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**Monthly YMF
Board Meetings**

SB/RC

Every first Monday

SB/VC

Every first Wednesday

MLAB

Every second Tuesday

OC

Every third Tuesday

For locations, please
contact any board
member.

**Everyone is
welcome!**

Legislative Day

David Garcia P.E

San Bernardino and Riverside Counties Branch YMF President



If our California infrastructure had ears, they would be ringing. Everyone seems to agree with our report cards; our state's infrastructure is neglected and is overwhelmed by the growing population.

Legislative Day was held on February 22, 2006. Around 80 engineers from across the state met with approximately 100 legislative members to discuss the need for transportation and water infrastructure. With infrastructure related topics being circulated through legislation, the legislators will be called upon to make very important decisions. We assured them that ASCE is a non-partisan resource dedicated to help them make these infrastructure related decisions. With this hot topic on the table, it appears to be an important issue and supported by all. Now, paying for it? Well that's a whole different story.

Some of the main issues were based on bond and financing acts such as Assembly Bill 1838 (Transportation Bond Acts) and Assembly Bill 1839 (Flood Protection and Clean, Safe Reliable Water Supply Bond and Financing Acts). Another issue we were concerned with was protecting policy that was already in place such as Assembly Constitutional Amendment (ACA) 4. ACA 4 would permanently lock away funding for state transportation projects by prohibiting the Legislature from robbing the gas tax fund money established by Proposition 42 in order to increase the state's General Fund.

Proposition 42 was the overwhelmingly approved statewide initiative that passed in March 2002 that was supposed to have guaranteed sales tax money from the sales of gasoline be dedicated to transportation projects. Unfortunately, a provision of the initiative allows the Legislature and Governor to suspend that guarantee and retain the revenues in the General Fund. Every year since the voters made that decision, the money has been taken to close the general fund deficit. In fact, out of the \$2.4 billion expected from Proposition 42 for fiscal year 2003-04 and 2004-05, only \$295 million has flowed to transportation projects.

Governor Schwarzenegger backs ACA 4. In his State of the State address, the Governor outlined his commitment to permanently protect gas tax dollars, and for the first time since Prop. 42 was passed, the Governor's 2005-06 budget did not raid the transportation fund.

ACA 4 was approved in the Assembly Committee on Transportation in January. ACA 4 will now move to the Assembly Appropriations Committee. It would require a two-thirds vote of both houses of the legislature to place it on the ballot, so we can all do our part and ensure that infrastructure funds are secured.

Meeting with the Assembly members and State Senators was a truly rewarding experience. The backgrounds of our legislators vary
(Continued on page 4)

2006 YMF BOARD MEMBERS

OC YMF PRESIDENT'S MESSAGE



Get Involved!

By: Kathereen M. Shinkai, P.E., M.ASCE

My term is already half over, and just the other day I was thinking of all the activities we have done so far this year and how many people have been involved in achieving that goal. You can probably tell by this edition of the newsletter that the various committees from all our YMF groups put together fun, educational, and informative activities. With so many events, there are numerous opportunities for new members to get involved. In the last newsletter I mentioned that all you need to do is attend one of our YMF events and you are already on your way to career networking and career development. This is absolutely true! I have met so many ASCE members since my involvement with YMF who didn't know about all the activities we participate in, and who have told me that they wished they had known earlier.

I am very happy to say that we have been seeing some new faces at our monthly Orange County Board meetings and our events this year. I would like to welcome the following to the OC YMF Group, they are: Mark Bartlett, Sarah Edwards, Rob Henderson, Grace Lee, Mario Lomeli, Brandon Park, Josh Ruiz, and Kenneth Zimmerman.

Our new members are very proactive and have jumped right into our group by organizing our OC YMF events. Brandon Park organized a very successful Happy Hour at Lucky Strikes at The Block in Orange. Chad Blackney is currently captain of our first ever OC YMF Softball Team leading sixteen of our younger members. Games are scheduled for every Monday at the Tustin Sports Park. If you have a chance, go out there and cheer your group on. Kenneth Zimmerman has become our Team Captain for our Annual Revlon Walk for Women's Cancers in LA. It's a 3 mile walk around the Los Angeles Memorial Coliseum area this May 13th. Enjoy a fun day walking with friends and family for a great cause. Mario Lomeli is currently organizing our exciting Anaheim Angels vs. the Seattle Mariners Baseball Night to be on Saturday, June 10th. Be sure you don't miss out on our famous Carne Asada Tailgate Party. Finally, for those who are taking the PE in October, Rob Henderson, this year's PE Chair, is setting up our popular Fall PE review. Not only is our review course priced at a discounted rate compared to other review courses, but we have done our best to get experienced instructors and have seen great results, as our passing rates exemplify, compared to other PE classes in the local area.

Finally, I have stated this over and over in the newsletter, but since people ask me all the time what the requirements are to be a YMF Member, I think it's worth mentioning again. All you have to be is under thirty-five years of age and a member of the national ASCE organization by paying your annual membership registration. We have a policy of not asking age unless you want to become an executive board member. As long as you are a kid at heart, we welcome all ASCE members to come and join our activities. Be sure to check out your company's policy on annual professional organization dues. Please note that OC YMF has no annual dues, just make sure you are on our email distribution list and show up to any event or Board Meeting, which is open to all and held on every third Tuesday of every month. Check out our calendar at www.asce-oc-ymf.org for more information. It's really that simple! Don't miss out. Give it a try and see what YMF is really all about.

If you have any additional questions, feel free to contact anyone on the Executive Board. We will be more than happy to answer your questions.

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|---------------------------------------|--|
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MLAB YMF PRESIDENT'S MESSAGE



Serving you better

By: Serge Haddad, P.E.

Welcome readers to the third edition of the LA Section YMF newsletter. In an effort to reach out to our non-YMF members, this newsletter is being electronically circulated to all ASCE members in the LA Section area. We hope that with this new exposure, our active membership base and support will exceed our expectations. We have been extremely busy in these last months laboring to make a positive difference in your profession.

The month of February hosted National Engineer's Week. This week was an opportunity for all engineering organizations to reach out and promote our profession to non-engineers. On February 22nd alone, YMF members participated in ASCE's Legislative Day in Sacramento, were awarded by the Los Angeles Community of Engineers and Scientists (LACES) organization at a separate event, and hosted a technical presentation at the University of Southern California.

In March, we toured the Pasadena City Hall retrofit and prepared for the Pacific Southwest Regional Conference hosted by our very own UCLA student chapter. This last April, we held the largest and most successful annual MLAB YMF Student Night and Job Fair at the New Otani Hotel and traveled to the Pomona Fairplex to reach out to new members at an ASCE recruitment table during the PE/EIT examinations. This was a new attempt at exposure and recruitment. We also hosted Social Nights near the fairplex on Friday and Saturday nights.

This newsletter marks MLAB YMF's midyear point. For me, it is a time of reflection on the goals I set as President and the progress of this organization. My goals were to serve MLAB YMF members to the best of my ability, to increase the budget and its security, and to coordinate with all levels of

ASCE. Coordination was demonstrated at the YMF Job Fair and Student Night. Over two hundred civil engineers participated in the event. National, Section, Branch, Student Chapters, and YMF branches all worked together to ensure its success. Our budget and financial base have never been more secure. This stability and security translates into greater member savings. Lower ticket costs and bigger venues are in our near future. We want to provide you more affordable access to YMF events.

With the completion of the school year, I will focus more of my energy on outreaching to civil engineering alumni and professionals under the age of 35. I want to hold more social events and technical presentations. I want to hear from my members. I want to hear what we can do to serve you better. We have the drive, the funding, and the power.

There are six months left in my term and I want to do more for you. Please contact me at serge.haddad@lacity.org if you have any comments or suggestions. If your schedule permits, come to our meetings at the Los Angeles County Department of Public Works building in Alhambra off of the Fremont exit on the 10 freeway. We hold meetings there from 6:30 pm to 8:00 pm every second Tuesday of the month.

SB/VC YMF PRESIDENT'S MESSAGE

By: Anna Bosin



Spring is finally here, the sun is out, and for many of us that means change! I know of many YMFers who have recently changed employers, gotten promotions, passed the PE, and achieved other exciting accomplishments. Congratulations! I hope YMF has played a positive role in these changes and that you will continue to benefit from all YMF has to offer.

Our YMF has come a long way and we have had some recent accomplishments; mainly our website is up and running! Our webmaster David Hayman has worked hard to get us up and running by the end of the year. Please check out the link! <http://www.sbvasce-ymf.org>

I too have a change around the corner...I have decided to take some time off from the working world to travel! It is a bittersweet decision- I have always had the dream to drop everything and travel for an extended time, but leaving friends and the Santa Barbara community behind will be hard. My travel plans include visiting Israel, Jordan, Alaska, and Canada; the latter two places I will be touring by bike! Where I finally land after my travels is unknown but I sure hope it has a YMF.

This month our YMF will hold early elections for the officer positions for next year. The transition will bring new momentum and fresh ideas to our group. I look forward to seeing the YMF group (AKA "My baby") grow-up and spread its wings by offering more and more to members each year.

SB/RC YMF PRESIDENT'S MESSAGE



Thanks for a Successful National Engineer's Week

By: David Garcia P.E.

"National Engineers Week highlights the contributions of America's engineers to our technological progress, infrastructure, strength, and prosperity. I applaud the professionals, educators, and students participating in National Engineers Week for your dedication to improving our quality of life and revolutionizing the way we learn, work, and communicate. By promoting a standard of professional excellence, you help ensure a promising future for all."

---President George W. Bush

The month of February set the stage for a number of events around ASCE's LA Section. National Engineers Week was a tremendous opportunity to showcase our profession to the public. From local high schools to the state capitol we all tried to emphasize the importance of a better quality of life. I give a very special thanks to those who participated or played a key role with the organization of the events.

RECENT YMF EVENTS

Outlook for Future Bridge Engineers is Promising

Minh Tran, P.E., K-12 Student Outreach

On February 24, 2006, over 150 students, teachers and volunteers convened on the campus of the California State University at Fullerton (CSUF) for the 12th Annual ASCE YMF Popsicle Stick Bridge Competition (PSBC). The event, which takes place on the Friday of National Engineering Week, gives local high school students a chance to showcase their teamwork, communication, presentation and bridge building skills.

Seventeen competing teams, each consisting of four students, from nine different high schools were presented with a challenge to build and present the strongest and most aesthetically pleasing bridge using only kraft wood popsicle sticks and ordinary white school glue. As with any real civil engineering project, these bright and energetic students had to deal with limitations on their design, including height, span, minimum clearances and the total weight of the bridge (which was limited to a maximum of one pound).

Each team was judged and scored in five major categories: Overall, Load, Presentation, Technical Paper, and the Impromptu Design Contest. This year's Impromptu Design Contest was a timed competition involving the building of the highest tower using only a limited amount of newspaper, plastic drinking straws and masking tape. The winning team had a tower height of 75 inches!



ASCE YMF volunteers, Lisette Bice and Brandon Park, check to see that a team's bridge meets the span and weight requirements prior to the start of the PSBC.

One of the most memorable segments this year was the presentation portion of the PSBC. Showing an amazing comfort level with computers and their practical applications, the students used sophisticated graphics to help illustrate the design and construction phases of their respective bridges. A few teams even went so far as to build miniature cities around their bridges, including detailed landscaping and battery-operated cars.

As in years past, the competition for the first place overall finisher was fierce among the perennial favorites. The final standings for the different categories were as follows:

Overall Competition

- First Place – South Torrance High School, Team 1
- Second Place – Narbonne High School, Team 1
- Third Place – South Torrance High School, Team 2

Load Competition

- First Place – South Torrance High School, Team 1
(Load at failure = 1,021 lb)
- Second Place – Narbonne High School, Team 1
(Load at failure = 701 lb)
- Third Place – South Torrance High School, Team 2
(Load at failure = 605 lb)

Presentation

- First Place – Gabrielino High School, Team 1
- Second Place – Warren High School
- Third Place – Narbonne High School, Team 1

Technical Paper

- First Place – Gabrielino High School, Team 1
- Second Place – Warren High School
- Third Place – Ramona High School, Team 2

Impromptu Design

- First Place – Narbonne High School, Team 1
(Tower height = 75 inches)
- Second Place – Warren High School
(Tower height = 74 inches)
- Third Place – San Pedro High School, Team 1
(Tower height = 69 inches)

Of course, this year's PSBC would not have been a success without the generous contributions from our corporate sponsors, the help of the volunteers from ASCE YMF (from both LA and OC) and the civil engineering students at CSUF. The combined efforts of these individuals helped to ensure an efficient, fair, and fun event for everyone involved.

(Legislative Day, Continued from page 1)

tremendously. They may be a teacher, a lawyer, a policeman, an engineer, or a nurse. After speaking with them, I truly believe they want to make a difference. They are more accessible than most may think. They seemed very willing to hear the ideas of their constituents and non-constituents.

At the end of the day, ASCE hosted a reception and invited the legislators and their staff to attend. There was a surprisingly large response. Many of the legislators and their staff joined us to expand on a few of the topics that had been discussed during the day. This was an immense learning experience and I recommend all engineers to get involved with their local or state government.

RECENT YMF EVENTS

OC YMF Happy Hour at Lucky Strike Lanes

By: Brandon Park, E.I.T.



What do you get when you mix food, cocktails, music, bowling, and a bunch of intelligent minded citizens? You get the scene of our OC YMF happy hour on February 9th at Lucky Strike Lanes at the Block. From bowling and billiards to a full size bar and lounge area, Lucky Strike Lanes turned out to be the perfect location to host our happy hour. There was an excellent turnout with about 15 members enjoying the festivities. 8 of us bowled while the rest sat back in leather chairs and enjoyed appetizers from “A menu that speaks to the inner child,” according to the LA times. I didn’t quite get flashbacks of my youth but the chicken bites and skewers definitely satisfied our appetites. While most of us were having a great time getting to know one another, an intense bowling rivalry also brewed between Ken Zimmerman and I. We battled till the 10th frame where I pulled away with a “lucky” strike. This was a terrific event and I look forward to the next OC YMF Happy Hour.

Life Member Brunch

By: David Garcia PE

San Bernardino and Riverside Counties Branch YMF President

The Los Angeles Section’s Life Member Forum (LMF) was conceived in 1990 and became a standing committee in 1992. The LMF was founded on the notion that a Life Member is probably no longer tied to the policies of their former organization and can advocate an independent view of what is best for the future of our communities, nation and the world. The Life Member receives the rewards of voluntary service, knowing they have made a contribution to the betterment of our communities. The annual Life Member Brunch is the Los Angeles Section’s way of passing on the heritage to all incoming members.

The annual Life Member Brunch was held during Engineers Week on February 25. This year 87 recipients from the Los Angeles Section were recognized for achieving Life Member Status. ASCE national president Dennis Martenson was the

keynote speaker. He spoke about the challenges of hurricane Katrina and building sound infrastructure. The biography of each inductee was presented prior to receiving their award.

It was an absolute pleasure to hear each individual’s biography. The biographies of our fellow professionals were a testament to their contribution to Civil Engineering. Whether it was transportation, water, structures, sanitation, land development, research, or publishing, the Life Members’ achievements were all for the benefit of humanity. I’ve been told that the younger members are the future of ASCE. If we can better society by accomplishing what the Life Members have during their careers, then the future looks bright, very bright.

Thank you for your hard work!

“Embracing the Future”

By: Marlon Calderon

On February 25, 2006 Project Partners, and a number of professional civil engineering societies hosted the first annual Civil Engineering Professional Development Conference and Job Fair at the Long Beach Convention Center. The focus was entirely on civil engineering careers in Southern California, and the goal was for those in attendance to embrace the future because many exciting changes and transitions are happening to the profession.

The conference was divided into two sessions, one in the morning and one in the afternoon. The audience present listened and took notes as the group of panelists gave their insight on trends, opportunities, tools, and strategies for a winning career in this new era of challenges and opportunities.

The first session zeroed in on the current trends to the profession and how job security continues to be redefined and how

global outsourcings sets up many challenges ahead. The high demand of civil engineers is creating an opportunity to rapidly advance your career, however the challenge of finding local engineers to do the analysis and design is forcing companies to outsource projects overseas. A multitude of opportunities lay ahead for civil engineers as the nation, and more specifically, the Los Angeles region, reinvest in our infrastructure. The panel believes that collaborative design tools, the breakdown of old mental models, thinking-out-of-the-box, and people business trends are transforming employers and careers. Understanding these trends and knowing what markets are growing is critical to planning your career.

The second session focused on developing career strategies, and how professional societies can advance your career. The panel recommended that the audience plan their careers as

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PACIFIC SOUTHWEST REGIONAL CONFERENCE

Concrete Canoe Competition

By: Cesar Moran

Unlike most spectators, the concrete competition began a week and a half earlier for me. As a judge, the competition began as soon as the technical papers arrived in the mail. I anxiously read through the papers, as if I was reading a novel. It had been two years since I was involved in the concrete canoe competition as a student. I was curious to see how the competition would play out. As a judge, I had the unique privilege of being able to see what every school was doing.

As I read the papers, I was fortunate enough to read the University of Arizona's "Blazing Saddles" report first. This report was written very well, and I learned a lot about the new mix designs that were used due to this year's new mix design. As I read through the remainder of the papers, I was quite disappointed. I found that the majority of schools did not follow the directions and format outlined in the rules. I was quite surprised that something as simple as a conclusion would be left out of the majority of the papers. I only hope that upon getting their score cards that the students would learn how to properly write a technical report, and more importantly, how to follow instructions. Reading the papers before the Pacific Southwest Regional Conference even started gave me great insight as to which schools put their heart into the competition and which ones didn't.

The first event I was able to meet the students at was at the display table. As long as they had a table, no real points were at risk. Schools could only lose points at this part of the competition, and a few of them did. It was very exciting to see the faces behind the papers I spent a week reading. I could tell that everyone was excited and nervous. So nervous, in fact, that it made me nervous. Overall, everyone was really pleasant and anxiously awaiting the next part of the competition.

The technical presentations followed the canoe display. This was my chance to see if the students really knew what they were talking about in their papers. It was quite easy to see who had simply used techniques and ideas from previous years, and who had actually put the time in to research and test their own ideas, or even just confirm the ideas of others. UCLA and Cal Poly San Luis Obispo were some of the schools who knew their material in and out. For those schools that did not put in the time, this part of the competition was especially embarrassing.

Two days after the technical presentation, the day that everyone has been waiting for arrives. Regardless of what school is in the lead from the technical presentation, the technical paper, and the display, this is for bragging rights. Every school has come out to race.

The day starts out with heavy rain the head judge decides to postpone the race in the hope that the skies clear up. After waiting an hour, the rain subsides and the competition begins. The first race was the long distance race. This is typically a long and slow race. The races that everyone was there to watch were the sprint races. One of

(Continued on page 10)

AISC Student Steel Bridge Competition

By: Serge Haddad, P.E.

The American Institute of Steel Construction Student Steel Bridge competition took all of Friday to complete. MLAB YMF's very own Serge Haddad and Julian Garcia were load testing head judges for the event. Initially the weather threatened with heavy rains, but fortunately the bridge gods allowed the sun to do its job. The UCLA plaza was packed with students anticipating the outcome of the event. Seventeen universities participated in the bridge competition. Several bridges were disqualified and many bridges were well designed. Each bridge was required to withstand a 50 lb lateral force and carry 1500 lbs near its center and 1000 lbs near its end without deflecting more than 2-inches.

The bridges were judged on aesthetics, construction speed, lightness, stiffness, construction economy, structural efficiency, and overall performance. Rules regulated the construction methods the students were allowed to use. The bridges were then weighed and load tested for deflection tolerances. Estimated costs were calculated and points awarded for the most economical bridges.

The overall winners of the 2006 AISC Steel Bridge competition were the University of California San Diego, California Polytechnic State University San Luis Obispo, and the University of Hawaii, 1st through 3rd respectively.



Digesting the PE/EIT Exams

By: Serge Haddad, P.E.

Finally, it's over. The big exam is done. Did you pass? Will you be back? Did you see our ASCE table? That's right; we were there amidst the crowds and the last minute cramming. We handed out invitations to the local sports bar, Scoreboards. It was a post-examination call for free food and drink. What would be better than to share a few free drinks, eat plenty of free bar food, and complain about the exam with fellow engineers?

Younger Members from various LA Section branches represented ASCE during the Friday and Saturday exams. We proudly displayed our new ASCE YMF banner and interacted with new and old friends at the testing grounds.

After the Saturday exam, approximately thirty examinees gathered into the sports bar, Scoreboards, and took advantage of the Younger Member Groups' generosity. The event was extremely successful. Many non-members got a chance to learn more about the benefits of joining the ASCE organization and were able to meet the various ASCE board members. It was a great outreach investment and something we look forward to doing every six months when those dreadful tests take place. We hope that the PE/EIT Exam will be a little easier to digest with our assistance.

ORANGE COUNTY YMF SPEAKER SERIES

By: Alan Yuan

Communication in Civil Engineering

Are you good at the technical aspects of engineering? Yes, you are, but what about when you meet the clients and try to convince them on your concept? Do you feel like it's not persuading or not interesting enough? So here comes the question - how to make a good case? Dr. Horne, Professor Emeritus, Dept. Civil & Environmental Engineering, University of California, Berkeley gave a speech on the first "speaker series" meeting on January 31st 2006. More than thirty younger engineers from ASCE YMF attended.

Dr. Horne's speech was about "Using Wetlands to Cleanup Water", but the real purpose was to show the bag of tricks to persuade others: processing your slides with a rhyme, keeping your points short and specific, facing the audience when you talk, and raising your voice or tone to emphasize the most important points, and so on. This lecture showed what 35 years of regular lecturing to Berkeley students and others has shown Dr. Horne.

We all benefited this wonderful discussion on how to deliver a great speech, and how to improve your verbal communication which, combined with written and math skills, is the only way out of the cubicle to leadership. At the end of the meeting, Dr. Horne led us to sing a song "Fixing the planet on a budget using wetlands" which was written by him. It was the first time for most of us to sing a song about engineering or about the profession we work in.

Ownership Options: How to Exceed Salary Ceilings

As you know there is a salary ceiling in every position if you just work as an employee, so what you are going to do when you see your salary plateau? Do you wait until it comes? No, definitely not. There is one good option to exceed your salary ceiling: ownership or striking out to be your own boss. Opening your own engineering consulting company is not an easy job and there are risks involved. How do you prepare to be your own boss?

Mr. Chris Diaz, Principle of Diaz and Yourman & Associates shared the story of DYA with about 20 engineers at the second meeting of our "ASCE OC YMF" "speaker series" on



March 23rd 2006. From his own experience, Mr. Diaz showed us what you can do to prepare to strike out on your own: more than 10 years practice experience in your professional area, necessary social networking skills, project and client management skills, and tangible leadership. So sitting on your chair and crunching the numbers will be only one of the requirements for your success, and sometimes without others, it is hard to lead you to great accomplishments.

Mr. Diaz also showed us plenty of ways to improve those non-engineering skills which are required being a successful engineer: Joining professional organizations, attending seminars, meeting clients, joining proposal meetings, and so on. Although we may be a little far away from the 10 years experience, certainly a lot of younger engineers are looking into ownership. The meeting ended with a lot of detailed questions regarding the way to exceed salary ceilings, risk management, and business operation.

The ASCE OC YMF "Speaker Series" is held on the last Thursday evening of every odd month. The goal is to focus on leadership skills, and other related topics. If you have a particular topic you are interested in, please contact Quanwei (Alan) Yuan (qyuan@moffatnichol.com) to check the potential opportunity to have the topic covered in the coming meetings. At the same time, if you are interested in sharing some topics with our younger engineer members, please contact Alan too, you are more than welcome. The next tentative topic is "client management" on May 25th. Please make sure that you are on the distribution list with ASCE YMF to receive flyers for any upcoming events.

Communication Between Contractors and Engineers; MLAB Technical Presentation

By: Cesar Moran

On February 22nd, MLAB YMF was fortunate to have Dr. Gregg Brandow from the engineering firm Brandow & Johnston Associates and Mr. Gary Rafferty from the contracting company Swinerton Builders speak on Proper Methods of Communication between engineers and contractors. The presentation was held at University of Southern California. Students and YMF members were able to learn from the two speakers about the importance of open communication in the workplace among all parties involved. The speakers more importantly touched on the issue of respect between engineers and contractors.

Mr. Rafferty made a great point about avoiding barriers in communication. He instructed us to be aware of misleading

prejudices against colleagues and coworkers. He emphasized that everyone sees a project from a different point of view, and if we respect our co-workers' opinions and concerns, we can move forward with greater progress.

Mr. Rafferty pointed out the tendencies of contractors and engineers to place blame on each other when something goes wrong. Engineers blame the contractor for constructing something improperly; and contractors blame the engineer for improper design.

The common thread throughout this presentation was the absolute necessity of effective communication between engineers and contractors. It is an important lesson for us all!

RECENT YMF EVENTS

MLAB's Tour of the Pasadena City Hall Seismic Upgrade and Rehabilitation Project

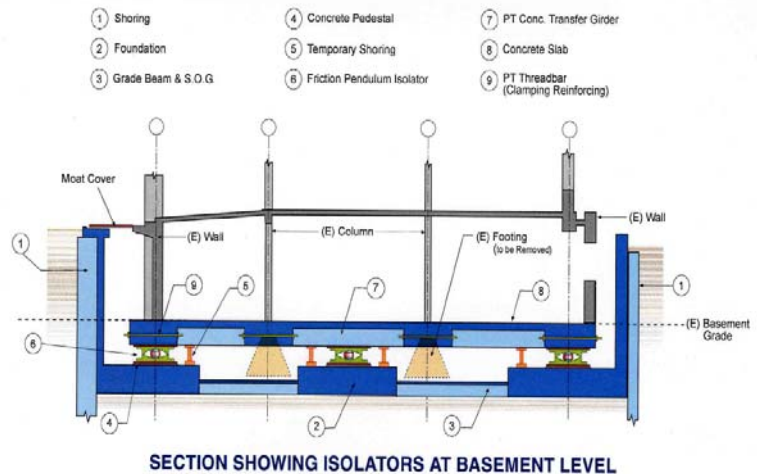
By: Greg Sommer, P.E.

Constructed in 1927, Pasadena City Hall has become a historic landmark for the Crown City. The beautiful dome has become an important part of this community's rich architectural heritage. In 2003, the City Council approved a plan for the seismic retrofit, historic renovation and infrastructure improvements to ensure that Pasadena City Hall will continue to stand proud and serve the community for another 100 years.

On Friday, March 3, 2006, approximately 30 MLAB YMF members had the opportunity to visit the job-site, for a behind-the-scenes look at this unique project. The tour was led by Bob Troutman, who is the construction manager for this project. Bob has worked on several other seismic retrofit projects over the past decade and is extremely knowledgeable. He provided an excellent tour and detailed explanations of the technical elements.

The project consists of structural upgrades including the installation of a base isolation system that will permit the building to move during a seismic event, new shear walls, and a "moat" to isolate the perimeter as well as a complete rehabilitation of the historic interior and exterior components of the building. Installing the base isolators involves removal of the original basement floor slab, excavation and installation of a new foundation, placement of a new basement floor support, and installation of 240 friction pendulum isolators between the

foundation and basement level. Forell/Elsesser Engineers, Inc. provided the structural design and Clark Construction Group - California LP is the General Contractor for the project. Building construction started in March 2005 and is expected to be completed in Summer 2007. If you missed out on this last tour, you may be in luck. We're hoping to arrange another tour this summer to check in on the progress of this project.



Sugar Cubes and Peanut Butter - Deliciously Constructive

By: Serge Haddad, P.E.

On Saturday March 11th, Cesar Moran, Serge Haddad, and Minh Tran hosted the first MLAB YMF Sugar Cube and Peanut Butter Seismic Structure competition for kids. The kids ranged from 1st through 5th grades. The event took place at St. John Maron Church in Anaheim. We were contacted by Paula Germanos, the church organizer, who on weekends opens the church doors to disadvantaged children from the neighborhood. Paula always prepares constructive activities for the children. She hopes that their participation will give them a sense of responsibility and positive alternative choices to drugs and crime.

The Sugar Cube and Peanut Butter structure competition is an event that was developed and used by the Seattle Branch YMF. The sugar cubes are the "bricks" and the peanut butter is the "mortar" of the structure. It utilizes the basic concepts of design, construction, and seismic activity. This exercise teaches the children to find a "happy me-

dium" with their projects. For instance, the more sugar cubes used will increase the strength of the structure, but at the same time will increase the structures cost. The more windows and doors (openings) a structure has the more aesthetically pleasing it is, however, it will weaken the structure during an earthquake.

The activity took approximately three hours to complete. The kids built structures as high as three stories (9 sugar cubes tall). The structures were judged on cost, aesthetics, and a total time of resistance to shaking. All the kids were rewarded with prizes for their efforts. The kids and volunteers enjoyed the activity. They kids were very en-

thusiastic about engineering and asked curious questions. They wanted to know how big buildings are built and how do earthquakes occur. We look forward to working with Paula and the kids again. We also hope to expand this activity to elementary schools.



RECENT YMF EVENTS

2006 Student Night and Job Fair

By Jesal Shah, P.E.

On Friday April 7th MLAB YMF hosted the annual Student Night and Job Fair at the New Otani Hotel in downtown Los Angeles. The event was a resounding success with over 32 civil engineering firms sending recruiters to meet with over 150 students from the 10 LA Section universities.

The foyer at the New Otani Hotel was vigorous with juniors and seniors networking with industry professionals.

After the Job Fair, there was a banquet, a speech on Iraqi infrastructure, and an awards ceremony. Colonel Alex Dornstauder, a graduate from West Point and doctoral candidate from the Massachusetts Institute of Technology, gave a speech on his on-site personal experience for the reconstruction efforts in Iraq. He mentioned that a number of positive events were unfolding over there that were not getting reported in the news. The Colonel discussed the rebuilding of infrastructure such as schools, water lines, sewer lines, and energy.

In the end, the LA Section, various ASCE branches, and YMF groups awarded numerous scholarships. LA Section

awards alone accounted for \$10,000 in value. I'd like to give all the Student Night and Job Fair Committee members a pat on the back for all the great work we accomplished.



PROFILES IN CIVIL ENGINEERING

Alexandre Gustave Eiffel (1832-1923)

Compiled By: Liz Dealy, P.E.



Born into a family of master weavers on December 15, 1832, Eiffel was influenced by his uncle and studied chemistry in hopes of one day taking over the family's vinegar factory. But a falling out over inheritance rights, led him to metallurgy.

By 1856, Eiffel took his skills to Paris where he was entrusted with overseeing the design and construction of the Bordeaux Bridge. His work impressed his colleagues and a series of contracts followed.

In 1866, Eiffel went into business for himself. His two most important projects to date included a train station in Portugal that is of the earliest examples of combined metal and masonry construction and the record-spanning Douro Bridge.

By 1878 the Eiffel Company had established itself as one of the major French metal construction companies. He was hired to construct the inner framework for the Statue of Liberty and a structure was designed to support the over 100 tons of copper. Eiffel insisted that this project was similar to his previous work and that the statue was simply a large metal pier calculated to resist wind stresses.

In 1886 the French government held a competition to design a tower to serve as the main attraction for the World's Fair. Eiffel's design was selected out of the 700 submitted. To him, the tower symbolized the previous century of advancements in the industry and would be a useful resource to meteorologists and cartographers.

At the height of his fame, Eiffel's image was tainted by scandal. His company agreed to construct 10 locks for the Panama Canal for the sum of 125 million francs. When the Panama Company dissolved, Eiffel became involved in the fallout that ensued. Though he was named blameless in the end, the affair took its toll. Eiffel retired from engineering and turned his attention to meteorology and aerodynamics, constructing some of the first wind tunnels and publishing on the effects wind resistance on metal structures well into his eighties.

Assembled from information provided by ASCE's History and Heritage Committee available at www.asce.org/history

"Are we to believe that because one is an engineer, one is not preoccupied by beauty in one's constructions, or that one does not seek to create elegance as well as solidity and durability?"

-Gustav Eiffel, February 14, 1887



RECENT YMF EVENTS (continued)

(Future, continued from page 5)

they plan for their projects, because effective management of your career is now more important than ever. Careful career planning and management provide effective strategy for anticipating and addressing unpredictable changes, and pave the road to new opportunity. Planning and management are critical ingredients to achieving a desirable and stable career. The panel emphasized the benefits that professional societies provide to the advancement of your career. Professional societies provide forums to meet and develop professional networks and relationships; they help you keep up-to-date on key topics, projects, and changes happening in the industry, which directly affect your career now. Significant changes are occurring and are expected to occur in our profession, however by planning and managing your careers will help you embrace the future so that you can grow and thrive in this new era.

(Concrete Canoe, continued from page 6)

the most impressive canoes to watch was UCSD's. This team had initially made their canoe out of a mix design that was never tested. Their first attempt at making a canoe resulted in a canoe that did not cure properly. The team had to quickly create another mix design and managed to do quite well in the canoe races.

In the qualifying races for sprints, USC faced a setback when UCLA smashed into the side of USC's canoe, breaking the hull in half. USC persevered and made it to the finals. Unfortunately the canoe was beyond repair and the best they could hope for was that the canoe would stay afloat long enough to finish the race in the final round. Fortunately, it did.

In the end, every school that participated had a great time and judging the competition was a great experience. It was great fun working with all the students who put in over 4 six months worth of work for a week-end of fun. Cal Poly San Luis Obispo took first place and will be competing in the national competition in Omaha Nebraska this summer. Best of luck to them, and to all the schools getting ready for next year's competition.

EVENTS CALENDAR

| | <u>DATE</u> | <u>EVENT</u> | <u>TIME</u> | <u>LOCATION</u> | |
|---|-------------------------|---------------------------------------|-----------------|---------------------|--|
| <p>Don't miss the upcoming</p> <p style="text-align: center;">MLAB</p> <p>Technical Presentation on Land Development</p> <p>Presented by:</p> <p style="text-align: center;">Corey Harpole Director of Community Development Newhall Land</p> <p>June 2006 at Jillian's Universal City Exact Date and Time TBD</p> <p>Watch for email announcements or contact: Liz Dealy edealy@ladpw.org 626.458.4921</p> | May 2006 | OC YMF Rock Your World with ERF | TBA | TBA | |
| | May 2006 | OC YMF school visits to promote ASCE | TBA | TBA | |
| | May 1, 2006 | SB/RC YMF General Meeting | 7:00 PM | Riverside, CA | |
| | May 13, 2006 | Revlon Run/Walk for Women's Cancers | 8:00 AM | Los Angeles, CA | |
| | May 9, 2006 | MLAB YMF Board Meeting | 6:30 PM | Los Angeles, CA | |
| | May 16, 2006 | OC YMF Board Meeting | 6:00 PM | Santa Ana, CA | |
| | May 22, 2006 | SB/RC YMF Board Meeting | 7:00 PM | Riverside, CA | |
| | May 25, 2006 | OC YMF Speaker Series | 6:30 PM | TBA | |
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| | June, 2006 | OC YMF San Diego Rock N Roll Marathon | TBA | TBA | |
| | June, 2006 | OC YMF Happy Hour | TBA | TBA | |
| | June 2-4, 2006 | OC YMF Camping Trip | TBA | Limekiln State Park | |
| | June 5, 2006 | SB/RC YMF General Meeting | 7:00 PM | Riverside, CA | |
| | June 10, 2006 | OC YMF Baseball Night | 4:30 PM | Anaheim, CA | |
| | June 13, 2006 | MLAB YMF Board Meeting | 6:30 PM | Los Angeles, CA | |
| | June 20, 2006 | OC YMF Board Meeting | 6:00 PM | Santa Ana, CA | |
| | June 26, 2006 | SB/RC YMF Board Meeting | 7:00 PM | Riverside, CA | |
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| | July 3, 2006 | SB/RC YMF General Meeting | 7:00 PM | Riverside, CA | |
| | July 8, 2006 | OC YMF Wine Tasting | TBA | Temecula, CA | |
| July 11, 2006 | MLAB YMF Board Meeting | 6:30 PM | Los Angeles, CA | | |
| July 18, 2006 | OC YMF Board Meeting | 6:00 PM | Santa Ana, CA | | |
| July 24, 2006 | SB/RC YMF Board Meeting | 7:00 PM | Riverside, CA | | |
| July 27, 2006 | OC YMF Speaker Series | TBA | TBA | | |

For extended calendar of events, please visit the ASCE Los Angeles Section website at www.ascelasection.org.

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Keep up to date with all the latest YMF events and important announcements. Join our e-mail list.

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