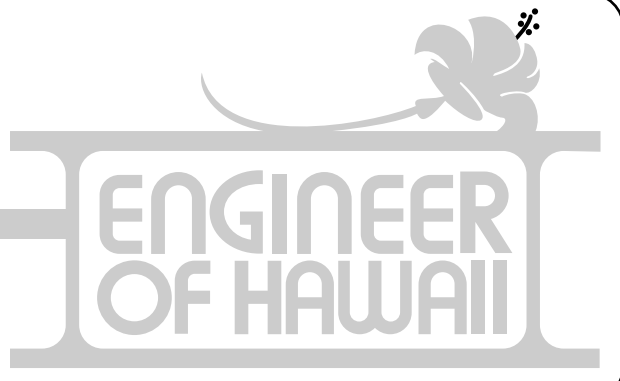


wiliki o hawaii



VOL. 40 NO. 2

SERVING 2000 ENGINEERS & LAND SURVEYORS

JULY, 2004

ASME-HAWAII SECTION 2004 OUTSTANDING ACHIEVEMENT AWARD

This is the ninth year for the ASME-Hawaii Section annual Outstanding Project/Design Competition. The award was created in 1996 to give recognition to deserving mechanical engineering-type projects or designs in Hawaii, Guam, and American Samoa that have been completed within the past five years. A panel of independent judges base their selection on which project or design provides greatest benefits to owner and customer in economics, social, and environmental aspects and shows outstanding use of mechanical engineering principles.

For 2004 the award is made to the Pacific Biodiesel Plant on Sand Island. The Hawaii Fuel Cell Test Facility on Cooke Street is awarded the Meritorious Award. Both projects received high marks for design concept. One makes better commercial use of existing technology and is providing a major impact today while the other is cutting edge technology in alternate energy and may provide greater impact on society in the future. Both help or will help the environment in one way or another, and they deserve our recognition as outstanding mechanical engineering related projects in Hawaii.

Pacific Biodiesel Plant

Their website opens with "Renewable energy for a cleaner tomorrow." Biodiesel is made from renewable fats and oils, such as vegetables oils, through a simple refining process. Actually Pacific Biodiesel produces biodiesel from used restaurant fryer oil. The process involves removing the glycerol molecule from vegetable oil in the form of glycerin (soap). Once the glycerin is removed from the oil, the remaining molecules are, to a diesel engine, similar to petroleum diesel fuel.

Biodiesel offers fleet operators a safe, cleaner alternative to regular old petroleum diesel fuel. It requires no engine modifications, and it delivers similar torque, horsepower and miles per gallon. In addition, biodiesel cuts down on targeted emissions. With a 20 percent blend with petroleum diesel and a catalytic converter, particulate matter is reduced 31 percent, carbon monoxide by 21 percent and total hydrocarbons by 47 percent. In addition, a blend reduces sulfur emissions and aromatics. In its neat form and in blends of 20 percent or more with petroleum diesel, the US Department of Energy has acknowledged biodiesel as an alternative fuel and can be used for vehicle credits under the Energy Policy Act.

The Sand Island plant was built in 2000. With its various tanks, pumps and other mechanical equipment, it has a capacity of 25,000 gallons per day of grease trap waste and 1500 gallons per day of biodiesel. The first Pacific Biodiesel Plant was built on Maui in 1996 as the answer to grave concerns over potential environmental and health problems resulting from restaurant grease clogging the Central Maui Landfill. Robert King, owner of King Diesel on Maui, who was contracted to maintain the generators at the Landfill, decided to do something about it. Searching the Internet, he hooked up with Daryl Reece, Agricultural Engineer, who had helped devel-



ASME-HI members at the biodiesel plant.
L-R: Robert King, Chester Kaitoku, Ed Chang, Jim Grogan, and Norm Giem.

(continued on page 9)



Barry Nakamoto, P.E., (right) poses with the Ka'aihue family at the ground breaking of their new house in Nanakuli

ENGINEERS BREAK GROUND ON NEW HABITAT HOME

The Hawaii Society of Professional Engineers participated in the groundbreaking ceremony for John and Michelle Ka'aihue's new Habitat home in Nanakuli on Saturday, May 27, 2004.

Funding from local sources is being provided through donations from the Hawaii engineering and construction community. A major portion of the local funding is pledged by the Hawaiian Electric Company.

The HSPE is sponsoring the home in conjunction with the National Society of Professional Engineers whose national convention will be held in Waikiki July 8-10. As part of their annual convention, the NSPE leaves a Legacy Project (major contribution to a local charity) to the host city they visit that year. Legacy Projects are nominated by the local chapters and are supported nationally in their effort to raise the necessary funds.

Honolulu Habitat for Humanity was selected, according to Ken Rappolt, P.E., chair of the HSPE host committee, because of the wonderful impact Habitat brings to our local families, and because engineers are pretty good at swinging a hammer! Engineers from around the country will be invited to spend a day working on-site alongside the Ka'aihue family as part of their convention weekend activities.

The HSPE Legacy sponsorship of \$20,000 will be matched with a \$40,000 grant from the Case Foundation. Anne Marie Beck, executive director of Honolulu Habitat, says that this time-limited matching grant has made it especially attractive for corporations and associations to partner with Habitat because their contribution goes such a long way.

The Ka'aihue family has worked hard for three years to qualify for a Habitat home, which requires them to provide 500 hours of "sweat equity" building another family's home as a down payment. All Habitat partner families also must meet Habitat's strict guidelines for eligibility (income 25- 50% below area median) and must reduce their credit load sufficiently to assure they can repay the no-interest, 20- year mortgage. The home will be built for \$65,000 with labor provided solely by volunteers. Sponsorship donations to Habitat are recycled over and over again as families re- pay their mortgages.



Published monthly by:

HAWAII COUNCIL OF ENGINEERING SOCIETIES

SERVICE PRINTERS, INC.

1829 Dillingham Boulevard • Honolulu, HI 96819

Telephone: (808) 841-7644 • Fax: (808) 847-1487

ADDRESS ARTICLES FOR PUBLICATION TO:

WARREN YAMAMOTO

1526-C Pukele Avenue • Honolulu, HI 96816

Telephone: 527-6988

WILIKI MAILING LIST

Additions and/or corrections should indicate the proper society, institution or association.

LAVERNE HIGA

Dept. of Design and Construction

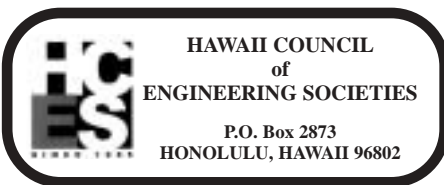
City & County of Honolulu

650 S. King Street, 15th Floor

Honolulu, Hawaii 96813

Office: 808-527-6246

Fax: 808-527-6103



**HAWAII COUNCIL
of
ENGINEERING SOCIETIES**

P.O. Box 2873
HONOLULU, HAWAII 96802

HOME PAGE: <http://hces.us>

2002-2003 OFFICERS

Chair:	Tony Lau	522-7426
Vice Chair:	Westley Chun	488-0477
Secretary:	Todd Barnes	585-0448
Treasurer:	Erik Kaneshiro	526-1267

SOC	Representative	Alternate
AACE	M. Uyehara	
ASCE	W. Chun	K. Niiya
ASME	J. Grogan	R. Liu
EAH	M. Tome	R. Morrissey
FALEA	M. Shoji	C. Dungca
HALS	E. Kaneshiro	
HSPE	R. Riley	P. Boucher
IEEE	G. Torigoe	O. Libed
ITE	C. Yoshida	R. Archilla
LGSEA	A. Dar	L. Nagata
SAME	T. Barnes	
SEAOH	D. Doi	
SFPE	S. Dannaway	
UH(assoc)	W.F. Chen	T. Dobry



UNIVERSITY OF HAWAII
College of Engineering

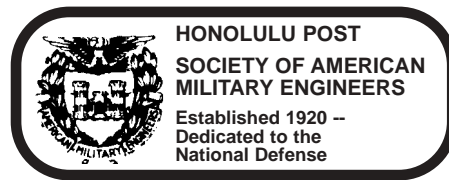
2540 Dole Street, Holmes Hall
Honolulu, Hawaii 96822

COLLEGE DEANS AND CHAIRS

Dean	Wai-Fah Chen
Interim Associate Dean	Vassilis Symros
Interim Assistant Dean	Tep Dobry
CE Chair	Ronald Riggs
EE Chair	Todd Reed
ME Chair	Bruce Liebert
HCAC Director	Magdy Iskander

SAME awards \$500 Savings Bond to John Vento

The Society of American Military Engineers awarded a \$500 savings bond to John Louis Vento for his award winning entry in the 2004 Hawaii Science Fair. His entry titled, *Groovy Airflow*, tested drag on a series of airplane wings. John wanted to see whether or not there would be an increase or decrease in the distance of drag when he placed different sized dimples on the wing. His hypothesis was the larger the dimple size the shorter the distance will be between the trailing edge and the intersection smoke. In order to test his idea he researched airplane wings on the internet. He used his research to build a wind tunnel, construct wings out of Styrofoam, and then tested four wings with four different sized dimples at four different angles (0, 10, 25 and 45 degrees). He used dry ice and warm water in his wind tunnel to create "smoke" to flow over each wing and then recorded the distance between the wing's trailing edge and the intersection of "smoke" flowing over the wing. John Vento is a sophomore at Kauai High School.



**HONOLULU POST
SOCIETY OF AMERICAN
MILITARY ENGINEERS**

Established 1920 --
Dedicated to the
National Defense

P.O. Box 31218; Honolulu, HI 96817
<http://posts.same.org/honolulu/>

2004-2005 SAME OFFICERS

PRESIDENT:
Col Steven Hoarn (PACAF)USAF
Steven.Hoarn@hickam.af.mil

1ST VP (Programs):
Todd Barnes (Weston Corp)
Todd.Barnes@westonsolutions.com

2nd VP (Sustaining Members):
Will Boudra (MWH Corp)
William.Boudra@mwhglobal.com

3rd VP (Membership):
Jim Bersson (HED)USA
James.L.Bersson@poh01.usace.army.mil

SECRETARY:
Maj Randy Whitecotton (PACAF)USAF
Randy.Whitecotton@hickam.af.mil

TREASURER:
Lt Kristina McGee (PWC)USN
McGeeKE@navy.mil

BOARD OF DIRECTORS

AT LARGE:
Capt Tom Bersson (PACDIV)USN
thomas.bersson@navy.mil

FORMER POST PRESIDENT:
Mark Schnabel (POD)USA
mark.schnabel@pacom.mil



Officers & Directors

President	Alan Cadieux
Treasurer	Dr. Amarjit Singh
Secretary	Maelyn Uyehara
Directors	Richard Campbell
	Joeshp Uno
	Karl Kagesa

YOUTH PROGRAM:

Cpt Yvonne Spencer (PACAF)USAF
Yvonne.Spencer@hickam.af.mil

READINESS:

Jim Frolich (JFC Corp)
jfrolich@hawaii.rr.com

INVESTMENT:

Paul Luersen (CH2MHill Corp)
pluersen@ch2m.com

COMMUNICATIONS:

Cpt Sam Battaglio (29th EB)USA
samuel.l.battaglia@us.army.mil

NOMINATIONS:

Paul Chinen (Shaw Corp)
paul.chinen@shawgrp.com

SCHOLARSHIP:

Cdr Bert Diehl (14th Dist)CG
rdiehl@d14.uscg.mil

EDUCATION:

Susan Globoker (USMC) USN
GlobokerSP@mfp.usmc.mil

ENGINEER'S WEEK LUNCHEON:

Capt David Fleisch (PACOM)USN
David.Fleisch@pacom.mil

CONSTRUCTION CAMP:

Lt Greg Jennings (PWC)USN
JenningsGP@pwcpearl.navy.mil

SMALL BUSINESS LIAISON:

Marc Aoyama (15 CES)USAF
Marc.Aoyama@hickam.af.mil

GOLF TOURNAMENT:

LTJG Jeremy Ramberg (PWC)USN
Jeremy.Ramberg@navy.mil

ENLISTED MATTERS:

CMSgt Wayne Quattrone (PACAF)USAF
Wayne.Quattrone@hickam.af.mil

June's Meeting

CDR Bert Diehl spoke to us about the SAME national meeting. He briefed the Executive Director's Report focusing on member statistics, post organization sizes, and status of reserve and special accounts. He also stated the SAME HQ accomplishments for 2003-2004.

July's Meeting

Speaker: CPT Scott Miller
Date: Tue, 13 Jul 04
Time: 11:15 - 13:00
Location: TBD
RSVP 06 July to Maj Randy Whitecotton at
Deadline: Randy.Whitecotton@hickam.af.mil
Payment will be collected at the meeting.



http://www.geocities.com/hals_us

Officers for 2004

President	Kevin Kea
Vice-President	Erik Kaneshiro
Secretary	Dennis Chong
Treasurer	Stacey Kimura
Director	David Hatchell
Director	Joanne Williamson
NSPS Governor	Pat Cummins
Past President	Layton Nakao

EXECUTIVE BOARD MEETING HIGHLIGHTS

May 13, 2004

Membership: 168 regular, 15 sustaining, 2 honorary, 5 life

Committee Chairpersons:

Aloha – Kendall Hee and Dennis Chong
 EASLA Board – Randall Hashimoto
 Education – Kendall Hee
 Continuing Education for Re-licensure – Kendall Hee
 E-mail – Kendall Hee
 HCES – Erik Kaneshiro
 Land Court – Pat Cummins
 Legislative – Mary Cummins
 Membership – Stacey Kimura
 Newsletter/Editor – Dennis Chong
 NSPS Board of Governors – Pat Cummins
 Programs – Erik Kaneshiro
 Public Relations – Pat Cummins and Dennis Yamasato
 Standards – David Hatchell
 Non-Profit/Incorporation – Kevin Kea
 WESTFED – Pat Cummins
 Workshops – Layton Nakao and Joanne Williamson
 Annual Dinner Meeting (McCoy Pavilion) – Joanne Williamson
 HALS 2004 Conference – Erik Kaneshiro, Chair
 SPC NAD83 – Pat Cummins

Committee Reports:

Non-Profit/Incorporation – Kevin presented a letter from the law firm of Ishida & Nagaue LLC concerning incorporation. The Board will review and comment at the next meeting.

Workshops – Joanne reports on various workshops forthcoming. Mentioned workshops were AutoCAD featuring Felicia Provencal, Pat & Mary doing Land Titles & Case Law, GPS by Ed Carlson, State Plane Coordinates, EXCEL spreadsheets and Digital Photography.

Annual Dinner Meeting (McCoy Pavilion) – Joanne reports September 17, 2004, 5:00 p.m.-9:00 p.m. dinner at 6:00 p.m., speaker will be Paul Lucas at 7:00 p.m.

2005 Conference – Possible topics/speakers were mentioned. Eric Hee will follow-up with potential speakers. HALS will extend invitation to NSPS President and Area Director.

NSPS Governor – Pat reported on the meeting held in Nashville, Tennessee this past April 17-18, 2004.

New Business

- HALS filing cabinet will be moved from State Survey.



2003-2004 OFFICERS

Office	Name	Phone	Fax
President	Cathy Leong	946-2277	946-2253
Vice Pres	Susan Uejo	521-5361	538-7819
Secretary	Pierson Koike	527-6989	521-2501
Treasurer	Fred Smoot	841-7617	833-6125
Past Pres	Richelle Suzuki	541-2530	541-2700

May Meeting Highlights

The May luncheon meeting was held on May 20, 2004 at the office of Belt Collins in Honolulu. The featured speaker was Lowell Chun, Chief of the Community Actions Plans Branch of the City and County of Honolulu, who spoke about the City's update to the Primary Urban Center Plan. The plan, one of eight for the Island of Oahu, is a policy plan started in 1995 that outlines methods for intelligent growth for the primary urban center and is in line with the policies outlined in the General Plan for Oahu. The General Plan directs growth to two main areas on Oahu, the primary urban center and Ewa, in an attempt to maintain the rural areas. The primary urban center extends from Pearl City to Kahala and contains approximately half of the population on Oahu and three-quarters of the jobs. The plan for this area emphasizes enhanced livability, accommodations for moderate growth, support of neighborhood plans, evaluation of regulations and standards, and the provision of adequate support. The final draft of the plan dated May 2002 is currently in review by the City Council, after which the City hopes to initiate programs to implement the recommendation of the plan. These recommendations include the establishment of an urban growth boundary and generalized land use framework, enhancement of the urban landscape, provision of a range of housing choices, promotion of convenient travel choices, and development of attractive outdoor areas.

July Meeting Announcement

The July Section meeting date, location, and guest speaker will be announced at a later date. Meeting notices are forthcoming.



PO Box 12204 Honolulu, HI 96828
 website: www.eaauh.org

2003-2004 OFFICERS

President:	Bryce T. Yonemura	473-8000 x2456
Vice Pres:	Kelli Goodin	441-3600
Secretary:	Ryan Sugamoto	956-3357
Treasurer:	Marian Nakama	836-1900 x234
Directors:	Lloyd P.C.W. Lee	
	Michael Y. Magaoay	
	Randolph H. Murayama	
	Wayne H. Nakamura	

EAAUH Annual General Meeting:

The annual general meeting was held on June 30 at the Honolulu Country Club. Guest speaker Daniel Dinell, Executive Director of the Hawaii Community Development Authority, gave a talk about the redevelopment of Kaka'ako.

2004 EAAUH Golf Tournament:

The tournament will be held at the Pearl Country Club on Friday, July 30. Hope to see you there!

Volunteers are also needed. If you would like to help, please contact Matt Fujioka (mkf@akinaka.com) or Stacie Kaneshiro (Stacie.Kaneshiro@hickam.af.mil) for more information.

For more information contact:
 Special Agent Aul Wong
 (800) 566-4380
 An Equal Opportunity Employer
www.fbi.gov

- ✦ Male and Female special agents
- ✦ Bachelor's or graduate college degree from an accredited institution
- ✦ Nationwide employment
- ✦ Computer Science/Information Technology, Engineering, Sciences (Architecture, Bio-chemistry, Biology, Chemistry, Forensics, Mathematics, Nursing, Physics, medical specialties), Accounting/Finance, Law, Languages, Intelligence, Foreign Counterintelligence, Counterterrorism
- ✦ 2-3 years strong professional/investigative/managerial work experience desired
- ✦ 23-36 years of age
- ✦ Drug policy/drug testing mandatory
- ✦ Entry-level salary (GS-10) is \$45,735 Academy training: \$56,240 - \$61,045 upon graduation, including locality/availability pay

FBI Special Agents
 AMERICA'S FINEST



2003-2004 ASCE Hawaii Section Executive Committee

		Phone	Fax
President	Westley Chun	488-0477	488-3776
	wkcchun@engrsol.com		
Pres-Elect	Keith Niiya	533-3646	526-1267
	kniya@atahawaii.com		
Vice-Pres	Walter Billingsley	846-3232	538-7819
	wbillingsley@beltcollins.com		
Secretary	Lori Fong	531-7094	528-2368
	lfong@ascehawaii.org		
Treasurer	Phillip Ooi	956-8512	956-5014
	ooi@willki.eng.hawaii.edu		
Past Pres	Horst Brandes	956-8969	956-5014
	brandes@willki.eng.hawaii.edu		

JULY DINNER MEETING

Program: Dave Penn, Ph.D., Total Maximum Daily Load (TMDL) Coordinator for the Department of Health's Environmental Planning Office.

The TMDL process is one component of a multi-faceted watershed-based approach to water quality management. In watersheds where the receiving waters are not reaching State water quality goals, this process further defines water quality problems and recommends actions to improve water quality. One goal of these actions is to reduce pollutant loads to the extent that impaired receiving waters will eventually meet water quality standards. Dave will provide an overview of the EPA-mandated TMDL program in Hawaii, describe the current status of the program, and discuss results from the initial phase of the program for the Ala Wai Canal watershed.

Date: **Thursday, July 15, 2004**

Location: Treetops at Paradise Park
Manoa Valley

Time: 5:30 p.m. - Social Time
6:30 p.m. - Dinner
7:30 p.m. - Program
9:00 p.m. - Adjourn

Menu: Multi-entree buffet

Cost: \$22.00 for Hawaii Section members
\$25.00 for non-section members and guests
\$11.00 for University of Hawaii at Manoa Student Chapter members

Please make check payable to "ASCE-Hawaii Section." Mail to Phillip Ooi, ASCE Treasurer, c/o Department of Civil & Environmental Engineering, University of Hawaii at Manoa, 2540 Dole Street, Holmes 383, Honolulu, Hawaii 96822, postmarked by Monday, July 12, 2004. Reservations for the dinner meeting to Phillip Ooi by Monday, July 12, 2004, by phone at 956-8512, fax at 956-5014, or email at ooi@willki.eng.hawaii.edu.

EXECUTIVE COMMITTEE MEETING

June 10, 2004

ASCE NATIONAL ANNUAL ELECTIONS

Information from the ASCE website: "ASCE's annual election process is now underway. Ballots will be mailed with the June ASCE News. In order to improve election participation, we are now offering the ability to download a ballot as an alternative to the pre-printed ballot. All ballots must be received no later than August 13, 2004.

The two official nominees for President-Elect are Conrad G. Keyes, Jr., ScD, P.E., P.S., Hon.M. ASCE and Dennis R. Martenson, P.E., DEE, F.ASCE. In addition, two Zone Vice Presidents, six District Directors, and one

International Director will be elected.

The ballot includes a constitutional amendment to restructure the governance of ASCE. The proposed amendment seeks to add Institute and At-Large Directors to the Board, reduce the overall size of the Board and enable a regional structure. For more information, please visit www.asce.org. And don't forget to vote!

ASCE HAWAII SECTION AWARDS

Please help us increase our scholarship endowment so that we can recognize those deserving students. We continue to accept tax-deductible donations with the goal of establishing a second annual scholarship. Make your check payable to 'ASCE Hawaii Section' and mail to ASCE Scholarship Committee, P.O. Box 917, Honolulu, HI 96808. If you have any questions, please contact Horst Brandes at 956-8969, or at brandes@willki.eng.hawaii.edu.

ASCE JOB LISTINGS

The following employers have openings they would like to fill:

Austin Tsutsumi & Associates, Inc. (Civil, Traffic/Transportation, Environmental and Surveying - Honolulu and Wailuku)

Board of Water Supply (Chief Capital Projects Officer - Honolulu)

CH2MHILL (Water Engineer - Honolulu)
Engineering Solutions, Inc. (Civil/Environmental Engineers - Honolulu)

Fewell Geotechnical Engineering (Geotechnical Engineer - Honolulu)

Fukunaga & Associates (Civil and Civil/Environmental Engineers - Honolulu)

Hawaii Pacific Engineers (Civil and Civil/Environmental Engineers - Honolulu)

Warren S. Unemori Engineering (Project and Civil Engineers - Wailuku)

Westaff (Maintenance Engineering - Hickam AFB, Hawaii)

Winzler & Kelly Consulting Engineers (Civil and/or Structural Engineering - Guam)

For more information on these job listings, please visit the ASCE Hawaii Section website at www.ascehawaii.org.

MEMBERSHIP DRIVE

ASCE counts on our members to help us grow every year by actively participating in the Member-Get-A-Member Drive. The drive is now year-round and offers great new prizes, such as cash rewards, gift certificates, digital cameras, personal digital assistants, LCD TVs and more. For most prizes, all you have to do to be eligible to win is refer a colleague. This is a great time to help out your colleagues while also helping ASCE find new members. Take a minute to think about the people in your professional life who could benefit from membership. Visit www.ASCEDrive.org to refer them and you could be a winner in the next drawing! Please contact our membership chair, Lori Nishida, at 533-3646 or lnishida@atahawaii.com for further information.

Membership Renewal

From this month's member data, ASCE has dropped any member not renewing their membership for fifteen (15) months. These members, who have not paid their 2003 dues, will no longer be included in our membership counts or on our membership data. This will greatly affect the standing of our Section, since standings are based on total membership. The total membership consists of new and retained members. If you have let your ASCE membership lapse and have not renewed, you may have been affected by this. Please contact our membership chair, Lori Nishida, at 533-3646 or lnishida@atahawaii.com for further information.

CONVERTING TO ELECTRONIC VERSION OF WILIKI

If you would like to help the ASCE Hawaii Section reduce operating costs by receiving your monthly issue of the Wiliki via e-mail, please contact Joanna Seto at 522-7426 or e-mail her at jseto@ascehawaii.org.

Additional articles on page 8

ACI CONCRETE FIELD TECHNICIAN PROGRAM – GRADE I CERTIFICATION

Sponsored by the Cement and Concrete Products Industry of Hawaii

The ACI Certification Program for Concrete Field Testing Technician—Grade I is for the purpose of certifying concrete technicians who have demonstrated the knowledge and ability to properly perform the seven (7) basic field ASTM tests on freshly mixed concrete.

Session I Classroom Training and Practice Session: Classroom training—Tuesday, August 10, and Thursday, August 12, 2004 from 4:00pm to 7:00pm at CCPI office, 2153 N. King Street, Suite 327, Honolulu, Hawaii.

Performance practice session: Saturday, August 14, 2004, from 8:00am to 12noon at Hawaiian Cement—Halawa, 99-1300 Halawa Valley Street, Aiea, Hawaii.

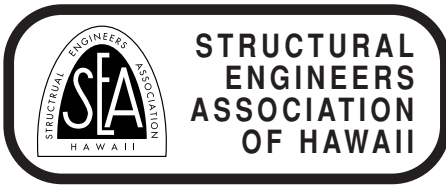
Session II Examination only: Saturday, August 21, 2004, from 7:00am to 1:00pm (specific times to be announced). Location will be Hawaiian Cement—Halawa.

Session I: Registration is \$150 per person and includes Classroom Training and Practice Session, ACI Technician Workbook and Manual. **Session II:** Examinations only. Full Exam (written/performance) \$175. Re-take for written exam only \$100. Re-take for performance only \$125. Class size is limited to 15 people.

Registration deadline is August 5, 2004

For additional information or to register, call CCPI at 848-7100





PO BOX 3348, HONOLULU, HI 96801
Web Page URL <http://www.seaoh.org>

OFFICERS & DIRECTORS

Position	Officer	Phone	Fax
President	Randy Chu	373-7950	373-7950
Vice Pres	Beverly Ishii-Nakayama	942-9100	942-1899
Secretary	Shawn Matsumoto	597-8555	597-8559
Treasurer	Jonathan Murai	533-2210	533-2686
Director	Ibbotson Kellett	540-1030	526-1989
Director	Les Nagata	951-5916	941-6489
Director	Wayne Kawano	848-7100	848-2626
Director	Dean Doi	955-4441	942-2027
Past Pres	Tom Tanimura	536-7692	537-9022

HIGHLIGHTS OF BOD MEETING

02 June 2004

Committee Reports:

Convention Committee: This year's convention will be held on Oahu at the Turtle Bay Resort. The theme for the convention will be "Earth, Wind, & Fire ... Whichever Governs – Seismic & Wind Provisions of IBC 2003" and will feature two guest speakers, Mr. Don Scott and Mr. Steve Harris, as well as SEAHO member, Mr. Gary Chock. Mr. Scott will speak on the wind provisions of the IBC 2003 and Mr. Harris will speak on the seismic provisions of the IBC 2003. Members should have received flyers in the mail. Flyers may also be downloaded from the SEAHO website.

This year, the Convention Committee has budgeted funds for scholarships. If you're interested in receiving a scholarship for this year's convention, please contact Jonathan Murai at 533- 2210 ext. 3952, Tom Tanimura at 536-7692, or email Tom Tanimura at se@tanimuraeng.com.

New Business:

Concrete Testing: Ibbotson Kellett and Wayne Kawano informed the BOD that the field technicians performing both the slump tests and preparation of cylinders at the jobsites may not be qualified. Ibbotson Kellett mentioned that some previously certified technicians have been observed for not performing these tests properly or in accordance with the ASTM guidelines. Both Ibbotson Kellett and Wayne Kawano recommended to the BOD that structural engineers need to address this issue by: 1) Stating in the contract documents that the technician shall be an ACI certified Grade I field technician. 2) Stating in the contract specifications that ACI certified personnel shall perform testing. 3) Enforce items 1 and 2 noted hereinbefore.

New Member Applications:

The following member applications have been received and open for comments from the membership:

Hongtao Qu - Englekirk Partners Consulting Structural Engineers, Inc., applied as an Allied member.

Saeid Pourjalali - KAI Hawaii, Inc., applied as an Allied member.

Paul Kane III - Aloha Marketing Manufacturers Representatives, LLC, applied as an Affiliate member.

Applications will be voted on at the July Board Meeting. Please notify any SEAHO Officer prior to the July Board Meeting if you

wish to comment on these prospective members.

Website Notes:

New postings on the website 1) Annual convention flyer 2) Seminar of slab on grade shrinkage and curl flyer 3) Masonry design seminar with software demonstration flyer.

2004 Calendar of Events:

Next BOD meeting: 07 July 2004, 4:30 p.m., at Shigemura, Lau, Sakanashi, Higuchi office.

July 13, 2004: Masonry Design and Software Demonstration seminar at the Pagoda Hotel. Seminar and software overview by Russ Brown of Clemson University regarding masonry lintel, wall, and shearwall design.

August 6-7, 2004: Annual convention at the Turtle Bay Hotel. Theme for the convention will be "Earth, Wind, & Fire ... Whichever Governs – Seismic & Wind Provisions of IBC 2003."

August 2004: Time and place to be announced. Self compaction and jet grouting.

September 16, 2004: Joint ASCE and SEAHO meeting at Treetops Restaurant. Presentation of Blast Design/Force Protection by Steve Baldrige.

Next Deadline for
Wiliki
is July 15th



STRUCTURAL SYSTEMS, INC.

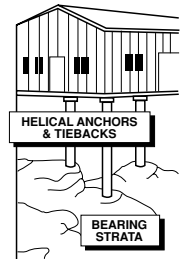
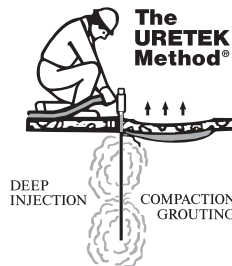
General Engineering

Since 1985

- New Construction
- Stop Settling
- Relevel Foundations
- Compaction Grouting
- Soil Nails/Shoring
- Micro & Pin Piles
- Rock/Soil Anchors
- Clay Stabilization
- Permanent Solutions



845-2474



Lic: AC-13555 • 1275 Mikole St.
www.ssihawaii.com • structurs001@hawaii.rr.com

"Design of Concrete Masonry with Software" by Russell Brown, P.E.

Sponsored by The Masonry Institute of Hawaii, Cement and Concrete Products Industry of Hawaii, and Structural Engineers Association of Hawaii

This seminar will feature an overview of the NCMA software capabilities and its many uses in designing masonry structures.

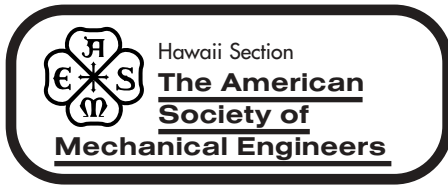
Tuesday, July 13, 2004, from 8:30 am to 12:00 pm (registration at 7:30 am), International Ballroom, Pagoda Hotel, 1525 Rycroft Street, Honolulu.

Featured speaker is **RUSSELL BROWN, P.E., Ph.D.** a Professor of Civil Engineering at Clemson University. He chaired the Flexure and Axial Loads Subcommittee of the Masonry Standards Joint Committee during the development of the 2005 Code cycle. He is one of two co-authors of the software being introduced at this seminar.

Registration fee is \$60.00 per person. Registration includes seminar, lunch, and handouts. NCMA Design Software available at special discount price of \$40.00 each. Class size is limited. Registration deadline is July 8, 2004.

For additional information or to register, call CCPI at 848-7100





Website: www.asme.org/sections/hawaii

ASME-HI 2004-2005 Officers

Chairperson	Raymond Liu	521-3777
Vice-Chair	LCDR John Markowicz	484-9164
Secretary	Sam Gillie	543-4737
Treasurer	Rodney Krienke	373-2916
Dir 1 yr	Ron Flegal	455-0254
Dir 2 yr	Chester Kaitoku	527-6063
HCEG Rep	James Grogan	254-2947

HAWAII SECTION COMBINED COMMITTEES & POWER TECHNICAL CHAPTER MEETING

Date: Tuesday, August 3, 2004
 Time: 5:30 p.m. to 7:00 p.m.
 Place: Hawaiian Electric Company, Inc. Ward Avenue Cafeteria
 Program: Awards Presentation-2004 ASME-HI Outstanding Projects

The program for the evening includes the presentation of the award plaques and presentations by the award recipients from Pacific Biodiesel and HNEI. All members and guests are invited and asked to attend. Members are always welcome. The Officers and Directors of ASME-HI look forward to seeing new and familiar faces. Naturally, we are constantly seeking help from the membership to fill the committee positions and with program ideas. Lots of free pizza and pop are always provided. Please contact Ray Liu or Sam Gillie for directions and more information.

JOINT ASME-ASHRAE MEETING HELD

The joint meeting between ASME and ASHRAE was held on May 13, 2004 at the East Room of the Pagoda Hotel. This meeting recognized the culmination of hard work of the mechanical engineering students at the University of Hawaii at Manoa in preparation for the Mine Madness, HPV (Human Powered Vehicle), and Mini Baha Competitions held on the mainland earlier in the year. These competitions provided the students the hands-on application of mechanical engineering principles learned in their course work to solve practical problems.

Besides the technical challenges, more importantly are the skills that the students gained that will carry them throughout their engineering career. Particularly, the skills gained by working in a team environment, setting goals for the project, project scheduling and planning, learning to communicate effectively with team members, marketing and selling the project for solicitation of funding all paid off in the end and will help them to be successful in their future career endeavors.

The students provided videos and power point presentations of their respective projects and had opportunities to address various questions from the audience of practicing mechanical engineers. This provided the students increased opportunities to communicate their ideas, explain the many challenges as well as successes, and gain increased confidence while presenting their projects before a different audience in a different and formal setting.

RECOGNIZING EXCELLENCE IN ASME MEMBERS

The ASME-HI Section strives to acknowledge

the contributions of local mechanical engineering professionals in their field. Recognition goes to Dr. Lloyd Hihara, Professor of Mechanical Engineering and research engineer, at the University of Hawaii at Manoa for his research work in corrosion as featured in the May 2004 article of the Malamalama magazine of the University of Hawaii.

The article, entitled "Fighting the Inevitable", describes the research work that Dr. Hihara does as head of the Hawaii Corrosion Research Lab at Manoa. Because of his pioneering research work in metal matrix composites and corrosion, the Department of Defense, Northrop Grumman and others have funded \$3.5 million dollars for the work over the last three years.

His work involves collecting corrosion data from expensive prototypes of communications wire made of metal matrix composites supplied by 3M, the makers of Scotchgard and other innovative products. The samples are placed in different locations around the island exposed to our corrosive environment. The data is electronically monitored every 30 minutes for a year. The data obtained will hopefully provide additional insight into how our naturally corrosive environment affects these samples placed in the field.

His research work has applications in all sectors of industries that mechanical engineers are involved with and has the potential to increase the performance and reliability of products manufactured in the future.

NEW UH ASME STUDENT SECTION OFFICERS

The ASME-HI Senior Section congratulates Jodi Ichimura, University of Hawaii ASME Student Section Chair, and her section officers for a job well done. Jodi graduated from the College of Engineering this past May and received her BS in mechanical engineering.

The new student section officers are as follows: Section Chair, David Katsuda; Vice Chair, Blake Sato; Secretary, Abel Siu; and Treasurer, David Narahara.

The senior section congratulates all the outgoing officers and welcomes the new officers as they work to promote the benefits of becoming a member of the American Society of Mechanical Engineers at the University of Hawaii at Manoa.

ASME-HI TEE SHIRTS

Chairman Ray Liu is working hard to procure Section tee shirts. He is currently waiting for a copy of the ASME logo in jpeg or tiff format; then he will solicit prices from local tee shirt vendors. Stay tuned for his progress.

ASME ONLINE MEMBERSHIP DIRECTORY

In response to an overwhelming number of requests from members asking for new tools to use in networking with other members, ASME introduced the new ASME Online Membership Directory. This new online directory can only be accessed by ASME members and will be limited to 5 searches and 20 results per day.

To be included in the online directory, ASME requires members to "opt in." If you do not respond, it will be taken as an "opt-out" response and you will not be included in the online directory. Please "opt-in" by visiting <https://members.asme.org/myasme/membershipsearch/index.cfm>.

FUTURE ACTIVITIES

Several tours and meeting speakers are being planned. Also visit the ASME-HI website for more information.

- Sept. 9, 2004, Annual Pearl Harbor Boat Tour, at 4:00 p.m., hosted by Stanford Yuen. Nine seats still available. Contact Ed Chang at 543-4227.

- Sept. 25, 2004, Kapaia Power Station Tour, at 10:00 a.m., hosted by Brad Rockwell, Kapaia Power Station Manager. The plant is located on the Island of Kauai. Please contact Ed Chang at 543-4227 if you would like to attend.



www.eng.hawaii.edu/~hspe

2003 - 2004 STATE OFFICERS

PRESIDENT: Peter Boucher, PE
 PRES-ELECT: Riley Smith, PE
 1st VICE PRES: Manuel Lanuevo, PE
 2nd VICE PRES: Kenneth M. Rappolt, PE
 SECRETARY: Neal Herbert, P.E.
 TREASURER: Nancy Burns, P.E.
 IMMEDIATE PAST PRES & NATIONAL DIRECTOR: Scott Seu, PE
 HONOLULU CHAPTER STATE DIRECTOR: Barry Nakamoto, PE
 MAUI CHAPTER STATE DIRECTOR: Eric H. Yamashige, PE, LS
 BIG ISLAND CHAPTER STATE DIRECTOR: Neal Herbert, P.E.
 KONA-KOHALA CHAPTER STATE DIRECTOR: Dan Lanterman, P.E.



www.sfpehawaii.org

OFFICERS

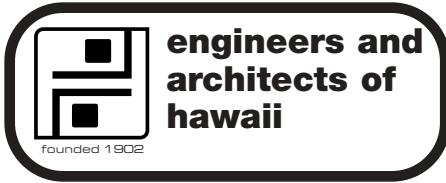
President	Melvin K. Harano, P.E.	848-6966
	<i>email: harano@thermaleng.com</i>	
Vice-Pres	Robert T. Bigtas, P.E.	526-9019
	<i>email: rbigtas-ssda@hawaii.rr.com</i>	
Secretary	Mark Gouveia, P.E.	521 3773
	<i>email: mgouveia@cdoca.com</i>	
Treasurer	Samuel S. Dannaway, P.E.	526-9019
	<i>email: sdannaway-ssda@hawaii.rr.com</i>	
Past Pres	Robert Lohaus, P.E.	833-4095
	<i>email: lohausebob@hawaii.rr.com</i>	
Directors:	Michael J. Orlowski	474-3819
	<i>email: orlowskim0@pwcpearl.navy.mil</i>	
	Robert M. Miller, P.E.	951-7215
	<i>email: fpehi@hawaii.rr.com</i>	
Webmaster	Derick Kam	
	<i>email: kam@thermaleng.com</i>	

JULY EXECOM MEETING

On Friday July 9 from 11:30 am to 1:30 pm there will be a meeting of the

Hawaii SFPE executive committee. It will be held at Dave & Busters. All members are welcome to attend. If you plan to attend please rsvp to:

Sam Dannaway,
 Hawaii Chapter SFPE
 Tel 526-9019 / Fax 537-5385
 E-mail: sdannaway-ssda@hawaii.rr.com



po box 4353, honolulu, hawaii 96813
An association for Hawaii's Engineers and Architects
New WEB Address <http://community.hei.com/eah>

OFFICERS FOR 2003 - 2004

President: Martin McMorrow
1st V.P.: Bob Morrissey
2nd V.P.: Gary Yamamoto
Treasurer: Ralph Dobson
Secretary: Sam Gillie
Director: Mary Ellen Nordyke-Grace (2 year term)
Ron Boyle (2 year term)
August Ahlf

July EAH Friday Meetings

Program Chair Ron Boyle

July 2 NO MEETING - In honor of Independence Day, Sun. July 4

July 9 Suzanne Jones, City and County of Honolulu, Recycling Coordinator

July 16 Robert Webster, Convanta Energy, H-Power

July 23 Joe Hernandez, Waste Management of HI, Waimanalo Gulch Landfill

July 30 To be Announced.

Meetings held every Friday at YWCA room 205 on Richards Street downtown. Parking at Alii Place off Alakea Street for \$1.00 per hour. Meetings start at NOON and end promptly at 1:00 pm.

Members-\$7.50 Guests-\$8.50

Program schedule may be adjusted. Call Secretary to confirm speaker. Anyone wanting a weekly email meeting notice please send your email address to Sam Gillie at sgillie@hei.com.

EAH May and June Meetings

May 14th, SPEAKER: Harvey A. Shapiro
Research Economist Honolulu Board of Realtors

SUBJECT: "Hawaii's Changing Housing Market": Mr. Shapiro reported that the Hawaii real estate market is again booming. The numbers in all categories exceed even the Japanese boom of the early nineties. Median prices are higher, time on the market is shortest, and inventories are lowest. 10 to 20 percent of sellers are getting premiums, that is, they are getting higher than their asking price. It is truly a Sellers market **The soundfile of this talk in available at the EAH WEB site. Go to "Past Meetings" Page.**

June 4th SPEAKER: Ben R. Finney,
Professor Emeritus, Department of Anthropology, University of Hawai'i at Manoa; Author; and Founder of the Polynesian Voyaging Society

SUBJECT: "Rediscovering Hawaii's Northern Islands" Ben Finney talked the Hoko La's currently on-going voyage to Hawaii's outer islands, such as Necker, French Frigate Shoals, Laysan, Midway and Kure Atoll. Ben presented his current arguments as to why Hawaiian archeological remains have been found on these islands. **The soundfile of this talk in available at the EAH WEB site. Go to "Past Meetings" Page.**



HAWAII CHAPTER

P.O. Box 508, Aiea, Hawaii 96701
Phone: (808) 485-1400 Fax: (808) 485-1500
Web Page: www.lgsea.com

2004 OFFICERS & DIRECTORS

	President	Vice Pres.	Secretary	Treasurer	Director	Director	Director	Director	Director	Past Pres.
	Mike Kasamoto	Jeff Hanyu	Will Wong	Bennett Fung	Rolando Agbunag	Glenn Isidro	Eric McKelvie	Darin Okuda	Brent Uechi	Akira Usami
Phone	955-6834	536-2108	945-0198	531-1308	626-3621	533-2210	330-8018	689-5400	521-6958	682-5747
Fax	955-2483	521-3000	944-1177	521-7348	626-3660	533-2686	394-3429	689-5406	533-6701	682-2928

2004 COMMITTEE CHAIRS

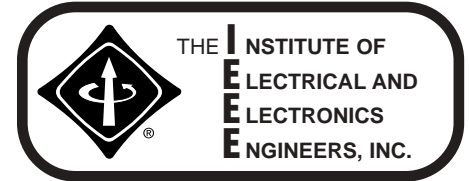
Program: Jeff Hanyu
Technical: Brent Uechi
Membership: Darin Okuda
Sponsorship: Glenn Isidro
Directed R&D: Jim Walfish
Specifications: Brian Ide
Website: Eric McKelvie

General Membership Update

On July 16th at the Plaza Club, the chapter will host a seminar by Dr. Reynaud Serrette, Professor at Santa Clara University and Director of the National LGSEA. The format of the event will be an afternoon seminar followed by a buffet dinner and update on chapter activities. In what has become a bi-annual visit to Hawaii, Dr. Serrette will update the chapter on his ongoing research with light gauge sheet steel shear walls. Respected as the authority in this field of research throughout the industry, Dr. Serrette always puts on a great seminar with active discussion. Dr. Serrette will also speak about other ongoing light gauge steel research topics. Please join us!

Looking for the latest information on Light Gauge Steel design? Visit our library at the Hawaii Pacific Steel Framing Alliance. Call 485-1400 for directions.

In LGSEA National news, the 10th anniversary of the LGSEA organization is set to take place during MetalCon 2004 October 20-22 in Las Vegas. Please mark it on your calendar to attend!



IEEE Hawaii Section

P. O. Box 37607 Honolulu, Hawaii 96837
Email: sec.hawaii@ieee.org
Web Page: <http://community.hei.com/ieee/>

2003 HAWAII SECTION OFFICERS:

Chairperson:	Grant Torigoe (torigoe@ieee.org)	833-8889
Vice Chair:	Mark Rognstad, (mark_rogstad@ieee.org)	956-8712
Sec/Treas:	Alison Lee (al.lee@care2.com)	224-9723
Past Chair:	Oscar Libed (oscar.libed@ieee.org)	441-8567
Past Chair:	Norm Kawachika (normk@ieee.org)	531-1308
Past Chair:	Fred Kobashikawa (fkobashi@ieee.org)	543-7753

Section Committee Chairpersons:

HCES Rep:	Fred Kobashikawa (fkobashi@ieee.org)	543-7753
Membership:	Steven Sano (ssano@ieee.org)	543-7981
Webmaster:	Steven Sano (ssano@ieee.org)	543-7981
Newsletter Editor:	Alison Lee (al.lee@care2.com)	224-9723
Professional Act:	Alison Lee (al.lee@care2.com)	224-9723
Student Act:	Tep Dobry (tep@ieee.org)	956-9740
Oceanic Society:	Mark Rognstad (mark_rogstad@ieee.org)	956-8712

2004 Efficient Electro-Technology Exposition & Conference

October 27 & 28, 2004

Sheraton Waikiki Hotel, Honolulu, Hawaii

Admission: \$189



REGISTER NOW!

Hawaiian Electric Company, Inc.
Maui Electric Company, Ltd.
Hawaii Electric Light Company,

Hawaii's Largest Energy Expo!

Featuring over 60 exhibits and over 40 workshops conducted by nationally recognized speakers. Workshop topics include lighting, HVAC, indoor air quality, water conservation, waste disposal, recycling, renewable energy & sustainable projects.

6TH BIENNIAL ENERGY EXPO

Registration forms at energyexpo.heco.com or call (808) 543-4790.





2003-2004 YMF OFFICERS

		Phone
President	Jamie Hikiji <i>jhikiji@ascehawaii.org</i>	521-3051
Vice-Pres	Paulette Chang <i>Hawaiiyymf@yahoo.com</i>	781-1187
Secretary	Scott Jennings <i>sjennings@rci-group.com</i>	845-8440
Treasurer	Geoff Ries <i>gries@wilsonokamoto.com</i>	946-2277
Stud Chap President	Ronald Malalis <i>malalis@hawaii.edu</i>	956-5808

Next YMF General Meeting

The next two YMF general meetings are scheduled for Tuesday, July 6, 6:00 p.m., at M&E Pacific, Davies Pacific Center, 841 Bishop Street Suite 1900; and August 3, 6:00 p.m., at Brew Moon Restaurant and Micro Brewery in Ward Center, 593-0088. If you are interested in attending to find out what the YMF is all about and how much fun we have, please call Jamie Hikiji at 521-3051.

YMF Technical Presentation, July 6, 2004 at 6:30 p.m. - Jet Grouting Applications in Hawaii

Kelly McGonagle, as a representative of Hawaii's premier jet grouting specialty contractor, Layne GeoConstruction, will present successful applications of jet grouting within the state. Layne GeoConstruction has been successful in numerous applications of this procedure on Oahu including jet grouting for foundation support, groundwater control, and soil stabilization. As the prime contractor for Layne's largest project on the island, Scott Jennings with Robison Construction, will participate in the presentation providing the client's perspective as to the success of this grouting method at the Sand Island Wastewater Treatment Plant. The presentation will be held at M&E Pacific, Davies Pacific Center, 841 Bishop Street Suite 1900. Beverages and light pupus to be served. If you are interested in attending or for more information, please contact Jamie Hikiji at 521-3051.

YMF Field Trip, July 11, 2004 at 8 A.M. - Ka'au Crater Hike

Please join us as Jeff Kalani leads us on a 3.5-4 hour hike of Ka'au Crater on Sunday, July 11, 2004. Check-in is at 7:30 a.m. and the hike leaves promptly at 8:00 a.m. A map of the meeting location will be provided later. Lunch will be provided for the first 20 ASCE members to sign up. \$5/person for lunch after the first 20 people and for those not in ASCE. Please bring your own drinks.

Please email Jon Yoshinaga at *yoshinaga@excite* if you are interested in participating. You will have to fill out a liability waiver form during check-in at 7:30 a.m. Hope to see you all there!

YMF Community Service Project, July 31, 2004 at 8 A.M. - Storm Drain Stenciling

On Saturday, July 31, ASCE YMF will assist the City and County of Honolulu by stenciling storm drains for public awareness. Each year, thousands of gallons of household pollutants

are washed down streets and storm drains that empty directly into reservoirs, streams and the surrounding ocean. The City & County of Honolulu tries to minimize such pollution by having volunteers stencil a warning on storm drains: "Dump No Waste - Goes to Ocean." If you would like to volunteer for this event, please email *eric.deruyter@ttemi.com* by July 26. We will be meeting a City representative at 8 a.m. at the makai corner of Pi'ikoi Street and Ala Moana Boulevard for instructions. Please do not be late. The event will last approximately 2 hours. Afterwards (at 10 a.m.), all volunteers, friends, and members are invited to join the Hawaii YMF for a picnic at Ala Moana Park. Food, refreshments, and volleyball will be provided. Mark your calendars for July 31st and we'll see you there!

FALL 2004 ASCE YMF PE EXAM REFRESHER COURSE

Dates: Saturdays, August 7, 2004 to October 9, 2004
9:00 a.m. to 12:00 p.m.
Location: Davies Pacific Center Conference Room
841 Bishop Street, Suite 1401
Cost: \$300 Early Registration Fee for ASCE Members (parking included)
\$375 Early Registration Fee for Non-ASCE Members (parking included)

Early Registration Deadline is July 7, 2004. Add \$25 late fee to registration fee if payment is postmarked or delivered after July 7, 2004. Class size is limited and registration is done on a first-come first-served basis. Please call first if registering late to verify room is available. Prices are subject to change after class begins.

This year's ASCE YMF PE Refresher Course will cover the "breadth-and-depth format" of the civil engineering professional examination. This year's lecturers are:

Structural Engineering
Mr. Ron Iwamoto, Iwamoto & Associates, LLC
Highway Geometry
Mr. Randall Urasaki, Parsons Brinckerhoff
Traffic Engineering
Mr. Wayne Yoshioka, Parsons Brinckerhoff
Geotechnical Engineering
Dr. Phillip Ooi, University of Hawaii at Manoa
Environmental Engineering
Mr. Raj Rath, C&C of Honolulu, Dept of Design and Construction
Hydraulics/Hydrology
Mr. Raj Rath

In addition to copies of the lecture notes for each subject and study supplies, class attendees will receive a copy of Michael R. Lindeburg's Civil Engineering Reference Manual for the PE Exam, 9th edition. Attendees will also have the option of ordering additional reference material at discounted prices.

To sign up for the Fall 2004 ASCE Hawaii Section YMF PE Refresher Course or if you have any questions, please contact Lorna Heller at 748-5944 or *lheller@hbws.org*.

ASCE Job Classified

Looking for work? Visit the ASCE's job listing page at <http://www.ascehawaii.org/jobs/jobsinfo.html>.

KNOW YOUR ASCE HISTORY

by C.S. Papacostas

Last month, I explained that at the 1893 World's Columbian Exposition in Chicago, the Lehrte and Misburg firm of Manske & Co. displayed a concrete statue of Germania. With help from Gregor Fischer of the University of Hawai'i, I obtained a translation of several German narratives about the history of cement production in the vicinity of Hanover ("Hannover" in German) where the aforementioned towns are located.

A cement-manufacturing expert by the name of Hermann Manske severed his employment with the first cement plant in the area to establish a competing enterprise in 1881. Other local competitors soon sprang up but by 1905, "Germania" was making 5% of the total cement production in all of Germany. Among its overseas customers were the Kohala Ditch Company and, also, "The Coal, Cement and Supply Co." of Wilmington, North Carolina. A 1902 local Chamber of Commerce publication explains that "they handle the 'Giant' brand of Portland Cement, manufactured by the American Cement Company of Philadelphia, 'Germania' imported cement from Germany, the 'Union' Rosendale cement, made in Philadelphia, all high grade products..."

About the Kohala Ditch, a June 3 article in the Commercial Pacific Advertiser says:

"Mr. Renear, father of Dan Renear the swimmer, returned from Kohala yesterday on the Kinau, having finished work on the Kohala ditch. Mr. Renear went to Hawaii last September to do the cement lining for the ditch. He states that water was to have been turned into the ditch yesterday for a test." The test was successfully run and the ditch, which the Hawaiian Star described as "a great feat of engineering," was officially opened on June 11, 1906. Undoubtedly, Mr. Renear handled the "A-1 imported Alsen and Germania brands" of cement specified by the ditch's engineer, M. M. O'Shaughnessy.

By that time, the global availability and cost of cement were severely impacted by the April 18, 1906 Great San Francisco Earthquake and the subsequent reconstruction activities there. Following are some effects on the Territory of Hawai'i: Several trade publications tell us that the Davenport cement plant being built in Santa Cruz County in 1906 "to supply the Panama Canal and satisfy the demand created by the US Navy's construction of Pearl Harbor" became a major cement supplier to the Bay Area recovery effort instead.

In response to the local shortages, cement was also brought into the territory from Asia. For example, the July 27, 1906 issue of the Hawaiian Star states that "[a] large consignment of cement arrived by the S. S. Manchuria yesterday. The consignment came to H. Hackfeld & Company... from Hongkong. The consignment consisted of 2500 barrels. The shortage of cement in the islands was the cause of the shipment. There has been a shortage here for months. Several steamers ago Hackfeld & Company received a special shipment of cement and by the Manchuria another shipment arrived. The vessel carried no shipment of cement for San Francisco; however, although there is a big demand for cement in the reconstruction of San Francisco."

(continued on page 9)

ASME Award, (continued from page 1)

op a method to process discarded cooking oil into clean-burning fuel for diesel engines. With no outside financial assistance, King and Reece formed Pacific Biodiesel, Inc. and built the first biodiesel plant in the Pacific Rim.

Hawaii Fuel Cell Test Facility

Fuel cells along with thermal, ocean, wind and solar power are the hopes for the future to help Hawaii reduce its dependency on fossil fuel. A fuel cell produces electricity through the electrochemical reaction of hydrogen and oxygen, without combustion. It operates like a battery, but does not rundown or require recharging. Its only byproduct is water.

The Hawaii Fuel Cell Test Facility, a state-of-the-art research facility opened for business in April 2003 to study ways to make fuel cell technology more commercially practical. This facility is a partnership of the Hawaii Natural Energy Institute (HNEI) of the University of Hawaii, Office of Naval Research ONR, UTC Fuel Cells, and Hawaiian Electric Co., Inc.

The test facility has three full size single cell test stands with space for up to eight test stands. The test stands enable researchers to see what fuel cells can do under a variety of operating conditions. At the test facility, they scrutinize how fuel cells stand up to long-term operation, investigate the cells' sensitivity to impurities in the fuel source, delve into the lifetime of components, examine the optimum water management requirements, and run the cells through a host of tests to determine how dependable they can be. The test stands were purchased from the UTC Fuel Cells.

The Hawaii Fuel Test Facility is part of the HNEI fuel cell program under the direction of Rick Rocheleau, Director of HNEI. The current testing activities focus on Proton Exchange Membrane (PEM) fuel cells which have a lower operating temperature than other types of cells and are therefore of interest for automotive and consumer applications. Other activities under this ONR funded program include development of biocatalysts for fuel cells, use of biocarbons for fuel cell and fuel cell components, and the exploration and characterization of methane hydrates as a future fuel.

In June 2003, HNEI hosted a tour of the test facility for a group of ASME Fluids Engineering Conference attendees. The ASME members commented on how impressed they were with the state-of-the-art fuel cell test facility.

On August 3, 2004 ASME-HI will present the attractive award plaques to the representatives of Pacific Biodiesel and HNEI, who will be giving a presentation of their facilities. ASME-HI members and others who may be interested can attend by contacting Ray Liu or Sam Gillie. Please refer to the ASME-HI meeting notice in the Wiliki.



www.eng.hawaii.edu/~hspe

HAWAII SOCIETY OF PROFESSIONAL ENGINEERS – MAUI CHAPTER

PO Box 4119
Kahului, HI 96733

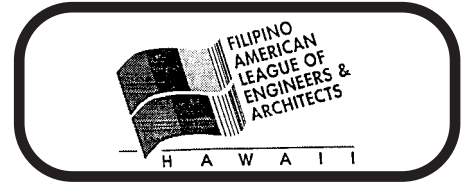
2003-2004 Officers:

- President Brooks Aoki, P.E., L.S. (242-4403)
- Vice-President Carlos Rivera, P.E. (242-4403)
- Secretary Wendy Kobashigawa, P.E. (270-7435)
- Treasurer Ty Fukuroku, E.I.T. (242-4403)
- State Director Eric Yamashige, P.E., L.S. (242-8611)

ASCE History, (continued from page 8)

Incidentally, Hackfeld's Dry Goods was established in 1849, renamed H. Hackfeld & Co. in 1898, became Liberty House in 1918 and, under the ownership of the Federated Department Stores Inc. of Cincinnati since 2001, is now known as Macy's.

As for the so called "oriental cement" I am all but convinced that it was actually produced in Macau (or Macao) and transshipped via Hong Kong to Hawaii. A cement plant was founded in 1887 on Green Island (Ilha Verde in Portuguese, Tsing Chau or Qingzhou in Chinese). At the time, Green Island was connected to the Macau peninsula by a causeway



P.O. Box 4135, Honolulu, Hawaii 96812
Website: <http://www.falea.org>

2003-2004 OFFICERS AND DIRECTORS

- President Marites C. Shoji
- Vice-Pres/ Pres.-Elect Greg Garcia
- Secretary Andrea Benitez
- Treasurer Vergel Del Rosario
- Asst Treas Maria Domingo
- Bus. Manager Armando Ines
- Auditor Marcelino Labasan
- P.R.O. Fred Quibol
- Directors Marlo Garcia, Rocky Marquez, Elvi Pineda, John Ramos, Joey Resurreccion, Jun Suela, Segundo Velasco

but, due to land reclamation, was absorbed into the peninsula by the early 1920s.

Next: the first production of portland cement in Hawaii.

Do you know of a civil engineering accomplishment or event that your fellow ASCE members might find interesting? Please send a brief description to C.S. Papacostas (fax 956-5014, email csp@wiliki.eng.hawaii.edu). Previous articles in the series may be found at the Section's web site. Just point your browser to <http://www.ascehawaii.org>.

WILIKI ADVERTISERS NEEDED

5" x 2" – (10□) \$64.00	2 5/16" x 2 1/2" (6□) \$40.00	7 1/2" x 5" – (37 1/2□) 1/2 page – \$240.00
7 1/2" x 3 5/16" – (25□) (1/2 page) – \$160.00	2 5/16" x 1 1/4" \$20.00	4 7/8" x 2 5/16" (11□) \$72.00

The price for the ads will be based on a 1 1/4" x 2 5/16" module size which is 1/24th of the page, and be \$20.00 per month with a 15% DISCOUNT for a 6-MONTH RUN.

Professional Directory

<p>WEST THOMAS ASSOCIATES Land Surveyors 75-5749 Kalawa St., Kailua-Kona, Hawaii 96740-1817 Tel: 808 329-2353 Fax: 808-329-5334 <i>Surveying Hawaii Since 1975</i></p>	<p>720 IWILEI ROAD SUITE 425 P.O. Box 3351 HONOLULU, HI 96801 PHONE: (808) 536-2705 FAX: (808) 599-4032</p>	<p>R. M. TOWILL CORPORATION SINCE 1930 PLANNING • ENGINEERING • ENVIRONMENTAL SERVICES PHOTOGRAMMETRY • SURVEYING • CONSTRUCTION MANAGEMENT 420 WAIKAMULO ROAD HONOLULU HAWAII 96817-4941 808 842 1133</p>	<p>URS Engineers Scientists Program and Construction Managers Environmental Planners 8111 PUALI STREET, 9th FLOOR Honolulu, Hawaii 96814-1141 PH: (808) 845-1116 FX: (808) 845-1158 URS@URS.COM www.urscorp.com</p>
<p>WALKER INDUSTRIES, LTD. Precast Concrete Products</p> <p>CONSPAN BRIDGE SYSTEMS AARON UNO P.O. Box 1568 Kahului, Maui, Hawaii 96732 Maui (808) 877-3430 Fax (808) 871-7282</p>	<p>YOUR AD COULD APPEAR HERE FOR \$200 A YEAR</p>	<p>Weston Solutions, Inc. Suite 2301 841 Bishop Street Honolulu, Hawaii 96813 Phone: 808.585.0448 Fax: 808.585.7378 www.westonsolutions.com</p>	<p>WILSON OKAMOTO CORPORATION Civil Engineers Structural Engineers Traffic Engineers Planners 19-088 2ND L277 1467 S. BERRY AVE., SUITE 401 70 808-546-2222 Honolulu, Hawaii 96813 www.wilsonokamoto.com</p>

Professional Directory

<p>YOUR AD COULD APPEAR HERE FOR \$200 A YEAR</p>	 <p>Earth & Environmental, Inc. Tel: 808.545.2462 Fax: 808.528.5379 www.amec.com</p> <p><i>Full service environmental consulting, engineering, and compliance support. Formerly Ogdan Environmental</i></p>	 <p>AUSTIN, TSUTSUMI & ASSOCIATES, INC. Civil Engineers • Surveyors 501 Sumner Street, Suite 521 Honolulu, HI 96817 Tel: 533-3646, Fax: 526-1267, Email: atahwi@atahawaii.com Branch Office: Wailuku, Maui CIVIL • TRAFFIC • SANITARY</p>	 <p>www.beltcollins.com</p>
<p>BROWN AND CALDWELL Environmental Engineering And Consulting • Analytical Services 119 Merchant St., Suite 200 • Honolulu, HI 96813 (808) 523-8499 Fax (808) 533-0226 2145 Wells St., Suite 302 • Wailuku, HI 96793 (808) 244-7005 Fax (808) 244-9026</p>	<p>YOUR AD COULD APPEAR HERE FOR \$200 A YEAR</p>	<p>S.S. DANNAWAY ASSOCIATES, INC.</p> <p>Fire Protection Engineers Building Code Consultants</p> <p>720 Iwilei Road, Suite 412, Honolulu, HI 96817 Tel: (808) 526-9019/Fax: (808) 537-5385 ssda@hawaii.rr.com</p>	<p>Y. Ebisu & Associates Acoustical and Electronic Engineers</p> <p>1126 12th Avenue, Room 305 Honolulu, Hawaii 96816 (808) 735-1634</p>
<p>ESM Esaki Surveying and Mapping, Inc. Lihue, Kauai, Hawaii Ph. (808) 246-0625 • Fax (808) 246-0229 esmap@hawaiian.net</p> <p>ENGINEERS • SURVEYORS Established 1979</p>	 <p>ENGINEERS, SURVEYORS, HAWAII, INC. (FORMERLY WILLIAM HEE & ASSOCIATES, INC.) 900 HALEKALUWILA STREET HONOLULU, HAWAII 96814 Phone: 591-8116</p>	 <p>Fewell Geotechnical Engineering, Ltd. OAHU: 96-1416 Waihona Place • Pearl City, Hawaii 96782-1973 (808) 455-8569 • FAX (808) 456-7062 MAUI: (808) 873-0110 FAX (808) 873-0906</p>	<p>MASA FUJIOKA & ASSOC. A PROFESSIONAL PARTNERSHIP</p> <p>ENVIRONMENTAL • GEOTECHNICAL • HYDROGEOLOGICAL CONSULTANTS</p> <p>MFA 99-1205 Halawa Valley Street, Suite 302 Aiea, Hawaii 96701-3281 Phone 808 484-5366 • Fax 808 484-0007</p>
<p>FUKUNAGA & ASSOCIATES, INC.</p> <p>1388 Kapiolani Blvd. Honolulu, HI 96814 Phone: 944-1821 Email: office@fainc.org Website: www.fainc.org</p>	 <p>GEOLABS, INC. Geotechnical Engineering and Drilling Services</p> <p>2006 Kalihi Street Honolulu, Hawaii 96819 Phone: 841-5064 Fax: 847-1749</p>	<p>GEOTECHNICAL GROUTING CONSULTANT Edward D. Graf</p> <p>182 Lumahai St. Tel: 808-396-9451 Honolulu, HI 96825 Fax: 808-396-2075</p>	 <p>Certified Arborist</p> <p>P.O. Box 893953, Mililani, Hawaii 96789-0953 Mobile (808) 381-1342 FAX (808) 625-4287 E-mail: ckwan@hawaii.rr.com</p>
<p>HPF CIVIL ENGINEERING AND PLANNING WASTEWATER AND WATER TREATMENT CONSTRUCTION MANAGEMENT SERVICES</p> <p>Hawaii Pacific Engineers, Inc. 1132 Bishop Street • Suite 1003 Honolulu, Hawaii 96813-2830 Phone: (808) 524-3771 • Fax: (808) 538-0445 E-mail: hpeinc@hawaiipacificengineers.com</p>	<p>HIDA, OKAMOTO & ASSOCIATES, INC. CONSULTING CIVIL ENGINEERS</p> <p>HDA PACIFIC GUARDIAN TOWER 1440 Kapiolani Boulevard, Suite 1120 Honolulu, Hawaii 96814 Phone: (808) 942-0066 Fax: (808) 947-7546</p>	 <p>ERNEST K. HIRATA & ASSOCIATES, INC.</p> <p>Soils and Foundation Engineering 99-1433 Koaha Place • Aiea, Hawaii 96701 Fax (808) 486-0870 • Phone (808) 486-0787</p>	 <p>SAM O. HIROTA, INC. Engineers & Surveyors</p> <p>864 S. Beretania Street Honolulu, Hawaii 96813 Telephone: 537-9971</p>
<p>INABA ENGINEERING, INC. 273 WAIANUENUE AVENUE HILO, HAWAII 96720</p> <p>Phone: (808) 961-3727 / Fax: (808) 935-8033 Civil Engineering • Structural Engineering Land Surveying</p>	 <ul style="list-style-type: none"> • Environmental & Infrastructure • Design & Engineering Services • Construction & Maintenance • Homeland Security <p>590 Paiea Street, Suite B, Honolulu, HI 96819-1835 Tel: (808) 840-2000 • FAX: (808) 639-0339</p>	 <p>KFC AIRPORT, INC.</p> <p>PROJECT MANAGEMENT CONSULTANTS PLANNING • ARCHITECTURAL/ENGINEERING DESIGN • CONSTRUCTION MANAGEMENT</p> <p>3375 Koapaka Street, Suite F220-48 Honolulu, HI 96819 Phone: (808) 836-7787 Fax: (808) 834-4833</p>	 <p>KN CONSULTING SERVICES, INC. Civil Engineers</p> <p>1451 S. South King Street, Suite 412 Honolulu, Hawaii 96814 Phone: (808) 941-8882 Fax: (808) 941-8828 Email: knconsb@pixi.com</p>
<p>THE LIMTIACO CONSULTING GROUP CIVIL ENGINEERING AND ENVIRONMENTAL CONSULTANTS</p> <p>615 Piikoi Street, Suite 1605 • Honolulu, Hawaii 96814 Tel (808) 596-7790 • Fax (808) 596-7361 • www.tlcghawaii.com</p>	 <p>LYON ASSOCIATES CIVIL ENGINEERING / CONSTRUCTION MANAGEMENT</p> <p>841 Bishop Street, Suite 2006 Honolulu, Hawaii 96813 Tel: (808) 536-6621 Fax (808) 523-1738 E-mail: admin@lyonassociates.com</p>	 <p>Surveying Civil Engineering & Design Environmental Engineering Water Treatment & Supply Construction Management Wastewater Collection & Treatment</p> <p>841 Bishop Street, Suite 1900 Honolulu, Hawaii 96813</p>	<p>NAGAMINE OKAWA ENGINEERS INC. CONSULTING STRUCTURAL ENGINEERS</p> <p>1001 Bishop Street • Pauahi Tower, Suite 725 Honolulu, Hawaii 96813 Phone: (808) 536-2626 • FAX: (808) 536-3926</p>
<p>NAKAMURA, OYAMA AND ASSOCIATES, INC. CONSULTING ENGINEERS ELECTRICAL/TELECOMMUNICATIONS/FIRE PROTECTION</p> <p>1314 South King St., Suite 401 Honolulu, Hawaii 96814-1939 Telephone (808) 591-8887 Fax (808) 596-2383</p>	 <p>NEWCOMER - LEE LAND SURVEYORS, INC.</p> <p>1498 Lower Main Street, Suite "D" Wailuku, HI 96793-1937 Tel: (808) 244-8889 Fax: (808) 244-8422</p>	 <p>...innovation through engineering and scientific excellence...</p> <p>Environmental Engineering Coastal Engineering Civil Engineering Planning</p> <p>Pacific Tower #2970, 1001 Bishop Street Honolulu, HI 96813-3654 (808) 531-3017 / Fax: (808) 531-3177 oceanit@oceanit.com / www.oceanit.com</p>	 <p>Okahara & Associates, Inc. Engineers & Consultants</p> <p>200 Kohala St., Hilo, HI 96720 / Ph. (808) 961-5527 Fax (808) 961-5529 677 Ala Moana Blvd., Suite 703, Honolulu, HI 96813 Ph. (808) 524-1224 Fax (808) 521-3151 73-5574 Maiea St., Bay 08, Kailua-Kona, HI 96740 Ph. (808) 329-1221 Fax (808) 329-1006</p>
<p>PGE Pacific Geotechnical Engineers, Inc.</p> <p>Soils & Foundation Engineering Consultants 429-B Waiakamilo Road Honolulu, Hawaii 96817 (808) 841-8024 FAX (808) 848-5102 E-mail: pge@pacificgeotechnical.com</p>	 <p>PACIFIC MACHINERY INC.</p> <p>94-025 Farrington Hwy. Waipahu, Hawaii 96797 808/676-0205 FAX 808/676-0264</p> <p>CATERPILLAR & OLYMPIAN Generator Sets, Engines, Switchgear and Ancillary Equipment. (Prime Power & Standby Power, 8-2000 kW) CATERPILLAR 3600 Utility Plant Generator Sets (1.5-5 MW)</p>	 <p>SUITE 300, KAWAIAHAO PLAZA 567 SOUTH KING STREET HONOLULU, HAWAII 96813 TELEPHONE: (808) 531-1676</p> <p>dba park engineering</p> <p>Engineers, Surveyors, Planners</p>	 <p>GRAY • HONG • NOJIMA & ASSOCIATES, INC.</p> <p>841 Bishop Street, Suite 1100 Honolulu, Hawaii 96813 Tel: (808) 521-0306 Fax: (808) 531-8018</p>
<p>Sato & Associates, Inc.</p> <p>HONOLULU 2046 South King Street Honolulu, HI 96826 Tel: (808) 955-4441 Fax: (808) 942-2027</p> <p>MAUI 2115 Wells Street Wailuku, HI 96793 Tel: (808) 244-9265 Fax: (808) 244-5303</p> <p>CONSULTING ENGINEERS • CIVIL & STRUCTURAL</p>	<p>SHIMABUKURO, ENDO & YOSHIZAKI, INC. Civil, Environmental & Structural Engineers</p>  <p>1126 12th Avenue, #309 Honolulu, Hawaii 96816-3715 Phone: (808) 737-1875 Fax: (808) 734-5516 Email: seyeng@lava.net</p>	 <ul style="list-style-type: none"> • CIVIL • STRUCTURAL • ENVIRONMENTAL • OCEAN <p>Consulting Engineers</p> <p>Marc M. Siah & Associates, Inc. 810 Richards Street, Suite 888, Honolulu, HI 96813, Ph: 538-7180</p>	 <p>501 Sumner Street, Suite 620 Honolulu, Hawaii 96817 Ph (808) 531-1308 Fax (808) 521-7348 Project Managers, Planners, & Engineers</p> <p>www.ssfm.com</p>

HAWAII COUNCIL OF
ENGINEERING SOCIETIES
P.O. Box 2873
Honolulu, Hawaii 96802

Presorted
Standard
U.S. Postage Paid
Honolulu, Hawaii
Permit No. 1400