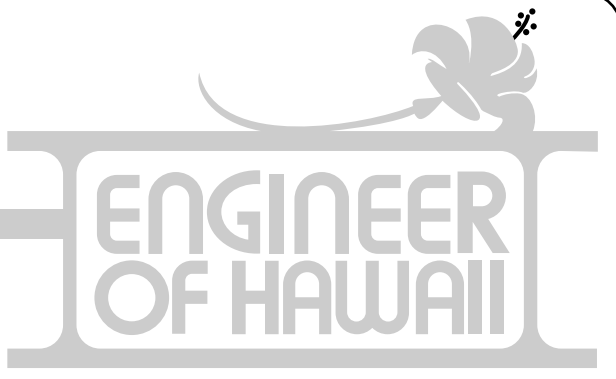


wiliki o hawaii



VOL. 38 NO. 9

SERVING 2000 ENGINEERS & LAND SURVEYORS

FEBRUARY, 2003

2003 Hawaii Engineer of the Year Wallace S. Miyahira, P.E.

Mr. Wallace S. Miyahira, P.E., has been selected as the 2003 Hawaii Engineer of the Year. He was selected for his outstanding contributions and tireless commitment to the civil engineering profession and numerous community service projects. He was nominated by the American Society of Civil Engineers (ASCE) Hawaii Section.



Mr. Miyahira received his Bachelor of Science in Civil Engineering from the University of Hawaii at Manoa in 1954. He is a licensed civil engineer in the State of Hawaii. Over the course of his career, he has worked at a number of engineering firms, government agencies and community development businesses including Belt Collins & Associates, Wilson Okamoto & Associates, M&E Pacific, Department of Public Works, City and County of Honolulu, Kaiser Aetna and Castle and Cooke Hawaii.

During his tenure as President of CEO of Castle and Cooke Hawaii (formerly Oceanic Properties, Inc.), Mr. Miyahira was responsible for directing the residential and commercial operations in Hawaii, establishing current and long-range operating objectives, plans, policies and programs, and representing the company with its major customers, the financial community, the government and the public. He planned, directed, and controlled operations of real estate activities including the full development process from the acquisition of land through financing, planning, architecture and engineering, construction, marketing and sale and leasing to ensure maximum return and profitability.

As Director and Chief Engineer of the Department of Public Works, City and County of Honolulu, Mr. Miyahira guided the City and County of Honolulu in developing the Honolulu Program of Waste Energy Recovery (H-Power) as an alternate source of energy and led the completion of the Sand Island Wastewater Treatment Plant's advanced primary treatment units and deep ocean outfall, both pioneering engineering achievements.

In addition to his professional accomplishments, Mr. Miyahira also dedicated time to professional engineering organizations. He served as President of the ASCE Hawaii Section in 1977, National Director of the Hawaii Water Pollution Control Association from 1980 to 1983, Director of the American Public Works Association Hawaii Chapter in 1984, and President and Board Member of the Hawaii Land Use Research Foundation from 1984 to 2000.

Even with his busy professional career, Mr. Miyahira devoted time to serve on numerous community groups. While a trustee of St. Louis High School, he served as chairman of the school's Facilities Committee, establishing the initial framework for a Facilities Master plan for the entire campus, including athletic fields fine arts center, student center and classroom renovations. As a Honolulu Symphony Board Member, he assisted with fundraising through community awareness to help the symphony achieve financial stability. As chairman of the University of Hawaii, College of Engineering Task Force, he led the committee in laying the groundwork that established stronger relations between the University of Hawaii, College of Engineering and the practicing engineering community which in turn enhanced awareness and increased monetary contributions.

Mr. Miyahira has received numerous awards and honors to recognize his accomplishments. Among his awards and honors are the 1980 Chapter Honor Member, Chi Epsilon, University of Hawaii, the 1983 University of Hawaii, College of Engineering Dean's Award, the 2000 Leukemia & Lymphoma Society's Man of the Year and his 2001 installation into the St. Louis High School Gallery of Distinguished Achievers.

Mr. Miyahira is a great example of what we as engineers should strive to accomplish in our professional careers and as members of the community. Congratulations to Mr. Wallace Miyahira, 2003 Hawaii Engineer of the Year.

2003 Student Engineer of the Year Aaron T. Ohta

The Hawaii Society of Professional Engineers (HSPE) is proud to announce that Aaron T. Ohta has been recognized as its 2003 Student Engineer of the Year.



Aaron is a 1999 graduate of Kalani High School, graduating first in his class of 278 students. Though he was offered admission to Caltech, Aaron chose to enroll at the University of Hawaii at Manoa as a Regents Scholar, one of only twenty students selected statewide to receive this prestigious award. He has maintained a perfect 4.0 grade point average in his four years in the UH electrical engineering program, and will be graduating with his Bachelor of Science degree this May.

For the most part, Aaron credits his academic success to his participation in a wide variety of curricular and extracurricular project-based learning opportunities, which have not only reinforced the material he learned in the classroom, but which also developed his teamwork, leadership, and management skills. In fact, learning and practicing basic skills as a team member, and then transferring that knowledge through mentoring others as a team *leader*, has been a consistent pattern for Aaron.

For example, in his freshman and sophomore years on the UH Micromouse Team, Aaron developed basic design and programming skills as a team member under the guidance of more experienced students. In his junior year, Aaron took over the duties from Wen Phan (2002 HSPE Student Engineer of the Year) as Micromouse Chair, managing the

(continued on page 9)

2003 ENGINEERS WEEK HIGHLIGHTS

FEBRUARY 16-22, 2003

Honolulu Kickoff Luncheon

Sponsored by Honolulu Post, Society of American Military Engineers Tuesday, 18 FEB, 1130 hours, Hale Koa Hotel Banyan Tree Showroom.

Speaker: Evan Dobbelle, President of the University of Hawaii
See reservation form on page 4

Honolulu Banquet

Sponsored by Hawaii Council of Engineering Societies Friday, February 21, 6:00 PM, Radisson Waikiki Prince Kuhio

Speaker: David A. Heenan
See reservation form on page 3

Honolulu Eweek Exhibit

Sponsored by HCES and chaired by the Institute of Transportation Engineers, Saturday, February 15 to Sunday, February 23, Kahala Mall.

Maui Banquet

Sponsored by Maui Chapter, Hawaii Society of Professional Engineers, Saturday, February 22, Sandalwood Restaurant in Waikapu.

Big Island Banquet

Sponsored by Big Island Chapter, Hawaii Society of Professional Engineers, Saturday, February 22.



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

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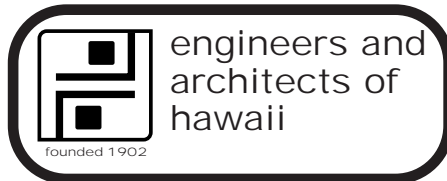
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February EAH Program

February 7, "Rapa Nui a Presentation on Easter Island"

February 14 - No Meeting President's Day

February 21 - No Meeting - Engineer's Week Banquet See You There!

February 28, Andrew Lockwood, Director of the Hawaii Pacific University, "The Elderhostel Program." Mr. Lockwood will show a 12 minute video tape of the national and international Elderhostel program in the Pacific Basin.

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.

Meeting Notes for December 6, 2002

SPEAKER: Dr. June Harrigan-Lum; State of Hawaii Department of Health, Environmental Planning Office Manager

SUBJECT: "What You Should Know About the Clean Water Act"

The Total Maximum Daily Load program is an awkward program. It sounds complicated but in practice it boils down a set of very simple preferred practices. The State DOH has been designated by the EPA to administer the TMDL program as is typical for EPA programs. TMDLs, stormwater permits, polluted runoff control Best Management Plans address a single goal - reducing pollutants in runoff entering the coastal ocean through stormdrains and streams. Thoughts to take with you: 1. It is not what you do on the land as much as how you do it within reason. 2. TMDLs are not always required legally, but they are good for business for green development, because people are looking for healthy places to live and work. 3. No one has a recipe for restoring broken aquatic ecosystems or habitats. We don't know how to replace the habitats, improve water quality and stop invasive species. 4. As natural resources are used up the long range social and economic consequences just aren't known. So much of developments are large uncontrolled experiments. Prevention may be a lot more effective than repair. 5. We should be more cautious and work towards improving natural resources in the future.

Concentration of material substance in the

water is mass per unit volume and is expressed as mg/l or Mg/l. TMDL program requires pollutant loads, which means water volume discharge have to be measured. This results in mass per unit of time or weight of a pollutant per day or year. They are looking for the total weight of discharged from a stream into the ocean per day or per year. TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards (Hawaii Administrative Rule Chapter 11-54, Water Quality Standards). Pollutant loads can be calculated for either numeric or narrative criteria. For example nitrates is limited to 150 mg/L in some waters. This is a numeric criterion. Water shall not contain any noxious substances or noxious algae. In other words the water should not be stagnant green and have a bad odor. This is a narrative criterion.

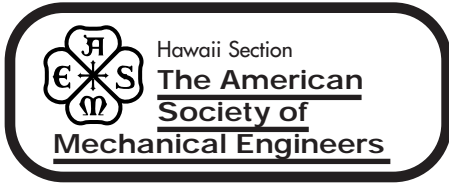
The boundary of the drainage basin is determined and mapped. Then the sub-basins are mapped or the land drained by each tributary system. The load coming out of the stream is measured and loads are allocated proportionally to each sub-basin depending on their respective area.

The basis for the TMDL is to refer to what is found through flow measurements in the environment and to refer back to what the water quality standards allow. So the water quality standard is multiplied by the volume of water discharged and that is the amount of pollutant that can be in the water without degrading the water quality. Water quality standards are set by looking at minimally polluted (but not pristine) waters. The TMDL is made up of three parts. The Waste Load Allocation (WLA). This is regulated by the clean water act through the NPDS point source discharge permits for Wastewater plants or industrial discharge and storm water runoffs. The non-regulated part is the Load Allocation (LA). There are programs for funding people to voluntarily use Best Management Practices (BMPs). This is for agricultural or residential runoffs for example. The Margin of Safety (MOS) includes errors, seasonal variations and allowance for future development in the basins. There has to be a WLA and a LA as part of NPDS permits and this now includes the storm water permits.

DOH priority is for perennial streams first as these carry most of the polluting loads of nutrients and sediments to the coastal ocean. But Hawaii has very limited stream and storm discharge volumes so flows are collected on a stream-by-stream basis. Of the numerous pollutants DOH is only working on sediments and nutrients, but DOH is thinking of working on metals, dissolved oxygen and temperature next.

Every two years the Clean Water Act list of Impaired waters is prepared. Data is reviewed and where data shows water don't met the standards the waters are listed. There are 123 waters on the list now. DOH has two contractors that are preparing TMDLs for DOH.

One of the Hawaii's big problems is water supplies. But rain that falls on concrete areas that are impervious and the water drains straight to the ocean, then there isn't any recharge. So drainage through harden channels destroys the habitat, community value of the stream and prevents recharge. So channelized stream designs are not recommended any longer. DOH would like to remove many existing channels and replace with soft engineering. People may then view these waterways as real streams instead of somewhere to dump their trash.



Website: www.asme.org/sections/hawaii

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| Dir 2 yr | Ed Chang | 543-4227 |

HAWAII SECTION COMBINED COMMITTEES & POWER TECHNICAL CHAPTER MEETING

Date: Wednesday, February 5, 2003
 Time: 5:30 p.m.
 Place: Hawaiian Electric Company, Inc. Ward Avenue Cafeteria

All members are invited and asked to attend. We are seeking help from the membership to fill the committee positions. 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 Jim Grogan or Sam Gillie for directions and more information. For Power Chapter questions, please contact Ed Chang.

TOUR OF THE PACIFIC BIODIESEL, INC. OAHU BIOFUELS FACILITY

Date: Saturday, March 1, 2003
 Time: 10:00 a.m.
 Place: 1003 Makepono Street, Honolulu, HI 96820 (Sand Island)

This facility processes discarded cooking oil into a clean- burning fuel for diesel engines. This plant is similar to the first plant built on Maui in 1996. That plant was the answer to concerns over potential environmental and health problems resulting from restaurant grease clogging the Central Maui Landfill. Contact Ed Chang if you would like to attend.

2003 FIRST ROBOTICS COMPETITION

Kevin Dang reports that the FIRST Robotics Competition Kick off was held Saturday, January 4, 2003. Dang is mentoring at Mililani High School. Preparations for the competition gets hot and heavy until late March. Engineers are encouraged to join in this challenging but rewarding experience.

PE REVIEW COURSE

Guy Pasco is again conducting a Mechanical Discipline P.E. review class. The 10-week course commenced January 21, 2003. Class is held one Tuesday evening per week starting at 6:00 p.m. and is conducted at the Hawaiian Electric Company's Ward Avenue facility (Ward Cafeteria room Cafe 2). Cost is \$50 for ASME members, and \$75 for non-members.

NEW WEBSITE FOR ASME HAWAII

Please visit <http://www.asme.org/sections/hawaii>. The January 2003 Wiliki showed an incorrect URL under the list of officers. The "s" at the end of "sections" was missing.

MATHCOUNTS VOLUNTEERS NEEDED

The Oahu Chapter Competition will be held Saturday, February 22, 2003 at the Kamehameha Schools Kalama Dining Hall starting at about 7:30 a.m. The State Competition will be held Saturday, March 15, 2003 at the same place and starting at the

(continued on page 8)



Engineers: Turning Ideas into Reality

2003 Engineers Week Banquet
 Friday, February 21, 2003
 Radisson Waikiki Prince Kuhio
 2500 Kuhio Avenue

Cocktails: 6:00 p.m.
 Dinner: 6:30 p.m.
 Program: Guest Speaker David Heenan, local businessman, author, academician will talk about "Double Lives — Stories of Extraordinary Achievement"
 Presentation of Awards - HCES Lifetime Achievement, Engineer of the Year, Young Engineer of the Year and Student Engineer of the Year
 Installment of new officers

Please reserve _____ table(s) of 10 persons or _____ individual seats for the 2003 Engineers Week Banquet at \$35.00 per person or \$40.00 per person if postmarked after Friday, February 14, 2003 deadline.

Please print names.

- | | |
|----------|-----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Company: _____

Address: _____

Society Affiliation(s): _____

Total Enclosed: \$ _____

Make checks payable to "HCES" and mail or deliver with this reservation form to:



2003 Engineers Week Banquet
 c/o Tony Lau, HCES Treasurer
 Hawaii Pacific Engineers, Inc.
 1132 Bishop Street, Suite 1003
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If you have any questions please contact Tony at 522-7426 or by e-mail at tlau@hawaiipacificengineers.com.



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Eligibility:

- (1) High school senior or full-time undergraduate or graduate university student
- (2) Engineering or Architecture Major (university students)
- (3) U.S. Citizenship
- (4) Minimum 3.0 GPA (require copy of latest transcript)
- (5) Military affiliation or experience (i.e., SAME member or dependent, ROTC) not required but given preference (1 to 5 bonus pts)

Requirement: Submit application information with transcript and the following type-written documents:

- (1) Resume of work experience (25 pts), academic (30 pts) and extra-curricular accomplishments (25 pts)
- (2) Documentation of acceptance to an accredited university and an indication of intent to study engineering or architecture
- (3) Essay (one page, double-spaced) written around Engineer's Week theme and its impact to society (10 pts) and the military (10 pts). (See www.eweek.org and www.same.org). Example: 1997 Theme "A Bridge to the Future" - essay could discuss how Roman military engineers built roads to quickly move their armies, which additionally improved trade and communication that built the great wealth of the Roman Empire.

Mail To:

Society of American Military Engineers
Honolulu Post, C/O Ms. Kelly Busquets
46-058 Ipuka Street
Kaneohe, HI 96744

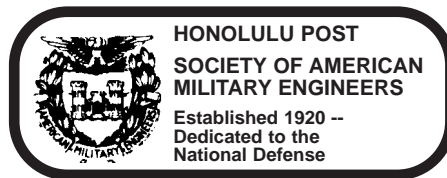
Deadline: Postmark 11 April 2003

For Further Information:

Ms. Kelly Busquets, Tel (808) 438-4980

Application Information: (Typewritten)

Name: _____ Sex: _____
 Citizenship: _____
 Home Address: _____
 City _____ State _____ Zip _____
 Phone: _____
 E-Mail (if any): _____
 School: _____ Major: _____
 Student Number: _____ GPA: _____
 Student Status:
 Undergraduate _____ Graduate _____
 (Check Applicable)
 Full Time Student: Yes _____ No _____
 Anticipated Graduation Date: _____
 Military Experience: _____
 SAME Affiliation: _____



P.O. Box 31218; Honolulu, HI 96820.
www.same.org/honolulu

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rambergjd@pwcpearl.navy.mil

22 members of the Honolulu Post of SAME were treated to an 'insiders' tour' of Aloha Stadium on 14 January. The tour included visits to the press box, locker rooms, and onto the playing field. Based upon the displays of throwing, catching, and kicking exhibited by many of the SAME attendees, their choice of an engineering profession was a wise one. The group was also treated to having their names individually listed on the stadium scoreboard. After the tour, there was a 30-minute question and answer period with the stadium engineer. SAME appreciates the efforts of Ms. Pia McManus and Mr. Ken Tong in making this an informative and entertaining tour.

2003 SAME PACIFIC REGIONAL CONFERENCE

The Honolulu Post of the Society of American Military Engineers (SAME) cordially invites you to the 2003 SAME Pacific Regional Training Conference being held at the Hale Koa Hotel in Honolulu on April 8-10, 2003. Concurrently, the

Honolulu District, U.S. Army Corps of Engineers (USACE) will present their 8th Annual Architect/Engineer and Contractor's Workshop at the conference on the morning of April 10. With a conference theme of "Engineering a Secure Future in the Pacific," we will bring together engineers, scientists, and decision makers from across the Pacific representing the various branches of the military, Pacific- region government agencies, and the business community to present and exchange ideas vital to the success of all engineering missions. The ever-popular Honolulu District workshop will focus on informing private sector firms what they must do to successfully obtain and execute work with the USACE.

For the most detailed and up-to-date information about the training conference, workshop agenda, registration, or exhibitor information, please log onto the SAME Honolulu Post website (<http://www.same.org/honolulu>) and select the "Regional Conference" link. Please continue to check the Honolulu Post website periodically for updates and the most current conference information. We look forward to seeing you in April!

Are you Staying Connected?

Ensure that SAME has your current email address. Email is the preferred communication medium. If you are not receiving emails from the Honolulu Post, please contact ENS Jeremy Ramberg at *rambergjd@pwcpearl.navy.mil* to update your information.

Environmental Chemical Corporation Awarded Five-Year, \$150-Million Debris Removal and Management Contract for Work in Pacific Region

On behalf of the US Army Corps of Engineers (USACE), Honolulu District, USACE New Orleans awarded Environmental Chemical Corporation (ECC) a five-year, \$150-million ID/IQ contract for debris removal, debris

Society of American Military Engineers Honolulu Post



Guest Speaker: Dr. Evan Dobelle,
President, University of Hawaii

President of the University system since July 2001, Dr. Dobelle is known for his strong leadership and results-oriented style.

Dr. Dobelle holds bachelor's master's and doctoral degrees in education and public policy from the University of Massachusetts and a master's in public administration from Harvard University. He is tenured as a full professor in the Department of Urban and Regional Planning at UH Manoa and lectures throughout the world in this discipline.

The Society of Military Engineers, Honolulu Post invites you to join us for the

2003 Engineer's Week Kickoff Luncheon

*Hale Koa Hotel, Banyan Tree Showroom
 Tuesday, 18 February 2003, 11:30 AM
 We look forward to seeing you there!
 Luncheon Cost : \$23.00*

RSVP BY 11 FEBRUARY. SEND THIS FORM AND PAYMENT TO:

Society of American Military Engineers, Honolulu Post
 C/O Cynthia Wong
 P.O. Box 31218, Honolulu, HI 96817

(make checks payable to Society of American Military Engineers)

NAME: _____ PHONE: _____ NO. IN PARTY: _____
 ADDRESS: _____
 LUNCH: Warrior Buffet

reduction, and site management services. Work under the contract will be awarded following any natural or man-made disaster within the State of Hawaii and Pacific Region. The current \$150-million ID/IO contract is a follow-on to the USACE Honolulu District's \$90-million ID/IO debris removal and management contract awarded to ECC in 1999.

Managed by ECC's Honolulu, Hawaii regional office, and assisted by five offices throughout the Pacific Basin, the contract involves emergency-response services for clearing, screening, reducing, transporting, and properly disposing of natural and man-made debris at disaster sites. As needed, ECC will also perform demolition services as part of cleanup efforts.

Types of debris ECC may be required to handle include (but are not limited to): vegetation, slide material (clay, sand, rock), lumber, concrete, asphalt, masonry, metals, and pesticides. All household hazardous wastes (HHW) will be managed by ECC's specially trained hazardous-waste-management team.

Under the former contract, ECC recently provided emergency-response debris-removal and management services after Typhoon Chata'an struck Guam on July 5, 2002. ECC provided all management, supervision, labor, and equipment in processing, transporting, and disposing of 160,000 cubic yards (cy) of green waste, 24,000 cy of household appliances, 26,000 cy of scrap metal, and 56,000 cy of construction and demolition materials. ECC's outstanding performance resulted in a letter of commendation from the Governor of Guam's Chief of Staff.

ECC is a leading California-based environmental-remediation firm with offices worldwide. Founded in 1985 and comprised of three divisions — Environmental, O&M, and UXO — ECC provides a complete range of services to protect public health and the environment. ECC serves a variety of Department of Defense (DOD) agencies, including the USACE, US Air Force, US Navy, and US Environmental Protection Agency. For more information about ECC, please log on to our web site: www.ecc.net.



HAWAII CHAPTER

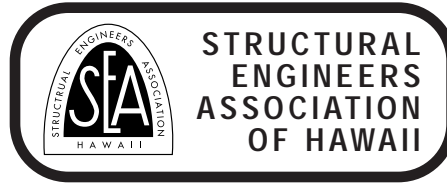
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| Director | Colleen Miyasato | 735-3211 | 735-3280 |
| Director | Darin Okuda | 689-5400 | 689-5406 |
| Past Pres | Les Nagata | 951-5916 | 941-6489 |

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| Technical: | Bennett Fung | 531-1308 | 521-7348 |
| Membership: | Adrian Lee | 536-7692 | 537-9022 |
| Corp. Spon.: | Ron Iwamoto | 533-2210 | 533-2686 |
| HCES: | Ather Dar | 486-2092 | 486-9261 |



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| Director | Les Nagata | 951-5916 | 941-6489 |
| Past Pres | Tom Tanimura | 536-7692 | 537-9022 |

HIGHLIGHTS OF BOD MEETING

January 9, 2003

Committee Reports:

2003 Convention – BOD voted in favor of having the annual convention on the Big Island.

Installation Banquet – The installation banquet will be held on Saturday, January 25 at the Hale Koa Hotel. The guest speaker will be forensic entomologist Lee Goff. Mr. Goff is a professor of forensic science at Chaminade University and also works with the FBI. I. Kellett will be mailing out flyers. BOD voted in favor of subsidizing a portion of the banquet cost.

Old Business:

Administrative Assistant – BOD voted in favor of having an administrative assistant to establish and maintain the membership database. \$2,000 will be allocated for this position. I. Kellett will contact potential candidates for approval for the next meeting. W. Segawa will prepare mail outs for event notifications.

2003 Budget – Budget requires an increase to send two delegates to the NCSEA Conference. Budget to be revised and approved at the next meeting.

SEAOH Website – Carol Kellett agreed to continue as webmaster.

New Business

Continuing Education Units – R. Chu reported that continuing education units was a prominent topic at the WCSEA Conference. R. Chu to establish a committee for continuing education units for SEAOH.

Qualifications Based Selection – Vote to join

Hawaii OBS Coalition was deferred. T. Tanimura will poll the BOD via email for a decision.

New Member Applications

Kevin Smith and Scott Wong of Baldrige & Associates Structural Engineering have applied for membership as allied members. Please notify any SEAHO Officer prior to the March Board Meeting if you wish to comment on prospective members.

Next BOD meeting: Tuesday, February 4, 2003 at Zippys Vineyard.



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

OFFICERS

| | | |
|------------|----------------------|----------------|
| President: | Jamie T. Hikiji | 521-3051 |
| Vice-Pres: | Bryce T. Yonemura | 473-8000 x2456 |
| Secretary: | Marian Nakama | 836-1900 x234 |
| Treasurer: | Kelli Goodin | 441-3600 |
| Directors: | Lloyd P.C.W. Lee | |
| | Michael Y. Magaoy | |
| | Randolph H. Murayama | |
| | Wayne H. Nakamura | |

EAAUH WEBSITE

We are pleased to announce the launch of the EAAUH website! Now it is even easier to find out more about our upcoming events and keep in touch with the engineering community in Hawaii.

Please visit us at www.eaaauh.org for information on upcoming events and EAAUH news. Golfers who participated in last year's tournament can look for photos of themselves as well as a list of the winners. You can find out about the EAAUH scholarship program and download an application form. You will also find useful links to other websites of interest to alumni and engineers.

Employers with positions to fill can also submit a job listing that will be posted on the website. This FREE service is provided by EAAUH to any interested employers.

We will be updating and adding more to the website shortly, so add it to your 'favorites' and visit often!

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Website: www.ascehawaii.org

2002-2003 Officers:

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| | <i>brandes@wilki.eng.hawaii.edu</i> | |
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| | <i>wkcchun@engrsof.com</i> | |
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| | <i>kniya@atahawaii.com</i> | |
| Secretary | Walter Billingsley | 846-3232 |
| | <i>wbillingsley@beltcollins.com</i> | |
| Treasurer | Lori Fong | 531-7094 |
| | <i>fujitani@pbworld.com</i> | |
| YMF Pres | Jeff Kalani | 593-1116 |
| | <i>jeff_kalani@urscorp.com</i> | |
| Past-Pres | Tony Lau | 524-3771 |
| | <i>tlau@hawaiiapacificengineers.com</i> | |

This month's activities will be held in conjunction with the Hawaii Council of Engineering Societies' (HCES) celebration of National Engineer's Week. Planned activities include a Kick-Off Luncheon on Tuesday February 18 at the Hale Koa Hotel featuring University of Hawaii President, Evan Dobbelle and a Banquet on Friday, February 21 at the Radisson Waikiki Prince Kuhio Hotel featuring Estate of James Campbell Trustee, David Heenan. Engineer's Week displays will be exhibited at Kahala Mall. Come by and visit ASCE Hawaii Section's Exhibit.

EXECUTIVE COMMITTEE MEETING

January 8, 2003

2002 CALENDAR OF EVENTS (subject to change)

- February 16 to 22, 2003 - Engineer's Week
- February 18, 2003 - Engineer's Week Kick-Off Luncheon
- February 21, 2003 - Engineer's Week Banquet
- March 2003 - Dinner meeting hosted by the Environmental Committee
- April 2003 - Dinner meeting hosted by the Geotechnical Committee
- May 2003 - Dinner meeting hosted by the Construction Committee
- June 2003 - Dinner meeting hosted by the Ocean & Energy Committee
- July 2003 - Dinner meeting hosted by the Structural Committee
- August 2003 - Dinner meeting hosted by the Transportation Committee
- September 2003 - Dinner meeting hosted by the Hydraulics- Hydrology Water Resources Committee

ASCE HAWAII SECTION ENDOWED SCHOLARSHIP AWARD

Applications for the annual ASCE Hawaii Section Walter Lum Scholarship are being accepted by the ASCE Hawaii Section until April 28, 2003. This annual scholarship is provided to assist those with financial need to pursue a degree in Civil Engineering. Applications are available from the ASCE Hawaii Section website at www.ascehawaii.org or from the University of Hawaii-Manoa Civil Engineering Department, Holmes Hall, Room 383. The scholarship is open to all juniors, seniors, and graduate students majoring in Civil Engineering at the University of Hawaii at Manoa with a cumulative GPA of 3.0 or above.

Preference will be given to active UH-Manoa ASCE Student Chapter members and to those students who demonstrate financial need without other substantial financial assistance. One \$1,500 scholarship will be awarded by the ASCE Hawaii Section Scholarship Committee at the end of the Spring semester for use during the Fall semester. Please contact Tony Lau at 522-7426 or tlau@hawaiiapacificengineers.com for more information.

A major goal of the ASCE Hawaii Section is to fund a second scholarship for Civil Engineering Students at the University of Hawaii. Show your support for our Civil Engineering students by donating to the ASCE Hawaii Section Endowed Scholarship Fund. Please send your contribution, payable to "ASCE Hawaii Section," to Tony Lau, 2003 ASCE Hawaii Section Scholarship Chair, at the ASCE Hawaii Section address, PO Box 917, Honolulu, HI 96808. All contributions to the fund are tax-deductible.

APPROVED FY 2003 BUDGET

| Income Categories | FY02 Actual Income | FY 03 Budget Amount |
|--------------------------|--------------------|---------------------|
| Section Dues | \$ 11,160.00 | \$ 11,000.00 |
| Society Allotment | \$ 3,876.73 | \$ 3,600.00 |
| Interest | \$ 359.34 | \$ 300.00 |
| Contributions to Section | \$ 1,408.70 | \$ 1,000.00 |
| Grants | (\$ 2,268.84) | \$ 0.00 |
| Entrance Fees | \$ 0.00 | \$ 0.00 |
| Advertising Income | \$ 645.00 | \$ 600.00 |
| ASCE HI Sponsored | | |
| Conference | \$ 2,518.47 | \$ 1,770.00 |
| Total Income | \$ 17,699.40 | \$ 18,270.00 |

| Expense Categories | FY02 Actual | FY03 Budget |
|------------------------|---------------|--------------|
| ASCE Conferences in HI | \$ 0.00 | \$ 1,860.00 |
| Miscellaneous | \$ 377.12 | \$ 150.00 |
| Donations from Section | \$ 200.00 | \$ 300.00 |
| Stationary & Supplies | \$ 12.48 | \$ 50.00 |
| Postage | \$ 700.84 | \$ 550.00 |
| Newsletter | \$ 5,955.81 | \$ 3,000.00 |
| General Printing | \$ 11.20 | \$ 0.00 |
| Meetings | \$ 43.78 | \$ 0.00 |
| Younger Member Forum | \$ 500.00 | \$ 700.00 |
| Student Chapter | \$ 1,500.00 | \$ 1,500.00 |
| Official Travel | \$ 6,915.18 | \$ 6,510.00 |
| Committee Expenses | \$ 563.42 | \$ 450.00 |
| ASCE Council | \$ 210.14 | \$ 200.00 |
| Financial/Legal Advice | \$ 0.00 | \$ 0.00 |
| Awards & Prizes | \$ 1,864.29 | \$ 3,000.00 |
| Total Expenses | \$ 18,854.26 | \$ 18,270.00 |
| Net Income (Expenses) | (\$ 1,154.86) | \$ 0.00 |

EAST MAUI IRRIGATION SYSTEM NATIONAL HISTORIC LANDMARK DEDICATION

The East Maui Irrigation System (EMIS) will be dedicated as a National Historic Civil Engineering Landmark at a ceremony on February 26, 2003 at the Alexander & Baldwin Sugar Museum in Puunene, Maui. Participants in the ceremony will include Tom Jackson, ASCE President, The Honorable Alan Arakawa, Mayor of Maui County, The Honorable Dain Kane, Council Chair of Maui County, and Dudley Pratt, Jr., History and Heritage Committee Chair of the ASCE Hawaii Section.

The EMIS consists of 74 miles of tunnels, ditches, inverted siphons and flumes that convey 62 billion gallons of water per year from the steep tropical forested watersheds on the Windward side of Haleakala to the semi-arid Maui isthmus. Construction of the EMIS, which began in 1876, sparked major irrigation aqueduct construction throughout Hawaii and development of the Hawaiian sugar industry. The experience gained in design and construction of the EMIS was subsequently used in developing significant irrigation projects in

other locations, including major domestic water aqueducts in the Western U.S.

ASCE's National Historic Civil Engineering Landmark program recognizes civil engineering works that have made a significant contribution to the development of the United States and to the profession of civil engineering.



2002-2003 OFFICERS

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| Secretary | Lori Nishida | 533-3646 |
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| Treasurer | Paulette Chang | 524-3771 |
| | <i>pchang@hawaiiapacificengineers.com</i> | |
| Student Chapter President | Meris Ota | 956-5808 |
| | <i>merisota@hotmail.com</i> | |

Next YMF General Meeting

The next YMF general meeting is scheduled for Tuesday, March 4, 6:00 p.m. at Compadres. If you are interested in attending, please call Jeff Kalani at 593-1116.

YMF March Field Trip - Sand Island Wastewater Treatment Plant

On Saturday, March 15, 2003, the YMF will be hosting a tour of the Sand Island Wastewater Treatment Plant, which will be guided by Scott Jennings, RCI project manager. Sand Island WWTP is undergoing over \$156 million of expansion to increase efficiency of the plant and, more importantly, provide a cleaner effluent to meet the demands of the Environmental Protection Agency. As of January 2003, the contractor is involved in construction of the new headworks facility, the concrete piling for the two new 140' diameter primary clarifiers, the ultraviolet disinfection facility, the screening facility, and the effluent pump station. Construction completed to date includes 78", 96", and 84" RCPP and the effluent junction structure. The tour will begin at 9:00 AM with parking available onsite and is limited to twenty participants. Long pants, boots, and hardhat are required. Please contact Florence Ching at chingfm@efdpac.navy.mil or 472-1342 by Friday, March 7, 2003 to sign-up and receive more information.

FE Prep Course Offered by ASCE Student Chapter

In preparation for the April FE exam, the University of Hawaii ASCE Student Chapter is offering a review course for the general engineering (morning) session of the test. The review covers math, computers, ethics, statics, dynamics, AC/DC circuits and electronics, fluid mechanics, mechanics of materials, chemistry, heat transfer, material science, thermodynamics and power cycles, and engineering economics. The classes will be held at UH-Manoa in the Donald Kim Computer Lab on Wednesday evenings and Saturday mornings. Though the registration deadline for the April FE exam prep course has already passed, please contact the ASCE student chapter via e-mail at asce.wilki.eng.hawaii.edu for inquiries regarding future courses.

ASCE Job Classified

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



Current Officers

| Office | Name | Phone | Fax |
|-----------|-----------------|----------|----------|
| President | Richelle Suzuki | 541-2530 | 541-2700 |
| Vice Pres | Cathy Leong | 946-2277 | 946-2253 |
| Secretary | Susan Uejo | 521-5361 | 538-7819 |
| Treasurer | Fred Smoot | 841-7617 | 842-1819 |
| Past Pres | Wayne Kawano | 833-1882 | 833-6125 |

November Meeting Summary

Mr. Tom Potter, President of Reno A&E, gave a presentation about loop geometry on November 12, 2002. Mr. Potter explained that if the geometry of a detector loop system is not correct, then the electronic circuitry cannot compensate for poor loop design. Millions of dollars have been spent on research in the last 40 years and loop detectors remain the most reliable detection system for traffic signal control systems. The various types of loops that have been tested include 6' x 6' loop, long loops, figure 8 loops, round loops, square loops rotated 45 degrees and the installation of different numbers of loops.

The loop geometry and sensitivity required depends upon what the loop needs to do. For highways and streets, loops are required to detect automobiles, trucks, motorcycles and sometimes bicycles. The size of the loop is a function of the traffic signal control system and the type of vehicles to be detected. For an average left turn lane, a 6' x 6' loop is suitable for the detection of vehicles. The installation of a loop requires a sawcut so it can be buried beneath the pavement. When the loop is hooked up to the electronics, a small current passes through it and an electric field is created around the wire. At the simplest level, loops measure inductance changes and the loop works as a metal detector. When a vehicle's conductive material enters the loop area, it causes a change in the electric field and it is interpreted as loading effect. A general rule of thumb is the height detection of a loop is about 2/3 of the shortest distance of the width or length. For example, the detection height of a 6' x 50' loop is 6' x 2/3 = 4'. Depending on the electronics, you may be able to increase the sensitivity to adjust this detection height.

Mr. Potter noted that the longer you make the loop, the higher you have to turn up sensitivity. However, increased sensitivity can cause detection problems for motorcycles. Sometimes, the loop may sense an automobile in adjacent lane better than a motorcycle resting on the loop because automobiles create a greater loading effect on the loop. In addition, four 6' x 6' loops which are spaced 9' apart may be designed to count vehicles with 97 percent accuracy. Spacing can be 9 or 10 feet, but there is slight loss of count accuracy if 10 feet spacing is used. Motorcycles can be better detected with four separate 6' x 6' loops than a single 50' x 6' loop.

The most important aspect of loop detection is reliability. Proper geometry and use correct materials (wire size and insulation) are the critical factors for reliable loop detection. Reliability is an important safety concern especially when loops are utilized to detect a vehicle crossing a train track or sensing airplanes crossing an airport taxiway.

December Meeting Summary

On December 20, 2002, Ms. Charlene

Shibuya, former Traffic Engineer for Maui County DPWWM, discussed Maui County's undulating experience with speed humps with ITE members. Most complaints at the Maui DPWWM have been about speeding. Previously, speed humps were only used in parking lots, not on public streets because of liability concerns. In 1991 or 1992, ITE announced it was developing speed hump designs for public streets.

Ms. Shibuya indicated at that time traffic engineers generally said no to speed humps because the MUTCD did not recognize speed humps as a traffic control device. The State law/administrative rules require roadway designs to follow MUTCD. Also, if you wanted to try something other than what MUTCD required, then approval from the Director of Transportation is needed. Although the DOT Director was concerned about liability problems, Maui County and the State DOT entered into a hold harmless agreement. Maui County agreed to use speed humps only on County local residential roads, not collector roads, and hold the State harmless. Subsequently, Maui County developed a speed hump ordinance, which passed in late 1995. It required 60% consent of the all the property owners within 500 feet of where the speed humps would be located. Maui DPWWM subsequently developed the administrative rules and put in layman's definition of local residential street - it has direct access, lowest level of mobility and generally doesn't service through traffic. The basis of design and placement of speed humps followed the March 1993 guidelines published by ITE. Speed humps are broader, 12 feet wide instead of only 3 feet like speed humps.

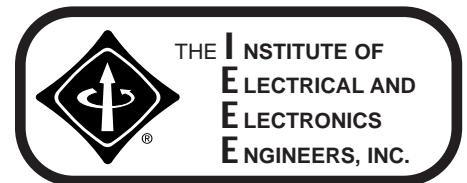
Ms. Shibuya noted the speed hump program was popular from the time it was initiated in Year 1996. The County has received 730 requests to date. When a request is received, the first check is to see if the road is eligible and to make sure it is not a collector road. The County asks for a block captain for a single point of contact and that person obtains the signatures to meet the required consent percentage of abutting property owners. About 100 requests were ineligible because they were collector streets. Sometimes the contact person decides it is too much work to collect the signatures. About 260 completed applications have been turned in. Speed humps have been installed on 237 streets and the rest is on the wait list, pending funding. Every fiscal year the County expends approximately \$500,000 on the speed hump program. The County found that they needed to resurface the streets in older subdivisions where speed humps are installed because the cross section is critical. In a single contract, the County may install about 60 humps with 2 or 3 humps on one street. Prices are slightly less than \$1400 per speed hump including striping and signing. ITE updated their speed hump guidelines in 1997 and MUTCD now has striping standard for speed humps.

Ms. Shibuya described some of the complaints they received about the installed speed humps. Also, the County was concerned because people in new subdivisions were applying for speed humps. When the program was started, the County did contact the fire department, ambulance and police department. The police supported the speed hump program because it reduced the number of speeding complaints. Although the fire department and ambulance did not publicly object to the speed hump program, the County is aware

that some emergency personnel do not like the speed humps.

The County was interested in addressing the speeding problems in other ways beside speed humps. About year and half ago, Maui DPWWM decided they wanted new subdivisions to have traffic calming elements in their design, specifically to avoid speed humps. In other words, the County wanted the engineers to think innovatively and develop different kinds of geometry or narrow the travel lanes to reduce travel speeds. Ms. Shibuya explained that Maui County just passed a traffic calming bill; the new regulations will apply to new subdivisions that will receive final approval after January 1, 2005. Some developers, even before bill passed, have been considering traffic circles or roundabouts. One developer will voluntarily install bulbouts. Residential streets on Maui have 44 feet right-of-way, 28 feet curb to curb, so the bulbouts will only extend 8 feet, leaving 20 feet at the narrowest locations for fire truck clearance. The traffic calming administrative rules are yet to be developed, but consultants need to be aware of the new ordinance. Maui County residential road are posted for 20 miles per hour (mph). In comparison, Oahu has a 25 mph speed limit in residential areas.

There have been objections to speed humps and in early 2002 the Maui County Council increased required property owner consent to 80%. Other speed reduction devices that Maui DPWWM has installed include raised crosswalks at intersections (only at one side) and speed table at mid-block crosswalk locations near schools. Truck restrictions in certain neighborhoods have also had a positive effect. At this time, the Maui speed hump program is being folded into the new traffic calming program as it will give the County a wider range of options to deal with speeding in residential neighborhoods.



IEEE Hawaii Section

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| Past Chair: | Norm Kawachika (normk@ieee.org) | 531-1308 |
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Section Committee Chairpersons:

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



www.eng.hawaii.edu/~hspe

STATE OFFICERS for 2002-2003

| | |
|--------------------|--------------------------|
| President | Mr. Scott Seu P.E. |
| President Elect | Mr. Peter Boucher P.E. |
| 1st Vice President | Mr. Riley Smith P.E. |
| 2nd Vice President | Mr. Manny Lanuevo P.E. |
| Secretary | Mr. Alva Nakamura P.E. |
| Treasurer | Mr. Kenneth Rappolt P.E. |
| Past President | Mr. Kirk Tanaka P.E. |
| National Director | Mr. Bruce Witcher P.E. |

STATE BOD CONFERENCE CALL MEETING December 18, 2002

I. National Business Report (Western Region, Practice Divisions, etc.)

Eric Yamashige reported on the resolutions that were made at the recent September 2002 meetings in Portland. Western Region VP Alan was going to e-mail state presidents with action items following the meeting.

All Western Region states are to offer their members the opportunity to join the Western Region listserv. The opportunity to "opt-in" instead of "opt-out" was decided at the meeting. Registration for all HSPE members available by e-mailing Marti Kramer at m.kramer@cspe.com.

Western Region "official" meetings are WR Annual Meeting (September 2002, Portland), and NSPE Winter Meeting (January 2003, SF). NSPE Annual Meeting (July 2003, San Antonio) is unofficial.

WR Resolution 2002-1: NSPE investigate & implement a program of funding assistance for state society representatives at Consensus Congress (submitted by Idaho).

WR Resolution 2002-2: NSPE include one short sentence explaining each BOD agenda item with distribution of agenda (submitted by Oregon).

WR Resolution 2002-3: NSPE post pre-BOD meeting documents on NSPE website 2/link on email agendas (submitted by Oregon).

WR Resolution 2002-4: NSPE BOD defer voting on agenda items significantly different from distributed information and new items (submitted by Oregon).

Western Region Operating Procedures revisions for vote at SF:

1. Waive Guam's \$200 fixed fee assessment and refund eligibility.
2. Change "Western Region" name to "Western and Pacific Region". This will also require NSPE bylaw changes.
3. WR goal of 5% membership increase in 2003, and 10% membership increase in 2004.

II. Western Region Meeting

Curt Beck reported on the 2003 Western Region Meeting. He indicated that 4 hotels were contacted; however, it appears that the meeting will probably be held on either the King Kam Hotel or the Keahou Beach Hotel on Sept. 19, and 20, 2003. The golf tournament will be held on Sept. 12, 2003. Holding the line on costs appears to be the deciding factor.

III. Scholarship Program

Sheryl Nojima reported that the education fund has about \$17,000 to help in this area along with MathCounts.

IV. MathCounts

Sheryl reported that March 1, 2003 is the deadline for application for MathCounts. Education Committee met on 12/17/02 regarding MathCounts and the plan is to begin after the New Year working with Mike Chun's office to plan for MathCounts. So far 53 schools have registered (state-wide). There was also discussion about approaching Aloha Airlines to help with transportation as in past years. Curt Beck will follow up on this matter. The Board also discussed the airline schedule and the need to make reservations early so that we would not be placed in the situation where students could not be booked due to congestion on flights.

V. Membership Program

Curt Beck reported that he is working with Delwin Ching in up grading the HSPE Website and is currently reviewing recommendations.

VI. There was no discussion on Golf Tournament, FE Exam Grants, 2003 Engineers Week, or NSPE Officer Visit for 2003.

HSPE – MAUI CHAPTER PO Box 4119 Kahului, HI 96733

JANUARY MEETING

Treasurer's Report:

Treasurer Carlos Rivera reported that our account balance was \$5,324.29.

Introduction of Guests:

President Brooks Aoki welcomed three new guests to our meeting. They were Ty Fukuroku from Warren S. Unemori Engineering, Melvin Yagin from Austin, Tsutumi & Associates, and Jase Miyabuchi from R.M. Towill.

Announcements:

Engineer's Week will be February 16th - 22nd, 2003.

Lesli Otani has not received any submittals yet for **Project of the Year**. Deadline is Saturday, January 18th, 2003.

MathCounts will be held on Saturday, February 8th at Kalama Intermediate School in Makawao. Wendy Taomoto asked for more volunteers due to the larger amount of schools participating this year.

Math Matters will be held on Saturday, March 1st at Lihikai School in Kahului. Eric Matsuda asked for ideas for the Hands-On Activity portion of the competition.

Career Shadowing will be held on Friday, February 21st, 2003 between 12 noon to 3 p.m. Carlos Rivera will notify volunteers about 1-2 weeks in advance with information regarding the students and high schools that will be participating.

Brooks Aoki recently sent out the applications for our **HSPE Scholarship**. The deadline for submittal is Friday, February 7, 2003.

Charlene Shibuya will be emailing the nomination requests for **2002 Engineer and Young Engineer of the Year** by mid-January.

Annette Matsuda reported that the **Maui News Supplement** for Engineer's Week will be published on Friday, February 14, 2003. All committees are required to submit their articles and/or photos to her by Monday, February 3rd. The MathCounts and Scholarship committees can submit their articles no later than Monday, February 10th. Digital photos can be emailed to Annette.

The **Engineer's Week banquet** is scheduled for Saturday, February 22nd, 2003 at the Sandalwood Restaurant in Waikapu. No guest speaker has been announced yet.

Brooks Aoki was contacted by Claire Miyasato from the Maui Economic Development Board requesting for volunteers to participate in their **Introduce a Girl to Engineering Day** program that will be held on Thursday, February 20, 2003. Volunteers need to report to the Maui County building to be matched with a student at 8 a.m. The students will have an opportunity to shadow their volunteer until lunch time, when they will return to the Maui County building for lunch.

There will be no Chapter meeting scheduled for next month due to the Engineer's Week activities. However, an email will be sent out the first week of February to provide more information regarding the Introduce a Girl to Engineering program and the Engineer's Week banquet.

Big Island Chapter E-Week activities

Our 2003 E-Week starts with a Kalua Pig fund-raiser where pork and chicken are prepared in an authentic imu Friday evening, Feb 14 and sold to members and the general public the following morning. Publicity includes radio spots- 2 lb containers will be available for \$10. We will then host a golf tourney on President's Day weekend, and a breakfast on Feb. 18 at the UHH cafeteria where a County Council proclamation will be presented. The week will be concluded on Feb. 22 with a banquet replete with entertainment, a guest speaker and door prizes, where our annual Engineer of the Year and Young Engineer of the Year awards will be presented. Those interested in more information may contact Neal Herbert at 974-7595 or 935-1946, or by e-mail at: nfherbert@earthlink.net.

ASME, from page 3

same time. Again, volunteers are needed to score and proctor the competitions. The Chapter competition needs 60 scorers and 15 proctors, while the State competition needs 24 scorers and 8 proctors. Please call Ed Chang at 543-4227 or e-mail him at echang@hei.com to help.

NOMINATIONS FOR ASME-HI SECTION 2003 PROJECT/DESIGN OUTSTANDING ACHIEVEMENT AWARD

The nomination deadline is April 30, 2003. 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 at 543-4227 or echang@hei.com. The nomination process is very simple, easy, and fast.

FUTURE ACTIVITIES PROPOSED

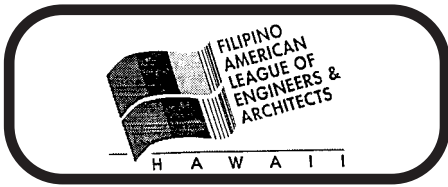
The following are activities we have planned or are looking into:

March 15-18, 2003: 2003 ASME Solar Energy ISEC Conference at the Mauna Kea Resort, Kohala Coast, Big Island.

March or April 2003: ASME Distinguished Lecturer - William L. Dean, P.E., on "The Engineer as an Independent Business Person: How to Start Your Own Engineering Company." CAPT. Joe Bradley will contact Mr. Dean for availability information.

May 2003: Region IX Regional Administrative Conference (RAC) is scheduled for Hawaii in 2003.

July 6-10, 2003: 2003 Summer Fluids Engineering Conference at the Sheraton Waikiki.



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

2002-2003 Officers and Directors

| | |
|--------------|-----------------------|
| President | Roger Urbi |
| Pres., Elect | Marites Calad-Shoji |
| Vice-Pres. | Leonard Obaldo |
| Secretary | Elvie Marie B. Pineda |
| Treasurer | Vergel del Rosario |
| Asst. Treas. | María Domingo |

FALEA's annual Fundamentals of Engineering (FE) review class started last January 11, 2003. Location was changed from the FILCOM Center to Group Builders, Inc. multi-purpose room in Sand Island.

First FALEA golf tournament for year 2003 will be held on February 1, 2003, at the Coral Creek golf course in Ewa Beach. For particulars, please contact Mr. Leo Obaldo at 672-4538.

Upcoming seminars includes Construction Safety and HVAC TA&B. For details, please call Mr. Roger Urbi at 220-3381.

Still looking for volunteers for our planned Technical Mission to the Philippines sometime in June 2003. For details, please contact Mr. Roger Urbi at 220-3381.

Student Engineer, from page 1

overall operations of this extracurricular project. Aaron continued the tradition that Wen had started a year earlier by conducting weekend tutorials to train new members. As a result, the Micromouse Team saw its biggest expansion in its seven-year existence, with six teams consisting of 23 students.

In his sophomore year, Aaron was part of an 8-student team that designed a 5-GHz wireless transceiver, an effort led by the 2001 HSPE Student Engineer of the Year, Kendall Ching. Working again under the guidance of more experienced students, Aaron learned that the overall performance of the system critically depended on the interaction of all of the electronic subsystems.

The teamwork experience and subsystems engineering skills that Aaron developed through these projects laid the groundwork for his role as Director of the UH CubeSat Project, in which over 60 civil, electrical, and mechanical undergraduate engineering students are designing and building a picosatellite for launch into low-earth orbit. As overall Project Director, Aaron managed seven multidisciplinary subsystems teams, raised and managed



http://www.geocities.com/hals_us

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Presented by
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February 27 & 28, 2003
 Radisson Waikiki Prince Kuhio Hotel
 2500 Kuhio Avenue, Honolulu, Hawaii

CONCURRENT SESSIONS

Mapping the Mahele, Condominium Property Regime, Original Surveys vs. Retracements, Description Writing, Business Writing for Surveyors, Coordinate Systems and Transformations, Surveyor Licensure in Hawaii, Public Land Survey System, Restoration of PLSS Corners, State GIS, GPS Basics, Photogrammetry, Rules of Construction, Field Procedures, Data Exchange with Autocadd/Land Desktop, Corpscon/Nadcon Program Conversion and much more...

Plus VENDOR DEMONSTRATIONS AND PRESENTATIONS

Wednesday, February 26, from 12:00 to 6:00 p.m., at McCoy Pavilion
 For conference updates, please check our website: www.eng.hawaii.edu/~hals

a \$120,000 project budget, organized design reviews with industry, and gave nearly 20 presentations in university, community, high school, and professional meeting settings. Aaron's efforts in directing the project ignited an interest in engineering within our community, as it was featured on the KHON TV news and front page of the *Honolulu Advertiser*.

In addition to all of these projects, Aaron served as a NASA Undergraduate Research Fellow in the Hawaii Space Grant Consortium and an Undergraduate Research Assistant in the UH Microwave/Millimeter-wave Research Laboratory for two years. In both of these roles, Aaron wrote research proposals that were subsequently awarded over \$100,000 in funding,



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 WHEN: February 25-27, 2003, 8:00 am to 4:00 pm

WHERE: Hilton Hawaiian Village

SEMINAR COURSE CONTENT:

- Fundamentals of Signaling Systems Protected Premises Fire Alarm Systems
- Initiating Devices Notification Appliances
- Applicable Sections of the National Household Fire Warning Equipment
- Electrical Code Fire Alarm System Interface with Sprinkler
- Fire Alarm System Interface with Systems
- HVAC Systems Fire Alarm System Interface with Elevators
- ADA Fire Alarm System Requirements
- Inspection, Testing and Maintenance

COST:

AFAA & SFPE-Hawaii members, their employees and all government employees - 1-2 attendees - \$535 each; 3+ attendees - \$492 each.

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co-authored five scholarly publications, and participated in four international and two national conferences, including presenting the only undergraduate research paper at the Korea-Japan Microwave Workshop in Yokosuka, Japan last October.

After graduating with his B.S. degree, Aaron plans to pursue his Ph.D. in electrical engineering at a mainland institution, and hopefully return to UH some day as a professor. The Hawaii Society of Professional Engineers and the UH engineering community congratulates Aaron Ohta on his meritorious achievements.

Professional Directory

| | | | |
|--|--|---|---|
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