



ASHRAE

Hawaii Chapter

HE EA MAKAMAE

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

SY 2011-12, Issue #3 HONOLULU, OAHU, HAWAII November 2011

PRESIDENT'S MESSAGE – Paul Scott



Aloha Fellow ASHRAE Hawaii Chapter Members:

Your officers and committee members continue to be working hard to serve you. The October meeting turnout was good. Honolulu Authority for Rapid Transit Authority spokesperson, Scott Ishikawa updated us on the status of Honolulu Rail Project. In addition to that, Griswold Controls Manager, Ken Luther provided an interesting session on the increasing use of pressure independent control valves during our "Do's & Don'ts" technical session. Mahalo to both of our speakers.

We are currently working on the upcoming Christmas Party to be held on 12/15/11 (Thursday) at the Willows Restaurant. As in the past, it is a "Past Presidents" Night. We look forward to see some of our Past Presidents. It will be a fun night with much fellowship.

We are also working on the Annual Technical Seminar to be held on 2/24/2012 at the East-West Center located at the University of Hawaii. Society Past President Kent Peterson, P.E. will be the keynote speaker to speak on the topic of "High Performance Building Design". Please look out for more information on this event.

This month, ASHRAE Distinguished Lecturer Ray Patenaude, P.E. will be our main program speaker. He has 34 years experience in the Building Systems field and I am sure he will give a great presentation on "Designing Buildings in Hawaii's Hot & Humid Climate". Ray is located in Florida and they have many similar problems that we experience here in Hawaii. I know that all our members will find his talk interesting and informative. Don't Miss It! Please remember that it is Students Night and please offer to sponsor one of our Student Members from UHM and HCC Student Branch.

Our hard working CTTC Chair Kevin Saito and RP Committee Chair Dean Borges have organized a Frizbee golf tournament, which was originally scheduled for November 5th. Due to tight schedule, it will be postponed to sometimes in January. Watch for the next announcement.

By now, you must have heard that our immediate Past President Lynn Bellenger has passed away on 10/19/11. Let's send our Aloha to the Bellenger family in this time of loss. Please keep her family in your thoughts and prayers. She served as Society President during SY 2010-2011. Mahalo. Scotty.

Snapshot of Chapter Activities - November 2011

SUN	MON	TUE	WED	THU	FRI	SAT
30	31	1	2	3	4	5
	Halloween Day 		Technical Tour: UHM C-MORE Microbiology Laboratory - Start at 10 AM			
6	7	8	9	10	11	12
		Election Day		Mthly Mtg Topics: 1. Designing Bldgs in Hot & Humid Climates 2. Specifying Storage Tanks for Potable Hot Water	Veteran's Day 	
13	14	15	16	17	18	19
				BOGs Meeting: ISE 3 rd Floor Conference Room (828 Fort Steet Mall) – Start at 4:30 PM		
20	21	22	23	24	25	26
		Technical Tour: UHM John A. Burns School of Medicine – CHW Plant, other HVAC&R Facilities - Start at 8 AM		Thanksgiving Day 		
27	28	29	30	Nov. 10th monthly meeting is Students Night, Membership Promotion Night & Research Promotion Night.		

UPCOMING CHAPTER MONTHLY MEETING

Students Night, ESI Membership Night & Research Promotion Night

Date: November 10, 2011 (Thursday)

Where: The Willows Restaurant, 901 Hausten Street, (808) 952-9200
www.willowshawaii.com)

Registration: Starts at 5:30 pm (RSVP Linda Scott at lscottes@aol.com)

Tech Session: 6:00 pm, "Specifying Storage Tanks for Potable Hot Water"

Dinner: Starts at 7:00 pm

Main Program: 7:30 pm, "Designing Buildings in Hot & Humid Climate"

Adjournment: 9:00 pm

Cost: \$45 per ASHRAE member; \$50 per guest; \$55 at the door registration.

Payment can be made via PayPal at

<http://hawaii.ashraechapters.org> Otherwise, make check payable to
ASHRAE Hawaii Chapter.

Direction to the Willows Restaurant



MAIN PROGRAM

Designing Buildings in Hawaii's Hot & Humid Climate

Raymond E. Patenaude, PE, CPMP, CMA, CIAQP, CEM, RPIH

Raymond E. Patenaude, Vice President of The Holmes Agency, Inc., is a registered Florida Professional Engineer specializing in forensic engineering of HVAC systems, moisture intrusion into buildings, and microbial contamination of building environments. He has been a Consulting and Forensic Engineer for over thirty-four years involved with the analysis, design and construction of building systems. As a recognized expert in his field, Mr. Patenaude, provides professional consultation and forensic investigation in building science including: cause and origin of construction defects; building envelope assessments; HVAC failure causation analysis; energy analysis; moisture intrusion; mold growth investigations; remediation management; claims and litigation support for commercial, residential, and institutional buildings.



Mr. Patenaude is an ASHRAE Distinguished Lecturer and former ASHRAE Vice President. He currently serves the Society as Vice Chair of TC 1.12, Moisture Management in Buildings, Chair of the Project Monitoring Sub-Committee for the new "ASHRAE Guide for Buildings in Hot and Humid Climates" and a member of Standard 100, "Energy Conservation in Existing Buildings". In addition, Mr. Patenaude is also a member of the National Society of Professional Engineers, National Academy of Forensic Engineers, National Academy of Building Inspection Engineers, National Institute of Building Sciences, Association of Professional Industrial Hygienists, the American Conference of Governmental Industrial Hygienists, American Industrial Hygiene Association and Chairman of the Board of the Certified Indoor Air Quality Professionals.

Designing buildings in the Hawaii area requires the integration of techniques found in the ASHRAE Guide for Buildings in Hot and Humid Climates. Mr. Patenaude, P.E. will provide a presentation on the fundamentals of building envelopes in hot and humid climates, control of outdoor ventilation air with the use of dedicated outdoor air systems and building air pressurization. These three building systems are the main cause for concern for Architects and HVAC Engineers; and comprise most building failures in hot and humid areas. Designing today's modern buildings requires the integration of building science within the professional design and construction team.

Limited copies of the "ASHRAE Guide for Buildings in Hot and Humid Climates" will be available for purchase at below publisher prices. This opportunity will only be available at the November 2011 Hawaii Chapter meeting. Please reserve your copy before the meeting if you want to take advantage of this special pricing. Contact Linda Scott when making your reservation.

DOs & DON'Ts TECHNICAL SESSION

Specifying Storage Tanks for Potable Hot Water

Jeff Harris, PVI Industries, LLC.



Jeff started in the plumbing industry in 1974 and has been working with specifiers of plumbing and heating products since 1979. Working for Moen, he was instrumental in developing the commercial faucet and sink product line in 1986 with Ed Hughes. In 1998, he joined PVI Industries, LLC, a manufacturer of commercial water heaters. Today, Jeff is responsible for the PVI product line and sister company Riverside Hydronics in Western part of both the United States and Canada.

Jeff has presented various topics to both ASHRAE and ASPE chapters over the years speaking about water heater design, today's hydronic boilers, and hybrid boiler system designs.

The presentation will be a review of materials utilized for potable hot water storage tanks. Jeff will review the three most common materials used today – carbon steel, stainless steel, and the new AquaPLEX® material that became available this year for tank construction. Jeff will offer information as to why each material is used and the processes required to insure longevity of each material.

"It is amazing how much can be accomplished if no one cares who gets the credit."

John Wooden

ASHRAE HAWAII 2011-2012 BOARD OF GOVERNORS
AND CHAPTER CHAIRPERSONS

Chapter Officers – Society Year 2011 - 2012

President: Paul “Scotty” Scott

President-Elect: Kevin Saito, P.E. LEED AP

Vice President: Barry Jim On, P.E. LEED AP, CxA

Secretary: Blake Araki, P.E.

Treasurer: Donna Kishi,

Chapter Board of Governors

Michael Chang, (Immediate Past President)

Scott La Beau

Bill Lee, P.E. LEED AP

Mofazzal Mir, P.E.

Alayna Shima

Chapter Chairperson

Attendance and Reception: Ross Okuda, P.E.

Technology Transfer: Kevin Saito, P.E. LEED AP

Programs: Scott Le Beau

Governmental Affairs: Michael Chang

Refrigeration: Dean Oakley

Technology: Herman Siu

Energy Awards: Mofazzal Mir, P.E.

Historian: Albert Hahn, P.E.

Memberships Promotion: Joseph Ting, P.E., CxA

Newsletter Editor: Barry Jim On, P.E. LEED AP, CxA

Research Promotion: Dean Borges, P.E. LEED AP, CxA

Student Activities : Bill Lee, P.E. LEED AP

Technical Seminar: Alayna Shima

Young Engineers of ASHRAE: Isaac Opedal

Webmaster: Joseph Ting, P.E., CxA

CHAPTER TECH TRANSFER – Kevin Saito, P.E.

What is CTTC? Many ASHRAE members get quite confused with the alphabet soup of acronyms. Even ASHRAE itself is an acronym. Sometimes, we get so lost in these acronyms that nobody knows what they mean or what they are. Well, “CTTC” stands for Chapter Technology Transfer Committee a.k.a. the jumbo or catch-all committee.

The Chapter Technology Transfer Committee exists at two levels within ASHRAE: one at the Society level and the other at the Chapter level. Let’s clarify the difference between the two levels. Society level denotes the ASHRAE Standing Committee reporting through the Members Council to the Board of Directors. Society CTTC consists of the Chairman, two Vice Chairs, the fourteen RVC (Regional Vice Chairs) from the regions worldwide and selected consultants appointed to this committee by the Society President-elect. At our Chapter level, CTTC Chair (by default) is the President-elect of the Hawaii Chapter, nonetheless, the Chapter President at his/her pleasure could appoint someone else to serve as chairman for this committee. As the committee chair, he has to recruit volunteers to serve as vice chair and members in order to help out in disseminating the tremendous technology transfer including & not limited to the technical, energy, refrigeration, advocacy & governmental activities as well as chapter programs, which benefit all grassroots members.

We hope that it clears some of the confusions, but, if you’re still confused like most members, let’s cut down to the chase. The responsibilities of CTTC as a standing committee at the Society level are as follows:

- Identify and develop resources for chapter programs
- Coordinate in the prompt dissemination of technical information to ASHRAE members of 170 chapters worldwide.
- Promote and administer the “Energy Awards” programs
- Promote governmental activities
- Coordinate input to the Society from chapters on standards, publications and position papers/statements
- Coordinate chapter refrigeration activities
- Develop, maintain and distribute a regional speakers list to assist chapters in their monthly chapter programs
- Promote continuing education activities at the chapter level.

CTTC also handles the ASHRAE DL (Distinguished Lecturers) Program. That being said, our Chapter requests annually a DL to help promote the technical activities and to disseminate technical information such as, “designing buildings in Hawaii’s hot and humid climate”. We are fortunate in competing with our fellow chapters within Region X to obtain our DL Raymond Patenaude, P.E., who is an expert on this matter to lecture us on November 10, 2011. Please RSVP Linda Scott by emailing her at lscottesi@aol.com and mark on your calendar. Seats are limited, as AIA & USGBC members are invited to participate.

STUDENT ACTIVITIES – William (Bill) Lee, P.E.

The new school year has already gone through half of its Fall semester for the 2011-2012 academic year. We are planning at least three (3) technical tours for both student branches, University of Hawaii at Manoa and Honolulu Community College branches so the students can observe the equipment in an operating air conditioning system as well as learn how ductwork and piping are fabricated prior to the installation at the jobsites. The tours and date of the tours are as follows:

1. November 2 (Wednesday): Tour of UHM C-MORE Hale Microbiology Bldg starts at 10 AM.
2. November 10 (Thursday): Tour of Alakai Mechanical Corporation's sheet metal and pipe-welding shops starts at 9 AM.
3. November 22 (Tuesday): Tour of UHM John A. Burns (JABSOM) Chilled Water Plant and Penthouse Mechanical Equipment Plant starts at 8 AM.

Our chapter past president, Joseph Ting, continues to teach the applied thermal engineering course at the University of Hawaii at Manoa this semester and serve as student adviser to the UHM Student Branch.

While Derek Oshiro continues to teach the Air-Conditioning & Refrigeration practical courses at Honolulu Community College and serve as the student adviser to the HCC Student Branch.

Although the technical tours were organized for the student members at both branches, we encourage our members & affiliates members to participate. If interested, please contact Bill Lee at 225-6248 (cell) and 687-8884 (office).

MEMBERSHIP PROMOTION – Joseph Ting, P.E.

It's Time to Update Our Chapter Roster!

Mahalo for your continuous supports this past year. Since the first electronic Roster was launched in January 2008, we received great feedback from all of our members.

If you have been browsing our new chapter website www.hawaii.ashraechapters.org, you may notice that there is a button for you to click-on to open the Chapter Roster. It should assist you in finding the contact person in our industry, the electronic line card of a specific company and the mechanical HVAC&R equipment/system you are designing, specifying or constructing. If you are an ASHRAE member, but have not paid your chapter dues, please do so. As it is password protected, only chapter dues-paid members will be given appropriately the password in order to get access to the said roster. For your information, you need to pay first the Society dues of \$185 before you can be a Chapter member. Until your Society dues & \$20 chapter dues are paid in-full for this fiscal year, you won't be provided with a password to access the roster.

With a dynamic HVAC&R community and the mobility of each member, the chapter needs to keep up with the fast pace in technology.

That said, the Chapter Board of Governors has recommended the committee to update this electronic Chapter Roster every year, which includes the directory of the chapter members, student members as well as the electronic line card of each supplier/vendor, consultant and contractor.

To help you promote your own company statewide, we need you to participate and support this program. Please go to our Chapter website for more information <http://hawaii.ashraechapters.org/membership.html>. Sponsors & contributors of the Chapter roster, kindly use the same form, as there is no change for the annual rate.

New Chapter Members

When SY 2010-11 commenced on 7/1/10, our Chapter area-assigned members was 244. As the SY 2011-12 opened its new year on 7/1/11, our Chapter area-assigned members showed 246 as provided by the ASHRAE HQ report... an increase of about 1% average growth. Mahalo for the hard work of my predecessor, Roland Suzuki & his committee members. That said, we'll start with the great news first. Let's welcome the two of our newest members, Mr. Brent K. Tamura and Ms. Allina Yang, who elected to be ASHRAE member as of July 1, 2011. Please attend the meeting to be recognized.

New Student Members

Likewise, let's welcome our new student members, who are our lifeblood of the Society. Listed below are the new members from both student branches:

ASHRAE – University of Hawaii at Manoa Student Branch			
Angelo Subia	Byron Blanchard	Cameron N. Xu	Chaoming Liang
Craig Calantoc	Christopher Hsu	Joseph E. Jenkins	Tara Lum
Birgitte Andresen	Elizabeth Gregg	Brandon Neill	Nelson Fernandez

ASHRAE – Honolulu Community College Student Branch			
Brian Nakama	Christopher Hara	Dane F. Masada	Jared K. Miyushiro
Jeremy C. Armstrong	Jim Q. Huynh	Jordan M. Abear	Jordan Y. Takasaki
Matthew A. Felix	Preston J. Ceria	Raymond K. Pedrina	Stetson K. Igne
Todd Y. Ogasanara	Chris Tom	Kalen T. Kumiyuka	

2011 UHM Career Fair



The ASHRAE-UHM Student Fair was held on October 26, 2011 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.



ASHRAE-UHM Student Branch dedicated this section for the generosity of those

participating 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 2011 Career Fair
CONSULTING, CONTRACTING, MANUFACTURER REP FIRMS & INDIVIDUALS

<p>ASHRAE Hawaii Chapter ACS Supply Corporation Admor HVAC Belimo Americas Christine DeTommeso Clyde Equipment Company Coffman Engineers Inc. DMG Hawaii Dorvin D. Leis Company Earle S. Matsuda Engineered Systems Inc.</p>	
	<p>Hawaii Energy Systems InSynergy Engineering Inc Island Controls Inc. MAPCO– Mechanical Accessory Products Co. Norman S. Wright Power Protection Systems/ Emerson Sen Plex Corporation - Oahu A/C & Plumbing Standard Sheet Metal Trane / Ingersoll Rand The Gas Company Thermal Engineering Corporation</p>

In closing, the November meeting is earmarked as ESI Membership Promotion Night in order to recognize the time & effort ESI (Engineered Systems Inc.) have mobilized its staff to assist in every aspect of the Chapter activities.

RESEARCH PROMOTION – Dean Borges, P.E.

This membership meeting is also a Research Promotion night. We will present last year's donors at this meeting as well as share our Chapter goals for SY 2011-12 with our membership. Our goals include achieving the Full Circle Award. If possible, we will identify a Golden Circle Investor. We will announce our special events for the upcoming months.

First & foremost, we would like to thank those of you, who joined us at the October meeting. For your information, the **FIVE** ball - **RED** ball game was played, but it was not taken, so we will start with a \$42 pot with ½ of the proceeds going to the winner, who holds the winning raffle ticket. The **RED** ball will be pulled out – we will be down to a **FOUR** ball- **RED** Ball game at the upcoming November meeting.

Switching to the Special Event, we will hold the “Marshmallows Stacking” event at this meeting. Each contestant gets a pre-sorted bag of miniature marshmallows and toothpicks. This is a time event (15 minutes maximum) requiring each contestant to build the tallest structure in the allotted time using only the marshmallows and toothpicks. We'll have a table set aside just for the event. Each contestant will donate \$5 in order to participate. The winner will take ½ of the pot of donations.



To learn more about ASHRAE Research Promotion, please click on the link below:

<http://www.ashrae.org/members/page/45>

To make donation to the ASHRAE Hawaii Chapter Research Promotion Campaign for Society Year 2011-2012, click here:

<https://xp20.ashrae.org/secure/researchpromotion/rp.html>

Money Raised For Research Promotion Campaign From SY 2006-07 To Date

Hawaii	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Chapter	\$63,062	\$11,500	\$48,633	\$15,051	\$8,463	\$842