

February Meeting



Changes in Environment, Safety, and Health practices at DOE facilities, including LBL and LLNL

Speaker: Charles Simkins
U.S. Department of Energy

Charles Simkins is a program manager in the Department of Energy's Environmental Restoration Division and is the Manager of the Technical Standards program for the Oakland Operations Office. He has also coordinated Environment, Safety, and Health (ES&H) and Quality Assurance (QA) oversight activities for the Oakland Operations Office Nuclear Energy Division. Since 1994, he has represented the Oakland office on the Department Standards Committee (DSC).

Dr. Tara O'Toole, Assistant Secretary for Environment, Safety, and Health was asked by the Secretary of Energy to define criteria for establishing an acceptable Standards Program. The DSC is a high-level committee with representatives from all the Principal Secretarial Officers (PSOs) and the field operations offices. It was established to help create and implement the Standards Program. Mr. Simkins will discuss the ongoing Standards Program, including implications for Lawrence Berkeley Laboratory (LBL) and Lawrence Livermore National Laboratory (LLNL).

Tuesday February 27, 1996

Location: Pasta Cuisine
500 12th St., Suite 33
(City Center Plaza, 12 St./City Center BART Station)
Oakland
(510) 834-7363 for directions only

Dinner: (Buffet Style) **Time:** 6:00 PM No host bar/appetizers
Lemon-pepper linguine with hazelnut chicken 7:00 PM Dinner
Vegetable ravioli in tomato-herb sauce 8:00 PM Presentation
Cost: \$20 ASME Members
Jambalaya \$10 Student Members
Caesar Salad \$22 Non-members
Apple crisp dessert \$12 Student Non-members

--- FOR DIRECTIONS/PARKING SEE BACK COVER ---

RSVP: Call S.F. ASME at (415) 721-4478 by noon, Monday, February 26.

Have We Not Cashd Your Check?

by Rich Myhre, Chair

Last Spring, we asked for voluntary contributions to our Farbar scholarship fund, student fund, and section operations fund in conjunction with the ballot for electing 1995-96 officers. The contribution form included our previous return address in the San Francisco Embarcadero Center. The company providing that P.O. Box "suite" moved abruptly about that time and appears to have lost some of our mail. Needless to say, we've moved our mailbox to ASME's Western Regional Office in San Rafael. However, a few members have reported that their checks to us were never cashed. You also may have sent us a check we've not cashed. If so, please accept our apologies and consider reissuing us a check in any amount along with your preference of how the money be split among the three funds. The Farbar Scholarship fund, awarded annually to promising student ASME members at UC Berkeley, SF State, and the Cal Maritime Academy, is particularly in need, as low interest rates have forced us to draw down the fund's principal to be able to give a respectable amount. Any help you can provide is greatly appreciated and should be tax-deductible.

Thank you.
Rich

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♦ Farbar Award & College Corner

San Francisco Bay Area Engineering Council presents 1996 Engineers' Week Banquet February 22, 1996

Keynote Speaker: Seth Shostak, Ph.D. "In Search of Extraterrestrials"

Could there be intelligent life elsewhere in the universe? We have explored nearby planets but found them disappointingly sterile. But now researchers are aiming for the stars, not by going there, but by using modern technology to sift through cosmic radio static in hope of eavesdropping on possible signals from advanced civilizations.

The most comprehensive such search ever undertaken, Project Phoenix, recently got underway in Australia. Over the next five years, sophisticated digital receivers on large telescopes will be used to probe the vicinities of nearly one thousand nearby sun-like stars.

But what are the chances of success? Are Earth-like planets a dime a dozen or a rare occurrence? Will Project Phoenix aim its antennae at the most likely sites for life? Can Nature by expect to readily cook up interesting biology elsewhere? Even if alien life is common, is any of it intelligent? And finally, suppose project Phoenix succeeds: Will we then be connected with a galactic community of supremely intelligent beings who will quickly take us to what otherwise would be a very distant future?

Seth holds a degree in physics from Princeton University and a Ph.D. in astronomy from the California Institute of Technology. For much of his career, he has conducted radio astronomy research on galaxies and has published approximately forty papers in professional journals. For more than a decade, he worked at the Kapteyn Astronomical Institute in Groningen, the Netherlands, using the Westerbork Radio Synthesis Telescope.

Seth is the Public Programs Scientist at Search for Extraterrestrial Intelligence (SETI) in Mountain View, California.

6:00 p.m. No-Host Cocktails in Hotel Nikko Grand Ballroom Foyer
7:00 p.m. Dinner in Hotel Nikko Grand Ballroom

Choice of
Grilled Breast of Chicken with Peppercorn Sauce
or
Sesame Salmon with Shiitake Mushrooms

Hotel Nikko
222 Mason Street
San Francisco, CA

Cost: \$40 (\$50 after Feb 15)

San Francisco Bay Area Engineering Council presents an Engineers' Week Lecture by Richard A. Hill, Oiler of the SS Jeremiah O'Brien on "To Normandy and Back" Tuesday, February 20, 1996 Tour 10:00am, Lecture 11:00am San Francisco, Pier 32 (free parking) \$10.00 Attendance limited to 50. Please call 1-800-624-9002.

BANQUET RESERVATION FORM

Please reserve ___ ticket(s) at \$40 each (Tables of 10 available)
___ Grilled Chicken ___ Sesame Salmon ___ Vegetarian (Indicate # of dinner choices)

AFTER FEBRUARY 15, TICKETS ARE \$50 PER PERSON

We wish to make a donation to the Engineers' Week Fund. Please use it in the following manner:
• Sponsor ___ student(s) for dinner @ \$40 each
• Monetary donation of \$ _____

TOTAL ENCLOSED _____

Mailing Instructions:
 Mail tickets to address shown below. (Please include stamped, self-addressed envelope)
 Hold tickets for pick-up at banquet

Name _____
Company _____
Address _____
City, State, _____
Zip _____
Phone _____

Make checks payable to: "Engineers' Week Fund"

Mail to:
Ralph Johnson
County of Alameda, Public Works Agency
399 Elmhurst Street
Hayward, CA 94544
Phone: (510) 670-5562 FAX: (510) 293-0960

ANSI Y14.5 GEOMETRICS UPDATE!

An Intensive, Interactive Training Program To Help You Understand, Apply and Interpret Many New Techniques Contained in TWO NEW American National Standards

Revision --- ASME/ANSI Y14.5M-1994 Dimensioning and Tolerancing
New --- ASME/ANSI Y14.5.1M-1994 Mathematical Def. of Dimensioning and Tolerancing Principles
February 28-29, 1996 @ Santa Clara Embassy Suites, Santa Clara, CA

WORKSHOP GOALS This intensive, two-day workshop is designed to provide you with the practical information you need to understand and implement major concepts [changes] in the revised ASME/ANSI Y14.5M-1994 standard on Dimensioning and Tolerancing and the new ASME/ANSI Y14.5.1M-1994 standard on Mathematical Definition of Dimensioning and Tolerancing Principles. It presents new symbols, principles, revised definitions and clarifications never before documented in Y14.5 or any textbook. It lends insight as to how to best implement these standards and how the material contained within may impact your company, its design drawings, manufacturing techniques and inspection procedures. Some changes are obvious, but others are subtle and can have a major impact on application and interpretation. Attendees will gain a solid understanding of these basic changes to the Y14.5 and the new Y14.5.1 standards and will then reinforce this information through practical applications and exercises.

WHO SHOULD ATTEND? This course is directed to anyone who has previously been trained in Geometric Dimensioning and Tolerancing and/or has a working knowledge of the ANSI Y14.5 standard (should be able to accurately interpret fundamental GD&T principles) and wish to update their knowledge with the newly issued revision of ANSI Y14.5M-1994 (Dimensioning and Tolerancing), ANSI Y14.5.1M-1994 (Mathematical Def. of Dimensioning and Tolerancing Principles), as well as other American National B89 Metrology Standards.

Your GD&T expert... James D. Meadows is a nationally-recognized/respected consultant, lecturer and author (four GD&T books, magazine articles, The Tolerancing Engineer engineering newsletter) on the proper application and interpretation of engineering standards. He has trained thousands of professionals in design, engineering, manufacturing and inspection disciplines for the auto/aerospace industries, the military, universities and the private sector on the application and interpretation of ANSI Y14.5 symbology and geometric part definition. He is a former tool and die maker with decades of hands-on experience and expertise in training others to create, interpret and inspect all aspects of dimensioning and tolerancing. He is an active member of eight ANSI and ISO committees. He is a renowned storyteller, capable of teaching vital concepts by relating past experiences, making for lively sessions, pertinent topic coverage and an enthusiastic acceptance. He is as full of enthusiasm for his subject as he is for course attendees' potential.

TOPICS COVERED

- The new standards:
 - ANSI Y14.5M-1994; ANSI Y14.5.1M-1994; ANSI B89 and ISO Standards [History, Logic & Impact on Existing [Future Systems]
- New concepts and symbols for:
 - Controlling the orientation of tangent planes
 - Actual mating envelopes, actual local size, actual mating size
 - Free state inspection sym. vs. restrained state inspection
 - Intro. of the spherical diameter symbol & the projected tolerance zone symbols inside of feature control frames.
 - Redefined radius vs. a controlled radius.
 - Implied RFS condition for positional controls.
 - Inclined datum features
- Resultant condition vs. virtual condition
- The boundary concept
- Simultaneous requirement
- Composite pos. tolerancing vs. two single segment pos. controls.
- Composite profile tol. vs. two single segment profile controls
- Axes vs. derived median lines. Planes vs. derived median planes.
- Symmetry.
- Compound patterns of features to construct datums
- New rules. Valid vs. invalid datum establishment
- What to do when the boundary says the part/feature is good and the tolerance zone says its bad.
- Controversy on tertiary datum feature of size representation
- Differences and new similarities between ANSI and ISO rules
- Tolerance zone conformance vs. actual value
- Inspection process planning
- Consolidation of parallelism, perpendicularity and angularity
- Making datum features of any mathematically definable surface such as compound curves or contoured surfaces.
- Statistical tolerance symbology

[Exercises & practical applications utilized throughout the workshop]

[Bring a drawing or your drawing questions... get answers to your job-specific questions as to how ANSI Y14.5 now impacts your company]

Course Fee: \$725 per person; 10% discount for 2 persons attending from the same company; 15% discount for 3 or more.
Course Materials: Y14.5M-1994 & Y14.5.1M-1994 Standards. 624-page hard cover text/reference book written by James D. Meadows entitled Geometric Dimensioning and Tolerancing. Applications and Techniques for Use in Design, Manufacturing and Inspection. 1995 Edition [materials valued at \$285]
Call (615) 824-8644 or FAX (615) 824-5262 now for more information and to reserve your spaces.



Institute for Engineering & Design, Inc.
235 E. Main, Ste. 254, Hendersonville, TN 37075 [prev. located in Hall Moon Bay, CA]

College 1996 Leonard Farbar Award

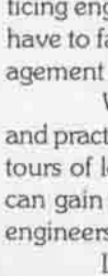
The San Francisco Section is looking for nominees for the Leonard Farbar Award. Awards will be given to outstanding undergraduate student members of U.C. Berkeley, San Francisco State, and the California Maritime Academy.

For more information please contact College Relations Chair Brandon Muramatsu, mura@me.berkeley.edu.

Applications are available from your local student section or the Western Regional Office at:
San Francisco Section
119-C Paul Drive
San Rafael, CA 94903-2022
(800) 624-9002
(415) 499-1338 (Fax)



San Francisco State ASME:
A joint student-professional dinner meeting with the San Francisco Section is planned for April
For more information on our events, call Robert Ballard, section chair at (415) 991-9066.



UC Berkeley ASME:
ASME Berkeley is revving up for the new year with a full slate of activities. Our student officers are busily organizing events such as the joint IEEE-ASME Student-Professional Awareness Conference (S-PAC).
The S-PAC, which will be held on March 7, will allow practicing engineers to present non-technical issues that engineering students will have to face. Topics range from intellectual property and moving up to management to career paths and personal finances. Anyone is welcome to come.
We strive to promote the contact and interaction between students and practicing engineers by inviting guest speakers from industry and arranging tours of local engineering facilities. Through these programs, our members can gain a greater understanding of how the real world functions and how engineers fit into that real world.
Later, on March 21, we host the annual Crabfeed for San Francisco Section. The event is composed of an all-you-can-eat crab dinner, followed by a distinguished speaker. Last year's speaker was Gus Guastafarino, former VP of Space Systems Division of Lockheed-Martin. This event is a great opportunity to listen to an outstanding speaker, meet other engineers, and eat a great meal!
Berkeley's E-Week in April helps to showcase the importance of engineering to the rest of the community. In the spirit of E-Week, we organize very popular contests, such as egg-drops and mouse-trap car races. ASME contests have become main attractions of the campus festivities.
To fulfill our goals and better serve our membership, we are constantly searching for speakers and corporate sponsorship for our events. For more information on our events, please check out our WWW page at http://www.me.berkeley.edu/~asme or e-mail asme@me.berkeley.edu or call our office at (510) 642-5549.

ASME International San Francisco Section

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Honors & Awards
Eric Worrell, P.E. (510) 689-4579

DOE/Nat'l Labs Liason
Charles Simkins Dept of Energy (510) 637-1636

Directions to Pasta Cuisine
..... From BART:
Get off at 12th St./City Center Station, exit from the center of the station (13th St.) into the Oakland City Center Plaza. Continuing up stairs, then take the escalator to central courtyard with multi-colored spindly sculpture in fountain. Pasta Cuisine is to the left of fountain.
..... From 880 and 580:
Take 980 (Downtown Oakland) to 11th St. exit, turn west at 11th and go about 4.5 blocks. Just past Clay, City Center pay garage is on left, or find street parking on 11th or 12th. City Center is bounded by 12th and 14th, Clay and Broadway. Pasta Cuisine is in the center of the complex.

At the Summer Annual Meeting ASME approved an increase in Student Member dues from \$15 to \$21 beginning with the 1996-97 dues year. The decision to increase dues came out of discussions with members and students themselves who recognize the value of ASME membership and realize that it costs ASME more to service student members than what they are currently paying.

ASME student members receive Mechanical Engineering and ASME News, as well as Mechanical Advantage, a newspaper for students; member rates on short courses, publications and the Engineering Societies' Library Services (Kansas City); Technical Division membership and local Section affiliation; and free attendance to National and Technical Division conferences and other society meetings.

In addition, student members have the opportunity to take advantage of all the non-technical benefits available to regular members such as: Resume-Link, an employment referral service; Regional/National Job Bulletin; On-Line Career Fair; participation in ASME's Electronic Network (ASME Net); ASME Personal Financial Passport; discount car rentals; and much more.

The Bay Connection welcomes letters to the editor and editorials from our membership! Please contact Johnny Wu, newsletter editor, (see fax, phone numbers on page 5 sidebar) for submissions.

As many of our members know the P.E. rewrite act being considered by the Board of Professional Engineers in Sacramento will have significant repercussions on our profession. This month we have made available on our web-site a digital copy of the "White Paper" written by Richard Johnson that discusses some of the details of the controversy surrounding the concept of "title domain." This paper is useful as a point of departure to more fully understand the P.E. rewrite act. All our members interested in this topic are encouraged to visit the site and download the information at http://design7.berkeley.edu/sfasme.