

ASHRAE

Hawaii Chapter

HE EA MAKAMAE

A monthly publication by the American Society of Heating Refrigerating and Air Conditioning Engineers, Inc.

SY 2010-11, Issue #3 HONOLULU, OAHU, HAWAII October 2010

PRESIDENT'S MESSAGE – Michael Chang

Aloha ASHRAE Ohana,

See you at the next Chapter Meeting!

Me ke aloha pumehana,
Michael



Chapter Officers – Society Year 2010 to 2011

President: Michael Chang
President-Elect: Paul “Scotty” Scott
Vice President: Kevin Saito, P.E. LEED AP
Secretary: Barry Jim On, P.E.
Treasurer: Paul Fukunaga, P.E.

Chapter Board of Governors

Blake Araki, P.E.
Albert Hahn, P.E. (Immediate Past President)
Donna Kishi
Scott La Beau
Bill Lee, P.E.
Dr. Melek Yalcintas, P.E.

Chapter Chairperson

Attendance and Reception: John Lau
Technology Transfer: Paul “Scotty” Scott
Programs: Blake Araki, P.E.
Government Affairs: Barry Jim On, P.E.
Refrigeration: Scott La Beau
Technology: Herman Siu
Energy Awards: Bill Lee, P.E.
Historian Joseph Ting, P.E.
Memberships Promotions: Roland Suzuki
Newsletter Editor: Kevin Saito, P.E. LEED AP
Research Promotions : Archibald Makatini
Product Show: Donna Kishi
Technical Seminar: Dr. Melek Yalcintas, P.E.
Student Activities : Alayna Shima
Young Engineers of ASHRAE: Brandon Maeda
Webmaster: Mark Yamamoto, P.E.

Nov 2010

SUN	MON	TUE	WED	THU	FRI	SAT
	1	2	3	4	5	6
7	8	9	10	11	12	13
				Chapter Meeting Student Membership Night		
14	15	16	17	18	19	20
21	22	23	24	25	26	27
				Chapter BOG Meeting		
28	29	30	 <p><i>Happy Thanksgiving!</i></p>			

Announcements:

- ✓ Nominations for Energy Projects are needed (contact Bill Lee)
- ✓ Tech Seminar and Product Show: March 11, 2010 (UH East-West Center)
- ✓ Refrigeration Field Trip: 20 Jan 2011 (Mid-Pac)
- ✓ UH Career Day: TBA
- ✓ Moanalua HS Day: TBA
- ✓ Job Opening at Coffman (see Employment Opportunities tab on Chapter web page.)

Next Board of Governors Meeting:

Date: 25 Nov 2010 (Thurs – seriously???)
 Time: 11:30 am
 Location: 1132 Bishop Street, Suite 1800 (Hawaii Energy Offices)

Treasure Hunt!!!

The Chapter is looking for the oldest:

- Consulting engineering firm.
- Installed controls system
- Installed AC system
- Longest ASHRAE membership in Society/Chapter



NEXT CHAPTER MEETING

Date: 11 November 2010 (Thursday)

Where: The Willows Restaurant (901 Husten Street, Phone (808)952-9200)

Registration: Starts at 5:30 pm. (Contact John Lau jl-msn@hawaii.rr.com or Marites Calad mcalad@norman-wright.com to RSVP)

Do's and Don'ts: Starts at 6:00 pm Mr. John Gesser ("Low Pressure Drop for Air Valves is Great but Phoenix "PAINTS")

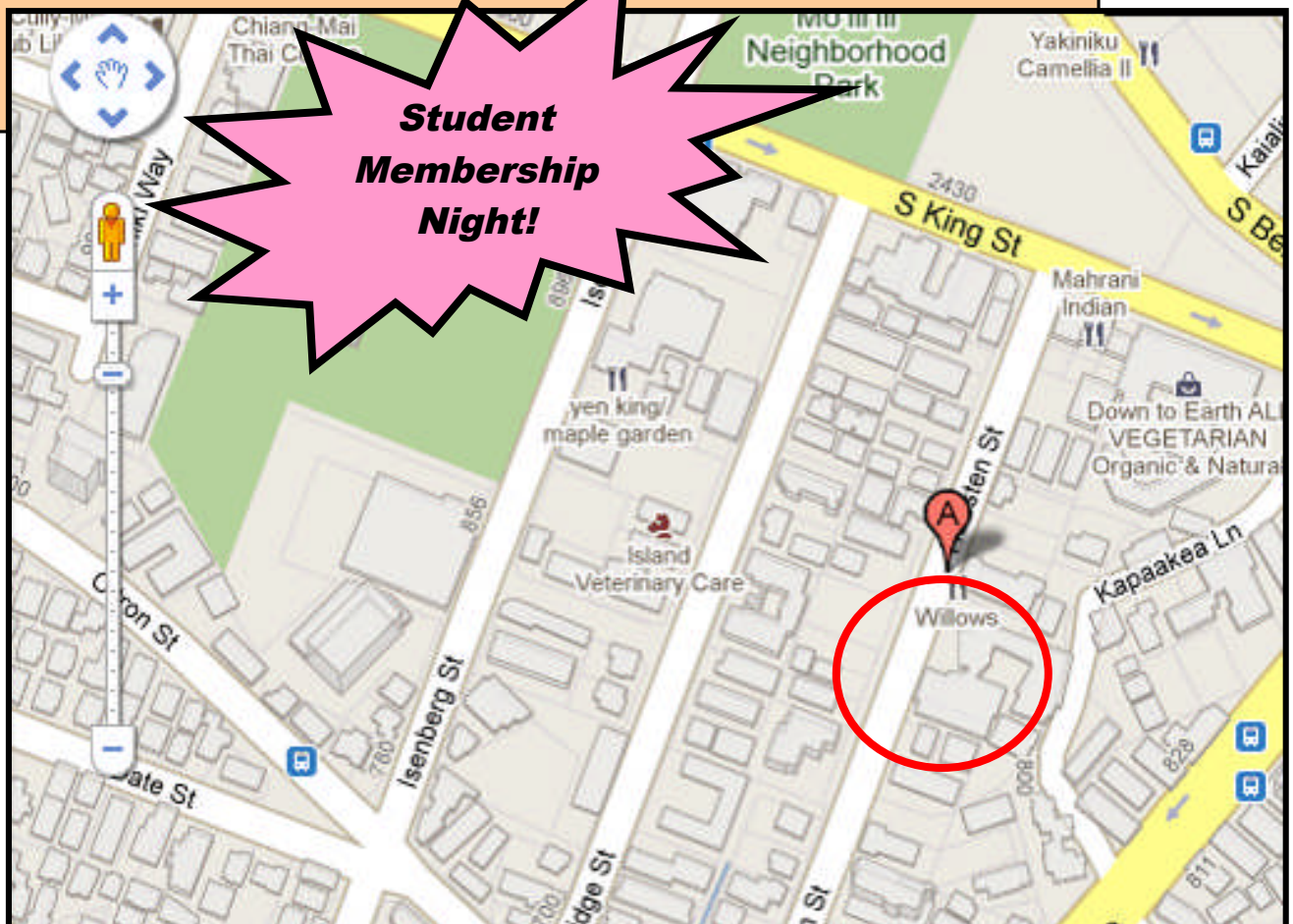
Dinner: Starts at 7:00 pm (buffet)

Main Program: Starts at 7:30 pm "Is LEED Sustainable?"

Main Speakers: George Ehara LEED AP, Dr. James Stone AIA LEED AP BD+C, and John White, LEED AP

Adjournment: 9:00 pm

Cost: \$45 per ASHRAE member; \$50 per guest; \$55 at the door registration. (Use the PayPal button on our Chapter web site for convenient payment.)



ASHRAE Hawaii Chapter – November 2010 Program

Main Topic: “Is LEED Sustainable?”

This month’s main program will feature a panel of three experts in the field of sustainability representing differing perspectives of the industry (Owner, Architect, and Contractor): George Ehara (contractor’s perspective), Jim Stone (architect’s perspective), and John White (owner’s perspective). How many times have you asked yourself if what the sales person was telling you was true? Ever wondered if sustainability equaled energy efficient? How can a building be sustainable and still use more energy than a building next to it? You have questions, they have answers. Please join us for this thought provoking evening and learn from the experts.

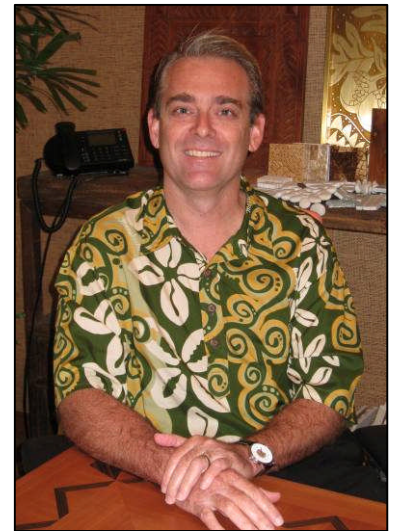
George Ehara is Swinerton Builder’s Division Manager overseeing all Hawaii operations. George is a LEED AP and has over 20 LEED Accredited Professionals on staff in Swinerton’s Hawaii office. Swinerton is fully committed to promoting sustainable design and construction in Hawaii, with over \$170M of LEED projects completed or under construction and many more in the planning stages. Swinerton was recently the first contractor recognized by Hawaii’s Department of Business, Economic Development and Tourism (DBEDT) as a Green Business through their Green Business Program



Swinerton recently partnered with Group 70 and various subcontractors in a pro bono effort to design and construct the Greenside Lanai at the Sony Open, the PGA’s first sustainable hospitality suite. Made of recycled shipping containers, the Greenside Lanai highlighted many green features, including a solar powered air conditioning system. Proceeds from the Greenside Lanai benefited the Friends of Hawaii Charity.

James L. Stone Arch. D. AIA LEED-AP BD+C is from Maui, Hawai’i and has practiced architecture for 21 years. Mr. Stone is a Principal at Group 70 International Inc. and received his Doctorate and Bachelors of Architecture degrees from the University of Hawaii at Manoa. His thesis is

titled “*Hoa äina: Placestudy’s of Sustainable Communities in Cultural and Ecological Harmony.*” He leads value driven, integrated project design teams for Sustainable; Institutional, Defense and Resort projects. Buildings designed by him have earned design awards from the American Institute of Architects, American Planning Association, City and County of Honolulu and Honolulu Division, and the Army Corps of Engineers. He is a licensed Architect and LEED® Accredited Professional. Green Building Design accomplishments include Kaupuni Village, a Net Zero Energy and LEED for Homes Platinum Community and the LEED certification of multiple projects for Institutional, Defense and Resort building types.



He is involved in the building industry and community through various avenues, including Founding Chair and Pacific Regional Representative for U.S. Green Building Council Hawai’i Chapter, Master Plan Committee member for Kaimuki Christian Church and School and a member and past board of director of the American Institute of Architects Hawai’i Chapter. His presentations on sustainability include “*Rooted Design*” for the 2005 Greenbuild International Conference, “*What Does it Take to Build Green?*” for the American Resort Development Association-National Conference, Hawaii Built & Buy Green Conference, Hawaii City Planning Officers Conference, Society of American Military Engineers and Pacific Naval Facilities.

John White is a career professional in building engineering and maintenance. He is currently the Chief Engineer at Central Pacific Plaza (CPP) and a Senior Engineer at ABM Industries, Inc. During his eight year tenure at CPP he has implemented and project managed several energy saving projects including the complete changed out of the chilled water plant, the installation of direct digital control (DDC) system on the air distribution system and an energy management system (EMS). He introduced the concept of preventive group re-lamping to CPP and has recently retro-fitted

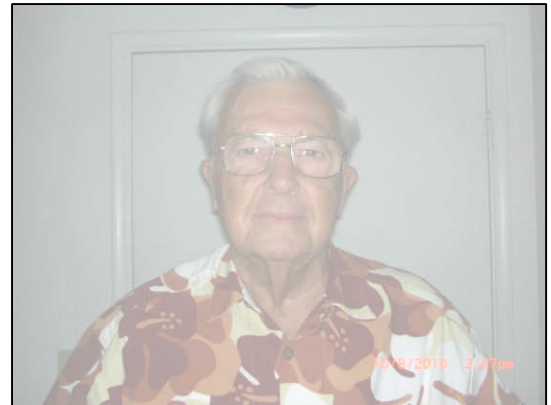


to the Super T8 Lamp and SuperMax ballasts. He has pioneered the change out of incandescent corridor down lights to super efficient light emitting diodes (LED). And, importantly, he was one of the first to initiate the EnergyStar Award for office buildings. As a result, CPP has been awarded seven consecutive EnergyStar certifications. John's efforts are not only exemplary in our community, but he has single-handedly been responsible for hundreds of thousands of dollars in energy savings for CPP. John is also a Leadership in Energy and Environmental Design (LEED) Accredited Professional (AP).

As an ABM Senior Engineer, John oversees many similar projects for other buildings as well as mentors other building engineers for ABM. He has also helped several other buildings obtain EnergyStar Awards, commissioned buildings, performed re-commissioning projects, and worked on LEED certified projects around the state.

Do's and Don'ts Topic: Variable Speed Drives: Low Pressure Drop for Air Valves is Great, but Phoenix "PAINTS"...

Do's and Don'ts



Speaker: John Gesser

Phoenix Controls Agent in Hawaii

Experience: 45 years with the HVAC industry in Hawaii covering Controls, Mechanical systems & equipment.

Introduced Phoenix Controls to the Hawaii market in 1995 with successful installations and continuing operations at the Hawaii State Department of Health at Pearl City, John A Burns School of Medicine, Pacific Ocean Science Technology Building at UH Manoa, Science & Tech UH Hilo, State Ag Science-Hilo and the Ag Science building at UH Manoa to name a few.

... The Rest of the Story!

Pressure independent

Accuracy to 5% of signal

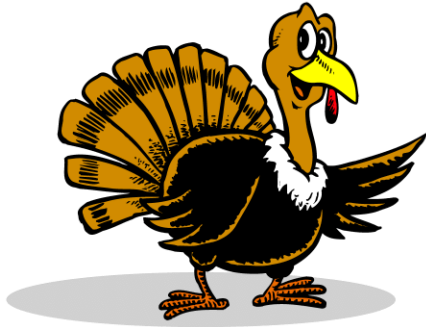
Inlet/Exit insensitivity

No recommended maintenance

Turndown – up to 20:1

Speed

ASHRAE NOVEMBER 2010 MEETING MENU



Chilled Items (2 of below)

Mixed Field Greens
Caesar Salad
Antipasto Salad
Nu Potato Salad
Bean Sprout Namul



Starch

Steam White Rice
Dinner Rolls

Hot Entrée's (3 of below)

Fried Noodles with Shredded Char Siu Chicken
Steamed Vegetable Medley with Garlic Herb Butter
Ratatouille with Fresh Basil & San Marzano Tomatoes
BBQ Chicken with Kabayaki Glaze & Grilled Scallions
Deep Fried Chicken Kara age with Ginger Soy Glaze
Soy/Star Anise Baked Chicken
Chicken Long Rice
Slow Braised Kalua Pig
The Willows Famous Curry (Shrimp or Chicken)
Condiments includes Raisins, Shredded Coconut, Peanuts & Mango Chutney

Dessert

Chefs Choice of Freshly Made Desserts

Beverage (1) Included

(Drink Tickets Will Be Provide By The Willows Based On The Confirmed Count)

Soft Drinks (Refillable)

Juices

Domestic Beer

Imported Beer

Willows Private Label (Well Drinks)

House Wine (by the glass)



Upcoming Chapter Meetings:

7 Dec - The Outrigger Canoe Club, 5:30pm (Past Presidents (Historical) Night & Christmas Party)

13 Jan 2011 - TBA, 11:30am (Research Promotion Day)

10 Feb - The Willows, 5:30pm (Membership Promotion Night)

11 Mar - Technical Seminar and Product Show

14 Apr - The Willows, 5:30pm (Student Membership Night)

12 May - The Willows, 5:30pm (Research Promotion Night)

9 Jun - TBA, 5:30pm (Installation Night)



Upcoming BOG Meetings:

(1132 Bishop Street, Suite 1800
Hawaii Energy Office at 11:30 am)

25 Nov 2010

16 Dec 2010

27 Jan 2011

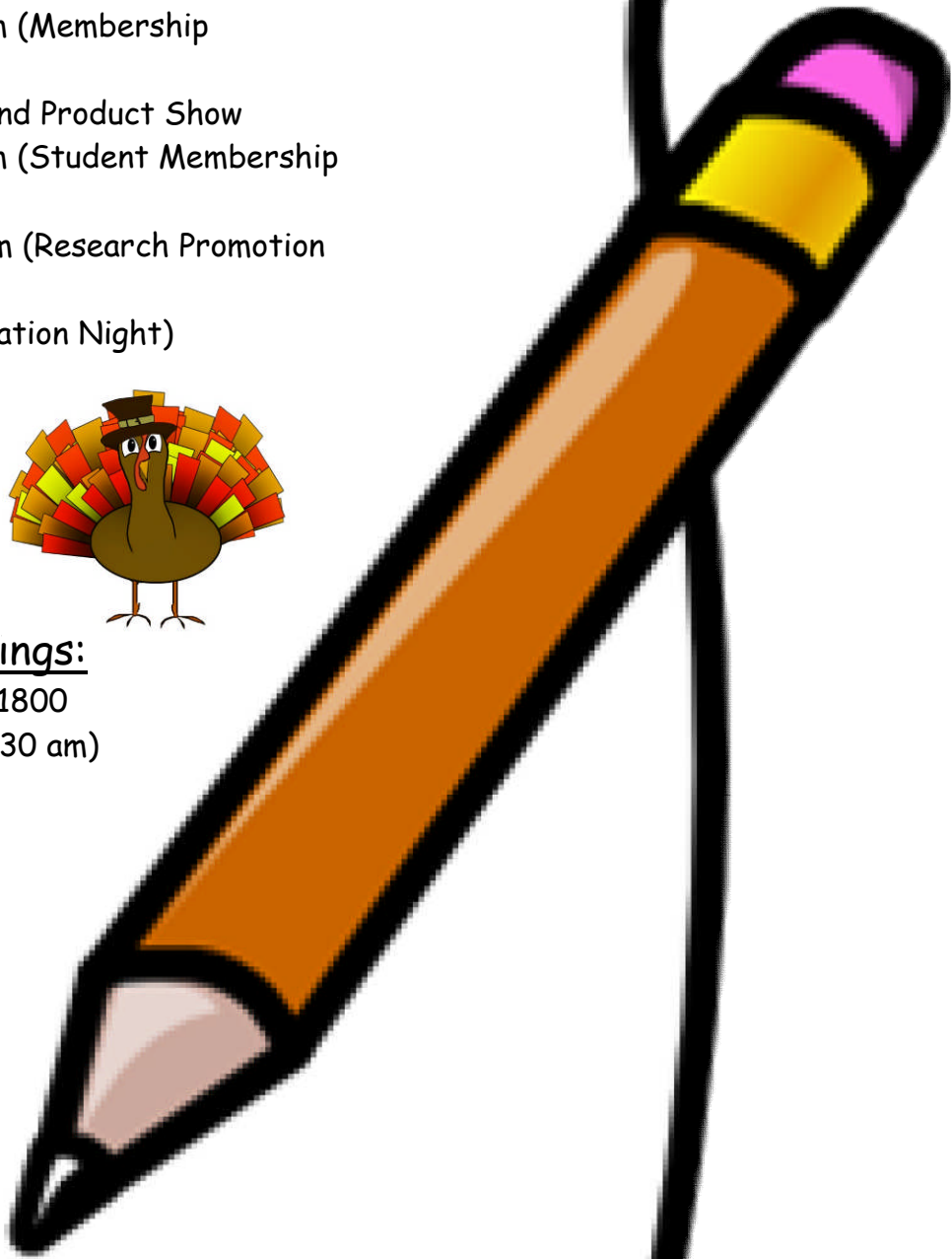
17 Feb 2011

24 Mar 2011

28 Apr 2011

26 May 2011

23 Jun 2011



From the Editor

We're nearing the end of another calendar year and I begin to reflect on what's happened this year. Did the number and intensity of the "ups" outweigh the frequency and depth of the "downs"? Let's pause and consider...

This year won't be recorded as the year that financed a family vacation to scuba dive off Australia or ski on the slopes of the Alps. True, we all struggled, tightened our belts, restructured our business plans, replotted our revenue forecasts, and dreamt of better times ahead. But was it so bad?

Do we have our health? We've seen the devastation wreaked upon Haiti, American Samoa, Pakistan, China, the Philippines, and even parts of the East Coast. Can we say we're worse off this year than others?

Do we have our wealth? Financial collapse abound, houses are in foreclosure, businesses are closing doors, and unemployment seems to rise every day? Do we have a job to go to every morning?

Do we have our family and friends? With economic pressure rising, it seems families are under more stress than ever. Friends lose their jobs and move out of state or back with their parents. Overseas conflicts claim the lives of fellow citizens; our family and friends.

Yet, through it all, there's the triumph of the Chilean miner rescue, the early signs of an economic turn around in Hawaii, and even a UH Football team that's won big on the road! It may not be the best year in recent memory but it's pretty darned good and I am thankful for any blessing sent my way. I hope you are too.

Kevin Saito, P.E. LEED AP
Kevin.saito@trane.com

"Gratitude is not only the greatest of virtues, but the parent of all others."
- Cicero (106 BC – 43 BC)



Student Activities Committee

On October 21st, members of the HCC and UH student branches toured the John A. Burns School of Medicine (JABSOM) central plant and Research Building mechanical room. The tour was conducted by Mr. Francis Blanco, Director of Projects Planning/Facilities for JABSOM, and Mr. Rob Lerseth, District Cooling Plant Manager for Board of Water Supply. Also accompanying us was Mr. Paul Fukunaga of Thermal Engineering, who designed the mechanical systems and was able to give us explanations of how everything worked.

The students were impressed with seeing the scale and scope of the mechanical systems in both the chiller plant and mechanical room and it gave them a glimpse of what they might be designing or working on in the future. This included seeing a 2700 ton chilled water plant along with the 100% outside air AHU's.

The students who attended the October "Chiller Roundtable" meeting found it very entertaining and informative and there was much discussion about it after. With November being "Student Night", we hope to have the same great student turnout.

I also met with the UH Solar Decathlon advisor and some of the students working on the mechanical portion of the project. The U.S Department of Energy Solar Decathlon is a prestigious bi-annual competition in which 20 collegiate teams from around the world are selected to design, build and operate solar-powered houses that are cost-effective, energy efficient and attractive. The homes are displayed on the National Mall in Washington, DC. The students are seeking advice on their design and would love to have feedback from our members regarding this.

As new activities are planned throughout the society year, we will be posting them in the newsletter. Any suggestions or comments for activities are always welcome.

Students Need Your Help!!!

We are seeking the donations your old ASHRAE Fundamentals Handbooks for use by the students. If you are interested in donating your handbooks please contact me.

Thank you,
Alayna Shima



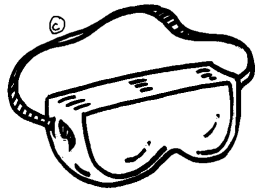
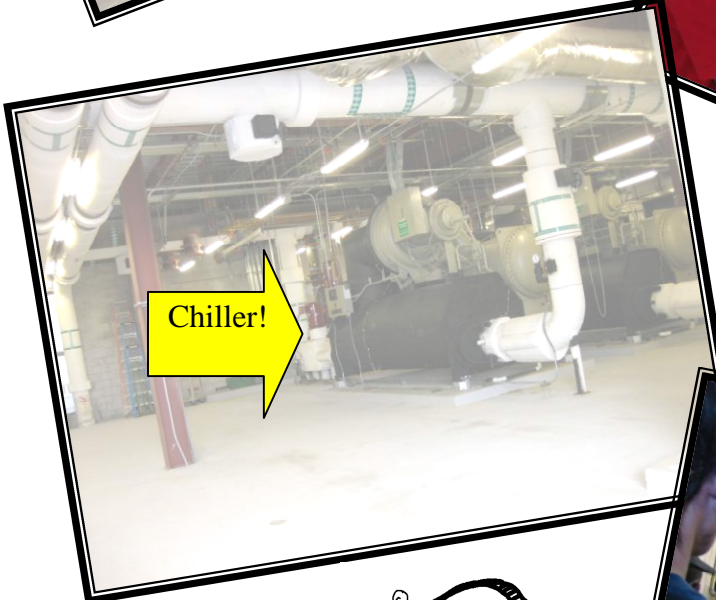
Scenes from the JABSOM Tour...



Chapter Treasurer Paul Fukunaga, P.E. starts the tour off. You can tell the alert engineering students by the way they inspect the as-built plans...



Mr. Rob Lerseth shows off the rooftop HVAC equipment



Mr. Francis Blanco discusses the penthouse mechanical room equipment.



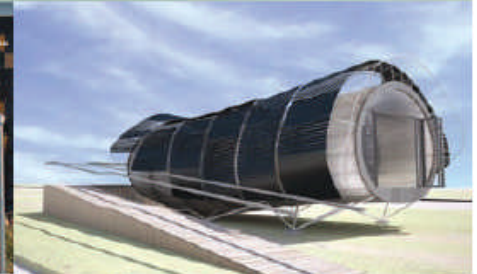
Mahalo to Alayna Shima for the photos!



GO UH!!!!

TEAM HAWAII @ The National Mall, Washington, D.C., Fall 2011

Team Hawaii - one of 20 university teams selected by the U.S. Department of Energy in the Solar Decathlon - will design and build a sustainable house leading the way to a more sustainable future



Exterior View of the Team Hawaii Schematic Design

About the U.S. Department of Energy Solar Decathlon

The Idea	Demonstrate the power of the sun
The Event	The U.S. Department of Energy Solar Decathlon 2011
The Contest	A housing competition of worldwide proportion
The Challenge	<i>Design, build, and operate a cost-effective, energy-efficient and attractive solar-powered house</i>
The Players	20 collegiate teams comprising the brightest student minds from around the world
The Result	Increased public awareness of the many cost-saving opportunities presented by clean energy products



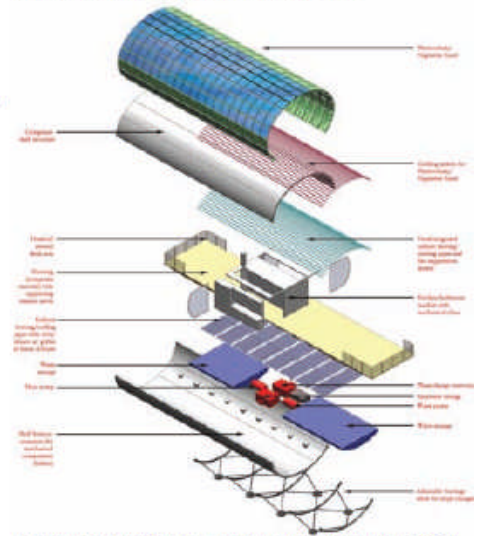
Interior View of the Team Hawaii Schematic Design

The U.S. Department of Energy Solar Decathlon challenges 20 collegiate teams to design, build, and operate solar-powered houses that are energy-efficient and attractive. **The winner of the competition is the team that best blends consumer appeal and design excellence with optimal energy production and maximum efficiency.**

About Team Hawaii

Team Hawaii is composed of students, faculty, and administration at the University of Hawaii at Manoa School of Architecture, College of Engineering, Shidler College of Business, Honolulu Community College, and industry professionals. We've created an interdisciplinary academic environment for student, faculty, and industry partner collaboration who otherwise may not have the opportunity to work together until they enter the workplace.

The project includes advanced composite and renewable materials, photovoltaics, heating and cooling systems, and novel house design tailored to tropical climates like Hawaii. The design seeks to develop innovative new ways to use materials, energy, and systems, and promotes fresh ways of living for a more sustainable future.



Exploded Systems Diagram of the Team Hawaii Conceptual Design

For more information on the Solar Decathlon, including media coverage and other details, please visit the U.S. Department of Energy Solar Decathlon 2011 Official Website (<http://www.solardecathlon.gov>)

For more information on the Team Hawaii Solar Decathlon effort, please visit <http://www.solar.hawaii.edu>

CONTACT INFORMATION: If you are interested in finding out more about the project, or if you'd like to make an in kind donation, please contact: Associate Professor David Rockwood, School of Architecture, University of Hawaii at Manoa, email: rockwood@hawaii.edu, phone: 808-956-8430. If you'd like to make a cash donation, please contact UH Foundation Gift Officer Harriet Cintron, email: harriet.cintron@uhf.hawaii.edu, phone 808-956-8855.

Research Promotion:

The Full Circle deadline is quickly approaching!

Don't miss this opportunity to make a leadership contribution to the RP Campaign and earn RP PAOE points!

Full Circle requires an Honor Roll level gift (\$100) from each Chapter Officer and the RP Chair. Completing Full Circle sends a message to all of your Chapter Members and donors that your Chapter's BOG 'walks the talk' and does not ask anything of others that they are not personally willing to do!

You can contact your RP Chair Archie Makatini at archibald.f.makatini@jci.com to make your contribution.

Your Chapter Officers have all pledged to fully support the ASHRAE Research Promotion campaign. We ask for support from the Chapter Membership to contribute as best you can to this vital and necessary program.

As you know, RP funds are used to sponsor essential research that guides government policy, shapes our industry, and keeps us moving into the 21st Century.

Mahalo and Aloha for your support.

Archie

Congratulations!

Your Chapter has achieved Full Circle for the 2010-11 Campaign!

OUR GOAL!!!

Join all of your Chapter Officers and RP Chair and support ASHRAE Research TODAY!

Technical Seminar and Product Show

When: March 11, 2011 (Friday)

Where: East West Center

Hawaii Imin International

University of Hawaii, Manoa Campus

Address: 1777 East West Road

Honolulu, HI 96848

www.eastwestcenter.org

Technical Seminar: \$125/member, \$150/guest, \$175 at the door

Product Show: Free Admission

Product Show Booth: \$600/booth, \$1100/two booths, \$1400/three booths

Contact: Donna Kishi (armi@hawaii.rr.com phone:676-3700 for Product Show)

Dr. Melek Yalcintas, P.E. (melek@ameltech.com phone: for Technical Seminar)



Technical Seminar - "Controls Relationship to Sustainable O&M"

The main topic of this year's Technical Seminar will be HVAC controls and the integration of commissioning and testing and balancing (TAB.)



Tentative Schedule of events

- ✓ 8:00 am Keynote Speaker – Ron Jarnagin – ASHRAE Society President-Elect
- ✓ 8:30 through 10:30, 2 sessions with Dr. Tom on Generic Controls, and A Commissioning Agent (TBA) with a Test and Balance contractor (TBA)
- ✓ 10:45 through 11:45 – Time to Visit the Product Show (Donna Kishi subcommittee Chair)
- ✓ Lunch is included as a part of the registration fee
- ✓ 12:15 through 2:15 – Panel Session of Engineer (TBA), T&B (TBA) , Cx (TBA), etc. with Moderator (TBA), Q&A
- ✓ 2:15 through 2:45 – Time to Visit the Product Show and Raffle prize drawing
- ✓ 3:00 through 4:15 – Closing Statements and Evaluation forms

Please contact Dr. Melek Yalcintas at melek@ameltech.com (Chair) or Dean Borges (Co-Chair) at deanborges@aol.com to volunteer as a speaker or to suggest a topic.



Membership Promotion

Aloha ASHRAE Members,

To ensure the future of the Society and the industry, ASHRAE is committed to advancing its programs and services for young members through helping them build their professional foundations.

Our next monthly meeting on 11/11/10 will serve as Student Membership Night. Any Member that brings a student guest will receive a \$10 Starbucks card. Engineering students are welcome to come to this meeting free of charge and dinner will be served.

Please RSVP to me if you will be bringing a student guest.

Thank you,
Roland Suzuki
Membership Promotion Chair
rsuzuki@standardhawaii.com



Chapter Technology Transfer

Please feel free to contact me
ESIKAILUA@aol.com if you have any issues
pertaining to chapter programs, technology,
energy, refrigeration and governmental affairs
that need my attention immediately. **Otherwise,**
contact the following chairperson for the various sub-committees:



1. Chapter Programs Chair Blake Araki - blakea@hawaii.edu
2. Technology Chair Herman Siu - hsiu@trane.com
3. Energy Awards Chair William Lee – leeb@coffman.com
4. Refrigeration Chair Scott LaBeau - scott.labeau@dmghvac.com
5. Governmental Affairs Chair Barry Jim On -
bjimon@insynergyeng.com

Let us know if you have any technical subjects that we should consider for
our monthly meetings.

Mahalo. *Scotty.*

ASHRAE HAWAII REFRIGERATION CHAIR

This year's Refrigeration Tour will be hosted by the Mid-Pacific Institute in beautiful Manoa Valley on 20 January 2011 (Thursday) from 5:00 pm to 6:00 pm.

Mid-Pacific Institute is a pre-Kindergarten through Grade 12 private school located in Manoa Valley. There are over 1500 students from all parts of the State, from other states, and from other countries. Established 140 years ago, Mid-Pac has thrived as a college preparatory school "addressing excellence through intellectual, social, cultural, spiritual, and physical achievement."

The tour will focus on the ice storage chiller plant recently constructed for Mid-Pac that serves as the backbone of their central air conditioning strategy for the campus.

The tour will be conducted by RJ Ritter, Contracting Solutions Manager, Trane Northwest District, and parking/attendees are limited.

Stay tuned for details!

Scott LaBeau



And now for something completely different...

Call for Abstracts

International Conference on Disaster Management

Topics

Presentations are invited from any one of the following or related areas:

- Emergency preparedness
- Risk analysis & assessment
- Detection, warning, & evacuation
- Communication mechanisms
- Immediate relief work
- Infrastructure renewal & reconstruction
- Infrastructure planning & design
- Water supply and housing
- Project management
- Rehabilitation
- Social infrastructure
- Health planning & relief
- Pandemic Management
- Disasters by terror
- Natural disasters
- Disastrous effects of climate change
- Disaster incidences and case studies
- Disaster prediction
- Disaster statistics

Special sessions organized by participants are welcome; please contact the organizers with your proposals.

Tentative Program

November 15: Inauguration & Conference Sessions
November 16: Conference Sessions
Closing Session, and Dinner

Venue

Univ of Hawaii Campus Center, Manoa

Website

<http://iiirr.ucalgary.ca/conference2010>

Organized by



(International Institute for Infrastructure Renewal & Reconstruction)

November 15-16, 2010

University of Hawaii,
Manoa, Honolulu

Hosted by

College of Engineering

University of Hawaii

Co-sponsored by



American Society of Civil Engineers



Abstract Submission

Please submit a 200-300 word abstract of the proposed presentation by email to Dr. Janaka Ruwanpura at janaka@ucalgary.ca by **Oct 15, 2010**.

Presentations

There will be no published proceedings, but power point presentations will be the recommended mode of dissemination.

Special Issue

Selected presentations will be published in a special issue of the *International Journal of Disaster Resilience in the Built Environment* www.emeraldinsight.com/ijdrbe.htm

Registration Fee: \$295 / person (includes daily lunch and dinner).
Make check payable to "RCUH," and mail with a cover letter to the attention of the Conference Chair before Oct 31, 2010.

Conference Chair

Professor Amarjit Singh
University of Hawaii at Manoa
Dept of Civil & Environmental Engrg.
2450 Dole Street, Holmes Hall 383
Honolulu, HI 96822, USA.

Co-Chair

Dr. Michelle Teng
University of Hawaii at Manoa
teng@eng.hawaii.edu

IIIRR Contact

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University of Calgary
Tel: +1-(403)-220-6892
janaka@ucalgary.ca

