

## 3rd Annual Hawaii Botball Robotics Regional Tournament

Waiakea High School team #2 was awarded the overall tournament championship after finishing 2nd for the documentation weblog, 1st in the seeding rounds, and 1st in the double elimination tournament in the third annual Hawaii Botball regional tournament, held April 1, 2006, at the Hawaii Convention Center. The 3rd annual Hawaii Botball regional was sponsored by the Hawaii Space Grant Consortium, the College of Engineering, the Hawaiian Electric Company and the Hawaii Convention Center. Botball ([www.botball.org](http://www.botball.org)) is a hands-on learning experience in robotics designed to engage students in learning the practical applications of science, technology, engineering and math. Twenty-four teams from 21 middle and high school, public and private schools, including a team from Nagoya, Japan, participated.

Robots are constructed from an 1800 piece Lego kit which includes two processors (XBC Robot Controllers) attached to Gameboys, and 20 sensors including color recognition cameras. Students design, build and program the autonomous robots to score points within the 90 second time limit; the context of this year's game was rescuing tribbles and the BotGuy doll from the flood zone and placing them in safe areas. Programming is done using a version of C language. A double elimination tournament followed three seeding rounds.

Mentors and volunteers included engineers and technology specialists from Boeing, the Joint Astronomy Center, BAE Systems, the Hawaiian Electric Company, and other firms. The 42 volunteers who were judges, score keepers, runners, pit monitors, etc. were in awe of the students work in engineering and programming, and observed the teamwork, good sportsmanship and communication practiced throughout.

### 06 HAWAII MASTER AWARDS LISTING

#### Documentation Weblog

3rd Documentation Weblog - Moanalua Middle  
2nd Documentation Weblog - Waiakea High  
1st Documentation Weblog - Waiakea High

#### Seeding Rounds:

3rd Seeding Round: Hilo Intermediate School:  
Seed Score - 7.5  
2nd Seeding Round: Highlands Intermediate:  
Seed Score - 10  
1st Seeding Round: Waiakea High School:  
Seed Score - 19

#### Judges' Choice Awards:

Spirit Award: Waimea Middle School

Excellence in Code/Tracking: Meinan Technical High School (Nagoya)  
Excellent Claw Design: Chiefess Kamakahale'i Middle School  
Excellent Pusher/Shover 'Bot: Hilo Intermediate  
Interesting Strategy: Hawaii Preparatory Academy  
Excellence in Team Unity: Lanai High School  
Innovative Strategy & Excellence in Tribble Gathering: Waiphu High School  
Most Bang for the Buck: Island School  
Excellence in Tinkering & Calibrating: Maui High  
Most Original Robot Name: Academy of the Pacific  
Never Say Die Award: Kahuku High and Intermediate  
Excellence in Robot Collaboration - "Bot Ballet": Earl's Garage

**Overall Judges' Choice:** Waiakea High School  
**Double Elimination Finalists:** Waiakea High School, Highlands Intermediate School, Meinan Technical High School, Hawaii Preparatory Academy, Waipahu High School

#### Double Elimination:

3rd Double Elimination: Honokaa  
2nd Double Elimination: Mid-Pacific Institute  
1st Double Elimination: Waiakea High School

#### National Website Winner:

2nd Place High School Division:  
Punahou School

#### Overall Tournament Winners:

1st Place: Waiakea High School  
2nd Place: Mid-Pacific Institute  
3rd Place: Highlands Intermediate School  
4th Place: Waiakea High School

Honolulu has been selected as the site for the National Conference on Educational Robotics (NCER) which will take place July 9-13, 2007 at the Hawaii Convention Center. The NCER will be available to only schools/teams which participate in the 2007 Hawaii Botball regional and includes the national Botball tournament, the Beyond Botball tournament for college students and other adults, poster sessions, the robotics showcase and workshops for students and teachers from national presenters.

Engineering firms and societies interested in becoming a sponsor of a Botball team or participating in the NCER, contact Hawaii Botball co-director, Art Kimura, Hawaii Space Grant Consortium, [art@higp.hawaii.edu](mailto:art@higp.hawaii.edu). For addition-

(continued on page 7)

## KNOW YOUR ASCE HISTORY

by C.S. Papacostas

### FOUR NU'UANU DAMS

Last December I started to trace the tumultuous history of the Nu'uaniu Dam at Reservoir No. 4 and its relation to Honolulu's water supply system. For this month (May 2006), I originally planned to elaborate on another major reason for constructing water-retaining dams in Nu'uaniu Valley: The generation of hydroelectric power to light the city's streets, a government operation that was inaugurated as early as March 1888.

However, after sending my April installment to Warren Yamamoto, our diligent Wiliki editor, a calamitous breach of the Kaloko (a.k.a. "Ka Loko" and "Koloko") Dam on March 14, 2006 robbed 7 people of their lives and wreaked havoc on the Garden Isle. The disaster sounded an alarm that affixed the state's attention almost exclusively on dam safety. Having written about Nu'uaniu No. 4, I should have anticipated the volume of inquiries I received about the utilization and condition of that particular structure, but I didn't!

Among those asking about it were news reporters, attorneys, engineers and planners, and other concerned folks. Surprisingly, many of these people were not aware of the fact that the "Big Nu'uaniu Dam" is not the only such structure in the valley. For example, I found it a bit discordant to watch a certain TV reporter talking about No. 4 while the cameraperson panned to No. 2 instead!

In response to this situation, I resolved to first paint with a very broad-brush an outline of the system's history in this and next month's articles, returning to the juicy details after that.

In a nutshell, there are four dam-impounded reservoirs in Nu'uaniu Valley. They are numbered from 1 to 4 as one travels mauka. No. 1 is located near the O'ahu Country Club on the 'Ewa side of Pali Highway and No. 4 is to the right of the highway as it climbs uphill from Honolulu near the famous precipice.

"The construction of storage reservoirs in Nuuanu, and in connection therewith the utilization of the water power for the purpose of lighting the city" was among the topics that the Superintendent of Public Works W. E. Rowell discussed in his 1890 biennial report to Lorrin A. Thurston, Minister of the Interior of the Kingdom of Hawaii.

He also said that "two reservoirs have been completed and the third is nearly so. In each case the same general plan of construction is followed viz: a dam of earth compactly rolled. Reservoir No. 1 is located at the Electric Light Works, was completed in August 1889, at a cost of \$11,320.63, [with] a capacity of 23,240,000 gallons. Reservoir No. 2, located at the half way bridge, was completed in June,

(continued on page 7)



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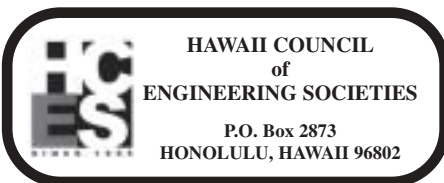
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Laverne Higa  
 Department of Facility Maintenance  
 1000 Uluohia Street, Suite 215  
 Kapolei, Hawaii 96707  
 Office: 808-692-5054  
 Fax: 808-692-5857



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P.O. Box 88840  
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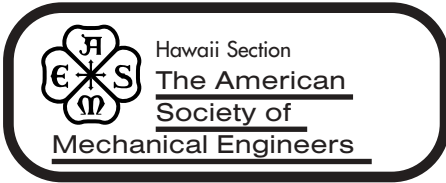
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**ACECH ACTIVITIES 2005-2006**

ACECH accomplished a great deal in the past year through the efforts of an outstanding network of committees. Engineering firms in Hawaii benefit greatly by belonging to such an active organization! Key highlights include:

- The AIA Liaison Committee members attended several AIA functions, met with AIA Honolulu Chair to discuss issues of mutual concern to both organizations, and attended a meeting of the AIA State Council to brief them on ACECH's legislative agenda, and to ask for their support.
- The Annual Meeting Committee organized an outstanding event in April 2006, including morning educational seminars, a luncheon business meeting including installation of 2006-2007 officers, and an evening social event.
- The Business and Professional Practices Committee conducted our annual salary survey and provided the compiled data to DAGS.
- The Business and Professional Practices Committee organized a workshop on Ownership Transition, with presentations by two ACEC Fellows, in February 2006.
- The City and County/BWS Liaison Committee organized the C&C Symposium held Sept 14, 2005. Speakers from DDC, DPP, BWS, DTS and the Managing Director were able to present various topics important for the A-E community.
- The C&C/BWS Committee also facilitated the City adoption of an A-E Consultant Evaluation Form for use in City projects.
- The Directory Committee worked extensively with a new publisher to develop a new format; directory published in November 2005.
- The Education / Scholarship Committee participated in several College of Engineering expos, MATHCOUNTS, and other events to encourage youth to pursue engineering careers.
- The Engineering Excellence Awards Committee organized the EEA judging and awards banquet, held in November 2005. The event was promoted extensively in PBN, Honolulu Advertiser, Building Industry Magazine, and Wiliki. A silent auction fundraiser for ACEC PAC was a great success.
- The Federal Liaison Committee (Corps of Engineers) assisted the AIA in planning the successful April 11, 2006 COE Symposium.
- The Federal Liaison Committee (NAVFAC Pacific) organized the NAVFAC Pacific Symposium in December 2005. The event was attended by incoming ACEC National President, Jeff Daggett.
- ACECH joined the Hawaii Council of Engineering Societies and set up a liaison committee with that organization.
- The Legislative Affairs Committee pursued legislation aimed at improving the business climate for Hawaii firms. ACECH supported bills regarding State contract language (the "defend" clause issue), tort reform (Certificate of Merit) and also testified on several other bills that would affect our industry. ACECH utilizes a bill tracker and legal council to assist us, and will hire a lobbyist for the 2006-2007 legislative season.
- The Membership Committee held a prospective membership breakfast in March 2006 and anticipates up to a 10% increase in membership.
- The Public Relations Committee took advantage of various opportunities, including radio appearances, newspaper and PBN articles, to provide positive information on the role of engineers in our society.
- The ACEC PAC was set up and is receiving contributions. The PAC distributed approximately \$6,000 in March 2006 toward re-election campaigns of legislators who support our interests.
- The Programs Committee arranged for a variety of informative and interesting speakers for monthly membership meetings.
- The QBS/Procurement Committee met with Aaron Fujioka, State Chief Procurement officer, to discuss recent complaints and procurement issues. The Committee is collaborating with the Hawaii Procurement Institute and LTAP to put on a procurement workshop in July 2006. Workshop will include discussion of various procurement models. Committee trying to set up round-table with various agency/county procurement personnel.
- The State Liaison Committee (DAGS, DLNR, HHA) assisted the DOT Liaison Committee for planning of State symposium in February 2006. The Committee also established bi-monthly meetings with DAGS, with on-going discussions regarding consultant rates, fees, evaluations, selection, revisions to the DCCM, and other procurement issues. The Committee worked with DAGS to have them remove the "defend" clause from DAGS contracts.
- The State Liaison Committee (DOE) served in an advisory role to Facilities Development Branch (looking at standard specs, etc.) and also assisted the DOE in planning for their Asset Management Database. Committee also organized multi-discipline group of engineers to work with Mililani High School industrial arts department to facilitate a real-world project with students in a year-long course. DOE interested in replicating program at other interested schools.
- The State Liaison Committee (DOT) spearheaded planning for planning for the State symposium in February 2006. Symposium included more participation by State agencies not previously involved (DLIR, DOE, DOH). Keynote Luncheon address by Lt. Gov. Duke James Aiona.
- The Website/IT Committee posted updated information and planned for complete overhaul of the ACECH website.



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

#### ASME-HI 2005-2006 Officers

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#### ASME-HAWAII SECTION MONTHLY MEETING

Date: May 8, 2006  
Time: 5:30 pm to 6:30 pm  
Place: Hawaiian Electric Ward Avenue Cafeteria

Please contact Ray Liu or Kevin Dang for directions and for more information. The meeting day has been changed to the second Monday of every other month starting this March.

#### NAVATEK TOUR

On April 11, 2006, the ASME section toured Navatek's construction shipyard. Eric Schiff, Vice President of Navatek Ltd, gave the local section a walking tour showcasing all the various hull designs. Mr. Schiff explained that Navatek is at the forefront of innovative hull form technology and continues to explore and develop new concepts in hydrodynamics, underwater lifting bodies, and drag reduction.

Later, Gary Shimoazono, P.E. and Vice President of RD&E at Navatek Ltd., gave an in depth presentation of the history and design of the various monohulls and multi-hull vessels. Mr. Shimoazono received his M.S. in Mechanical Engineering from the University of Hawaii. Mr. Shimoazono described the benefits of Navatek's vessels: better motions, seakeeping, sea kindliness, increased range and payloads, reduced power requirements and emissions output, and higher speeds in a seaway.

#### ASME HAWAII SECTION ATTENDS KAHUKU H.S. CAREER FAIR

ASME Hawaii section members Raymond Liu and Derick Kam participated in the Kahuku High School's Career fair held on Thursday, April 27, 2006. This event targets high school students who are interested in a pursuing a technical career in engineering and provides an opportunity for ASME to promote the mechanical engineering profession to the next generation of engineers.

Promotional literature from ASME International handed out to the students included: 1. Mechanical Engineering Technology - Which Path Will You Take? 2. What Is A Mechanical Engineer? 3. ASME at a Glance.

Section members volunteer their time and effort to promote the profession of mechanical engineering and strive to share their knowledge with our future engineers. ASME Hawaii would like to thank the volunteers for taking the lead to perpetuate the mechanical engineering profession. ASME members interested in volunteering in future events should call Raymond Liu at 497-1395 for more information.

#### COACH KEVIN DANG AND SPIDERS

Congratulations to Kevin Dang and his FIRST

Lego League team of home schoolers, The SPIDERS. Besides taking first place in the November 2005 Hawaii FIRST Lego League tournament, they were featured in the March 29, 2006 MidWeek.

The enterprising SPIDERS have been busy raising funds for their International FIRST Lego League Competition trip to Atlanta, April 27-29, 2006, by selling Zippy's Chili tickets, Pizza Hut Literacy cards, car washes, and whatever they can think of.

#### ELECTRONIC WILIKI ACCESS

ASME members wanting to receive an e-mail notice when the latest Wiliki issue is available electronically should contact Ed Chang at "[change025@hawaii.rr.com](mailto:change025@hawaii.rr.com)". This electronic issue usually is available several days before the hardcopies are received through the U.S. Postal Service.

#### ASME LEADERSHIP TRAINING CONFERENCE (LTC)

Jim Grogan represented the Hawaii Section at an ASME Leadership Training Conference in Houston, Texas March 3,4 and 5. The conference primarily concerned the ASME recent reorganizing/districting to better accommodate the international character of the society and the change in the manner in which funds will be provided to local sections. Funds will no longer be provided on a membership basis instead will be provided on justified need requests, i.e., to support various local activities.

#### ASME COMMUNITIES OF PRACTICE

ASME's Communities of Practice (COP) is an online interaction tool designed with mechanical engineer's needs in mind: links to helpful resources, industry news and, more importantly, solutions and ideas from peers. It's much more than discussion boards, because there are many tools integrated into this site to help COP members connect with each other. Access to the COP site is open to both members and non-members of ASME. Visit the ASME website to join, if you haven't already. From the website, you can join and visit Communities, and view and reply to discussions of your interests.

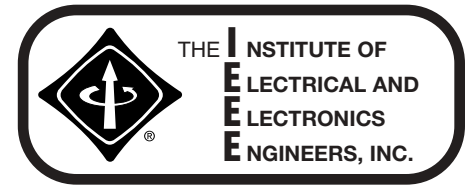
#### OPEN ENROLLMENT FOR OCTOBER 2006 P.E. EXAM CANDIDATES

The ASME Hawaii section will be providing a P.E. exam refresher course for all candidates who qualify for the October 2006 exam. All candidates should have obtained qualifying experience under a licensed registered engineer with the State of Hawaii prior to the examination deadline date.

Volunteer instructors from the University of Hawaii, who are also licensed mechanical engineers in the State of Hawaii, will teach the course. The cost of the course is \$200.00 and the location and times will be determined. For more information, please call

Raymond Liu at 497-1395 or visit the [www.sections.asme.org/hawaii](http://www.sections.asme.org/hawaii).

(continued on page 7)



#### IEEE Hawaii Section

PO Box 37607 Honolulu, Hawaii 96837  
Email: [aet@ieeee.org](mailto:aet@ieeee.org)  
Web Page: <http://ewh.ieeee.org/r6/hawaii/>

#### 2006 Hawaii Section Officers

Section Chair:	Al Toda	455-1331
	<a href="mailto:aet@ieeee.org">aet@ieeee.org</a>	
Vice-Chair:	Nancy Roemer	
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Sec.-Treas.:	Mark Rognstad	
	<a href="mailto:mark_rogstad@ieeee.org">mark_rogstad@ieeee.org</a>	


#### 1. The Hawaiian Railway, Sunday, May 21

This train runs from Ewa up the leeward coast of Oahu <http://www.hawaiianrailway.com/>

We'll do lunch at the station in Ewa, then ride up the coast. For information, place contact Nancy Roemer at [NLRomer@aol.com](mailto:NLRomer@aol.com).

#### 2. Robotic Fair, Sat, June 17

Open to the public, this will have a chop suey mixture of Robots from the educational system competitions and a research robot. For information, please contact Mark Rognstad at [mark\\_rogstad@ieeee.org](mailto:mark_rogstad@ieeee.org).




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- ✦ 2-3 years strong professional/investigative/managerial work experience desired
- ✦ 23-36 years of age
- ✦ Drug policy/drug testing mandatory
- ✦ Entry-level salary (GS-10) is \$50,383 Academy training; \$60,666 - \$68,632 upon graduation, including locality/availability pay



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	email: <a href="mailto:kniiya@atahawaii.com">kniiya@atahawaii.com</a>		

**MAY DINNER MEETING**

**Program: Cliff Lum, The Honolulu Board of Water Supply**

The Honolulu Board of Water Supply (BWS) has appointed Cliff Lum as the new Manager and Chief Engineer. Cliff, a Hilo native, has more than 22 years of diverse technical expertise in water and wastewater with both public and private sector companies in Hawaii and California. As manager, Mr. Lum is responsible for the overall strategic direction and management of the BWS, with a focus on furthering the department's mission, "Water for Life - Ka Wai Ola". Cliff will share his views of the BWS and the challenges facing the organization in the coming years, including a discussion on a recently completed rate study.

Date: **Thursday, May 18, 2006**

Location: Pagoda Hotel

C'est Si Bon Room  
 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 checks payable to ASCE-Hawaii Section and mail to Mike Hunnemann, ASCE Treasurer, c/o KAI Hawaii, 31 N. Pauahi Street, 2nd Floor, Honolulu, Hawaii, 96813, postmarked by Monday, May 15, 2006. Reservations for the dinner meeting to Mike Hunnemann by Monday, May 15, 2006, by phone at 791-3980, fax at 533-2686 or email at [mhunnemann@kaihawaii.com](mailto:mhunnemann@kaihawaii.com).

**EXECUTIVE COMMITTEE MEETING**

May 3, 2006

**ASCE HAWAII SECTION STUDENT SCHOLARSHIPS**

Please help us increase our scholarship endowment so that we can recognize those deserving students. We continue to accept tax deductible donations with the goal of increasing the annual scholarships. Make your check payable to 'ASCE Hawaii Section' and mail to ASCE Scholarship Committee, P.O. Box 917, Honolulu, HI 96808. If you have any questions, please contact Keith Niiya at 533-3646, or [kniiya@atahawaii.com](mailto:kniiya@atahawaii.com).

**ASCE JOB LISTINGS**

The following employers have openings they would like to fill:

- Austin Tsutsumi & Associates, Inc. (Civil Engineer - Honolulu and Wailuku, Land

Surveyor - Honolulu)

- Bills Engineering Inc. (CADD Technician)
- Brown and Caldwell (Civil or Mechanical Engineer - Honolulu, Project Manager - Maui)
- Engineering Solutions, Inc. (Civil/Sanitary Engineers)
- Fewell Geotechnical Engineering (Geotechnical Engineer - Honolulu)
- Fukunaga & Associates (Civil and Civil/Environmental Engineers - Honolulu)
- Towill, Shigeoka & Associates, Inc. (Licensed Professional Land Surveyor, Computer/Draftsperson (CAD), experienced Party Chiefs and Rodpersons for Oahu and Kona)
- Warren S. Unemori Engineering (Project Engineer, Civil Engineer, & CAD Operator - Wailuku)
- Zapata Engineering (Geotechnical Engineer)

For more information on these job listings, **(continued on page 7)**

**Short Course**

**"Rock Blasting Vibration and Airblast Monitoring and Control"; Wednesday June 7, 2006 - 8 am - 4 pm; Sheraton Waikiki Hotel, "Waianae Room", Honolulu, Hawaii**

**Course instructors**

**Dr. Catherine T. Aimone-Martin**, President, Aimone-Martin Associates, LLC, New Mexico  
**Sandra Duvauchelle**, President, Lehua Management Services, Inc., Hawaii

This course is for civil engineers and project managers and will provide the basics of rock drilling and blasting with explosives. Blast techniques used to plan and implement a blasting pattern design will be reviewed. Emphasis will be placed on the generation and propagation of ground vibrations and noise (or airblast), the use of seismographs to control these off-site affects, and the response of structures near blasting operations. Effective public relations methods and addressing blasting claims will be stressed. CEUs are available.

For additional information or to register, call 808-870-9860 or 505-980-9949 or e-mail [cathy@aimone-martin.com](mailto:cathy@aimone-martin.com) or [lehuaserv@aol.com](mailto:lehuaserv@aol.com).



**HAWAII CHAPTER**

98-029 Hekaha St. Unit 23, Aiea, Hawaii 96701  
 Phone: (808) 485-1400 Fax: (808) 485-1500  
 Web Page: [www.lgsea.com](http://www.lgsea.com)

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	email: <a href="mailto:brian@iwamotollc.com">brian@iwamotollc.com</a>		
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	email: <a href="mailto:jeffhanyu@allisonide.com">jeffhanyu@allisonide.com</a>		


National LGSEA Secretariat  
 Don Allen 202-263-4488, x14 fax 202-785-3856  
[steeldon@earthlink.net](mailto:steeldon@earthlink.net)

**Steel Scholarship Golf Tournament**

The LGSEA-Hawaii Chapter will participate in the 2006 Steel Scholarship Golf Tournament spearheaded by the Hawaii Pacific Steel Framing Alliance on Friday, May 5, 2006 at Pearl Country Club. Registration starts at 12nn with a 12:30pm shotgun start. A portion of the proceeds from the annual tournament will be donated as a scholarship of a student from the UH-Manoa College of Engineering. Visit [hawaiisteel.com](http://hawaiisteel.com) for more information.

**Seminar Tackling Connectors in Contact With Treated Lumber**

The LGSEA-Hawaii Chapter will hold a membership meeting on Wednesday, May 24th at **(continued on page 7)**



**MANAGER AND CHIEF ENGINEER**

The Kauai County Board of Water Supply invites highly qualified, service-oriented, and motivated individuals of the highest integrity and ethics to submit a comprehensive resume of their educational and professional qualifications for the position of Manager and Chief Engineer ("Manager"). The Manager must have a minimum of five (5) years experience in utility water supply systems, including administration, planning, designing, developing, operating, and managing of such water systems.

The Manager has significant interaction with consumers, County, State, Federal and private agencies and administers policies, rules and regulations established by the Board of Water Supply.

The Manager selected will have proven experience in the area of utility capacity planning, long-term facility planning, water quality, testing and monitoring, and knowledge of rules and regulations regarding potable drinking water established by the U.S. Environmental Protection Agency and enforced by the Hawaii State Department of Health.

Please submit a resume that includes your past twenty (20) year employment record, proof of registered professional license, membership in professional organizations such as Hawaii Water Works or American Water Works Associations, education and degrees, professional references and acquaintances **no later than Wednesday, May 31, 2006** to: County of Kauai, Board of Water Supply, P.O. Box 1706, Lihue, HI 96766.

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www.eng.hawaii.edu/~hspe

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	<i>eric.yamashige@co.maui.hi.us</i>	
Hilo ChDir.	Galen Kuba, P.E.	961-8422
	<i>galen_kuba@co.hawaii.hi.us</i>	
Kona ChDir	Dan Lanterman, P.E.	325-8426
	<i>dlanterman@hualalairesort.co</i>	

#### HSPEEF Scholarship Program

Hawaii Society of Professional Engineers Educational Foundation (HSPEEF) is pleased to invite graduating high school students to apply for the annual HSPEEF Scholarship Program. As in past years, the HSPEEF Scholarship Program is intended to assist deserving students in attaining their baccalaureate engineering degree. Since its inception, HSPEEF has awarded over \$25,000 in scholarships to deserving Hawaii students entering accredited engineering programs at colleges and universities both here in Hawaii as well as on the mainland.

Some of the key guidelines of the HSPEEF Scholarship Program are as follows:

- ✓ Students who have been admitted to any ABET-EAC accredited engineering degree program are eligible to apply
- ✓ Preference will be given to first-time freshman (entering the 2006 academic year)
- ✓ Maximum dollar amount \$500 per year, renewable over 4 consecutive years (\$2,000 total)

Interested students may contact Queenie Komori, HSPEEF secretary and scholarship chairperson at 543-4526 or by e-mail at *q.komori@heco.com*. Complete application packages must be submitted by mail and post-marked by the May 31, 2006 deadline.

#### HSPE Installation Banquet

The annual HSPE Installation Banquet will be held on June 24, 2006. Ms. Kathryn Gray, P.E., F.NSPE, President, will be the guest speaker. She will also be installing president-elect Mr. Kenneth Rappolt, P.E. and his officers for the 2006 – 2007 term. Please contact Queenie Komori by e-mail at *q.komori@heco.com* if you are interested in attending this event.

What: HSPE Installation Banquet

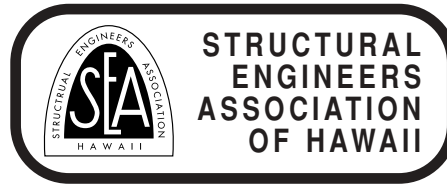
Date: Saturday, June 24, 6:00pm

Place: 3660 on the Rise at Waialae

Menu/Cost: Caesar Salad, Asian Pesto Stuffed Breast of Chicken, Wasabi Cream Lilikoi Cheesecake with Raspberry Coulis

**\$40.00 (included tips/taxes)**

All entrees are served with Taro Rolls and 3660's Island Roast Coffee or Tea.



PO BOX 3348, HONOLULU, HI 96801

Web Page URL <http://www.seaoh.org>

#### 2006 BOARD OF DIRECTORS (BOD)

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Past Pres.	Beverly Ishii-Nakayama <i>beverlyn@lava.net</i>	942-9100

#### HIGHLIGHTS OF BOD MEETING

April 12, 2006

##### Committee Reports:

2006 SEAHO Convention Committee: Convention registration has reached the 80 person maximum. From now, people will be placed on a waiting list. Members may be given preference over non-members.

General Membership Meetings/Technical Seminars/Events:

– The Charles Thornton Dinner was held on March 8, 2006 at the Japanese Cultural Center. Proceeds from the dinner will go to the “Arthur N.L. Chiu Endowed Scholarship in Civil Engineering”. SEAHO appreciates the contribution of all who attended.

– Technical Seminar ATC-45 was scheduled for April 26, 2006 from 8:00 am to 12:30 pm at the Neal Blaisdell Center, Hawaii Room. The ATC-45 was put on by the State Civil Defense.

– Simpson Strongtie Seminar is scheduled for May 24, 2006. The topic of the seminar will be galvanized steel in contact with preservative treated lumber.

– ATC-20 is scheduled for June 20, 2006 in Honolulu at the Pagoda Hotel and June 21, 2006 in Hilo. FEMA will provide the instruction material. A seminar in Hilo on June 21, 2006 is pending; the Hilo venue is to be determined.

– PCI Design Handbook 6th Edition Seminar is scheduled for July 2006.

– AISC 13th Edition Design Handbook Seminar is scheduled for October 26, 2006.

Golf: The first golf outing is scheduled for Friday, May 26, 2006 at Pearl Country Club. Ten tee times have been reserved. The next golf outing will be on Friday, November 24, 2006.

#### New Member Applications:

The following membership application has been received and is open for comments from the membership: Kylie Yamatsuka, Baldrige and Associates Structural Engineering, applied as a Member.

This application will be voted on at the June Board Meeting. Please notify any SEAHO Officer prior to the June Board Meeting if you wish to comment on this prospective member.

#### New Business:

SEA Northwest Conference: The conference will be held from July 20 –22, 2006 in Oregon. The information about the Conference will be posted on the SEAHO website.

#### Old Business:

Emeritus Professor Arthur N.L. Chiu Memorial Endowment: Bev Ishii-Nakayama will be the SEAHO representative on the oversight committee.

SEAHO Representative for 2006 Hawaiian Cement Concrete Achievement Award: Bennett Fung and Dean Doi will represent SEAHO as jurors to serve on the review and selection panel for the 2006 Concrete Achievement Award given bi-annually by Hawaiian Cement.

Public Outreach: SEAHO is in the process of establishing a public outreach seminar on

(continued on page 7)

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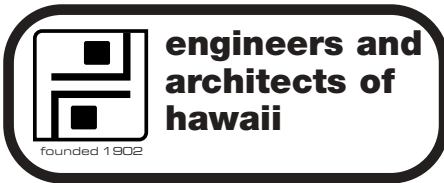
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#### May Meetings

Program Chair: Greg McCartney

**May 5** Woodrow Goins, Director, FEMA

**May 12** Laura H. Thielen, Director, State Office of Planning - Low Impact Design Project

**May 19** Dan Smith, VP-Corporate Communications: Hawaiian TelCom

**May 26** No Meeting Memorial Day Holiday

Meetings held every Friday (except Holidays) at YWCA room 205 on Richards Street downtown. Meetings start at NOON and end promptly at 1:00 pm. Parking at Alii Place off Alakea Street for \$1.50 per hour.

Buffet Lunch: Members-\$8.00, Guests-\$9.00, BYO lunches welcome. If not having the Buffet Lunch a donation is requested: Members \$1, Guests \$2; to help cover room rental costs.

Program schedule may be adjusted. Call Secretary Sam Gillie at 543-4739 (543-4804 FAX) 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).

The EAH Banquet will be held at 5:30 pm. May 6th at the Oahu Country Club. Cost about \$45 Contact Ralph Dobson if you plan to attend.

#### Sad Note:

It is with deep regret that EAH notes the passing of Bill Atkinson Jr. long time EAH Emeritus Member. Bill joined EAH in 1957 and was President in 1991. Bill attended EAH meetings regularly and was very active throughout his almost 50 years of membership. He will be missed by all. From the Star Bulletin March 14, 2006:

William John "Bill" Atkinson Jr., 80, of Honolulu, a U.S. Army veteran who served in World War II, Lihue Plantation civil engineer and retired Hawaiian Electric Co. civil engineer, died. He was born in Honolulu. He is survived by wife Sheila G., daughter Susan, and brothers James and Robert. Private services.

#### Meeting Notes for March & April 2006:

The sound recording of EAH presentations are posted to the EAH's WEB site.

#### Meeting Notes for March 10th, 2006:

Speaker: Frank Hays- Pacific Area Director National Parks Service

Subject: "The National Parks Service and Manzanar Japanese Internment Camp"

Frank Hays was the first superintendent of Manzanar National Historic Site. Frank worked to develop the site against certain parts of the community that were opposed. Manzanar War Relocation Center was one of ten camps at which Japanese American citizens and resident Japanese aliens were interned during

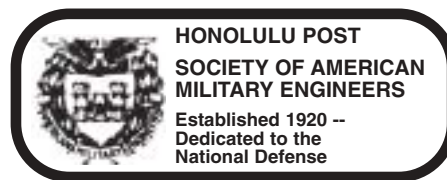
World War II. Located at the foot of the imposing Sierra Nevada in eastern California's Owens Valley, Manzanar has been identified as the best preserved of these camps. After it opened, Manzanar became the large town in the Owens valley.

#### Meeting Notes for March 17th, 2006:

Speaker: Walter Ikehara Fishery Information Specialist, National Marine Fisheries Service

Subject: "Fisheries Management in the Pacific Islands"

Walter Ikehara gave us an overview of the work that he does on managing the Fisheries around the Hawaii Islands. [Correction: Previously the EAH bulletin had stated that the fishing industry had hooked over 16 leatherback sea turtles. Actually, Walter had spoken of loggerhead turtles. Walter told us of 1 interaction (hooking, entanglement, or contact with the fishing gear) of a leatherback turtle and 16 loggerhead turtle interactions with the swordfish longline fishing fleet this year as



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

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#### SCHOLARSHIP GOLF TOURNAMENT & PACIFIC INDUSTRY FORUM

The Honolulu Post of the Society of American Military Engineers is combining its annual Scholarship Golf Tournament with the PACIFIC Industry Forum during May 2006.

Kicking off the two-day event is the Golf Tournament on 16 May at Marine Corps Base Hawaii. The '05 Golf tournament raised more than \$16,000 to support the Post's annual scholarship program which provides funding to local students pursuing their education in engineering, mathematics, and the sciences. The Post hopes to raise \$20,000 this year. Interested golfers and potential sponsors should contact Mr. Dana Voight, [Dana.Voight.ctr@hickam.af.mil](mailto:Dana.Voight.ctr@hickam.af.mil), for more information.

On 17 May at the Hale Koa Hotel in Waikiki, SAME will host a one-day event to bring Sustaining Members together with PACOM, Services, and contracting agencies in a briefing and round table forum to present the strategic view of the theater (unclass), provide access to the contracting agencies, and allow for interactive discussion and promotion opportunities for sustaining member capabilities. Interested participants and attendees should contact CAPT David L Fleisch, [David.Fleisch@navy.mil](mailto:David.Fleisch@navy.mil), for more information.

Additional information regarding these events will be posted on the Post website as it becomes available. <http://posts.SAME.org/Honolulu>.

of the EAH meeting. The allowed interaction limit on an annual basis is 16 leatherbacks and 17 loggerheads. Since the limit of 17 loggerhead turtle interactions was reached, late Friday afternoon (Friday March 17), they closed the swordfish longline fishery effective Monday morning, March 20th. An interaction doesn't necessarily result in a death of a turtle. The most common interaction is entanglement in the fishing line or hooked through a flipper, and the turtles are released alive. Many have a satellite tag attached to them so that scientists can track their movements and behavior.] For more information see: <http://swr.nmfs.noaa.gov/pir/>.

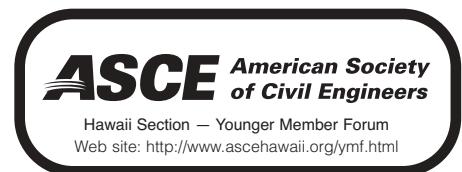
#### Meeting Notes for March 17th, 2006:

Speaker: Howard Wigg - State Energy Division

Subject: "Peaceful Lighting: From Excellent Visual Acuity to Harmony in the Mid East"

Howard presented his insightful presentation on the philosophy of light. Howard explained how the most uniform of light is natural sunlight and thus the most pleasing to human beings. New fluorescence lights are now rated to have

(continued on page 7)



#### 2005-2006 YMF OFFICERS

		Phone
President	Florence Ching	227-4704
	<a href="mailto:fching@ascehawaii.org">fching@ascehawaii.org</a>	
Vice-Pres	Lori Nishida	533-3646
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Past Pres	Paulette Ujimori	257-6920 ext. 231
	<a href="mailto:pujimori@ascehawaii.org">pujimori@ascehawaii.org</a>	

#### Next YMF General Meetings

The next two YMF general meetings are scheduled for Tuesday, May 2, 6:00 p.m., at Gordon Biersch Brewery Restaurant at Aloha Tower, 599-4877, and Tuesday, June 6, 6:00 p.m., at E&O Trading Co. at Ward Centre, 591-9555. If you are interested in attending to find out what the YMF is all about and how much fun we have, please call Florence Ching at 227-4704.

#### Next Generation Professionalism in Projects and Contracts

By Florence Ching,  
Hawaii Section YMF President

On Thursday, April 6, 15 attendees had the opportunity to receive wisdom and practical knowledge from Mr. Bernard Kea, Sr., P.E., and Chairman Emeritus of Community Planning and Engineering, Inc. (CPE) during a lunch presentation sponsored by the ASCE Hawaii Section YMF and CPE. With more than 40 years of civil engineering design experience especially in the area of land development, Mr. Kea discussed engineers' obligation to the public, responsibility to the client, quality of work, moral responsibility, and ethics. Participants included students from the University of Hawaii and workers from the private and public sector.

A big mahalo to Mr. Bernard Kea, Sr. for volunteering his time, Ms. JoAnne Wong of CPE for helping to organize this event, and thanks to everyone for attending.

**ASCE History, from page 1**

1889, at a cost of \$10,989.59 with a capacity of about 7,959,000 U.S. gallons [and] Reservoir No. 3 is located about one-fourth mile mauka than No. 2 and will be completed probably before the 1st of June at a cost of about \$6,600 with a capacity of 12,240,000 gallons." As early as that time, Rowell already recommended capacity expansions.

In his report to the 1890 Legislative Assembly, Minister Thurston places No. 1 "at the Electric Light Station," No. 2 "at the Half-way house," and No. 3 "opposite Luakaha." Of course, geographic referencing to one's familiar monuments is prone to cause difficulties to future readers and historians, to wit, the "electric station" is now an all but forgotten ruin, "the Half-way House," "the Half-way bridge," and a nearby "Maile Store" are depicted on old maps that are often of questionable accuracy, and "Luakaha" meant different things at different times, including varying extents of upper Nu'uuanu Valley, a once well-known stately residence, and a street. Trying to avoid using such references, however, is not as easy as one may think and, in fact, I have committed the same sin above by identifying the location of No. 1 in relation to the O'ahu Country Club and the Pali Highway.

In 1892, only two years after completion of the third dam, John C. White, Superintendent of the Honolulu Water Works, informed the next Interior Minister, Charles N. Spencer, that "reservoir No. 3 leaks very badly through the old ground along the Government road." Likewise, No. 2 is "leaking very much along the bottom of the made dam," whereas No. 1 "is in like condition, leaky."

By this time, proposals for a larger dam and reservoir farther up the valley were at least a decade old, but the issue became embroiled in a debate on "pumping artesian water vs. gravity distributed surface water," along with attendant issues such as purity, cost, availability, and generation of power. Disruptions during and subsequent to the 1893 overthrow of the Monarchy impacted events and it was not until June 23, 1905, that a contract was signed for a project that commenced on July 29 of the same year and was initially scheduled for completion by October 1, 1906. Unfortunately, as Governor George R. Carter was to be quoted in the June 22, 1906, Evening Bulletin, "no large public work can be undertaken without meeting severe opposition, both just and unjust."

Accusations flared up in June 1906 about faulty design, improper construction methods, inferior materials, ulterior motives, and even nepotism that rekindled the bitter controversy

and caused a series of delays, the cancellation and re-letting of the contract, two sets of major design changes, and cost escalations. In a subdued tone, Governor Carter, in 1907, related to the U.S. Secretary of the Interior that "of the various internal improvements undertaken by the Territory during the past year, none has caused more public comment than the Nuuanu dam [that] is not only to furnish water, but also power to light the city, operate the sewer pumps, or in dry seasons to operate the pumps at low levels which draw their supply from the artesian basins under the city."

The next Governor, Walter F. Frear, accepted the project (No. 4) in 1910 and so informed the U.S. Secretary of the Interior by saying "a reservoir with a capacity of about 700,000,000 gallons was completed at an elevation of about 1000 feet in Nuuanu Valley back of Honolulu, at a cost of about \$300,000."

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>.

**ASCE, from page 4**

please visit the ASCE Hawaii Section website at <http://www.ascehawaii.org/jobs/jobs.html>.

**MEMBERSHIP DRIVE**

ASCE counts on our members to help us grow every year by actively participating in the Member-Get-A-Member Drive. All you have to do to be eligible to win is refer a colleague, and you will be entered into quarterly drawings. Prizes range from iPods, to gift cards, to cash. 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](mailto:lnishida@atahawaii.com) for further information.

**Botball Tournament, from page 1**

al information, see Midweek Magazine at [http://www.midweek.com/content/story/the-weekend\\_extrastory/playing\\_ball\\_with\\_robots](http://www.midweek.com/content/story/the-weekend_extrastory/playing_ball_with_robots) and the Hawaii Tribune Herald at and the Hawaii Tribune Herald at <http://www.hawaii.tribune-herald.com/articles/2006/04/16/features/features04.txt>.

**LGSEA, from page 4**

the Plaza Club. Registration starts at 5:30pm. The featured speaker is Mark Crawford, vice president of engineering of Simpson Strong-Tie. Mr. Crawford is nationally recognized for his research on galvanized steel in contact with various preservative lumber treatments and the effects of these treatments on the steel members. He will discuss his research of various chemicals used in pressure-treatment of lumber and protection options in real world applications. Visit [hawaiisteel.com](http://hawaiisteel.com) for more information.

**EAH, from page 6**

CRI (Color Rendering Index) into the 90 percent range. CRI is an optical rating which compares the fluorescence light to equivalent natural sunlight. Howard referenced various studies that show that people work, study and generally perform their best in environments that have good lighting and the best lighting is when it is close to natural sunlight.

**ASME, from page 3**

**ANNUAL PEARL HARBOR BOAT TOUR BY STANFORD YUEN**

Past-Chairman Stanford Yuen invites members and their families and friends to his annual Pearl Harbor Boat Tour. This tour is courtesy of the Navy Region Hawaii and the U.S. Navy. The tour is on May 25, 2006 from 4:00 to 5:30 p.m. Departure is at the pier at the Arizona Museum. This is an educational boat tour around Ford Island and Pearl Harbor, highlighting major features, e.g. December 7 attack; Ford Island; shipyard; Supply; Submarine Base; and more.

Visit ASME Hawaii's website ([www.sections.asme.org/hawaii](http://www.sections.asme.org/hawaii)) for more information. Contact Ed Chang at 543-4227 if you would like more information or make reservations (required by May 11, 2006).

**SEAOH, from page 5**

Hurricane. The purpose of this would be to educate the public, promote home strengthening, and provide more exposure for the SEAOH association and our profession. We will be partnering with other agencies. The seminar would last a half day. We are seeking volunteers to help organize this event; anyone interested please contact Bennett Fung.

**Professional Directory**

<p><b>SHIMABUKURO, ENDO &amp; YOSHIZAKI, INC.</b> Civil, Environmental &amp; Structural Engineers</p>  <p>1126 12th Avenue, #309 Honolulu, Hawaii 96816-3715 Phone: (808) 737-1875 Fax: (808) 734-5516 Email: <a href="mailto:seyeng@lava.net">seyeng@lava.net</a></p>	 <p><b>Marc M. Siah &amp; Associates, Inc.</b> Consulting Engineers 810 Richards Street, Suite 888, Honolulu, HI 96813, Ph: 538-7180</p> <ul style="list-style-type: none"> <li>• CIVIL</li> <li>• STRUCTURAL</li> <li>• ENVIRONMENTAL</li> <li>• OCEAN</li> </ul>	 <p>501 Sumner Street, Suite 620 Honolulu, Hawaii 96817 Ph (808) 531-1308   Fax (808) 521-7348 Project Managers, Planners, &amp; Engineers <a href="http://www.ssfm.com">www.ssfm.com</a></p>	 <p><b>WES THOMAS ASSOCIATES</b> Land Surveyors 75-5749 Kalawa St., Kailua-Kona, Hawaii 96740-1817 Tel: 808 329-2353 Fax: 808-329-5334 Surveying Hawaii Since 1975</p>
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