



ASHRAE

Hawaii Chapter

HE EA MAKAMAE

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

SY 2008-09, Issue #3 HONOLULU, OAHU, HAWAII October 2008

NOVEMBER DINNER MEETING

STUDENT NIGHT

Thursday, November 13, 2008

Tech Session: The DO & DON'T For Mechanical System Layout

Main Program: A New Energy Code for Hawaii

- 5:30-6:00 PM Registration
- 6:00-6:30 PM "DO & DON'T" Technical Session
- 6:30-7:30 PM Attitude Adjustment (Open bar – 2 drink tickets)
- 7:00-7:30 PM Dinner & Committee Reports
- 7:30-8:30 PM Main Program

REGISTRATION: RSVP Kevin Saito kevin.saito@trane.com and remit payment to ASHRAE Hawaii Chapter, P.O. Box 3916, Honolulu HI 96812-3916 by November 11, 2008. Otherwise, for expedient registration, remit payment via "PayPal" by clicking <http://hawaii.ashraechapters.org>.

RSVP (Pre-registration): All pre-registrants (show or no show) will be billed accordingly.

- ASHRAE Members: \$40 per person
- Non-Member of the above organizations: \$45 per person

No RSVP (Registration on-site):
Regardless of Members or Non-Members: \$50 per person

MAIN PROGRAM:

A New Energy Code for Hawaii

This month's main program will feature **Howard C. Wiig**, Energy Analyst, Strategic Industries Division, State Department of Business Economic Development & Tourism (DBEDT).

Mr. Wiig will highlight the 2007 State Law mandating Hawaii to adopt statewide the International Code Council (ICC) "suite of codes".

The said codes include the current issue of the International Energy Conservation Code (IECC).

The law was passed in response to concerns about Hawaii being one of the last "home rule" states with wide disparities between county building codes.

The resulting Building Code Council is under the guidance of State Comptroller Russ Saito.

The IECC subcommittee carefully reviewed the IECC-2006 and modified the mainland code to suit Hawaii's unique conditions.

The differences between the "Hawaiianized" version of IECC 2006 and the current ASHRAE

DIRECTIONS TO THE WILLOWS

901 Hausten Street, Honolulu (Phone: 952-9200)

FROM DIAMOND HEAD (Westbound): Take H-1 and exit at Kapiolani Blvd cut-off. Go past University Avenue & turn RIGHT at Hausten Street.

FROM EWA (Eastbound): Take H-1 and exit at Isenberg Street cutoff. Turn LEFT on King Street and take the 2nd RIGHT into Hausten Street.

90.1-1999 energy code will be described. The results of the recent ICC 2009 code hearings which shaped IECC-2009 will also be described.

Howard C. Wiig was born and raised in Honolulu. He completed his undergraduate studies at University of California Berkeley in 1964 and his graduate studies at University of Hawaii Manoa in 1968. He was a free lance journalist worldwide while he was undergraduate and moved on to serve as State of Hawaii and as president of For the past three has devoted his energy analyst at the last 8 years, he also serves as Board Chairman for Lord & Trigg.



from 1960 thru 1968, pursuing his graduate studies. He legislative aide in the Legislature from 1972-73 Pegasus from 1973-76. decades since 1976, he public service as an State's DBEDT. In the

His professional areas of focus include Marine Debris Cleanup, Daylighting, Dark Skies, Lighting & Human Performance, Cool Roofs/Cool Attics, Commercial & Residential Energy Codes, Incentives for Efficiency Measures in Buildings. Some of his professional affiliations were as follows: President of Illuminating Engineering Society (Hawaii), Co-founder & President of Dark Skies International (Hawaii), President of DBEDT for Business Toastmasters Club. Some of his publications include numerous articles on lighting efficiencies and building technologies in technical & trade publications. One of his professional awards include "Top 50 Innovations in American Government" presented by Harvard University, Kennedy School of Business.

engineering firm in Charlotte from 1990-92 and for a mechanical contracting company in Salisbury from 1992-94. During that same period of time, he taught AutoCad and Introduction to Mechanical Engineering at Central Piedmont Community College and UNCC, respectively. He won two of the three international awards from Autodesk.

His consulting and contracting experiences combined with his teaching experiences have provided him a solid foundation to serve well as Design Services Manager for Anvil International worldwide. He has been with Anvil International since 1995. In his current position, he is one of the presenters at their semiannual training sessions for sales personnel, representative agents, and distributors. He also assists in the product development and marketing for Anvil International.

TECHNICAL SESSION:

The DO & DON'T of Mechanical System Layout

The speaker for this session will be **David Campbell**, Design Services Manager for Anvil known as Grinnell), Gruvlok & hangers Portsmouth, New Campbell would like to International to the cover the evolution of will then demonstrate economic analysis of layout with cost savings focus on some of the Anvil's products, such as the suction diffuser, tri-service & balancing valves showing their versatility and different applications with actual cost savings data.



International (formerly manufacturer of with 2000+ employees in Hampshire. Mr. briefly introduce Anvil attendees. His talk will Anvil as a company. He some examples of the mechanical system alternatives. He will also

David A. Campbell received his Bachelor of Science in Mechanical Engineering from The University of North Carolina at Charlotte (UNCC) in 1989. After graduating from UNCC, he worked as a piping designer for a consulting

"DO & DON'T Technical Session will be held monthly. To the other product manufacturers or service companies, who are interested to conduct this session, make your reservation with Kevin Saito. Cut \$250 check and make it payable to ASHRAE Hawaii Chapter. Send it to P.O. Box 3916, Honolulu HI 96812-3916. Otherwise, remit your payment via PayPal.

Go to our chapter website at www.hawaii.ashraechapters.org.

President's Message – Joseph K. Ting, P.E.

On October 9th, the ASHRAE Hawaii Chapter was fortunate to have DAGS Comptroller & Director Russ K. Saito to speak as an authority from the State of Hawaii on the subject pertaining to energy savings performance contract (ESPC). It was well received by the engineers, owner representatives, contractors and UHM students, who attended his presentation.



His talk highlighted the ESPC enabling law & its financing mechanisms, which allow his Agencies to maximize their use of available alternative financing contracting mechanisms. Such mechanisms include the energy-savings contracts, the municipal lease and purchase financing, and, the utility energy efficiency service contracts. Energy-savings contracts shall provide significant opportunities for making state facilities more energy efficient at no net cost to taxpayers. He walked through with the attendees the ESPC implementation strategy. The participating Agencies are as follows: Department of Accounting and General Services, Department of Agriculture, Department of Business, Economic Development and Tourism, Department of

Defense, Department of Education, Department of Hawaiian Homelands, Department of Health, Department of Public Safety, The Judiciary, and University of Hawaii. Our chapter PP Sam Gillie thanked Comptroller Russ Saito for a great presentation.

Our chapter PP Bob Hann thanked his fellow PP Ken Richardson for providing us an excellent & entertaining presentation on the DO & DON'T of Today's Controls. Listed below is the summary of his talk..... tidbits for a better building controls system:

- Use Controls Specification Builder.
- Delete the Filter Alarm. Instead, specify a Differential Pressure Transmitter.
- Delete the High Static Alarm.
- Delete the CHW Supply Temp. Use common temperature reading from the chilled water plant.
- Coordinate with EE to have Duct Smoke Detectors furnished by Fire Alarm Contractor (not A/C Contractor).
- Don't specify Computer Workstations/Computer Laptops if not needed. Instead, specify Web Server, which should provide unlimited users (in lieu of single users) in accessing through Internet or Intranet.
- Provide points list and schematic diagram for each system.
- Know the differences between "Thermistors" and "RTD Sensors". Specify only what is applicable.
- Amperes vs. Current Switches: Always use an "Amperes" switch.
- Differentiate "Room Sensor w/Adjust, Override & Status" and "Digital Display"
- Do not use "Differential Pressure Switches" for Pump and Fan Status. Use an "Amperes" transducer.



On behalf of the deceased member's family, Joe Tanaka (formerly Vice President of Heide & Cook Limited), HCL VP Operations Ross Sasamura, P.E. received the Member's certificate of the late Joe Tanaka.

To top off the evening, our RP Chair Marites Calad prizes for silent auction. A soon-to-be member, Keith a great bottle of Napa Valley Duckhorn together gorgeous wine tumblers for \$55 (market value at elect Albert Hahn won the other silent auction bid Chardonnay + Austrian Riesling for \$20 (market addition to that, Albert also won the RP 50/50 Raffle his \$65 share back to the Chapter. What a lucky



donated some exotic Yamanaka garnered with a set of \$85). Our president-for a French value at \$54). In \$130 pot and donated evening for Albert!

For those of you who missed the past two events, come on and participate at our future meetings held on every second Thursday of the month at The Willows. We'll sure entertain you at great length for you to bring back invaluable technical information to enhance your professional career through our chapter's continuing educational process...."LEARNING".

As such, I would like to share our mission statement with all of you. Learning is the fundamental goal of ASHRAE Hawaii Chapter. To this effect, it is the activity that binds the HVAC&R community together, and our success as a chapter in fostering it, is what determines our ultimate value to the Society and to the environment around us. Learning includes discovering new truths about nature (AIR, WATER & ASHRAE MEMBERS, etc.), creating technologies, and above all, developing a lifetime learning habit that ensures the continuing ability to acquire new ideas and perspectives.

CHAPTER PROGRAMS – Kevin Saito, P.E.

My apologies for missing the October meeting but family matters took precedence. I hope you found the DO & DON'T technical session with Ken Richardson and the ESPC presentation by Russ Saito interesting and informative. The upcoming October meeting will feature Anvil International for the technical session and our main program speaker will be Howard Wiig from the State of Hawaii Department of Business and Economic Development and Tourism. In past presentations, Howard has presented interesting topics such as efficient lighting and the problems resulting from the Pacific Gyre, a large swirling mass of waste plastic that is gathering in the Pacific Ocean the size of Texas. Howard is a knowledgeable and interesting speaker with thought provoking topics and a way to make you go "hmmmm". I look forward to these presentations and to seeing all of you again. You still have the opportunity to sign up for future technical sessions, so please let me know if you're interested and I'll find a session that will meet your schedule. Mahalo for your support!

CHAPTER TECHNOLOGY TRANSFER – Albert Hahn, P.E.

Insynchronizing with the recent ESPC talk by Russ Saito, we would like to share with our membership an article, which was published by Rebuild Hawaii in the Spring of 2003. This article entitled, "ESPC Cogen in Kona Hospital" was contributed by NORESKO Tracy Taoka.

The Hawaii Health Systems Corporation (HHSC) and NORESKO have recently completed the first in a series of Energy Savings Performance Contracting (ESPC) projects for the Statewide Hospital system. The project at the Kona Community Hospital includes a cogeneration system which produces 455 kilowatts of prime power electricity for the hospital. Waste heat is captured and is used to produce domestic hot water and chilled water (via an absorption chiller). HHSC and NORESKO are proud to report that the cogeneration plant has been in operation since mid February with all applicable interconnection agreement documentation executed with Hawaii Electric Light Company, Inc. Other Energy Conservation Measures (ECMs) at the Kona Community Hospital include:

- ◆ Chiller plant upgrades
 - New energy efficient screw chiller
 - Primary-secondary pumping
 - New energy efficient cooling tower
- ◆ Lighting upgrades
- ◆ Kitchen exhaust system controls
- ◆ New Energy Management System
- ◆ Domestic water booster pump upgrades
- ◆ Premium efficiency motors
- ◆ Window tinting

The project also includes 12 years of full coverage maintenance on the cogeneration equipment (generator, engine, heat exchangers). Total cost of the project was \$4,044,900 and NORESKO will be guaranteeing savings in excess of \$5 million over the twelve-year term. HHSC and NORESKO were also in the construction phase of two additional projects at the Hilo Medical Center and Kauai Veteran's Memorial Hospital at that point in time. These projects also include cogeneration and the plants are scheduled to be on line in May and July of 2003, respectively.

MEMBERSHIP PROMOTION – Min Zhong, P.E.

Final call for chapter electronic roster updates – Mark on your calendar November 15, 2008 as the cut-off date!

To those of you who have sent in your updated line-cards, we thank you for your supports. As companies change their products, which they represent, so do the line cards. Therefore, we need your most recent line-cards on our 2009 Chapter Roster to be published on January 1st, 2009. If we do not hear from you by the closing of business on November 15th, we would proceed with what we have on-hand. For your convenience in remitting your payment other than by check, we have requested from our webmaster to provide you a PayPal button if chose to pay by credit card.

The Chapter BOG requested the committee to update the said electronic roster every year, as a result of the mobility of each member as well as the changes of supplier/vendor representation. With the advent of information technology, our chapter is blessed in keeping-up with the dynamic of our HVAC&R community.

RESEARCH PROMOTION – Marites Calad

Last membership meeting was a Research Promotion night. Raffle tickets were sold at 10 for \$5 dollars and a total of \$130 was collected. The idea was to have the winning ticket keep 50% of the collected money and the other 50% donated to ASHRAE Research Promotion on his/her behalf. The member with winning ticket, Albert Hahn, our chapter President-elect and a very proud new father, decided to donate his share of \$65 back to ASHRAE Research Promotion.

We also had our first “Silent Auction” for this year. There were two packages members could bid on:

- 2004 Duckhorn Cabernet from Napa Valley + (2) Wine Tumblers (valued at \$85.00)
- 2004 French Chardonnay & 2005 Austrian Riesling (valued at \$53)

These items were donated by Norman S Wright- Pacific. The winning bidders were Keith Yamanaka and Albert Hahn. We collected a total amount of \$75. We raised a total of \$205. Thank you to Albert for his generosity, the auction winners and to all who participated in the raffle contest.

For registration information on the 2009 Technical Seminar & Product Show, click on this URL address and pull down the “Events” menu <http://hawaii.ashraechapters.org/events.html>. Read the chapter president’s invitation; complete the registration form and select/reserve the specific booth as shown on the Product Show layout. Reserve ASAP a product show booth or a place for the technical session at East West Center. Remit your payment via PayPal or mail-in completed registration form with your check payable to ASHRAE Hawaii Chapter – RP Committee.

HISTORIAN – Harendra Panalal, P.E.

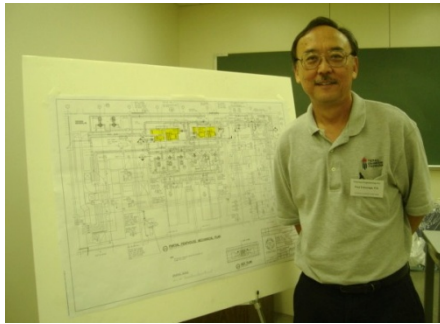
In continuing the work started last month, the selected documents found in the two boxes of historical records were scanned into CD file. As the 215 MB file is too large to be posted in our website, anyone who is interested to have a copy of the said CD of historical records can request by emailing me at henryP@leisinc.com.

Although the said records dated from 1969 to 1997, nonetheless, there are missing records from 1978 to 1988. Anyone who knows the whereabouts of the historical records from Giovanni Chung (SY 1978-79) to Kevin Chong (SY 1987-88), please let Henry know, so that he can complete the said records. Moreover, it appears that no historical record has been filed from SY 1997-98 to date, other than what was recently submitted by Dave Waller (SY 2001-02).

STUDENT ACTIVITIES – Paul Fukunaga, P.E.

The ASHRAE-UHM Student Fair was held on October 23, 2008 at Holmes Hall, University of Hawaii at Manoa (UHM) from 9:00 AM to 11:45 AM. Following the fair, there was a short presentation on the roles of mechanical contractors, suppliers, and consulting engineers in the HVAC industry for the students.

Based on the positive experiences reported by the UHM students who attended the January 2008 meeting in New York, the Board of Governors decided to set aside funds for sponsoring several mechanical engineering students to attend the ASHRAE Winter Conference in January 2009 to be held in Chicago. At the October Chapter meeting, several UHM ASHRAE Winter Conference described their positive experiences of their trip to New York where they met other representatives of the HVAC&R community. The generosity of those participating ASHRAE-UHM Student Branch companies that initiated their efforts to continue in providing the financial support for the student branch at University of Hawaii at Manoa.



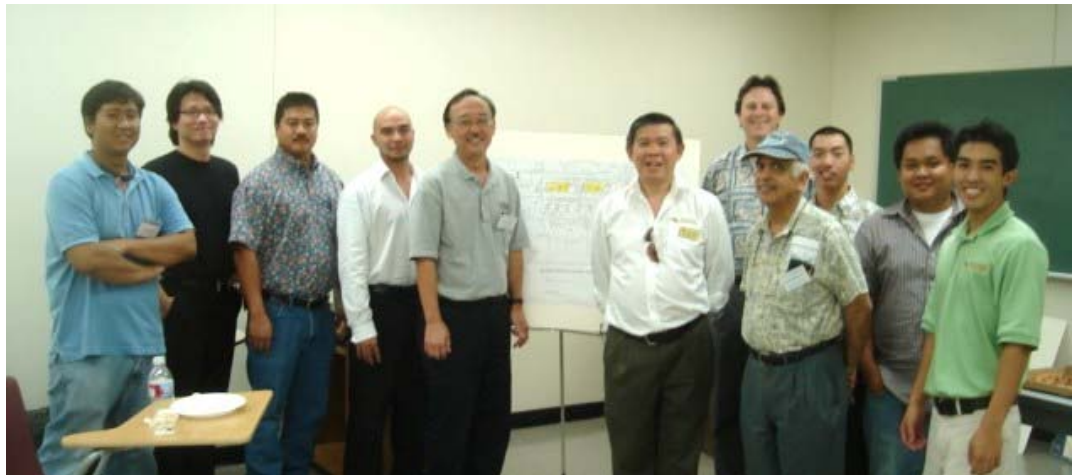
the January 2008 meeting in New York, the Board of Governors decided to set aside funds for sponsoring several mechanical engineering students to attend the ASHRAE Winter Conference in January 2009 to be held in Chicago. At the October Chapter meeting, several UHM ASHRAE Winter Conference described their positive experiences of their trip to New York where they met other representatives of the HVAC&R community.

dedicated this section for the companies that initiated their efforts to continue in providing the financial support for the student branch at University of Hawaii at Manoa.

Participating Companies/Institutions at ASHRAE-UHM Career Fair

CONSULTING, CONTRACTING & MANUFACTURER REPRESENTATIVE FIRMS

Admor HVAC
 Alakai Mechanical Corp.
 Delta Controls
 DMG Corporation
 Dorvin D. Leis Company
 Heide & Cook Company
 HSI Mechanical
 InSynergy Engineering Inc.
 Island Controls
 Johnson Controls, Inc.
 MAPCO
 Norman S. Wright
 Standard Sheet Metal
 Thermal Engineering Corp.



INSTITUTIONS

ASHRAE Hawaii Chapter
 University of Hawaii at Manoa



BOARD OF GOVERNORS' MEETING MINUTES – 9/25/08

1. Meeting called to order by Joseph Ting at 11:40 AM.
2. Attendees - Joseph Ting, Paul Fukunaga, Sam Gillie, Ken Richardson, Rick Schnarr, Phil Townsend, Mofazzal Mir, Kevin Saito, Harendra (Henry) Panalal, and Albert Hahn + his 4 months old baby daughter.
3. The 8/14/08 meeting minutes was moved and approved unanimously.
4. Articles for newsletter due date needed to be submitted by 9/28/08 (Sunday).
5. Kevin summarized the upcoming programs.
 - Oct. 9th meeting – Russ Saito to speak on ESPC / Ken to present DO & DON'T of Today's Controls
 - Nov. 13th meeting – Howard Wiig to speak on Hawaii Energy Code / Dave Campbell to present DO & DON'T of Mechanical System Layout
 - Dec. 11th meeting – Panel of Speakers on "InSynchronization of MEP Engineering in Design/Construction" / Christmas Party
 - Discussion on how to handle & resolve the crowd during the "DO & DON'T Technical Session" – Use the stage, setup a partition or find a dedicated room; Purchase a screen if stage needed to be used for this session.
 - Continue with the self-introduction but keep it short! Close the meeting program at 8:30 PM and announce to attendees to stay if preferred... to discuss further with speakers or to network with others... otherwise, meeting should be adjourned.
6. Mofazzal requested for additional help at registration desk; Mike to provide the list of registrants who paid via PayPal.
7. Henry reported only Dave Waller completed his section; other past presidents (PP) need to complete their write-ups. Upon receipt from past historian Andrew Pong the chapter historical records, Henry scanned 1/3 of them and handed the CD to Joseph. He suggested that Boyd Chee and/or John Gesser should provide the write-up for the deceased PP. Most of them have already been recorded.
8. Sam Gillie received two certificates for Life Member Lloyd Funada & deceased Life Member Joe Tanaka. They will be honored accordingly at our monthly meeting.
9. Paul distributed the Society's procedure for setting-up scholarship. It was discussed if the money in our Merrill Lynch's account was meant for the scholarship. Sam has indicated that it was not specifically meant for student scholarship. Nonetheless, the chapter provided the UHM Student Branch \$2000 in Society Year 2007-08. Joseph has directed Paul to setup a scholarship committee together with Rick Schnarr and Sam Gillie as his committee members. The said committee will provide BOG the guidance on how to disburse the scholarship to the student branches (UHM & HCC).
10. Henry brought up the setting up of a reference library of HVAC books including ASHRAE Handbooks, Standards and Guidelines. Sam suggested that the Chapter pays for a membership at UH Hamilton Library so that the said library can receive its own handbook on an annual basis. Henry will provide us a report if the said library would accept our offer and he should include the designated person's name at UH Hamilton Library, who would be the recipient on behalf of the library.
11. ASHRAE-UHM Student Branch's Career Fair will be on 10/23/08 at Holmes Hall.
12. Hawaii Chapter Section – It was suggested that a section be established in neighbor islands such as, Big Island or Maui. Paperwork is available in ASHRAE MCO We need at least 10 names to establish a section in any of the mentioned islands.
13. A contract was signed for the rental spaces at East West Center to hold the chapter's special event, 2009 Hawaii Chapter Technical Seminar & Product Show on February 27, 2009. Flyer, invitation and layout floor plan for the product show need to be prepared at the earliest possible. Ken will take charge of assigning the product show booth based on "first-come first served" registration. Barry is still working on the list of speakers for the technical seminar.
14. The Golf Tournament's flyer and registration form is now available on our website. PayPal button is provided.
15. "Bike Program" - Phil reported that it would be best served if the Chapter launched a pilot project starting at University of Hawaii campus in Manoa.
16. Meeting adjourned at 12:40 PM.

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