

# wiliki o hawaii

ENGINEER  
OF HAWAII

VOL. 39 NO. 10

SERVING 2000 ENGINEERS & LAND SURVEYORS

MARCH, 2004

## 2004 ASCE HAWAII SECTION MIDDLE SCHOOL BRIDGE COMPETITION

On January 30, 2004, the ASCE Hawaii Section, with assistance from the Hawaii Section YMF and the University of Hawaii College of Engineering, held its first model bridge competition at the University of Hawaii Engineering Expo 2004. Amidst the swarm of students participating in various contests and exhibits, 7th and 8th graders from six schools around the island gathered in the Structural Engineering lab at Holmes Hall 101 to see whose bridge was the best. The students spent over three weeks designing and building the popsicle stick bridges to conform to the specifications provided by ASCE. The winner would be the bridge that could support the most weight. Three bridges pulled off the task of supporting the maximum weight of 211 pounds. To break this three-way tie, bridges weighing less were ranked higher. First place went to 7th graders Jeremy Deibert, Allison Nakahara and Isabel Romero of Mililani Middle School, whose bridge weighed 2.15 pounds. Second place went to Rachel Kwak, Kimberly Frisch and John Pyun of Niu Valley Middle School, whose bridge weighed 2.40 pounds. Third place went to 8th graders Bryan Chun, Jonathan Ringor and Ryley Yamamoto of Mililani Middle School, whose bridge weighed 2.55 pounds. The judges also awarded the most aesthetically pleasing bridge, which was built by Sebastian Howard, David Guyer and Kenzie Endrina of Kapolei Middle School. Their bridge held 197 pounds and weighed 1.48 pounds.

## HCES OFFICERS FOR 2004-2005

The new officers of the Hawaii Council of Engineering Societies were installed at the annual banquet on February 28, 2004. Their term of office is from March 2004 to February 2005.

Chairman is Tony Lau, who has served as HCES Treasurer from 2002 to 2004. He is with the American Society of Civil Engineers, and served as the Hawaii Section president. Tony is a civil engineer with Hawaii Pacific Engineers.

Vice Chairman is Westley Chun, who is president of the American Society of Civil Engineers Hawaii Section. Westley is a principal at Engineering Solutions.

Secretary is Todd C. Barnes, a representative of the Society of American Military Engineers, Honolulu Post. Todd is a civil engineer with Weston Solutions.

Treasurer is Erik Kaneshiro, vice-president with the Hawaii Association of Land Surveyors. Erik is a land surveyor with Austin, Tsutsumi and Associates.



*Tony Lau, Chair*



*Westley Chun, Vice Chair*



*Todd C. Barnes, Secretary*



*Erik Kaneshiro, Treasurer*



*The winning team from Mililani Middle School.*



*A team presents their bridge to the judges*



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

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HOME PAGE:  
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Vice Chair:	Westley Chun	488-0477
Secretary:	Todd Barnes	585-0448
Treasurer:	Erik Kaneshiro	526-1267

<b>SOC</b>	<b>Representative</b>	<b>Alternate</b>
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ASCE	W. Chun	K. Niiya
ASME	J. Grogan	R. Liu
EAH	M. Tome	R. Morrissey
FALEA	M. Shoji	C. Dungca
HALS	E. Kaneshiro	
HSPE	S. Nojima	S. Seu
IEEE	O. Libed	F. Kobashikawa
ITE	W. Kawano	A. Archilla
LGSEA	A. Dar	L. Nagata
SAME	T. Barnes	
SEAOH	L. Nagata	R. Chu
SFPE	S. Dannaway	
UH(assoc)	W.F. Chen	T. Dobry



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Treasurer	Dr. Amarjit Singh
Secretary	Maelyn Uyehara
Directors	Richard Campbell
	Joesph Uno
	Karl Kagesa



[www.eng.hawaii.edu/~hspe](http://www.eng.hawaii.edu/~hspe)

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 Eric H. Yamashige, PE, LS  
 BIG ISLAND CHAPTER STATE DIRECTOR:  
 Neal Herbert, P.E.  
 KONA-KOHALA CHAPTER STATE DIRECTOR:  
 Dan Lanterman, P.E.

**Big Island Chapter launched E-Week observance with Adopt-A- Highway clean up**

The Big Island Chapter of the Hawaii Society of Professional Engineers launched its observance of National Engineering Week Feb. 23-27, by picking up litter along bay front highway and Kamehameha Avenue on February 7. The object of the annual observance is to increase public awareness of the impact engineering has on our daily lives, to recognize special achievements by local engineers and students and to raise funds for scholarships and award.

The Big Island and Kona-Kohala Chapters of the Hawaii Society of Professional Engineers assisted in Mathcounts on Feb. 14 at Hawaii Preparatory Academy where 11 Big Island teams competed by answering selected math problems.

A special engineer's network breakfast was held at the Firehouse Restaurant Hawaii on Monday, Feb. 23. Bruce McClure, Director of Public Works, Hawaii County was the guest speaker and also presented the Mayor's E-week proclamation.

A dinner banquet was held at the Hilo Yacht Club on Friday, Feb. 27. Troy Kindred, Civil Defense Director, was the guest speaker and the award for the Engineer of the Year and State Engineer of the Year was made.

The main fund-raising activity will be imufresh kalua pork or chicken, offered in quart size containers for \$10 each and available for pickup at the Waiakea Settlement YMCA on Lanikaula Street the morning of Saturday, Mar. 6. For tickets and information call 961-8338.

**MAUI CHAPTER REPORT FEBRUARY 2004 MEETING**

**Treasurer's Report:** Treasurer Ty Fukuroku reported that our account balance was \$4,444.75.

**Introduction of Guests:** The State HSPE Board of Directors attended our meeting after their Board of Directors meeting. Those in attendance were Riley Smith, Manny Lanuevo, Ken Rappolt, Neal Herbert, Nancy Burns, Scott Seu, Dan Lanterman, and Barry Nakamoto.

**There was no guest speaker this month due to coordination for Engineers Week Activities.**

**MAUI CHAPTER ENGINEERS WEEK ACTIVITIES**

February 22nd - 28th, 2004

**Engineer/Young Engineer of the Year:** Charlene Shibuya reported that the Engineer of the Year is Eric Yamashige (our State Director) and the Young Engineer of the Year is Carlos Rivera (our Chapter Vice President).

**Project of the Year:** The project of the year award will be given to the County of Maui Department of Public Works and Environmental Management - Solid Waste Division for their Central Maui Landfill Entrance Facility project.

**HSPE Scholarship:** Brooks Aoki said the scholarship deadline was today. He had received a few applications earlier but expected to receive the bulk of the applications today.

**Maui News Supplement:** Annette Matsuda said they had obtained a commitment of \$6,200 and so far received \$3,600 in checks.

**MathCounts:** Wendy Taomoto reported that 7 schools were registered to participate on February 14th. We have 3 schools less than last year possibly due to school budget cuts. Kyle Ginoza, the County of Maui's Director of Transportation will be giving a motivational speech at the competition. Several years ago Kyle won our Chapter competition and went on to the State and National competitions.

**Introduce a Girl to Engineering Day:** Introduce a Girl to Engineering Day is Thursday, February 26th. Brooks Aoki had asked the Maui Economic Development Board representative to look into changing the date and shortening the time allotment for next year. Having it the day before Career Shadowing is difficult schedule-wise and the time period seems a bit too long to sustain the girls' interest.

**Career Shadowing:** Carlos Rivera said he has all his volunteers set for February 27th. He is expecting a list of the students on Tuesday, February 17th and will subsequently notify all volunteers.

**Engineers Week Banquet:** The Engineers Week Banquet will be Saturday, February 28th at the Dunes at Maui Lani. The guest performer will be Magician Brenton Keith & His Bag O' Tricks.

**Math Matters:** Math Matters will be held on Saturday, March 13th at Maui Waena School cafeteria. Four schools have registered so far.

**HSPE LEGACY PROJECT:**

State HSPE 2nd Vice President Ken Rappolt provided details on the ongoing HSPE Legacy Project which has a goal of raising \$20,000 to "buy" an entire house for the Habitat for Humanity program. A few items are currently up for bid on the NSPE website. Maui Chapter State Director Eric Yamashige will be scheduling a meeting to coordinate solicitation of donations.

**Wiliki advertisers wanted.**

**See page 11 for our very reasonable rates.**



#### 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

#### MARCH 2004 MEETING

Speaker: Cheryl D. Soon, Director,  
Department of Transportation  
Services, City and County of  
Honolulu.

Topic: Waianae Coast Emergency Access  
Road Project

Date: Tuesday, March 23, 2004

Time: 11:45 AM

Place: Belt Collins Conference Room  
2153 North King Street, Suite 200

Cost: \$8.00 for members/guests and  
\$5.00 for students

Please call Pierson Koike at 527-6989 or  
send email message to [pkoike@co.honolulu.hi.us](mailto:pkoike@co.honolulu.hi.us)  
by noon, Tuesday, March 16, 2004 to  
make your reservations. Payment will be col-  
lected at the meeting.

#### January Meeting Highlights

The January luncheon meeting was held on  
January 27, 2004 at the office of Belt Collins in  
Honolulu. President Cathy Leong announced  
that Pierson Koike of the City and County of  
Honolulu, Department of Transportation  
Services had been appointed to fill the recent-  
ly vacated Secretary position.

The featured speaker was Gareth Sakakida,  
Managing Director of the Hawaii Transportation  
Association (HTA) that represents the visitor  
and trucking industries. Mr. Sakakida began  
his presentation by discussing several issues  
that HTA views as problematic. With regards to  
the Bus Rapid Transit (BRT) project, the HTA is  
officially opposed to the project. The BRT will  
require the reduction of lanes along Dillingham  
Boulevard which would greatly affect their  
trucking industry members and the BRT would  
provide additional competition for their visitor  
industry members in Waikiki. In addition, the  
BRT project proposes to narrow some lanes to  
9' in width which the HTA feels is inadequate  
for their vehicles. Mr. Sakakida also discussed  
the Nimitz Highway Contraflow lane, which the  
HTA is in support of since the project reduces  
traffic congestion along the roadway, and load-  
ing zones in downtown and Waikiki. Currently,  
there are not enough loading zones in these  
areas and the few that do exist are often  
blocked by non-commercial vehicles or other  
commercial vehicles that small enough to fit  
into garages. Finally, Mr. Sakakida discussed  
several problems associated with the lack of  
maintenance along roadways. First, the crown  
of a roadway can become a hazard for trucks if  
it is too steep due to pavement overlay since a  
truck may list and hit obstacles on the side of  
the road. Second, trees alongside a roadway  
can become a hazard if not maintained prop-  
erly since they can reduce the vertical clear-  
ance for larger vehicles. Third, truck runaway  
ramps are often not provided along roadways,  
especially on the other islands, and those that

#### ITE Hawaii Golf Tournament

If you are interested in playing in this  
year's ITE Golf Tournament, please  
reserve the following date on your calen-  
dar:

Date: Friday, April 30, 2004  
Location: Hawaii Prince Golf Course,  
Ewa Beach

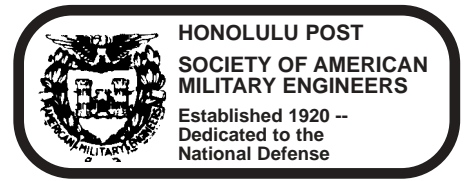
First check-in time starts at 10:45 a.m.

Additional information will be forthcom-  
ing in the next few weeks. In the mean-  
time, please contact Susan Uejo, ITE Golf  
Committee Chairperson if you have any  
questions. You may contact her at phone  
521-5361 or email [suejo@beltcollins.com](mailto:suejo@beltcollins.com).

do exist may not be maintained properly there-  
by negating its effectiveness.

#### Logo for the 2006 District 6 Annual Meeting

ITE Hawaii Section Members and Guests are  
invited to submit a logo for the 2006 District 6  
Annual Meeting that will be held here in 2006.  
The logo should incorporate the basic confer-  
ence information (District 6 Annual Meeting,  
Honolulu, Hawaii, June 25-28, 2006), the stan-  
dard ITE logo, and a theme relating to Hawaii  
and/or transportation. For example, the  
Albuquerque (2001) logo consists of Route 66  
with a backdrop of mountains and hot air bal-  
loons while the San Jose (1998) logo contains  
a car, bus, desert palm trees, and the city dis-  
played on a laptop computer screen. Some  
logos only display themes relating to the host  
city such as a picture of the Hoover Dam for  
Las Vegas (1999), a guitar with music sheets  
for Nashville (2000), and the city skyline and  
the space needle for Seattle (2003). The logo  
should have text that is legible at 1 to 2 inches  
in height and saved as a .pdf file. All entries  
should be sent to Irene Quiaoit, Publicity Chair,  
via e-mail at [iquiaoit@wilsonokamoto.com](mailto:iquiaoit@wilsonokamoto.com) by  
March 31st. If you have any questions, please  
contact Irene via e-mail or at 946-2277.



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

#### SAME OFFICERS

President:	LTC Dave Press	438-1069
Vice Pres:	COL Jim Lyon	449-8363
Secretary:	CPT Sam Battaglia	438-1468
Treasurer:	LT Kristina McGee	471-1170x250

#### February's Meeting

Dr. Larry Price was the speaker for the  
Engineer's Week Luncheon.

#### March's Meeting

Speaker: Mr. Jim Schaefer, PACAF Civil  
Engineers Staff Air Force Programs Forecast

Date & Time: Tue, 09 Mar 04

Location: Hickam Tradewinds Club

Menu: Pacific Lunch Buffet

Cost: TBD

RSVP Deadline: 02 Mar 04 to CPT Battaglia at  
[battagiasl@shafter.army.mil](mailto:battagiasl@shafter.army.mil)

Payment will be collected at the meeting.



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

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 Web Page: www.lgsea.com

**2004 OFFICERS & DIRECTORS**

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

**2004 COMMITTEE CHAIRS**

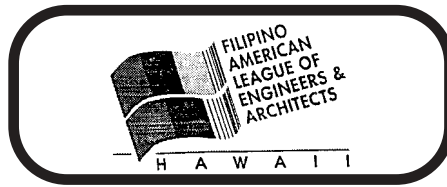
Program:	Jeff Hanyu
Technical:	Brent Uechi
Membership:	Darin Okuda
Sponsorship:	Glenn Isidro
Directed R&D:	Jim Walfish
Specifications:	Brian Ide
Website:	Eric McKelvie
Public Relations/Wiliki:	Akira Usami
Field Problems:	Rolando Agbunag

**General Membership Update**

Feverishly planning the first program of the calendar year, a field trip to the Colony at the Peninsula, a condominium development in Hawaii Kai by Stanford Carr Development. This structure is a four-story load bearing light gauge steel framed multifamily building that would be the largest of its kind in Hawaii to date. Currently working out the logistics of a tour of this venue during construction hours.

Wrapping up a successful sponsorship drive for 2004. As the Chapter is supplementing the membership renewals of its local members as dues increase for national membership, we are very interested to see how many membership renewals are submitted. We hope there is a high retention percentage with the chapter subsidizing a portion of the dues increase. The level of renewals will influence the operating budget for 2004 and dictate how the funds for the year are allocated. Committees are in the process of submitting their budgets for approval for 2004.

The BIA Building and Remodeling Show at the Blaisdell Arena on Feb 5-8 was extremely well attended. Thank you to all members who volunteered to man the Hawaii Steel Alliance booth. The impressive steel framed structure attracted much attention and many visitors stopped by to ask questions about steel framing. Another Show highlight was the Steelman Competition on Saturday, February 7th. Three steel framing contractors sent a representative to build a 8'x10' shed in a span of three hours. The structures were judged upon speed, quality, adherence to design, and appearance of the worker. The winner was John Williams of Sunrise Construction. Judges on the panel included LGSEA member Ibbotson Kellett of Special Inspection Consultants and Chapter President Mike Kasamoto.



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

**2003-2004 OFFICERS AND DIRECTORS**

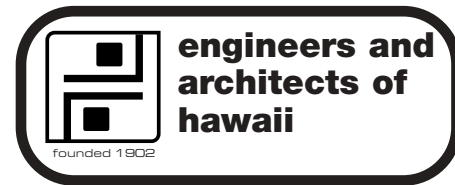
President	Marites C. Shoji
Vice-Pres/ Pres.-Elect	Greg Garcia
Secretary	Andrea Benitez
Treasurer	Vergel Del Rosario
Asst Treas	Maria Domingo
Bus. Manager	Armando Ines
Auditor	Marcelino Labasan
P.R.O.	Fred Quibol
Directors	Marlo Garcia, Rocky Marquez, Elvi Pineda, John Ramos, Joey Resurreccion, Jun Suela,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

**FALEA GOLF TOURNAMENT**

Tony Lau 522-7426  
 Saturday: March 13, 2004  
 Location: Hawaii Prince Golf Course, 91-1200 Fort Weaver Road, Ewa Beach 96706, Tel#: 944-4567  
 CHECK-IN: 6:30 AM ( Please be punctual)  
 TEE OFF: 7:15 AM  
 GREEN FEE: \$52.00  
 TOURNAMENT FEE: \$7.00

Entries for the above tournament are now being accepted. Only twenty eight (28) spaces are available and will be assigned on a first-come and first-served basis. Forms and fees must be received by the Tournament Director no later than Monday, March 1, 2004. Nobody shall be allowed to play unless fees are paid. All entry forms and checks payable to "Segundo Velasco" shall be mailed to FALEA Golf Tournament, Attn. Segundo Velasco, 1159 Manuwa Drive, Honolulu, Hawaii 96818. PLEASE DO NOT SEND CASH. For questions about this tournament, please call Segundo Velasco at 256-6053 (cell), 836-6452 (off) or Greg Garcia at 383-7177 (cell) or 838-8829 (off)

FALEA will be having a picnic in conjunction with our Huli-Huli Chicken fundraising-pick up on Saturday, March 20. The tickets for the Huli-Huli Chicken fundraising are now available. They are \$7.50 each. Please call any of the officers & directors know if you want to purchase. Thank you in advance for your help and participation. If you have any questions about these events or FALEA, please call Marites Shoji at 678-3916 or 294-4202.



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 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

**EAH March 2004 Program**

Program Chair: Victor Russell  
 Meetings will be held on the following Fridays, See EAH WEB page for details.  
 Friday March 5, 2004  
 Friday March 12, 2004  
 Friday March 19, 2004  
 Friday March 26, 2004 **NO MEETING** – Kuhio Day

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](mailto:sgillie@hei.com).

## 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.

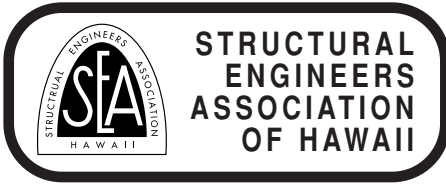
**Session I (Practice Session only): Saturday, April 24, 2004** from 8:00am to 12 noon at Ameron Hawaii, Sand Island.

**Session II (Examination only): Saturday, May 22, 2004**, from 7:00am to 1:00pm (*specific times to be announced*). Location will be at Ameron Hawaii, Sand Island.

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**Session I:** Performance Practice session only (No fee)  
**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 May 14, 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

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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 Kellet	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

05 February 2004

#### Committee Reports:

**Convention Committee:** This year's convention is tentatively set to be held on Oahu. The committee has not yet determined the theme for the convention but "codes" seems to be a possibility.

#### New Business:

Beverly Ishii-Nakayama distributed the tentative schedule of events for 2004. The Board will provide comments and/or suggestions to the tentative schedule. Also being considered is an IBC/UBC seminar with speaker Ed Houston at the beginning of 2005 to coincide with the IBC-03 adoption.

**Hurricane Resistant Shelter Criteria:** The Hawaii State Civil Defense has requested that SEAHO review its Hurricane Shelter Design Criteria. The Board recommended that new emergency shelters be designed for 105 mph (fastest mile) wind velocity with an importance factor of 1.15. Beverly Ishii-Nakayama will verify that the importance factor is 1.15 in ASCE 7-02. See the SEAHO website for the Hurricane Shelter Design Criteria and the State Hurricane Shelter Plan.

**Thomas Ahsing Scholarship:** The Board approved a donation of \$100 to this scholarship fund. This perpetual scholarship fund, being established by the Hula Halau that Tom was so active in, will benefit Civil Engineering students.

**Ad Hoc Committee on Structural Engineering Practice:** Recently, there has been some concern expressed that the structural codes are becoming too complex to apply in everyday practice. A committee has been set up to study this issue of complex codes and code revisions. A survey has been sent out to poll our membership on this issue. See SEAHO website in the "ISSUES" section for editorials on this topic.

**Website:** Les Nagata has been appointed Web Monitor and is the only person authorized to post on the SEAHO website. All items to be posted on the SEAHO website shall be submitted to Les Nagata and require either the President's or the Board's approval before posting.

Les Nagata suggested that our administrative assistant (Laura Moore) maintain the membership database and be the hub for all communications with our membership. The Board shall consider and discuss at the next Board

meeting.

Xianping Li and Rebecca Yee were unanimously accepted as Allied members and Tim Waite was unanimously accepted as an Associate member.

#### New Member Applications:

Received applications from the following people:

1. Alison Agapay, Nagamine Okawa Engineers Inc., applied for Allied membership.
2. Jose Mandawe, Jr., Nagamine Okawa Engineers, Inc., applied for Allied membership.
3. Grant Okunaga, Miyasato Kuniyoshi Engineers LLC, applied for Allied membership.
4. Brian Murdock, KAI Hawaii, Inc., applied for Allied membership.
5. Haili Camarillo, KAI Hawaii, Inc., applied for Allied membership.

Their applications will be voted on at the April Board Meeting. Please notify any SEAHO Officer prior to the April Board Meeting if you wish to comment on this prospective member.

#### SEAHO Mass Email:

SEAHO is currently setting up a mass email system to distribute information to its member-

ship. The Board has decided that this is the most efficient and cost effective way to quickly distribute appropriate information to its members. *Throughout the year there are many issues that come up that may require immediate response or may be of interest to the general membership. This information will only be sent to those in the email system. Most of this information will also be posted on the SEAHO website. For members who do not wish to be notified via email, important documents (ballots, meeting notices, membership renewal, etc.) will still be sent out via postal mail. SEAHO has recently conducted a test email to verify email addresses. If anyone did not get a test email, it is probable that you are not in our system. Email your address to [les.sag@verizon.net](mailto:les.sag@verizon.net).*

#### Web Notes:

SEAHO is currently upgrading the website. If you have any comments or suggestions, please forward to Les Nagata at [les.sag@verizon.net](mailto:les.sag@verizon.net).

Newly posted articles on the website are as follows:

1. State of the SE Practice: Discusses the issue of overly complex design codes.

(continued on page 8)

## AVOIDING FLOORING FAILURES ON CONCRETE SLABS

Sponsored by the Cement and Concrete Products Industry of Hawaii

This seminar will feature the serious and costly issues that face designers, contractors, owners and installers of concrete floor and floor covering materials—moisture-related flooring problems, coatings and indoor air quality.

**Tuesday, March 30, 2004**, from 8:30 am to 3:30 pm (registration at 8 am)  
Pagoda Hotel, 1525 Rycroft Street, Honolulu

**Featured speaker is PETER A. CRAIG**,  
*an independent concrete floor consultant with the firm Concrete Constructives. Mr. Craig is past president of the International Concrete Repair Institute, co-chairman of two ACI moisture task group committees (302 and 306), and a member of ASTM committee on moisture-related standards.*

Registration fee is \$75.00 per person. Registration includes lunch and handouts.  
Class size is limited. Registration deadline is March 25, 2004.

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



## STRUCTURAL SYSTEMS, INC.

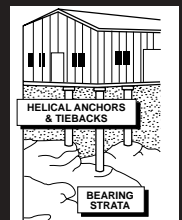
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### 2003-2004 ASCE Hawaii Section Executive Committee

		Phone	Fax
President	Westley Chun	488-0477	488-3776
	<i>wkchun@engrsol.com</i>		
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	<i>kniiya@atahawaii.com</i>		
Vice-Pres	Walter Billingsley	846-3232	538-7819
	<i>wbillingsley@beltcollins.com</i>		
Secretary	Lori Fong	531-7094	528-2368
	<i>lfong@ascehawaii.org</i>		
Treasurer	Phillip Ooi	956-8512	956-5014
	<i>ooi@wiliki.eng.hawaii.edu</i>		
Past Pres	Horst Brandes	956-8969	956-5014
	<i>brandes@wiliki.eng.hawaii.edu</i>		

### MARCH DINNER MEETING

Program: Challenges and Opportunities, A BWS Look at Water for a Sustainable Future, by Barry Usegawa, Principal Executive, Water Resources Unit, Honolulu Board of Water Supply.

Mr. Usegawa's presentation will include a discussion of unique challenges faced by the BWS, including pipeline replacement, water conservation, estimating groundwater supply, watershed protection, planning for Oahu's future water needs, opportunities for a sustainable future, recycled water, seawater and brackish water desalination, Kalaeloa Deep Ocean Water Facility Study, ocean thermal energy conversion, and the Kakaako district cooling project.

Date: **Thursday, March 18, 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, January 12, 2004. Reservations for the dinner meeting to Phillip Ooi by Monday, March 15, 2004, by phone at 956-8512, fax at 956-5014, or email at *ooi@wiliki.eng.hawaii.edu*.

### EXECUTIVE COMMITTEE MEETING

February 10, 2004

### 2004 CALENDAR OF EVENTS (subject to change)

April 15, 2004 - Order of the Engineer Ceremony, Recognition of Life Members, Student Chapter presentation

### ENGINEER'S RING CEREMONY PLANNED FOR APRIL DINNER MEETING

The Engineer's Ring Ceremony is the public induction of candidates into the Order of the Engineer. The Order is the roster of engineers in the United States who have participated in an Engineer's Ring Ceremony and who have publicly accepted the "Obligation of an Engineer." During the Ceremony, candidates

formally accept the Obligation of an Engineer and receive a stainless steel ring to be worn as a symbol of recognition of membership in the Order of the Engineer. Additional information on registration for the Ceremony will be forthcoming. Please see the announcement and registration form in this issue. Additional information on the planned ceremony is available on the ASCE Hawaii Section website at [www.ascehawaii.org](http://www.ascehawaii.org).

### ASCE HAWAII SECTION AWARDS

**ASCE Excellence in Journalism:** The American Society of Civil Engineers' Excellence in Journalism Award honors newspaper journalists for outstanding reporting that enhances public understanding of the role and impact of civil engineers and civil engineering solutions in the design for clean water, transportation, the environment and other public works projects. The national winner receives a \$2,000 honorarium and a plaque presented to them at the Civil Engineering Conference and Exposition.

**Civil Government:** The Civil government award recognizes those members of the engineering profession who have rendered meritorious service in elective or appointive positions in government. William D. Shannon, Past Vice President of ASCE, contributed funds to establish this award. The award was officially instituted by action of the Board of Directors in October 1963.

The award is made to those members (except honorary members) of ASCE who have contributed substantially to the status of the engineering profession by such public service. The award consists of a plaque and a certificate.

**Edmund Friedman Professional Recognition:** To recognize the importance of professional attainment in the advancement of the science and profession of engineering, Edmund Friedman, Past President of ASCE, contributed funds to establish this award. It was officially instituted by action of the Board of Direction on March 7, 1960. In February 1964, the Board of Direction voted to include the donor's name in the name of the award. The award is made annually to a member (except for an Honorary Member) of the Society who is judged to have contributed substantially to the status of the engineering profession by: (a) an established reputation for professional service; (b) objective and lasting achievement in improving the conditions under which professional engineers serve the public and private practice service; (c) significant contributions to improving civil engineering education; (d) guidance of young civil engineers in the formative stages of their careers; or (e) other evidence of merit that advanced the Society's professional objectives. The award consists of a plaque and a certificate.

**John I. Parcel - Leif J. Sverdrup Civil Engineering Management:** To encourage effective leadership and management skills in the civil engineering profession, this award was endowed by the associates of John I. Parcel and Leif J. Sverdrup, Honorary Members, ASCE. The award was officially instituted by action of the Board of Direction in September 1976. The award is made annually to a member of ASCE, who has made a definite contribution in the field of civil engineering management. This contribution may have been made either in the form of written presentations or notable performance. The award consists of a plaque, a certificate, and a cash prize determined annually by and subject to the approval

of the Society Awards Committee based on the income from the award endowment

For more details on this award please visit the ASCE website at [www.asce.org](http://www.asce.org), or contact Jon Young (ASCE awards committee chairperson) at 521-5361.

### 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)
- Hawaii Pacific Engineers (Civil and Civil/Environmental Engineers - Honolulu)
- Warren S. Unemori Engineering (Project and Civil Engineers - Wailuku)
- 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](http://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](http://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.

### 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*.

### HAWAII SECTION SCHOLARSHIP

The Scholarship Committee continues to accept donations to the Hawaii Section Scholarship Fund with the goal of establishing a second annual scholarship for a deserving ASCE Student Chapter member. All-contributions are tax-deductible. This month we would like to thank ASCE Honorary Member Dudley Pratt, Jr. and ASCE member Dan Takeyesu for their generous donations.

Please make checks payable to 'ASCE Hawaii Section' and mail to ASCE Scholarship Committee, P.O. Box 917, Honolulu, Hawaii 96808. If you have any questions, please contact Horst Brandes at 956-8969, or at *brandes@wiliki.eng.hawaii.edu*.

**See other ASCE articles  
on page 10.**





**AN ORDER OF THE ENGINEER RING CEREMONY  
WILL BE HELD AT THE ASCE APRIL DINNER MEETING  
APRIL 15, 2004  
AT TREETOPS RESTAURANT, MANOA VALLEY**

ASCE Hawaii Section President, Westley Chun, invites you to participate in the Order of the Engineer Ring Ceremony to be held in conjunction with the April 2004 Dinner Meeting of the ASCE Hawaii Section. Patricia Galloway, ASCE National President, will preside over the Ring Ceremony.

The Order of the Engineer was initiated in the United States to foster a spirit of pride and responsibility in the engineering profession, to bridge the gap between training and experience, and to present to the public a visible symbol identifying the engineer. The first Ring Ceremony was held on June 4, 1970 at Cleveland State University. Others like it have since spread across the United States at which graduate and registered engineers are invited to accept the Obligation of the Engineer and to wear a stainless steel ring.

The Ring Ceremonies are conducted by Links (local sections) of the Order, of which ASCE National is one. Over 300 ASCE members have participated in ASCE led Ring Ceremonies since Spring 2003. More information on the Order of the Engineer can be found at [www.order-of-the-engineer.org](http://www.order-of-the-engineer.org).

Any engineer is eligible for induction into the Order of the Engineer if he or she has graduated from an ABET-accredited engineering program or holds a license as a Professional Engineer. Students enrolled in ABET-accredited engineering degree programs are eligible if they are within two academic terms of graduation. Guests are welcome to witness the induction ceremony.

Participants at the ASCE Hawaii Section Dinner Meeting Ring Ceremony will take the Obligation of the Engineer and receive a stainless steel ring. The cost for the Ring Ceremony will be \$10.00. Engineers need not be civil engineers or members of ASCE to participate in the Ring Ceremony. Attached, please find a registration form for the Ring Ceremony. A ring sizing chart to assist in determining your ring size is available from the ASCE Hawaii Section website at [www.ascehawaii.org](http://www.ascehawaii.org).

For additional information on the Ceremony and to obtain a registration form, please contact: Walter Billingsley, ASCE Hawaii Section Vice-President, at 846-3232 or [wbillingsley@beltcollins.com](mailto:wbillingsley@beltcollins.com).



## Engineers Ring Ceremony

ASCE Hawaii Section Dinner Meeting  
April 15, 2004  
Treetops Restaurant, Manoa Valley

Sponsored by the  
American Society of Civil Engineers  
World Headquarters Link  
and the ASCE Hawaii Section

Name: \_\_\_\_\_  
(to be printed on certificate for participants only)

Professional Credentials: P.E. P.L.S. E.I.T.  
(to be printed on certificate for participants only)

Mailing Address: \_\_\_\_\_  
(needed for participants only)

Ring Size: \_\_\_\_\_ (fifth finger of your writing hand)  
(needed for participants only – form for measuring ring size is available on the ASCE Hawaii Section website at [www.ascehawaii.org](http://www.ascehawaii.org))

I attest that I am eligible for induction into the Order of the Engineer by merit of:

1. having graduated from an ABET-accredited engineering program, or
2. holding a license as a Professional Engineer, or
3. being enrolled in an ABET-accredited engineering program and within two academic terms of graduation.

\_\_\_\_\_  
signature date

Registration Fee: \$10.00 per initiate (includes ring and certificate)

Fee is payable via cash or check. Please make check payable to "ASCE Hawaii Section." Mail completed form with payment to Phillip Ooi, ASCE Hawaii Section Treasurer, Department of Civil and Environmental Engineering, University of Hawaii at Manoa, 2540 Dole Street, Holmes Hall 383, Honolulu, HI 96822-2303. Registration forms with payment must be received by March 29, 2004.

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	Robert M. Miller, P.E. email: rpehi@hawaii.rr.com	951-7215
Webmaster	Derick Kam email: kam@thermaleng.com	

**HAWAII SFPE SEMINAR ANNOUNCEMENT****PLAN REVIEW AND INSPECTION OF FIRE SPRINKLER SYSTEM**

The Hawaii Chapter of the Society of Fire Protection Engineers is sponsoring this excellent two day seminar through a special arrangement with the National Fire Sprinkler Association. This seminar will be very useful for those responsible for the review of fire sprinkler plans and inspection of fire sprinkler systems.

Date: April 27 and 28, 2004  
Location: Fort Shafter Golf Clubhouse (Hale Ikena)

Cost: \$250 (\$200 for SFPE members, Chapter Friends, fire service personnel)

For information and to register contact: Sam Dannaway, Program Chairman, Hawaii Chapter SFPE, Tel (808) 526-9019 / Fax (808) 537-5385, E-mail: seminars@sfpedahawaii.org.

**NFPA 101/5000 MEANS OF EGRESS PART I**

The Hawaii Chapter of the Society of Fire Protection Engineers is sponsoring this excellent seminar through a special arrangement with the National Fire Protection Association.

Sponsored by: Hawaii Chapter, Society of Fire Protection Engineers

Date: March 22, 2004  
Time: 7:30 AM - 5:00 PM

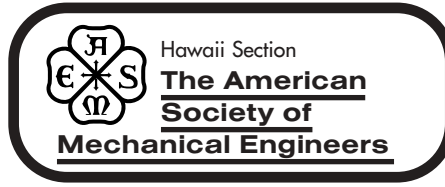
Location: Fort Shafter Golf Clubhouse  
Cost: \$50 (\$40 for SFPE members, Chapter Friends, code officials, and AIA members)

Deadline: The registration deadline is Friday, March 19, 2004.

Who should attend: Fire Protection Engineers, Architects, Building & Fire Officials, and Insurance Loss Control Representatives. Participants in this seminar will receive 7.0 AIA/CES/HSW Credits.

For information and to register contact:

Sam Dannaway, Program Chairman  
Hawaii Chapter SFPE  
tel(808)526-9019 / Fax(808)537-5385  
E-mail: seminars@sfpedahawaii.org



Website: [www.asme.org/sections/hawaii](http://www.asme.org/sections/hawaii)

**2003-2004 OFFICERS**

Chairperson	Raymond Liu	521-3773
Vice-chair	LCDR John Markowicz	484-9164
Treasurer	Rodney Krienke	373-2916
Secretary	Sam Gillie	543-4739
Past-chair	James Grogan	254-2947
Dir 1 yr	Ed Chang	543-4227
Dir 2 yr	Ron Flegal	455-0254

**HAWAII SECTION COMBINED COMMITTEES & POWER TECHNICAL CHAPTER MEETING**

Date: Tuesday, March 9, 2004

Time: 5:30 p.m. to 6:30 p.m.

Place: Hawaiian Electric Company, Inc. Ward Avenue Cafeteria

All members 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. In addition, we are having a Power Technical Chapter meeting to discuss programs for next year. Lots of free pizza and pop are always provided. Please contact Ray Liu or Sam Gillie for directions and more information. For Power Chapter questions, please contact Ed Chang.

**ENGINEERING & ARCHITECTURE HISTORY MUSEUM**

Responses to the Honolulu Star Bulletin Brainstorm! challenge, "What should the city do with the elegant old sewage pump station?" were printed Sunday, January 25, 2004. Jim Grogan's response described the Hawaii engineering museum idea. If you missed this editorial, you can read about it at website <<http://starbulletin.com/2004/01/25/editorial/special.html>>.

**ISISHAWAII ONE+ONE E-MENTORING PROGRAM**

Ray Liu and the ASME Hawaii Section are helping to promote the isisHawaii e-mentoring program to ASME-HI members. For this pilot program female members of ASME-HI have been contacted to serve as mentors to young women interested in the engineering profession. Using Internet technology, mentors connect with junior and senior girls who show interest in STEM (science, technology, engineering and math). IsisHawaii, The Oahu Division of Women in Technology, and Mililani High School

(continued on page 11)

**SEAOH, from page 5**

- NCSEA: Contains two articles on NCSEA issues.
- Self Certification: Effort by the County of Hawaii to allow design professionals to self certify their work. This essentially bypasses the traditional permit review process.
- IBC 2003 Amendments: Amendments to the IBC 2003 as proposed by the City and

County of Honolulu. The IBC 2003 is scheduled to be adopted in late 2004.

**2004 Installation Banquet:**

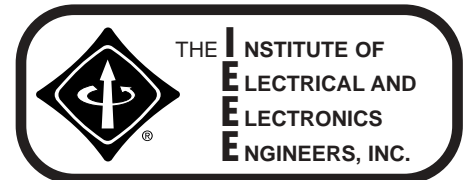
133 members, spouses, and guests attended the 2004 Installation Banquet at the Moana Surfrider Hotel. Everyone enjoyed pupus on the Grand Salon Terrace, a dinner of Fillet Mignon and Grilled Scallops and the improvisational comedy of Loose Screws. Special thank you to sponsors Island Ready Mix, Rocky Mountain Prestress, Ameron Hawaii, Dietrich Industries, and Special Inspection Consultants.

**2004 Calendar of Events:**

Next BOD meeting: 03 March 2004, 4:30 p.m., at Shigemura, Lau, Sakanashi, Higuchi office.

March 2 -4 Anti-Terrorism Force Protection Requirements Seminar by ACECH and AIA.

March 26 Tentative General Membership Meeting: Field trip to Tileco, Rocky Mountain Precast and AES Plants.

**IEEE Hawaii Section**

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

**2003 HAWAII SECTION OFFICERS:**

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

**Section Committee Chairpersons:**

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

**MARCH MEETING NOTICE**

Speaker: Russ Saito, Director of DAGS

Topic: "Debarment"

Date: March 24th (Wednesday)

Time: 6:00 pm

Place: UH Manoa  
Campus Center Cafeteria

Cost: \$15 for dinner

RSVP: [oscar@hawaii.rr.com](mailto:oscar@hawaii.rr.com) or call 383-3333. RSVP deadline is March 18.

The meeting is open to the public. Seating is limited, so please RSVP early. This is a very important topic among the engineering community that will be clarified at this presentation.





# Hawaiian Electric Company, Inc.

***Giving you the power***

*An Equal Opportunity/Affirmative Action Employer/ M-F-D-D*

At the Hawaiian Electric Company (HECO), we do more than provide electricity. We deliver reliable, environmentally friendly electricity, explore alternate energy sources and help our customers manage their electric consumption. We are looking for energetic, goal-oriented individuals to join our team of professionals to provide excellent, efficient service to our customers. HECO is currently recruiting candidates for the following positions:

## **Civil/Structural Engineer**

The Civil/Structural Engineer will be responsible for: designs, plans and engineering studies for Civil/Structural systems of the Hawaiian Electric Company's generation, transmission, distribution, telecommunications and substation facilities; performing design calculations, cost estimates, equipment and construction specifications, evaluating proposals, and making recommendations; field inspections to verify field conditions and compliance with drawings and specifications.

### **Qualifications:**

- Bachelor of Science degree in Civil Engineering or Structural Engineering from an accredited engineering college.
- Thorough knowledge of the principles and practices of engineering design, project engineering, project management, and construction methods associated with structural projects with a minimum of 5 years relevant engineering experience using various codes such as Uniform Building Code (UBC), American Institute of Steel Construction (AISC), American Concrete Institute (ACI).
- Working knowledge of personal computers and/or mainframe systems and related software applications such as spreadsheets, word processing, etc. Working knowledge and experience in application of structural software programs such as STAAD, STRUDL, RISA, etc. as related to projects.
- Working knowledge of City, State and Federal laws, ordinances, regulations and procedures as related to specific projects and assignments.
- Demonstrated interpersonal skills to handle confrontational, difficult and/or sensitive issues. Ability to handle such issues with professionalism while using tact, courtesy and discretion.
- Ability to remain flexible in a demanding work environment and adapt to rapidly changing priorities.
- State of Hawaii Professional Engineer License in the Civil and/or Structural Engineering branches.
- Must have or be able to qualify for a current State of Hawaii and HECO driver licenses to conduct on-site surveys/inspections of projects.

## **Electrical Engineers (Substation & Transmission/Distribution)**

The Electrical Engineer will be responsible for: designs, plans, project management and engineering studies for Electrical/Control systems and transmission/distribution systems of the Hawaiian Electric Company's facilities. The Engineer will also perform design calculations, cost estimates, equipment and construction specifications, evaluating proposals, and making recommendations; responsible for field inspections to verify field conditions and compliance with drawings and specifications.

### **Qualifications:**

- Bachelor of Science degree in Electrical Engineering from an accredited engineering college.
- Working knowledge of the principles of transmission/distribution, electric substation, communication, and control design with specific working knowledge of: Air Insulated Substation & Gas Insulated Substation physical layouts, physical and electrical characteristics of major electrical equipment, relay protection, control schemes, Remote Terminal Units, Generator Control Units, SCADA, Energy Management Systems, telemetry, microwave, fiber optic, radio systems, LANs, WANs, Programmable Logic Controllers, auxiliary systems, and specification development, etc.
- Working knowledge of personal computers and/or mainframe systems and related software applications such as spreadsheets, word processing, etc.
- Working knowledge of City, State and Federal laws, ordinances, regulations and procedures as related to specific projects and assignments.
- Demonstrated interpersonal skills to handle confrontational, difficult and/or sensitive issues. Ability to handle such issues with professionalism while using tact, courtesy and discretion.
- Ability to remain flexible in a demanding work environment and adapt to rapidly changing priorities.
- State of Hawaii Professional Engineer License in the Electrical Engineering branch.
- Must have or be able to qualify for a current State of Hawaii and HECO driver licenses to conduct on-site surveys/inspections of projects.

We also have openings for the following positions:

## **Power Plant Electrical Engineer Power Plant Mechanical Engineer**

To explore this employment opportunity, visit:

<http://careers.heco.com>  
or call (808) 543-4611



**2003-2004 YMF OFFICERS**

		Phone
President	Jamie Hikiji <i>jhikiji@ascehawaii.org</i>	529-7229
Vice-Pres	Paulette Chang <i>Hawaiiymf@yahoo.com</i>	781-1187
Secretary	Scott Jennings <i>sjennings@rci-group.com</i>	845-8440
Treasurer	Geoff Ries <i>gries@wilsonakamoto.com</i>	946-2277
Stud. Chap. President	Ronald Malalis <i>malalis@hawaii.edu</i>	956-5808

**Next YMF General Meetings**

The next two YMF general meetings are scheduled for Tuesday, March 9, 6:00 p.m. at Murphy's Bar & Grill 531-0422, and April 6, 6:00 p.m. at Gordon Biersch Brewery Restaurant 599-4877. 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.

**ASCE YMF Helps Clean Up Hanauma Bay**

On January 18, 2004, several members of ASCE YMF volunteered to assist staff at Hanauma Bay to clean up trash in the parking lot and beach area of Hanauma Bay. Gloves and trash bags were provided for the clean up. Water and sodas were provided for refreshment. A beautiful morning with spectacular views of the bay and spending time with YMF friends made it a great experience!

**ASCE YMF Kicks Off First Social Event of 2004**

February 7, 2004 the ASCE YMF sponsored the first social event of the 2004. The twelve participants enjoyed great food, drink and company at Magoo's Pizza followed by an exciting University of Hawaii Men's basketball game in which the Warriors (15-4, 7-2) defeated the San Jose State Spartans 56 to 55 to retain their lead in the WAC standings. Please join us for our next scheduled social event tentatively scheduled for April. Details to follow.

**ASCE Job Classified**

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



**ASCE YMF cleanup crew at Hanauma Bay.**

**KNOW YOUR ASCE HISTORY**

by C.S. Papacostas

Volume XVII, No. 22 of "The Journal of Electricity, Power and Gas with Which is Incorporated The Engineers' Architects' and Builders' News," was published on December 1, 1906 in San Francisco. Included in this issue of the journal is What appears to be one in a series of articles entitled "Irrigation Works in the Hawaiian Islands," by M. M. O'Shaughnessy, M. Am. Soc. C. E., San Francisco.

Much of the article describes the construction of the first 14 or so miles of the Kohala Ditch on the Big Island of Hawai'i. O'Shaughnessy was both an investor in the Kohala Ditch Company and the Chief Engineer for the aqueduct. The narrative wanders a little to topics such as ground water sources on several islands and also contains a hand-written table of detailed "Statistics of Pumping Plants in the Hawaiian Islands." Surprisingly, the article about the first 14-mile segment of the Kohala Ditch appeared in print only several months after the segment's completion in June 1906.

As I reported back in August 1998, the ditch drops about 80 feet in elevation from 1,045 feet at "the bottom of the intake above sea level at first large stream (Honokane)" to 956 feet "at the terminus in the plantation fields." But the grade is not constant over the entire length. Rather, "the fall in tunnels and flumes is one foot in 833 feet, and in ditch to Hawai is one foot in 1000 feet." Of the 71,000 feet of aqueduct, 46,000 consisted of 45 tunnels, flumes "of the most substantial kind" traversed 2,000 feet, and the remaining length was open ditching. The longest of the tunnels "was 2,500 feet, and was cut through in 10 months, being completed on the 24th of March 1906." In his peculiar prose, the author explains that, given the average labor wages of \$1 per day, hand drilling proved to be "more economic than the use of either air or electric drills. An experiment was made in one case with a highly advertised gasoline drill, which proved an absolute failure and had to "be consigned to the scrap heap."

Coarse as well as fine aggregates for the concrete lining were obtained by crushing blue rock at the site. It was found that "the beach sand was rather poor in quality and the cost of packing, hauling and handling to the point where used in the ditch made it more expensive." The cement was "A-1 imported Alsen and Germania brands, averaging \$2.60 per barrel in Honolulu. The steamer and other transportation rates from Honolulu averaged \$1.30 per barrel more."

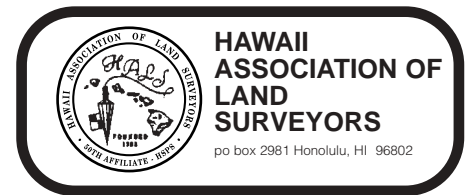
The construction materials were "trammed through the tunnels in cars pulled by mules ... The type of track used by me in all this work consisted of band rails 1 1/2 inches wide and 3-16 of an inch thick, 16 feet long, with holes reamed out for track spikes about two-

foot centers..."

The 600 Japanese laborers were housed under corrugated iron roofs, with sidewalls of eight-ounce duck tacked to light scantling frames. The raised floors "nearly always two feet above the ground and higher if practicable" provided "a place for drying the men's clothes in wet weather." Additionally, "an hospital and medical department was also provided for the men, who were assessed 50 cents a month apiece for this object."

Although the author makes numerous references to the "men" that made up the labor force, two pictures show very young children of both genders. A particularly spectacular of these pictures carries the caption "Aqueduct Under Waterfall" and shows several workers as well as a woman carrying a young girl on a ledge behind the waterfall. There is no mention of female workers or whether family members resided at or whether they simply visited the workers' camp.

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](mailto: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>.



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GISMAP (Geographic Information Systems Mapping in Asia and the Pacific) will bring professionals together from government, private, educational, and non-profit sectors to identify and discuss innovative, as well as traditional, applications of GIS and spatial information technologies. The conference will focus on how these technologies and methodologies can be applied to enhance the sustainability, livability, viability and security of our unique and vulnerable Pacific and Asian communities. Abstracts and papers should be emailed to Goro Suljoadikusumo, [goro.suljoadikusumo@hawaii.gov](mailto:goro.suljoadikusumo@hawaii.gov), 587-1839, by March 15, 2004. Registration details and forms are available on the conference website at <http://www/higicc.org/gismap.asp>.

## ASME, from page 8

are coordinating this pilot e-mentoring program. IsisHawaii is a cyber-community of forward-thinking women networking with like-minded individuals and accomplished role models in Hawaii. Their mission is to seek self-awareness, empowerment and inspired motivation through positive interaction with other women. Please visit their website at <http://www.isishawaii.org> for more information.

### CONFERENCE ON NANOTECHNOLOGY GROWTH IN BIOTECH AND MEDICAL DEVICES

Interested in nanotechnology? This is the branch of engineering dealing with the design and manufacture of extremely small electronic circuits and mechanical devices built at the molecular level of matter where dimensions and tolerances are in the range of 0.1 to 100 nanometers (nm). It is closely associated with MEMS or micro-electromechanical systems, a technology that combines computers with tiny mechanical devices such as sensors, gears, and actuators embedded in semiconductor chips. ASME's Nanotechnology Institute is sponsoring a conference on growth opportunities for the Biotech and Medical Sectors from April 15-16 at the National Academies of Sciences and Engineering in Irvine, Ca. For more information, please visit the website at <http://www.asme.org/events/nanobio>.

### FEDERAL GOVERNMENT FELLOWSHIP PROGRAM

ASME is taking applications for the 2004-2005 Federal Government Fellow Program. This program, sponsored annually by ASME since 1973, provides members the opportunity to work for one year with the staff of a congressional committee, U.S. Senator or Representative. ASME has a limited number of stipends of \$45,000 per fellow. Because the stipend is not intended to be the fellow's entire financial support, the remaining salary and other costs must be negotiated between fellow and his or her employer. The deadline for applications is April 1, 2004. For more information about the program and to access an application form go to the ASME website <http://www.asme.org/gric>.

### NOMINATIONS FOR ASME-HI SECTION 2004 PROJECT/DESIGN OUTSTANDING ACHIEVEMENT AWARD

The nomination deadline is April 30, 2004. Although this date is a ways off, you can submit nominations any time before that date. If you know of any unusual or outstanding mechanical engineering-type project or design that have been completed within the past five years, please contact Ed Chang. The nomina-

tion process is very simple, easy, and fast.

### REQUEST FOR DONATIONS FOR THE ASME HUMAN POWERED VEHICLE (HPV) PROJECT

The UHM ASME Student Section HPV Team continues to seek support and donations from the engineering community for expenses to design, build, and compete in the April 23-25, 2004 ASME West Coast HPV Competition in Corvallis, Oregon.

The Student HPV Team plans to compete in the April 2004 ASME West Coast Competition. Because of the high cost to participate in this annual ASME student competition, the students seek your help in funding. They expect expenses to reach as high as \$15,000 for materials and travel. Donations are tax deductible. Checks can be made out to "UH Foundation/Engineering/HPV" and mailed c/o Dr. Mehrdad Ghagemi Nejhad, Department of Mechanical Engineering, University of Hawaii at Manoa, 2540 Dole Street, Holmes Hall #302, Honolulu, HI 96822. Any support will be greatly appreciated.

### 2004 MATHCOUNTS COMPETITIONS

The Oahu Chapter Competition was held February 21, 2004 and the State Competition scheduled for March 13, 2004. The results of both competitions will be announced in the April Wiliki.

### FUTURE ACTIVITIES

Several tours and meeting speakers are being planned. Please watch for the dates and the topics in future Wiliki issues and at the ASME-HI website.



PO Box 12204 Honolulu, HI 96828  
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**TEAMS Event:** The College of Engineering hosted the Tests of Engineering Aptitude, Mathematics and Science (TEAMS) Competition on February 21 at the UH Manoa Campus Center Ballroom.

**Upcoming College of Engineering Events:**  
College of Engineering Open House (March 6, 2004)

**2004 EAAUH Golf Tournament:** Volunteers are needed for the 2004 golf tournament. If you would like to help, please contact Matt Fujioka ([mkf@akinaka.com](mailto:mkf@akinaka.com)) or Stacie Kaneshiro ([Stacie.Kaneshiro@hickam.af.mil](mailto:Stacie.Kaneshiro@hickam.af.mil)) for more information.

Don't forget to check the EAAUH website at [www.eaauh.org](http://www.eaauh.org) for pictures of the 2003 EAAUH golf tournament, information on events, job listings and EAAUH news.

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