interest. Registered conference attendees will be provided access to the presentation materials after the conference.



Exhibit Hall

Companies will be showing services and capabilities in the exhibit hall. Space is limited and is nearly sold out. If you want to become an exhibitor, visit the Post web site. The exhibitors of record at this time are:

ECORP Consulting, Inc.
 Black & Veatch
 Blaine Tech Services, Inc.
 Granite Construction Company
 MWH
 Parsons Brinckerhoff
 cbec, inc. eco engineering
 HDR Engineering, Inc.
 Psomas
 Tetra Tech
 Vali Cooper & Associates, Inc.
 Fugro Consultants, Inc.
 Burselson Consulting, Inc.
 Gregg Drilling and Testing, Inc.
 Magnus Pacific Corporation

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MC-12 Briefing Gives Beale AFB Mission Context to SAME Members

by 2Lt Brett Foster, USAF

On the 28th of July 2011, Beale AFB was host to approximately fifty SAME members for our monthly General Meeting. Lunch was served and presentations were delivered by the sponsors Swinerton Government Services and Collins Engineers, Inc. Afterwards, the main presentation was provided by Captain Adam "Sofa" King, USAF ACC 9 OG Det 5. Captain King gave an informative look into the recent Air Force acquisition of the MC-12 Liberty, and its recent bed-down at Beale AFB.

The MC-12 is not just an aircraft, but a complete collection, processing, analysis and dissemination system. The aircraft are military versions of the Hawker Beechcraft Super King Air 350 and Super King 350ER. A fully operational system consists of a modified aircraft with sensors, a ground exploitation cell, and line-of-sight and satellite communications data links, along with a robust voice communications suite. The MC-12 capability supports all aspects of the Air Force Irregular Warfare mission (counter insurgency, foreign internal defense and building partnership capacity).

In April 2008 Defense Secretary Robert M. Gates established a new task force to ensure the Defense Department is doing everything possible to provide intelligence, surveillance and reconnaissance (ISR) assets to support warfighters. The Secretary of Defense established on 18 April 2008 the DoDwide ISR Task Force

to identify and recommend solutions for increased ISR in the USCENTCOM AOR. There's an insatiable demand in theater for full-motion video imagery produced by the Air Force's high-flying, loitering craft. But there is also great demand for other forms of ISR. As Gates told reporters, "They want them quickly; they want them now, so the first seven of them were to be in the field by the end of 2008. Using these small aircraft to do ISR is a whole new mission for the Air Force."

Following the briefing the floor was opened for questions. The discussions, like the brief, was honest and direct; ranging from topics on the ISR mission in Afghanistan and Iraq, to the potential controversy between the Air Force and Army over the low altitude ISR mission. Colonel William (Bill) Leady concluded the day by thanking and coining Captain King, and offering his insight on the issue.



The first MC-12 Liberty aircraft in-theater taxis out of an aircraft hangar for its first combat sortie June 10 at Joint Base Balad, Iraq. The Air Force's new manned intelligence, surveillance and reconnaissance platform, the MC-12 is designed to directly support ground forces with real-time ISR capability. (U.S. Air Force photo/Senior Airman Tiffany Trojca)

Army, Air Force and Navy Summer Camps a Huge Success for Future Engineers

by Dave Zuber, Brown and Caldwell

This year the SAME Sacramento Post successfully sponsored three high school students to participate in summer SAME Engineering Camps. Nathan Ritter of Mariposa High School, Andrew Falwell of Sheldon High School, and Bernard Watts of Laguna Creek High School each participated in our local application process, were nominated, and were accepted to the summer engineering camps. Nathan participated in the Navy Camp in Port Huenenme, Andrew participated in the Air Force camp in Colorado Springs, and Bernard participated in the Army Camp in Vicksburg Mississippi.

Each camp is a high energy, one-week event that provides hands-on experiences for students from across the country. The camps generally consist of about fifty to one hundred students that are broken up into smaller squads or teams that work together for the entire week. Each team is introduced to a wide variety of construction techniques and competitions. Students also get to learn about the principles of techniques like welding and wood frame construction, as well as get to design and build working structures and systems. The Navy campers even got to learn how to handle and operate firearms. It is not all work however, camp participants also get to participate in fun activities such as construction competitions and camp Olympics while experiencing firsthand what life on a military installation or Academy is like.

At the Seabees camp, Nathan participated in a spirited ultimate Frisbee tournament, a "Humvee Pull" where each squad pulled the vehicle 50 yards, a Nail Driving Relay, and the "Indirect Fire" where each team had to fire water balloons from a catapult they designed and built at the beginning of the week. At the Air force



Students at the SAME Engineering Camp

Camp, Andrew's team built a sprinkler system, wood shed and waste water system, got to tour the US Air Force Academy laboratories and cadet facilities, and spent time with a local A&E firm. At the Army Camp, Bernard's competed in a cardboard boat contest, toured a Nissan manufacturing plant, and visited an operational Army Base to talk with helicopter pilots.

Most of the learning activities are the first chance these students have for hands on experiences with engineering and construction problems and are a great chance to take a first step in a career in engineering. All of these activities take place under the supervision and mentorship of professional engineers. As you might expect, the campers were exhausted by the end of the week but it is not a week they will typically forget.

SAME Student Chapter Activities at CSUS

By Matt Salvesson, Professor for Department of Civil Engineering, California State University, Sacramento

2011 Student Activities

Sacramento State is excited to be revitalizing a new student chapter of the SAME Sacramento Post this semester. The College of Engineering and Computer Science hosts a large, active, and diverse student population of 2,500 undergraduate and graduate students. Many are actively and enthusiastically involved in a wide range of college activities and organizations that extend well beyond the classroom. Here is an update of some of the student happenings and achievements during the 2010 – 2011 academic year.



Sac State 2011 Concrete Canoe – “High Rollers”

ASCE Mid-Pacific Conference

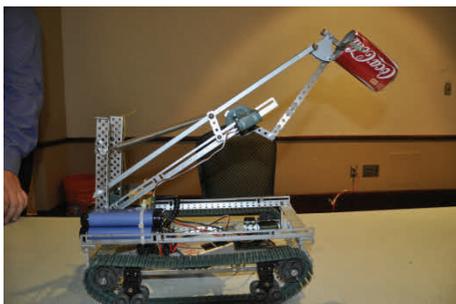
Sacramento State played host this year to the 2011 ASCE “Mid-Pac” conference, attracting over 400 students from 11 west coast universities. Students competed in “traditional” ASCE events such as the concrete canoe races, the water treatment competition, and the steel bridge competition, as well as other social events such as concrete bowling, and a geotechnical challenge. The water treatment team performed well enough that they were invited to the annual national competition.

Construction Management

Sacramento State participated in the Associated Schools of Construction Region 7 and Open Problems competition in February. They turned in an impressive performance that included a national championship in the electrical division, second in the nation in the mechanical division, and third in the nation in the project risk division. Regional awards included a first in the heavy civil division, a first in the multi-family division, and a second in the design-build division.



Sac State 2011 National Champion Electrical Team



Lunabotics Prototype

Lunabotics

The college of engineering sponsors a cross discipline team of student engineers charged with designing and build a robot capable of digging simulated lunar soil. The rules for the team are set forth by the NASA and challenges students to design and build an excavator, called a Lunabot, that can mine and deposit a minimum of 10 kilograms of lunar simulant within 10 minutes. The complexities of the challenge include the weight and size limitations of the Lunabot, and the ability to control the Lunabot from a remote mission control center.

The students team has already completed a small prototype.

Q&A with Brittany and Nathan regarding their attendance at SAME National Leaders Workshop

Brittany White (USAF) and Nathan Rockwood (Mead & Hunt, SAME Sacramento Post Director) attended the SAME Post Leaders Workshop in Alexandria, VA (SAME HQ) on August 17 – 19. SAME National (National) offers two workshops each year that are organized by the SAME Executive Director and HQ Staff, to provide Post Leaders with information on best practices, the National Strategic Plan and Goals and offer an opportunity to share ideas to achieve the goals set forth in the SAME Strategic Plan. The workshops also provide Young Members a unique opportunity to work with Post Leaders as well as the National Leadership. The Sacramento Post encourages its leaders to attend, so that the programs, events and opportunities that are provided to members of the Sacramento Post are in line with the goals set forth at National.



Brittany White and Nathan Rockwood

The following is Q&A with Brittany and Nathan about some of the topics that were covered at the workshop and the value that National brings to our Sacramento Post Members:

When and why was SAME started?

SAME started in the early 1920's after WWI so that "collective knowledge and the cooperation between the public and private sectors that proved vital to combat success would [not] be lost." SAME "would preserve and expand upon connections formed in war and promote the advancement of engineering and its related professions." (Reference: www.same.org)

What is an SAME Streamer?

Streamers consist of pins attached to the Post Flag that provide a way for individual SAME posts to receive national recognition for their efforts in six categories: Education and Training, Emergency Preparedness and Homeland Security, Outreach and Communications, Relationships and Recognition, Membership, and Distinguished Post.

Do government personnel participate in SAME and serve on SAME Boards in their personal or official capacity?

Government personnel support SAME in their personal capacity to promote collaboration and cooperation between the public and private industries so that our combined efforts can better support our common goal, which is, national security and development of future engineers.

There was a breakout session about college outreach and getting college chapters involved, what did you take away from that?

There were many great ideas to help promote SAME to get students involved. The main emphasis of the discussion was to stick to value added interaction with the students in a way that also helps them to realize the benefit of participating in SAME. One idea was to sponsor student chapter leaders to attend a Student Leaders Workshop like the one coming up in San Diego. Another great idea

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2011 SAME Golf Tournament (cont.)

(Continued from page 1)

The income generated from the golf tournament allows the Sacramento Post to continue encouraging and supporting prospective students to pursue careers in the engineering and technical fields. The proceeds will be used for the Sacramento Post Scholarship Fund and will be awarded to qualified high school and college students from the Sacramento area. Thank you to Steve Sanders, President of SAGE for volun-

teering to coordinate this event and to our generous sponsors: Title Sponsor: HDR; Dinner Sponsor: Kiewit; Refreshment Sponsors: SAGE, Brown & Caldwell, Arcadis Malcolm Pirnie, and Lionakis; Lunch Sponsor: Martin Brothers Construction; 1st Drink Sponsor: Magnus Pacific; and Hole Sponsors: Lionakis, Dewberry, Psomas, ITSI, Brown & Caldwell, MWH, Sapper West, Taber Consultants, Taber Drilling, AHTNA, CH2M Hill, Vali Cooper & Associates,

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SAME Student Chapter Activities at CSUS (cont.)

(Continued from page 5)

Hornet Racing

The Sac State Hornet Racing Formula SAE team put in another fine showing this year, culminating with an international student competition in Fontana. The team dedicated many hours throughout the year, designing, building, and ultimately racing the car in a competition that involved more than 75 teams. The competition evaluated the 4 cylinder fuel injected vehicle in categories such as strength, acceleration, and endurance. The Hornet Racing team is also preparing a Mini Baja for competition this year.



Sac State 2011 Hornet Racing Formula SAE Team

Q&A with Brittany and Nathan (cont.)

(Continued from page 6)

was to work with faculty to sponsor a senior capstone project. The students could even attend a Post general body meeting to practice their presentation and give feedback. Assigning a student to the Post board is another way posts have helped to keep students involved.

An NCO council was recently formed at the National Level, what is the goal of this council and why is it important?

The NCO council was set up specifically to focus on getting military non-commissioned officers more involved in SAME. By giving this effort direct attention at the National Level, SAME will be able to do more to reach out to NCO's and show them the mutual benefit of having them integrally involved in the organization. SAME on its part will greatly benefit from the military, construction, and technical experience that NCO's bring from years of involvement in all three. NCO's will realize a wealth of networking and leadership opportunities and exposure to civilian jobs in industry, that will help them in their military career and at the time they transition from the military to the private sector.

The 2011 California Water Conference (cont.)

(Continued from page 2)

Brown and Caldwell
SAGE
Accutest Labs
Construction Testing Services, Inc.
ARCADIS
Shannon & Wilson
Dynamic Solutions, LLC

Please plan to stop by the exhibit hall to learn and network. In addition to the primary exhibit hall the conference will provide tabletop space outside the hall for special exhibits. USACE Sacramento District is planning to use a tabletop exhibit during the conference.

Icebreaker

The icebreaker has always been a highlight of the SAME Sacramento Post Water Conferences. Don't miss this chance to meet and greet. The icebreaker will be Monday, October 3 from 5:00 PM to 7:00 PM in the California Ballroom Patio and Pavilion at the DoubleTree Hotel. This year, the Exhibit Hall will be open during the icebreaker. So with the food, drinks, music, exhibits to see, and people to meet, 7:00 PM will come all too early. If you are attending the conference, don't miss the icebreaker. If you can't attend the entire conference, but want to attend the icebreaker, simply purchase an exhibit hall only pass, and the icebreaker is included.

Pre-conference Golfing

The pre-conference golf outing is a great opportunity to network with your fellow SAME members and conference attendees at the SAME Pre-Conference golf outing. Tee off is Monday, October 3rd at 7:30AM with completion by noon (lunch is provided immediately after). The venue is Haggin Oaks Golf Complex, 3645 Fulton Ave, Sacramento. For those attending the confer-

ence, there will be plenty of time to golf, get some work done, set up your exhibit, check in, and attend the icebreaker. You are welcome to sign up for the golfing even if not attending the conference.

In summary, the SAME 2011 California Water Conference is packed with information and opportunities. Please plan to attend. The registration link and all the information for the conference is on your SAME Sacramento Post website, www.samesacramento.org.

We wish to thank our sponsors for this conference. Sponsorships are still available if your firm would like to join this list. Our sponsors are:

Diamond Sponsor:



Gold Sponsor:



Silver Sponsors:



Small Business Sponsors:



(Dave Cook is an elected member of the Board of Directors of the SAME Sacramento Post and is the Owner/Principal of Cook Consulting. He is currently working as Co-chair for the 2011 California Water Conference.)

Sacramento Post Membership Report

September 1, 2011

David O. Cook, P.E., P.M.P
Principal, Cook Consulting
Sacramento Post Membership Chair & Elected Director

SAME Sacramento Post saw an increase in membership in August of six members, three individuals and three REP Members. All in all, membership was very stable.

Sacramento Post membership roster as of August 31, 2011 was as follows:

Individual Members: 224
 (increase of 3 members since August meeting)

Sustaining Member Representatives: 451
 (increase of three REP since August meeting)

Total Members: 675

Sustaining Member Firms: 110 (no change)

New Post Individual Members

Mr. Edward Lesnick, Universtiy of S CA
 Joseph Menard
 Mr. Keith L Stout

New Post Sustaining Member Firm Representatives

Mr. Ethan Mobley, Michael Baker Corporation
 Ms. Amber Kirk, Kennedy/Jenks Consultants
 Mr. Webb Smith, Atkins
 Mr. Wes Cullumber, HNTB
 Mr. Geoff Brownell, Michael Baker Corporation
 Mr. Jamil Ibrahim, MWH

Sacramento Post Presents Our Sustaining Member Firms

AECOM
 AGS, Inc.
 AHTNA Engineering Services, LLC
 Ahtna Government Services Corp.
 Allied Industries Inc.
 AMEC
 Andregg Geomatics
 ARCADIS/Malcom Pirnie
 Atkins
 Ayres Associates
 Battelle
 Bay West, Inc.
 Black & Veatch Special Projects Corp-New
 Blackburn Consulting
 Blaine Tech Services, Inc.
 Brown and Caldwell
 Burleson Consulting Inc.
 Burns & McDonnell

Cabrera Services, Inc.
 CAPE
 Cardno ENTRIX
 Cardno TBE
 CDM
 CH2MHILL
 Collins Engineers Inc.-New
 Conti Federal Services, Inc.
 David Evans and Associates, Inc.
 Dewberry
 DI Aggregate Management, LLC
 ECC
 EM-Assist
 EMCOR Services, Mesa Energy Systems
 Engineering/Remediation Resources Group (ERRG)
 Envirocon, Inc.
 Environmental Resources Management (ERM)

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The Sacramento Post appreciates the support from all our Individual Members and Sustaining Member Firms!

Those individuals or firms interested in becoming SAME members can contact Sacramento Post Membership Chair, **David Cook** at cook931@me.com or 530-677-5771 . For information on types of available SAME memberships, please visit: <http://www.same.org/>

Sacramento Post Presents Our Sustaining Member Firms (cont.)

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EOD Technology Inc.-New ESA Flintco, Inc. FMJ Marketing Forsgren Associates, Inc. Fugro Consultants, Inc. Genterra Consultants, Inc. Geocon Inc. GeoEngineers, Inc. Gkkworks Hammel, Green, and Abrahamson, Inc. HDR ICF International Innovative Technical Solutions Inc. (ITSI) Jacobs JF Jones Company Kennedy/Jenks Consultants Kiewit Kleinfelder Lionakis MACTEC Engineering and Consult- ing Inc. Magnus Pacific Corporation Marsh Creek LLC Mead & Hunt, Inc. MGE Engineering, Inc. Michael Baker Corporation Miyamoto International	MWH Ninyo & Moore Northgate Environmental Manage- ment, Inc. Parsons Parsons Brinckerhoff PIKA International Prudent Technologies, Inc. Psomas Ramsey North, Inc RBF Consulting Robert Heinen Consulting Engi- neers Rolf Jensen & Associates Salaber Associates, Inc. Sanders & Associates Geostruc- tural Engineering, Inc. (SAGE) Science Applications International Corp. Shannon & Wilson, Inc. Site Work Solutions, Inc. Soil Stabilization Products Com- pany, Inc. Spectrum Services Group, Inc. Stanley Consultants Inc. Stantec, Inc. Suulutaaq, Inc. Swinerton Incorporated Teichert Construction TerranearPMC, LLC Tetra Tech, Inc. The Dutra Group	The Louis Berger Group, Inc. The Shaw Group, Inc. The Stahl Companies, Inc. The Whiting Turner Contracting Company Towill, Inc. Trihydro Corporation Turn-Key Construction Services, Inc. U.S. Army Corps of Engineers - Sacramento District URS Corporation Vali Cooper & Associates, Inc. Versar Vista Environmental Consulting, L.L.C. WEST Consultants, Inc. Westervelt Ecological Services Weston Solutions, Inc. Whitney-Stone, Inc. Wildlands, Inc. Winzler & Kelly Wood Rodgers, Inc. Woolpert, Inc. Yerba Buena Engineering & Con- struction Inc.
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2011 SAME Golf Tournament (cont.)

(Continued from page 7)

GEI Consultants, Kleinfelder, URS and Landslide Solutions. Last but not least, a big thank you to all of the 2011 participants and volunteers. The level of success and participation for this event just keeps getting better every year. The 2012 Annual Scholarship Fund Golf Tournament will be held at Granite Bay Golf Club on June 21st. If anyone would like to volunteer for next year's event, please contact Babette Neal or Steve Sanders at 916-729-8050.

For any questions or comments about the newsletter, please call Nathan Rockwood at 916-971-3961 or email at nathan.rockwood@meadhunt.com



The Society of American Military Engineers
