

ACECH HONORS ENGINEERING EXCELLENCE

The American Council of Engineering Companies of Hawaii (ACECH) awarded its 2003 Engineering Excellence Awards in ceremonies held at the Kahala Mandarin Hotel on December 1, 2002. Honored this year were projects ranging from an air cooling system to an athletic field.

The Grand Conceptor Award was presented to the team of Sato and Associates and Geolabs Inc. for their project on the Kapalama Campus of Kamehameha Schools. Carved into the face of the Koolau mountain range, a 5.5 acre athletic complex stands, named after a king. The Kuniakea Athletic Complex seats 3,000 spectators and will be hosting football, soccer, track and field events and special community events.

Described by national track and field facility experts as one of the finest high school athletic complexes in the country, Kuniakea is compared to Olympic facilities. The complex contains two large meeting/classrooms, a first aid room and two large storage rooms on the field level. Built on three levels, the complex includes Mawaena field, that will be used as a practice area for athletics, special events and parking; a promenade with concessions areas, restrooms and ticket booths; and a regulation football and soccer field.

With a high school athletic program deemed the largest in the country by the National Federation of High Schools 2002 report, Athletic Director Blaine Gaison saw the need to upgrade its four lane, 300-yard dirt track and playing field that sloped down the mountain to a regulation sized track and field as well as a comprehensive, first class facility for students and the community. According to building professionals, the complex had nearly not been built because of enormous cost involved in constructing the massive facility on the mountainous terrain of Kapalama Ridge.

Engineers at Sato and Associates, Inc. and Geolabs, Inc., however, were able to lower previous construction estimates by nearly 50% by repositioning the project's footprint to accommodate natural terrain and designing five types of retaining walls, some rarely used in Hawaii, for various areas of the project. Locally uncommon techniques included, in order of least utilized, the tie back soldier pile, soil nail, and MSE walls.

Alternative retaining wall techniques and technology where applicable and appropriate may likely increase throughout the state as owners realize the benefits that could be obtained. Applications of these varied systems at Kuniakea will serve as textbook illustration

and actual demonstration of the value of these different solutions per situation, and of the value that thoughtful, creative engineering can bring to a project.

Receiving the 2003 Excellence Award was URS Corporation's Hakalaoa Falls Emergency By-Pass Tunnel. In 1989, about 30 feet of the existing 8-foot diameter water tunnel, a part of the 90 year old, 22 mile long, existing Lower Hamakua Ditch System collapsed due to a catastrophic landslide (peeling off the cliff face) in the midsection of the 2,000-foot high Hakalaoa Falls. The tunnel was only about 10-25 feet from the cliff face at the collapsed location. The water tunnel from the main weir at Kukuihaele to the collapsed tunnel section at Hakalaoa Falls is about 2 miles. Shortly after the cliff face peeled off with 30 feet of water tunnel, a temporary, 25-foot wooden flume was built across the collapsed section of the tunnel to restore flow to the tunnel. However, loose rocks continued to fall into the flume and diversion of water from Hakalaoa Falls triggered outcries from local farming communities and environmental groups.

Using a combination of geomechanics rock mass quality evaluation techniques and state-of-the-art finite element methods, and URS' experience on local geologic conditions, a by-pass tunnel design and specification was developed rapidly, to allow safe construction of the 300-foot, 7 foot diameter, hand-mined, liner plate supported by-pass tunnel without causing another catastrophic landslide, within budget and on schedule, despite remote, inaccessible location.

Belt Collins received a 2003 Honor Award for its project, From Waste to Worth: Pilot Study on the use of Contaminated Dredged Material. The study found that contaminated dredged material can be economically reused after processing. This kind of work is important to Hawaii since numerous harbors and other water bodies require periodic dredging such as the Ala Wai Canal and Pearl Harbor.

The 400 page study, which was conducted for the U.S. Army Corps of Engineers, Honolulu Engineering District, broke new ground for such a proposed pilot-scale dredged material processing facility, know as DMPF, since no other facility of this type and scale has been designed anywhere in the United States.

The civil engineers, environmental consultants, physical planners and marketers at Belt Collins were faced with many challenges during preparation of the study. Among those challenges were environmental review and permit approval for a unique facility that would



Kuniakea Athletic Complex

process contaminated material, projection of future volume of dredged material, physical and chemical characteristics of dredged material, application of processing technologies that have not been fully tested on contaminated dredged material from marine environments, ability to obtain land to site a DMPF, and perhaps, most important, cost-effectiveness analysis of usable products from such a facility.

Social and economic consideration were a vital part of the study because it is unacceptable in many parts of the world, besides the United States, to simply dump contaminated dredged material into the oceans. Likewise, as land becomes more and more scarce, especially in urbanized coastal areas, siting or expanding land-based disposal facilities can be daunting.

The result of the extensive study was that the development of such a pilot-scale DMPF which could be expanded in the future, is economically feasible and can be justified from the standpoint of cost-effectiveness analysis.

C. Don Manuel's Maryknoll Grade School Thermal Energy Storage District Cooling Project also was recognized as a 2003 Honor Award recipient. The project, constructed below budget cost and completed on time during the 2 _ months summer break, allowed the grade school campus to begin a new school year with a very cool classroom facility. It provided a fully automatic programmable centralized air conditioning system to all three classroom buildings with an underground chilled water loop, sized for enough capacity to the 10 years programmed anticipated growth with junction boxes for uninterrupted central plant

(continued on page 6)



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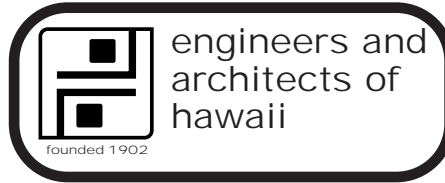
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March 2003 Program

Program Chair Victor Russell
March 7th TOA
March 14th City and County Building Department – Speaker TOA
March 21st TOA
March 28th Gary Chock, Structural Engineer – Hurricane Wind Design

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 Dec 13 , 2002: Assessing Cultural Impacts

Arnold Lum, Adjunct professor William S. Richardson School of Law, University of Hawaii at Manoa

Why are cultural assessment being done now and they weren't being done 10 years ago. National Environmental Policy Act (NEPA) and C343 HRS have been on the books for 3 decades. Both have required the assessment and analysis of the impact of projects on cultural and historic features. Neither however explicitly defined cultural or cultural practices as something to address in either environmental assessments (EA) or Environmental Impact Statement (EIS). If a project is subject to NEPA or Ch 343, an EA has to be done to determine if there is an impact on the environment. If the result is positive, then the EIS has to be prepared. This includes mitigation measures to reduce impacts. If an impact is clear then only an EIS may be prepared.

Until year 2000 cultural and cultural impacts did not get much attention. Typically an EA or EIS would only note the presents or lack of archeological or historic features within the project site. The law has changed. In 1992, the congress amended the NEPA, to require requirements for certain consultation. The agency that administers the NEPA is the Advisory Council on Historic Preservation (ACHP). The ACHP developed very detail

administrative regulations, on how the consultation requirements should be done. Those rules were adopted in December 2000.

The Federal requirements have impacted how cultural assessments are done.

Section 106 of National Preservation Act requires that any federal undertaking, such as a 404 permit for a Dredge and Fill Permit or Section 10 Waterways Permit. Under section 106 it has to be determined if there are Traditional Cultural Properties (TCP's) that will be affected by the federal undertaking. If it is required then the project must consult with native Hawaiian organizations or Indian tribes on the mainland. This is a shift away from NEPA, which had been the primary driver in Federal Environmental compliance. The focus has shifted considerably to the NCHP requirements.

What are TCP's? TCP's are geographic, topographic and structural features that have cultural or religious significance. A classic example would be "Bears Lodge" in South Dakota, which is a large basalt cone the was featured in the Movie "Close Encounters of the Third Kind". This wasn't built by humans, but it is considered to be cultural significant by several Native American tribes. Even if the project would not physically touch the feature, consideration must be given if the project impacts the cultural or historical fabric of the TCP. An example in Hawaii was the Waahila ridge. Now Waahila ridge is a TCP. It was consider a cultural property because there were legends that referred to the ridge. Structures that may not have any specific human historical events associated with them, now have become legally significant as cultural properties.

The State Ch 343 was amended by Act 50 in 2000. Act 50 requires every EA examine if the project will have a significant impact on cultural practices. If an impact is determined, mitigation measures must be addressed in the EIS.

The third requirement that drives cultural assessment is the Ka'upulehu Resort Case Supermine Court Case. This case held that separate and apart from NEPA and Ch 343, there is a public trust policy, under the Hawaii Constitution for State and County agencies that issue discretionary permits, that those agencies undertake a cultural impact analysis even when there are no federal funds.

Five years ago the Environmental Council adopted guidelines for assessing cultural impacts for EAs and EIS's. The guidelines are modeled on the DLNR's draft Historic Preservation Rules, that have not been promulgated. The guidelines recommend first don't look at just the footprint of the project, look at the whole ahupua'a and determine if there are any cultural practices and if any of the practices tie in to the project site. Previously evidence of cultural and historical importance was determined by a search of written records. Now any living persons that lived or are familiar with the site have to be consulted. So now oral histories become important.

How engineers and architects design and build out a site, which has cultural features and practices, will challenge how engineers and architects work in the next decade.



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HSPE STATE BOD CONFERENCE CALL MEETING

January 22, 2003

1. **REPORT ON NSPE WINTER MEETING:** A verbal report was presented by members who attended the recent NSPE Western Region Winter Meeting. A decision was reached to exempt Guam for paying \$200 seed money for meetings. The Western Region Meeting's name will be changed to the Western and Pacific Region Regional Meeting. This change was made to more accurately describe the areas from which representatives who attend these meetings represent. There was also discussion of the western states trying to strengthen the role of the Regional VPs. There was discussion on the organizational structure of the Western Region. It was discussed that 70 cents of the dues go to the Western Region. Discussion was held on what states would be willing to support a regional organization? Curt Beck discussed the practice division program and trying to get software engineering into the licensing procedure. Clyde Nagata also reported on attendance at the Winter Region Practice Sessions.

2. **ENGINEERS WEEK:** It was announced that the Engineer of the Year would be Wally Miyahira who was President of Castle & Cooke. There was no selection made for Young Engineer of the Year. Aaron Ohta was selected as Student Engineer of the Year. It was announced that the Engineering Week Banquet would be held on February 21st at 6:00PM at the Radisson Waikiki Prince Kuhio Hotel. Big Island and Maui will hold its Engineers Week Banquet on February 22.

3. **NEXT BOARD MEETING:** The next Board of Directors Meeting will hold on February 21, 2003 at the HECO cafeteria conference room at Ward Ave. Meeting will begin promptly at 2:00PM.

4. **NEXT INSTALLATION OF OFFICERS MEETING:** Howard Blitman, President of NSPE, will be participating in the Installation of Officers at Banquet on all islands. Banquets will be held from June 12 to June 14, depending on the island. Maui 6/12. Honolulu 6/13, Kona 6/14.

5. **MATHCOUNTS:** Sheryl Nojima reported on Mathcounts. A total cost of \$11,300 is estimated for the entire Mathcounts competition. Steering Committee sent letters out to companies who did not participate in the recent golf tournament for donations.

6. **SCHOLARSHIP APPLICATION:** Applications for scholarship must be in by March 1, 2003.

7. **LEGISLATIVE BILLS:** There is currently a bill related to continuing education for license renewal. Discussion was held on this subject

and it was decided to testify in support of the bill, with HSPE offering assistance to the licensing board in developing a continuing education program. Hearing is on Friday. House Bill 93, Senate Bill 311.



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LAS VEGAS FIELD TRIP

If you're happy and you know it, clap your hands! There was a lot to be happy about for those alumni and friends who joined us for our first ever field trip to Las Vegas. Some of those attending were the lucky winners of a FREE trip at the past EAAUH Golf Tournament.

The fun started with a visit to the annual World of Concrete exposition, where thousands of square feet of the latest in concrete products and equipment were on exhibit. The festivities continued with golfing, gaming, shopping, a slot tournament, and banquet.

Everyone had a great time, and made a few new friends as well. We hope to make even more new friends next time! Clap, clap, clap!



Happy faces...Attendees of EAAUH's Las Vegas Field trip.



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MARCH MEETING

As a reminder, The ITE Hawaii Section March meeting will be a tour of the Matson Navigation Company yards. The tour will consist of a presentation and demonstration regarding their GPS container tracking system and a short tour of their facilities. As with other meetings, during the presentation we will be providing lunch. Matson has been gracious enough to offer to host more than one tour to accommodate all of our interested members. Due to the initial response to the tour, we have scheduled a second tour date. The tour information is as follows:

Speaker: Bill Schmidt, Systems Manager, Matson Navigation Company
 Date: March 20, 2003 and March 27, 2003
 Time: 11:30 AM - 1:00 PM
 Location: Pier 51B Sand Island Access Road, Tower Building, 2nd Floor
 Parking: Enter the Matson yard through their main entrance where you will be instructed where to park. The Tower Building is the tallest building in Sand Island so it should be easy to locate.
 Cost: \$8.00 members/\$5.00 students.

Please RSVP Cathy at 946-2277 or cleong@wilsonokamoto.com, by March 17, 2003. Please indicate which tour you wish to sign up for, 20th or 27th.

2003 Meeting Highlights

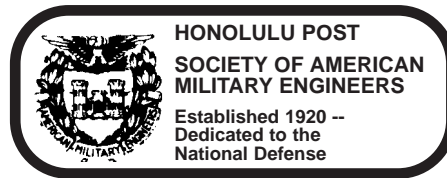
At the ITE January 16, 2003 luncheon meeting, Mr. Earl Matsukawa, Director of the Planning Consultant Group at Wilson Okamoto and Associates, Inc., spoke about the County of Maui's preservation plan for the bridges in the Hana Highway Historic District. When the project initially started, the district was eligible, but hadn't been nominated for the State and National Register of Historic Places. However, an application had been completed by the time the project was finished. This project only covered the 14 County bridges in this district, which are about 80-90 years old. The bridges are narrow (essentially single-lane bridges) with low posted weight limits (as low as 3 tons). The planning process for the project considered the historic resource values, public safety issues, funding, as well as community and agency input. Only one bridge is categorized as being individually significant, but the other bridges are considered as contributory resources to the historic character of the district.

Some of the historic defining features of the bridges include the single lane operations, unique railings, inscriptions, arches, abutments and wingwalls. Structurally, some of the bridges were in very bad shape. For instance,

the rebars were exposed and rusted through, which caused concern for catastrophic failure when a vehicle crossed the bridge. If current AASHTO standards were followed, it would require two-lane bridges, raising railing heights, installing steel guardrails at the approaches, proper signage, and increased hydraulic capacity. All the bridges are functionally obsolete because they are single lane and many are structurally deficient.

There are tort liability issues that are unique to Hawaii. In the Taylor-Rice case, a drunk driver hit a guardrail on Kauai that had a buried end treatment; the State Supreme Court ruled that the State DOT had an obligation to improve the guardrail since they had widened the highway pavement. The resulting interpre-

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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 Information" link. Please continue to check the Honolulu Post website periodically for updates and the most current conference information. The attached Program Schedule will provide you with some insight of what to expect at the Conference!

We look forward to seeing you in April!



Society of American Military Engineers Honolulu Post Scholarships

Award: Two \$1,500 Scholarships with Junior SAME Memberships

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)

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

CONCRETE ACHIEVEMENT

2007



JUDGES AWARD

OWNER/DEVELOPER:
The Shops at Wailea, L.P.

ARCHITECT:
Architects Hawaii Ltd.

STRUCTURAL ENGINEER:
American Structural
Engineers

GENERAL CONTRACTOR:
Hawaiian Dredging
Construction Company

The Shops at Wailea

A basalt exposed aggregate architectural mix was used extensively throughout the lower level of the courtyard slab on grade. Custom green toned Monier Tiles with contrasting "splash" highlight colors is unique to the Shops. Each roof reflects a lightly different hue from a distance. The concrete and concrete products tied the whole complex together while providing minimum maintenance to the owners.



Innovative Energy Systems Workshop

The "Innovative Energy Systems Workshop" is scheduled for March 19-20, 2003, in the C'Est Si Bon Room of the Pagoda Hotel at 1525 Rycroft Street, Honolulu, HI.

This two-day workshop will present the final results of the recently completed "Sea Water Air Conditioning Feasibility Analysis" project. Preliminary results from two other projects will also be presented and discussed ("Integration of Energy Storage with Seawater Air Conditioning [SWAC] Systems" and "Application of the Kalina Cycle to Waste Heat Recovery in Hawaii.")

The workshop will cover district cooling systems, SWAC, thermal energy storage systems, applications of the Kalina cycle, and waste heat recovery. Selected invited speakers will present information on each of these topics. This workshop will attempt to bring together mainland and international experts in energy storage systems, district cooling systems, and waste heat recovery with local experts in sea water air conditioning (SWAC) systems, in order to help commercialize such systems in Hawaii.

District Cooling provides chilled water from a cooling plant through a network of pipes to multiple residential, industrial and commercial buildings for air conditioning use. SWAC uses an abundant renewable energy resource, cold, deep seawater from depths of more than 1,600 feet, and a heat exchanger, to cool the chilled water used in a district cooling system. Thermal Energy Storage technology can be used to significantly reduce energy costs by allowing energy-intensive, electrically-driven cooling equipment to be predominantly operated during off-peak hours when electricity rates are lower.

The best system for Hawaii (and possible other areas where the technology might be marketed) might be a hybrid SWAC/Thermal Energy Storage system. This would allow the SWAC system to supply a much larger base load cooling demand (for a given pipe size and cost), and for the energy storage system to supply the peak demand. A smaller energy storage system would also be able to provide peaking capabilities for a much larger district cooling system. Utility demand during peak demand periods would be reduced significantly. Energy savings in excess of 80% are possible. Cost savings of 18 to 58% are also possible.

The Kalina cycle is a thermal-to-mechanical energy conversion process that is able to convert relatively low temperature waste heat into useful mechanical energy at better efficiencies than other types of heat engines. The Kalina cycle engine is at least 10 percent more efficient than the other heat engines, is simple in design, and can use readily available, off-the-shelf components. Applications of the Kalina cycle include ocean thermal energy conversion (OTEC) and as a bottoming cycle for fossil fueled and geothermal power plants and combined heat and power (CHP) generation systems.

Applications of these innovative energy systems have the potential to supply more than half of the State of Hawaii's renewable energy goals and to allow a much more efficient use of current energy supplies.

A site visit to the Natural Energy Laboratory of Hawaii at Keahole Point, Hawaii, on Friday, March 21, 2003, is also planned.

For additional information, contact: Dr. David Rezachek at drezache@dbedt.hawaii.gov or (808) 587-3814.

ACECH, from page 1

operation during connection to future buildings.

Taking advantage of the low temperature of melting ice, it provided higher cooling capacity to use smaller pumps and smaller distribution piping as compared to a conventional chilling plant. A variable volume chilled water pumping system was designed to enhance energy conservation combined with quick acting, maintenance free, self-balancing fully underground supply loop for a very energy efficient, low profile District Cooling system.

The classrooms are provided with individually controlled fan coil units (FCU) with adjustable outside air intake quantity to meet the present Indoor Air Quality (IAQ) Standards: a simple wall mounted manual controller operates each FCU with fan speed selection and room temperature adjustment capabilities, to the delight of the teachers. The low temperature chilled water supply assured proper dehumidification to prevent mold and mildew growth.

A totally underground ice storage vault, a first in Hawaii, was constructed below the outdoor basketball court due to space limitations. The ice storage tank was fully insulated to prevent heat conduction from the ground and minimize thermal expansion/contraction of the concrete vault. The Chilling Plant was programmed to make ice at night, during off-peak hours to qualify for the HECO preferred discounted rate. Ice is melted daytime to make chilled water to meet the campus air conditioning requirements. The new TES system is saving the Grade School 57% of the campus' air conditioning bill.

The installation of the Thermal Energy Storage District Cooling has solved the Utility's power supply deficiency problem by providing the entire campus with air conditioning while actually reducing daytime power demands. TES system was constructed cheaper and is operating at half the cost of a comparable conventional air conditioning system.

Life expectancy is better than the conventional system due to cooler night time ambient

temperature for a lower cooling tower condensing temperature and therefore, a cooler chiller, operating at the most efficient, constant full load to make ice. It avoids the fluctuating demand of the daytime conventional chiller and the associated partial load compressor loading-unloading stresses and lower operating efficiencies.

The diversity of this year's Engineering Excellence Award winning projects illustrates the complex and interesting challenges faced by Hawaii's engineering firms. ACECH is proud to honor this year's award recipients. Their work brings pride not only to the firms themselves, but also to the entire profession.

ITE, from page 4

tation is that if you improve one component of the highway, then you should bring all components of the highway up to contemporary standards, even though the highway may have been built to earlier/different standards when it was originally constructed. Also, if a project uses federal funds, then it has to meet current State standards, which are the AASHTO guidelines. The community opposed the widening of the bridges.

The breakthrough in this project occurred when FHWA allowed a design exemption for a single-lane bridge and it is done on a case-by-case basis. The design/reconstruction of each bridge is discussed with the community. The public did not want more steel guardrails so rock guardwalls are being installed at the approaches. The recreation of railings and other features is also being included in the rehabilitated bridges. In addition, simpler, different type of signage is desired by the community. If the State develops historic/scenic bridge standards, then these bridges would be included in such a program. The State DOT is also changing its attitude and is willing to consider alternative designs, but the liability for the State remains very high.

ACI/PCA 318-02 BUILDING CODE SEMINAR

*Sponsored by the Cement and Concrete Products Industry of Hawaii
and the Structural Engineers Association of Hawaii*

A one-day seminar on the new ACI 318-02 Building Code. This seminar will focus on the significant changes in the 2002 edition of the ACI 318 Building Code.

Tuesday, March 25, 2003 from 8 am to 5 pm (registration at 7:30 am)

Pagoda Hotel, "C'est Si Bon" Room, 1525 Rycroft Street, Honolulu

Instructors:

BASILE G. RABBAT, Ph.D.

Manager, Transportation Structures and Structural Codes, Portland Cement Association, Skokie, Illinois.

W. GENE CORLEY, Ph.D.

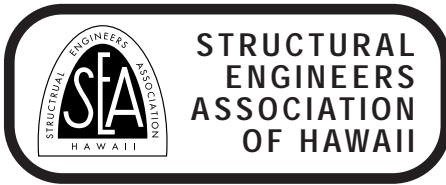
Senior Vice President, Construction Technology Laboratories, Skokie, Illinois.

Regular registration is \$195.00 per person. SEA/OH/member registration before March 1, 2003 is \$150.00. Registration fee includes seminar, lecture notes, and lunch. The registration fee does not include reference material. Optional reference books (must be ordered by March 1, 2003): ACI 318-02 @ \$75.00, and PCA notes @ \$90.00.

Class size is limited. Registration deadline is March 14, 2003.

For additional information or to register, call CCPI at 833-1882





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

2003 OFFICERS & DIRECTORS

Position	Officer	Phone	Fax
President	Randy Chu	373-7950	373-7950
Vice Pres	Wes Segawa	935-4677	935-2070
Secretary	Bennett Fung	531-1308	521-7483
Treasurer	Susan Kuniyoshi	488-7579	488-7818
Director	Ibbotson Kellett	540-1030	526-1989
Director	Les Nagata	951-5916	941-6489
Past Pres	Tom Tanimura	536-7692	537-9022

HIGHLIGHTS OF BOD MEETING

February 4, 2003

Committee Reports:

2003 Convention – After reviewing additional information presented by the Convention Committee, the BOD voted on 1/20/03 in favor of having the annual convention at Manele Bay Hotel on the island of Lanai instead of on the Big Island. The convention will be held August 8-9, 2003. Convention theme will be Structural Repairs and Strengthening: A Hawaii Perspective.

Installation Banquet – The installation banquet was held on Saturday, January 25 at the Hale Koa Hotel.

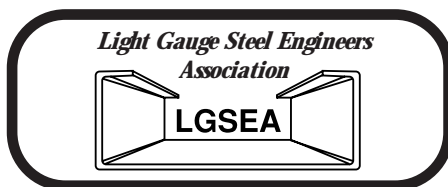
Seminars – Committee is planning to sponsor the following seminars: ACI/PCA Seminar, New ACI 318-02 Building Code; AISC Practical Steel Design.

Old Business:

Administrative Assistant – BOD still seeking someone to fill the administrative assistant position. T. Tanimura will assist with developing an outline of duties for this position.

2003 Budget – Budget was reviewed, amended and approved.

SEAHO Website – Carol Kellett agreed to



HAWAII CHAPTER

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

2002-2003 OFFICERS & DIRECTORS

Position	Name	Phone	Fax
President	Brian Ide	536-2108	521-3000
Vice Pres	Akira Usami	682-5747	682-2928
Secretary	Jeffrey Hanyu	521-6958	533-6701
Treasurer	Garret Muranaka	946-2277	946-2253
Director	Bennett Fung	531-1308	521-7348
Director	Ron Iwamoto	533-2210	533-2686
Director	Mike Kasamoto	955-6834	955-2483
Director	Jim Walfish	737-0141	734-2177
Director	Colleen Miyasato	735-3211	735-3280
Director	Darin Okuda	689-5400	689-5406
Past Pres	Les Nagata	951-5916	941-6489

2001-2002 COMMITTEE CHAIRS

Program:	Akira Usami	682-5747	682-2928
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

continue as webmaster.

SEAHO Membership Database – The BOD spent considerable time discussing problems with the current incomplete membership list. The list needs to be updated and is used for distribution of information to the membership. Recruiting a member to maintain the list was thought to be too much of a burden. The BOD plans to include this as part of the Administrative Assistant's duties. In the meantime, information will be distributed using existing membership records.

New Business

BOD voted on and approved Mr. Gary Fujiwara as an affiliated member.

BOD reviewed and revised the membership renewal form. Membership renewal form will be mailed out later this month.

Steve Baldrige presented his concerns regarding having the Structural Engineer of Record to sign the Honolulu C&C Special Inspection form: There are items on the form that is not pertaining to practice of structural engineering; The Contractor's responsibilities are not spelled out on the form, and the Contractor is not required to sign the form; Additional liability to the structural engineer signing this form. Steve Baldrige will form an Ad-Hoc committee to study the issues, discuss with the building department and present recommendations to the BOD.

New Member Applications

Brent Uechi of Englekirk Partners Consulting Structural Engineers, Inc. has applied for membership. Please notify any SEAHO Officer prior to the April Board Meeting if you wish to comment on prospective members.

2003 CALENDAR OF EVENTS

Next BOD meeting: Thursday, March 6, 2003, 4:00 p.m. at Zippys Restaurant, Vineyard Blvd.

General Membership luncheon meeting: Friday, March 14, 2003 at the Pagoda Hotel.

ACI/PCA Seminar, New ACI 318-02 Building Code: Tuesday, March 25, 2003 at the Pagoda Hotel.

SEAHO convention: August 8-9, 2003 at the Manele Bay Hotel, Lanai.

AISC Practical Steel Design: Thursday, October 2, 2003 at the Pagoda Hotel.



2002-2003 CHAPTER OFFICERS

		Phone	Fax
President	Bob Lohaus	833-4095	
Vice-Pres	Mel Harano	848-6966	848-6964
Treasurer	Sam Dannaway	526-9019	537-5285
Past Pres	Jayn Higashi	526-9019	537-5385

1. The Hawaii Chapter SFPE Executive Committee will be meeting on Friday March 14 at 11:30 am. The location of the meeting will be announced.

2. The Hawaii SFPE still offers proctoring of NICET fire protection specialty exams. For more information check our website at www.sfpehawaii.org or call 526-9019.



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	<i>brandes@willki.eng.hawaii.edu</i>		
Pres Elect	Westley Chun	488-0477	488-3776
	<i>wkcchun@engrsol.com</i>		
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	<i>kniiya@atahawaii.com</i>		
Secretary	Walter Billingsley	846-3232	538-7819
	<i>wbillingsley@beltcollins.com</i>		
Treasurer	Lori Fong	531-7094	528-2368
	<i>fujitani@pbworld.com</i>		
YMF Pres	Jeff Kalani	593-1116	593-1198
	<i>jeff_kalani@urscorp.com</i>		
Past-Pres	Tony Lau	524-3771	538-0445
	<i>tlau@hawaiiapacificengineers.com</i>		

MARCH DINNER MEETING

Program:

- 1) The new Director of Health, Dr. Chiyome Fukino, will discuss her goals and objectives for the Department of Health.
- 2) Craig Gorshuch of Hawaii Medical Vitrification will discuss his company's use of Plasma Arc Technology (PAT) to treat medical waste at Campbell Industrial Park. PAT, which is an alternative to either incineration or direct disposal of wastes, is used to immobilize hazardous constituents, recover energy and valuable products, and reduce volume and mass for final disposal.

Date: Thursday, March 20, 2003
 Location: Treetops at Paradise Park, Manoa Valley
 Time: 5:30 p.m. - Social Time
 6:30 p.m. - Dinner
 7:30 p.m. - Program
 9:00 p.m. - Adjourn
 Menu: Multi-entree buffet
 Cost: \$22.00 for Hawaii Section members
 \$25.00 for non-section members and guests
 \$11.00 for University of Hawaii at Manoa Student Chapter members

Make check payable to "ASCE-Hawaii Section." Mail to Lori Fong, ASCE Treasurer, C/O Parsons Brinckerhoff, Pacific Tower, Suite 3000, 1001 Bishop Street, Honolulu, HI 96813, postmarked by Monday, March 17, 2003. Reservations to Lori Fong by Monday, March 17, 2003 by phone at 531-7094, fax at 528-2368, or email at *fujitani@pbworld.com*.

EXECUTIVE COMMITTEE MEETING

February 6, 2003

2003 CALENDAR OF EVENTS (subject to change)

- 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

HAWAII SECTION RECEIVES PUBLIC SERVICE AWARD

The ASCE Hawaii Section has received the 2002 Public Service Award for Zone IV. The award was presented at the ASCE Zone IV Management Meeting in Honolulu on March 1, 2003. As a recipient of the Zone IV award, the Hawaii Section becomes a nominee for the ASCE National Public Service Award. The award is the result of extensive public service activities throughout the year, particularly by the Hawaii Section Younger Member Forum. Kudos to Past President, Tony Lau, for preparing the nomination!

HAWAII SECTION AWARD RECIPIENTS HONORED AT NATIONAL CONVENTION

ASCE Hawaii Section members C. Dudley Pratt, Joanna Seto and Tony Lau were each presented with awards at the ASCE National Convention in Washington D.C., November 5-7, 2002. C. Dudley Pratt was recognized for being elected as an Honorary Member of ASCE, Joanna Seto was presented with the ASCE Co-National Young Government Civil Engineer of the Year Award, and Tony Lau received the ASCE Edmund Friedman Young Engineer Award for Professional Achievement. The photos show each honoree receiving their award.

Honorary Membership is awarded to civil engineers who attain acknowledged eminence in their profession. Mr. Pratt, a former president of HEI and a former Trustee of the Estate of James Campbell, was presented with his award and medallion by ASCE National President Thomas Jackson.

The National Young Government Civil Engineer of the Year Award recognizes distinguished civil engineers employed in public service for demonstrated leadership potential in Public Service Engineering. Ms. Seto, who works for the Clean Water Branch of the State of Hawaii, Department of Health, was presented with her award by ASCE National Past President H. Gerard Schwartz.

The Edmund Friedman Young Engineer Award for Professional Achievement is presented annually to a young engineer who has shown significant service to the advancement of the profession; significant evidence of technical competence, high character, and integrity; leadership in the development of the attitude of young engineers toward the profession; and contribution to public service outside of their professional career. Mr. Lau, who works



C. Dudley Pratt, Jr. receives Honorary Membership award from ASCE National President Thomas Jackson.



Joanna Seto receives Co-National Young Government Civil Engineer of the Year Award from ASCE National Past President H. Gerard Schwartz.

COUNTY OF HAWAI'I • NEW RATES • CIVIL ENGINEER I

\$2,670.00 plus shortage differential of \$409.00/month
 Immediate Vacancy – Department of Water Supply in Hilo

Minimum requirements: A combination of education and experience substantially equivalent to graduation from an accredited college or university with major work in civil engineering.

CIVIL ENGINEER III

\$3,122.00 plus shortage differential of \$928.00/month
 Immediate Vacancy – Department of Public Works in Hilo

Minimum requirements: A combination of education and experience substantially equivalent to graduation from an accredited college or university with major work in civil engineering and two years of professional civil engineering experience.

CIVIL ENGINEER IV

\$3,515.00 plus shortage differential of \$1,406.00/month

Three Immediate Vacancies – Department of Public Works & Department of Water Supply in Hilo and Kailua-Kona

Minimum requirements: A combination of education and experience substantially equivalent to graduation from an accredited college or university with major work in civil engineering and three years of professional civil engineering experience.

License requirement: Possession of a certificate of registration as a professional engineer in the United States at time of filing.

Recruitments are open on a continuous basis. Should we plan to close these recruitments, notice of the last day to file applications will be posted in our office one week prior to the effective date.

Call the County of Hawaii's job-hotline at #(808) 961-8618 for an application packet or visit our website at *co.hawaii.hi.us* - our recruitment announcements and application forms for open-competitive recruitments are on-line and can be downloaded.

Text telephone users (for persons with hearing impairments) call the Department of Civil Service at #(808) 961-8619.

An Equal Opportunity Employer

for Hawaii Pacific Engineers, Inc. was presented with his award by ASCE National Past President H. Gerard Schwartz.

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 March 28, 2003. **Please note the revised deadline date.** 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@hawaiiipacificengineers.com for more information.

ASCE HAWAII SECTION SCHOLARSHIP ENDOWMENT FUND

The ASCE Hawaii Section Scholarship Committee would like to thank Hawaii Section Life Members Delwin Ching, Dan Takamatsu and John Stall for their generous contributions to the ASCE Hawaii Section Scholarship Endowment Fund. A special thanks goes to Jerome Neyer of the Michigan Section for his contribution to the scholarship fund in remembrance of the late Hawaii Section Past President Walter Lum. In 1998, Walter Lum made a sizeable donation to establish the ASCE Walter Lum Scholarship Endowment



Tony Lau receives the Edmund Friedman Young Engineer Award for Professional Achievement from ASCE National Past President H. Gerard Schwartz.

Fund, which allows the Hawaii Section to award a \$1,500 scholarship to a UH ASCE Student Chapter member annually. If you would like to make a contribution to the ASCE Hawaii Section Scholarship Fund, please contact Scholarship Committee Chair Tony Lau at 524-3771. All contributions are 100 percent tax deductible.

SECOND ANNUAL WEST POINT BRIDGE CONTEST

Your help is requested! As the primary sponsor, ASCE is pleased to announce the opening of the second annual West Point Bridge Design Contest (WPBDC). The contest is a realistic, internet based, hands-on competition for middle and high school students, designed to develop excitement and interest in engineering activities. This contest is specifically aimed at promoting math, science, and technology education in U.S. middle and secondary schools. Contest participants must be at least 13 years old at the time of registration and must be enrolled in middle school or high school in the US. The qualifying round of the contest runs from January 11 to April 10, 2003.

The contest is free. For more information on this exciting contest and to download the bridge design software go to <http://bridgecontest.usma.edu>. The prizes are as follows:

- Each member of the first place team receives a \$15,000 scholarship.
- Each member of the second place team receives a \$5,000 scholarship.
- Each member of each team that successfully completes the Final Round receives a notebook computer.

Although information packets have been mailed out to middle and high schools across the US, **your help is requested to spread the word about this outstanding contest to schools, youth activity groups, Girl/Boy Scouts, after-school activities, or any other student organization.** Any assistance with this communication or other help that you can give to students & teachers will be greatly appreciated.

FIND A JOB - FILL YOUR OPENINGS!

The ASCE Hawaii Section web page provides the posting of job openings for the civil engineering community. If you are looking for a job, this is the first place to look! Please visit our ASCE Hawaii Section website at www.ascehawaii.org to view the currently posted job openings. If you are an employer, you can advertise your job opening to all ASCE Hawaii Section website visitors for a minimum monthly fee of \$40. The ASCE Hawaii Section website is linked with other ASCE section and ASCE student chapter websites, expanding the number of civil engineers with access to your job listing to over 123,000 worldwide. The ASCE Hawaii Section website has thousands of

visitors a year. For further information, please contact ASCE Hawaii Section's webmaster, Joanna Seto at (808) 586-4329 or at jseto@eha.health.state.hi.us.

MEMBERSHIP DRIVE

The drive is now year-round and offers great new prizes every one or two months, so you'll always have new opportunities to win. ASCE is giving away prizes like cash rewards, gift certificates, digital cameras, personal digital assistants, LCD TVs and more. For most prizes, all you have to do to be eligible to win is refer a colleague and if they join, you'll be entered into end-of-month drawings. To refer colleagues, go to the Member Drive Web site at www.ASCEDrive.org. There are even more opportunities to win just by referring colleagues, regardless of whether they join. A special rewards club, the *Signature Club*, has also been created for members who have recruited five new members. Club members receive additional rewards and exclusive offers from ASCE that are simply not available to the general membership.

There has never been a better time to help out your colleagues while also helping ASCE find new members. Take a minute to think about the people in your professional life who could benefit from membership. Visit www.ASCEDrive.org to refer them and you could be a winner in the next drawing!



2002-2003 OFFICERS

		Phone
President	Jeff Kalani jeff_kalani@urscorp.com	593-1116
Vice-Pres	Jamie Hikiji jamie.hikiji@m-e.com	521-3051
Secretary	Lori Nishida lnishida@atahawaii.com	533-3646
Treasurer	Paulette Chang pchang@hawaiiipacificengineers.com	524-3771
Student Chapter President	Meris Ota merisota@hotmail.com	956-5808

Next YMF General Meeting

The next two YMF general meetings are scheduled for Tuesday, March 4, 6:00 p.m. at Compadre's, and Tuesday, April 1, 6:00 p.m. at Murphy's Bar and Grill. If you are interested in attending, please call Jeff Kalani at 593-1116.

ASCE Job Classified

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

Professional Directory

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<p>FUKUNAGA & ASSOCIATES, INC. 1388 Kapiolani Blvd. Honolulu, HI 96814 Phone: 944-1821 Email: fainc@aloha.com Website: www.fainc.org</p>	 <p>GEOLABS, INC. Geotechnical Engineering and Drilling Services 2006 Kalih Street Honolulu, Hawaii 96819 Phone: 841-5064 Fax: 847-1749</p>	<p>GEOTECHNICAL GROUTING Consultant Edward D. Graf 182 Lumahai St. Tel: 808-396-9451 Honolulu, HI 96825 Fax: 808-396-2075</p>	<p>Engineering and Environmental Services (formerly known as Harding Lawson Associates) Harding ESE 98-1247 Kaahumanu Street, Suite 305 • Aiea, Hawaii 96701 Phone: 808-486-6009 / Fax: 808-486-7184 • Civil Engineering and Design • Environmental Services • Geotechnical Engineering • Construction Monitoring</p>
 <p>CIVIL ENGINEERING AND PLANNING CONSTRUCTION MANAGEMENT SERVICES Hawaii Pacific Engineers, Inc. 1132 Bishop Street • Suite 1003 Honolulu, Hawaii 96813-2830 Phone: (808) 524-3771 • Fax: (808) 538-0445 E-mail: hpinc@hawaiipacificengineers.com</p>	<p>HIDA, OKAMOTO & ASSOCIATES, INC. CONSULTING ENGINEERS The Commerce Tower, Suite 1120 1440 Kapiolani Boulevard Honolulu, Hawaii 96814 Phone: (808) 942-0066 Fax: (808) 947-7546</p>	 <p>ERNEST K. HIRATA & ASSOCIATES, INC. Soils and Foundation Engineering 99-1433 Koaha Place • Aiea, Hawaii 96701 Fax (808) 486-0870 • Phone (808) 486-0787</p>	 <p>SAM O. HIROTA, INC. Engineers & Surveyors 864 S. Beretania Street Honolulu, Hawaii 96813 Telephone: 537-9971</p>
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