



# HE EA MAKAME

March 12, 2017

P.O. Box 3916, Honolulu HI 96812-3916  
Ashraehawaiichapter.info

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## Presidents Message

*By Dean S. Borges, P.E.*

Our annual technical seminar and product show is planned on Friday, March 24, 2017 at the East West Center of University of Hawaii at Manoa by Technical Seminar Chair Matt Tio, Technical Program Chairs Les & Jan Taniyama, and RP/Tabletops Chair Dave Drapalik. Hope you can connect up with this venue and informational opportunities this year.

Our RP Committee's planning of the 30<sup>th</sup> Annual Golf Tournament on May 5, 2017 at Pearl Country Club is well on the way for another great event. Get your team information in early so they can have the right size Golf Shirts for your teams.



*Dean S. Borges  
InSynergy Engineering*

It was nice to learn from our Region X DRC that the Opportunity Fund project we submitted for the Institute for Human Services was approved for funding. So, we'll submit another claim for support of the Sustainability Luncheon activities.

Check with Min Zhong for the CTTC Energy Award applications and Tony Rasabout for the Refrigeration Comfort Cooling Award. We are doing well in PAOE at 4830 points - #1 in Region X - keep pushing BOG's team members to report your activities to me.

## Technical Seminar and Product Show

Date: 24 March 2017

Where: East West Center at University of Hawaii, Manoa

1777 East West Road

Honolulu, Hawaii 96848

[WWW.EASTWESTCENTER.ORG](http://WWW.EASTWESTCENTER.ORG)

Registration: Starts at 7:30 am. Contact Valerie Mencias at [vmencias@norman-wright.com](mailto:vmencias@norman-wright.com) for additional info.

Morning Technical Session: 8:00 am to 12:00 pm

Lunch: 12:00 pm to 1:30 pm

Afternoon Technical Session: 1:30 pm to 4:00 pm

Adjournment: Approx. 4:00 pm

Cost: \$150 for ASHRAE member; \$175 for non-member; \$25 for student.

Payment via credit card: <https://ashraehawaiichapter.info>

Otherwise, make check payable to ASHRAE Hawaii Chapter.

## Annual Technical Seminar: A Delve into Hawaii's Quandary – Energy Efficiency the Ever Moving Target

ASHRAE Hawaii Chapter's annual technical seminar is planned on March 24, 2017 at East West Center, The University of Hawaii at Manoa. A variety of interesting topics will be covered by a number of well qualified presenters. Two round table discussions on energy efficiency and controls will be organized during the technical seminar.

A table top product show will also take place during the lunch time. Refer to the technical seminar flyer attached with this newsletter for more information.

## Chapter Officers

### Chapter Officers for Society Year 2016-17

- President: Dean Borges, P.E.
- President Elect: Kevin Luoma, P.E.
- Vice President: Mofazzal Mir, P.E.
- Secretary: Willie Diguc
- Treasurer: Samantha Niver, P.E.

### Chapter Board of Governors

- Donna Kishi (Immediate Past President)
- Lori Arakawa, P.E.
- Matthew Tio
- RJ Ritter
- Ryan Chang, P.E.

### Committee Chairs

- Attendance and Reception Chair: Valerie Mencias/Hazel Wong
- Energy Awards Chair: Min Zhong, P.E.
- Technology Awards: Kelsey Koshi
- Grassroots Government Activities Chair: Andrew Crossland, P.E.
- Historian Chair: Donna Kishi
- Membership Promotion Chair: Lori Arakawa, P.E.
- Newsletter Editor Chair: Mofazzal Mir, P.E.
- Chapter Programs Chairs: Les Taniyama, P.E. and RJ Ritter
- Refrigeration Chair: Tony Rasabout
- Research Promotion Chair: Dave Drapalik
- Student Activities Chair: Diamond Pedro
- Technical Seminar Chair: Matthew Tio
- Product Show Chair: Ryan Chang, P.E.
- Technology Transfer Chair: Kevin Luoma, P.E.
- Webmaster Chair: David Lebowitz/Jake Gribbon
- Young Engineers of ASHRAE Chair: Daniel Murakami
- Sustainable Activities Chair: Josh Jackson
- CRC Action Chair: Donna Kishi
- Nominating and Events: William P. Lee, P.E., Donna Kishi
- Long Range Planning: William P. Lee, P.E.



*Kevin Luoma, P.E.  
WSP Hawaii*



*Mofazzal Mir, P.E.  
InSynergy Eng. Inc.*



*Willie Diguc  
Oahu AC*



*Samantha Niver, P.E.  
WSP Hawaii*



*Donna Kishi  
Norman S. Wright*



*Lori Arakawa,  
P.E.DOD*



*Matthew Tio  
DMG Hawaii*



*RJ Ritter  
Trane*



*Tony Rasabout  
Coffman Engineers*



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*Ryan J Chang.*  
*TAB Engineers*

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*Valerie Mencias*  
*Norman S. Wright*

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*Diamond Pedro*  
*ACS Supply Corp.*

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*Kelsey Koshi*  
*ACS Supply Corp.*

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*David Lebowitz*  
*Oahu AC*

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## Chapter Technology Transfer Committee Chair Report

By Kevin Luoma, P.E., Chapter CTTC Chair

Aloha All,

Some of you might not be aware of numerous free resources that are available to ASHRAE members. The website is here:

<https://www.ashrae.org/resources--publications/free-resources>

Some of the highlights of the free resources are the followings:

- Access to ASHRAE Journal articles and ASHRAE Research Reports. If there is an article from a past journal that you would like to look at, this is the spot.
- A free web application tool for modeling compliance with ASHRAE Standard 90.1-2010
- Free On Demand ASHRAE Webcasts, a small sample of the webcast are:
  - Making Net Zero Net Positive: Solving the Efficiency and Cost Paradox
  - New Tomorrows for Today's Buildings: Existing Building Commissioning - April 23, 2015
  - Buildings in Balance: IEQ and Energy Efficiency - April 17, 2014
  - Assessing Building Energy Performance, from Principles to Practice - April 18, 2013
- Free ASHRAE Software

### Upcoming Webcast:

Take Control: Using Analytics to Drive Building Performance

April 20, 2017 1:00 - 4:00 PM EDT

<https://www.ashrae.org/membership--conferences/webcasts>

This webcast will feature industry experts who will define the importance of, and why we should strive for, better building operations through improved controls and analytics. Viewers will be able to describe key elements of controls and analytics for building operations, and identify steps required to deploy analytics in building projects, including commissioning. This program will quantify how applying best practice controls improve building performance, and will recognize the value of analytics in building operations to achieve a reduced cost and increased performance.

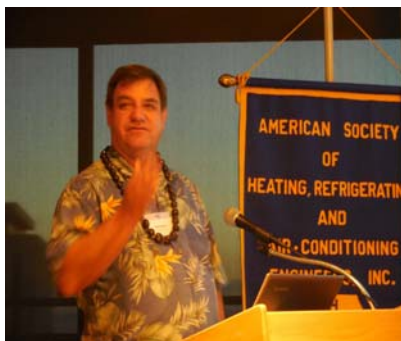
Last but not least, here is a quick bio of an influential engineer:

Willis Carrier: Willis Carrier was born on November 26, 1876 in Angola, NY. He received an engineering degree from Cornell University in 1901 and started working at Buffalo Forge Company in that same year. In the spring of 1902, consulting engineer Walter Timmis visited the Manhattan office of J. Irvine Lyle, the head of Buffalo Forge's sales activities in New York. Timmis' client, Sackett & Wilhelms, found that humidity at its Brooklyn plant wreaked havoc with the color register of its fine, multicolor printing. Willis Carrier invented the cooling coil system to address this humidity issue initially with cooling water drawn from an artesian well that first summer and supplemented by an ammonia compressor in the spring of 1903 to meet the demands of the first full summer of operation. With this, the modern air conditioning was born.

Mahalo Nui Loa!



## Pictures from February Monthly Meeting



## Message from the Newsletter Editor

*By Mofazzal Mir, P.E.*

ASHRAE Hawaii chapter is organizing their annual seminar and product show on March 24, 2017 at East West Center of the University of Hawaii at Manoa. The theme of this year's technical seminar is "A Delve into Hawaii's Quandary - Energy Efficiency and Ever Moving Target". A number of well qualified speakers will discuss interesting topics related to energy efficiency. A table top product show will also be organized for the local vendors to display their products. We highly encourage all members to attend the most significant technical event of ASHRAE Hawaii Chapter and hear from the leaders of our local HVAC industry.

We were honored to have Karine Leblanc, Director of Regional Chair (DRC) of region X, at our February monthly meeting. She has updated us with the activities of Region X. It was very informational and will be useful for the members that would like to serve in the regional level.

Josh Jackson, Sustainable Activities Committee Chair, provided a wonderful presentation on the vision and mission of his committee and the road map to achieve their goal. Josh set an excellent example for other grass root committee to follow.

Mr. Keith Block, Business Program Manager of Hawaii Energy, did an excellent job in providing us the information related to Hawaii Energy's 2016/2017 Program Updates. He emphasis again and again that we coordinate with Hawaii energy at the beginning of any project where we are hoping to benefit from one of the Hawaii Energy's rebate program.

Every year, HVAC&R community of Hawaii sponsors ME 417 students of the University of Hawaii at Manoa to attend AHR winter Expo and trade show. A number of students were sponsored to attend this year's Expo and Trade Show at Las Vegas, Nevada. Those students wrote interesting articles describing their experience at the event. We have attached their perspectives with this newsletter for your reading pleasure.

Last but not the least, attached are also our last BOG meeting minutes and February Monthly Meeting Minutes in case you are interested to know what was discussed.

Mahalo to everyone until we write again!

### ASHRAE Hawaii Chapter

P.O. Box 3916  
Honolulu, HI 96812-3916

Chapter Website:  
[www.ashraehawaiiichapter.info](http://www.ashraehawaiiichapter.info)

ASHRAE Main Website:  
[www.ashrae.org](http://www.ashrae.org)

E-mail:  
[admin@ashraehawaiiichapter.info](mailto:admin@ashraehawaiiichapter.info)



# ASHRAE HAWAII CHAPTER

Technical Seminar – MARCH 24, 2017

A Delve into Hawaii's Quandary – Energy Efficiency the Ever Moving Target

## ASIA ROOM

### East West Center at UH Manoa

0730 To 0800	Registration and Coffee	
0800 To 0915	Energy Quotient – What is this?	<b>Rep. Chris Lee</b> , Chair, Energy and Environmental Protection Committee (EEP) – House of Rep., District 51 <b>Caroline Carl</b> – Hawaii Energy
0930 To 1030	Combined Heat & Power (CHP) Opportunities in Hawaii	<b>Gene Kogan</b> – US DOE Pacific CHP TAP <b>Lori Sun</b> – Hawaii Gas
1045 To 1200	Round Table Energy Efficiency: All Sides of the Coin	<b>Kevin Luoma</b> – WSP Group <b>Steve Sullivan</b> – Operations for Shidler Pacific Advisors, Past BOMA President <b>Keith Block</b> – Hawaii Energy <b>Les Taniyama</b> – PSIG HI, IFMA VP
1200 To 1330	Lunch and Table Tops	
1330 To 1430	Round Table Controls: The Mechanical and Efficiency Disconnect	<b>Bill Lee</b> – Coffman Engineering <b>Dennis Toba</b> – Ron Ho and Associates <b>Jason Forester</b> – Island Controls <b>Blake Araki</b> – University of Hawaii Manoa
1445 To 1545	Hawaii Energy: Case Studies	<b>Keith Block</b> – Hawaii Energy
1545 To 1600	Closing Remarks	<b>Dean Borges</b> , ASHRAE Hawaii President, Insynergy Engineering



EWC, UNIVERSITY OF HAWAII, MANOA CAMPUS



HAWAII IMIN INT'L CONFERENCE CTR (a.k.a. EWC)



INSIDE OF ASIA / PACIFIC ROOMS

# ASHRAE HAWAII CHAPTER

Technical Seminar – MARCH 24, 2017

A Delve into Hawaii's Quandary – Energy Efficiency the Ever Moving Target

## PACIFIC ROOM

### East West Center at UH Manoa

0730 To 0800	Registration and Coffee	
0800 To 0915	Energy Quotient – What is this?	<b>Rep. Chris Lee</b> , Chair, Energy and Environmental Protection Committee (EEP) – House of Rep., District 51 <b>Caroline Carl</b> – Hawaii Energy
0930 To 1030	Hawaii Energy: Case Studies	<b>Keith Block</b> – Hawaii Energy
1045 To 1200	Round Table Energy Efficiency: All Sides of the Coin	<b>Kevin Luoma</b> – WSP Group <b>Steve Sullivan</b> – Operations for Shidler Pacific Advisors, Past BOMA President <b>Keith Block</b> – Hawaii Energy <b>Les Taniyama</b> – PSIG HI, IFMA VP
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1545 To 1600	Closing Remarks	<b>Dean Borges</b> , ASHRAE Hawaii President, Insynergy Engineering



## REGISTRATION FORM

Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Phone #: \_\_\_\_\_

E-Mail: \_\_\_\_\_

ASHRAE Chapter: \_\_\_\_\_

### TECHNICAL SEMINAR

(100 Attendees – RSVP online or to determine guest list contact Valerie Mencias [vmencias@norman-wright.com](mailto:vmencias@norman-wright.com) by March 20)

	Number	Cost	Total
Member		\$150	
Non-Member		\$175	
Student		\$25	

Each admission includes one lunch ticket and continental breakfast along with coffee, tea and water throughout the day.

**If admission is purchased prior to date of event, attendee will also receive a raffle ticket for a chance to win a very generous prize. Raffle will be held during closing remarks, attendee must be present to win.**

### TABLETOP DISPLAYS

(10 Max – First Come First Served)

One Table per Exhibitor	\$300	
Extra Lunch	\$15	

Each tabletop includes an admission, lunch and refreshments.

### TAX-DEDUCTIBLE DONATION

Sponsor:	
Sponsor:	
Sponsor:	

**PLATINUM: \$250+    GOLD: \$150-\$249**  
**SILVER: \$50-\$149    BRONZE: \$25-\$49**

### TOTAL AMOUNT:

Make checks payable to: **ASHRAE Hawaii Chapter**  
– Technical Seminar Committee  
Send check to: **P.O. Box 3916 Honolulu, HI 96812-3916**

## 2017 Technical Seminar & Tabletop Display Committee

Chairman                      Matthew Tio

SUBCOMMITTEE            CHAIRPERSON

Technical Programs        Les Taniyama  
                                     Jan Taniyama

Event Coordination        Dawn Kanno

Registration                Valerie Mencias  
                                     Donna Kishi

**A BIG MAHALO TO OUR  
VOLUNTEERS, MEMBERS,  
SUPPORTERS, DONATORS,  
AND EXHIBITORS.**

**DONATIONS AND PROCEEDS  
WILL GO TOWARDS AN  
ASHRAE SCHOLARSHIP  
FUND.**



**ASHRAE (American Society of  
Heating Refrigerating & Air-  
Conditioning Engineers, Inc.)**



**2017 Technical Seminar  
March 24, 2017**

**“A Delve into Hawaii’s Quandary  
– Energy Efficiency the Ever  
Moving Target”**

**Hosted By:**

**ASHRAE HAWAII CHAPTER  
TECHNICAL SEMINAR COMMITTEE**

[WWW.ASHRAEHAWAIICHAPTER.INFO](http://WWW.ASHRAEHAWAIICHAPTER.INFO)

**East West Center**

**Hawaii IMIN International  
University of Hawaii, Manoa  
1777 East West Road  
Honolulu, HI 96848**

[WWW.EASTWESTCENTER.ORG](http://WWW.EASTWESTCENTER.ORG)

# **2017 AHR Expo Trade Show Jan. 28-31, Las Vegas, Nevada**



## **University of Hawaii at Manoa Student's Perspectives**

Fall 2016 Semester, Course ME 417 Students

## **2017 AHR Expo Trade Show (Las Vegas, Nevada) – A Student's Perspective**

**Ryan W.S. Chun, UHM Student, Fall 2016 Course ME 417**

"Learning doesn't stop once you leave the classroom" is a quote my dad always shares with me. The AHR Expo is a perfect example of this. While attending the conference as related to the school work, it was not in a classroom and it certainly was not like anything that I had ever done before.

With over 2,000 exhibits and 60,000 professionals jammed in two massive Las Vegas Convention Rooms, the show was a spectacle like I had never seen before. The coolest part of it all was that it wasn't a festival with the most popular musicians or a kick-off event for your favorite new "gadget"... it was entirely surrounded around the HVAC&R industry. People from around the world came to see the latest technology and the most advanced innovations, just to learn from industry experts. They all came to learn! It left me with excitement about getting into a field: learning it, owning it and having fun with it.

There were two main parts of the seminar for me: the floor and the seminars. The floor consisted of the sprawling rows of booths and exhibits. The seminars were about hour-long lectures of varying topics led by different industry professionals. Each of the experiences was unique and a different beast entirely.

The convention floor was colorful, crowded, chaotic and cool. There were booths from the size of a pop-up tent to the towering displays with viewing and meeting rooms. Large signs and flashing lights competed for my attention. They were trying to convince me that they were the perfect company for my business. The moment I fell within their orbit, I was showered with pens, bags, stickers and... "Hey there boys, how are you doing today?" I even saw a keg at one of the booths!

There was so much going on and it was all so complex. The prime example I can share was the Trane's booth. Professor Ting was kind enough to arrange for this year's class to have a personal tour of their exhibit. A woman greeted us and personally walked around with us, introducing all of the individual salespersons, who were experts on the particular piece of equipment. They spared no expense for this production. The tour opened with a city virtually laid out on a large touch-screen TV. They used this portion to demonstrate how the technology they are working on relates to their three goals of efficiency, sustainability and innovation. From there, we were walked around booth to booth, learning about all of the latest technology ranging from controls, pumps and energy retrieval. To me, the most impressive part was inspecting these massive metal fabrications and listening to the salespersons describing the design decisions behind it. It's very cool... there were many smart people out there, who can envision it, understand it and then implement it.

The other part of the Expo was the seminars. The experts from various fields would put on lectures that were open to the public. I personally attended "Psychometrics without Tears", "BACnet: How To Integrate Your Systems and Increase Efficiency", and "LonMark: New Technology and HVAC&R Energy Efficiency Through Proper Maintenance". They were all interesting and I was able to take away insights from each of the respective fields. For instance, I never thought how as a system degrades from normal use, how it becomes less efficient. It was a novel thought for me that just by cleaning the ducts, filters and other components of an HVAC&R system, how you can increase the overall efficiency simply by requiring the fans to do less work. These seminars were a good chance to expose me to parts of HVAC&R that I haven't classically been exposed to. The LonMark and BACnet talks allowed me to peer behind the curtain of what will be my future career in the Controls Industry.

All in all, the AHR Expo in Las Vegas was a unique experience both from the learning standpoint and the cultural point of view. I had never been to a similar exposition at all, nevertheless, one of that size, which showed me just how large of a community of HVAC&R Industry is.

## **2017 AHR Expo Trade Show (Las Vegas, Nevada) – A Student's Perspective**

### **Kent C. Harada, UHM Student, Fall 2016 Course ME 417**

Fall 2016, ME 417 Class of the University of Hawaii at Mānoa was privileged with the opportunity to attend the 2017 AHR Expo Trade Show in Las Vegas, Nevada. The Expo consisted of technical seminars intended to directly improve the industry's knowledge and understanding as a whole, as well as a show floor where over thousand of vendors set-up exhibits to showcase some of their products. The experience resulted in an augmented understanding of the HVAC&R industry as a whole.

The AHR Expo consisted of a showroom floor where various vendors set-up booths to demonstrate their products. I learned about noise control from various vendors such as Kinetics Noise Control Inc., IAC Acoustics, BRD Noise and Vibration Control Inc. While at the Expo, I was able to attend two seminars.

The first seminar I attended was entitled "Humidity and Occupants: What the Latest in Humidity Research Means for You." The seminar started with a quick review of the elementary psychrometrics and how to use its chart. It was used as a segue, which led to human comfort and why understanding relative humidity is of paramount important. Current humidity research shows that electrostatic discharge events are much more likely to happen, when relative humidity drops to below 45%, and are significantly more likely to happen, when relative humidity drops below 20%. Current research has also found that when the dew point drops below 26 °F, humans begin to experience eye discomfort in the form of excessive dryness. Nasal membranes dry out at less than 30% relative humidity, which relates to an increase in contraction of infectious diseases such as influenza by over 500%, and as a result, an increased operating cost for hospitals.

The second seminar that I attended was titled "How to Grow Debt Free while Generating Cash". The seminar recounted the speaker's journey as an electrician, and his struggle to build a business. The seminar mentioned the typical business profit model of taking into account the cost of materials, labor overhead and miscellaneous expenses to create a selling price for services. The downfall of this method is that it creates a situation, where the business can fail, if the costs aren't estimated correctly, resulting in zero profit for the company. In additional to that, some entrepreneurs will setup the business without considering their own salary requirements, resulting in the business owner putting in countless hours of work for no pay. The seminar recommended instead to consider the needs of the business first, and extract profit from the gross revenue, then use the remaining cash to pay for everything else (i.e. labor, materials, overhead, etc.). This method will reduce estimation errors, and allow the company to quickly see if adjustments in productivity are necessary.

Many companies chose to use the Expo as an opportunity to host private hospitality events to thank some of their vendors and private guests for supporting their company. We were given the opportunity to attend the following events: AAON, Cleaver Brooks and Alerton. The venues for these events ranged from a large conference room, to a private room in steak house, and to a night club. At all of these events, we were given the valuable opportunity to network with professionals in the HVAC&R Industry.

Attending the AHR Expo was a unique experience that provided us with the valuable information that would have not been possible without the coordination of Professor Ting and the generous donations from the various companies in the Hawaii's HVAC&R field. Attending the Expo provided real-work experiences that simply could not be created in the classroom thus proving very useful to any mechanical engineering students interested to work in the HVAC&R Industry.



## **2017 AHR Expo Trade Show (Las Vegas, Nevada) – A Student's Perspective**

### **Po'okela Stillman Reyes, UHM Student, Fall 2016 Course ME 417**

This year, our class was privileged to attend the 2017 AHR Expo in Las Vegas, Nevada. We were exposed to many different types of equipment from walking the exposition floor. Attending seminars was the main priority to enhance our perspective on different subjects pertaining to HVAC&R. Private hospitalities allowed us to gain knowledge from many experienced engineers. Our trip consisted of many unforgettable eye-opening experiences, lessons and overall big picture of the industry.

During our visit, we committed to two full days of visiting the exposition from walking the floor, attending seminars, and engaging with various companies. I attended two seminar sessions: "Psychrometrics without Tears" and "How to Grow Debt Free While Generating Cash." The first seminar was geared towards gaining a better scientific understanding, while the second was to better understand the business side of the industry. Both seminars were enriched with technical content and many applicable stories to bridge the technical aspects to real world situations.

The first seminar was interesting in giving me a different perspective on quantifying and conceptualizing some aspects to deal with "psychrometrics". The interesting part about this presentation was a story told by the speaker about air balancing techniques and the two methods on how to properly balance a system. The second seminar was given as a more business approach. The speaker gave a talk on actions people should take in business, so that they may avoid growing in debt. The main take-away from this talk was learning how to organize each branch of your business from marketing to call-taking to accounting. An emphasis was put on the accounting portion, introducing a new type of accounting versus the standard accounting. The speaker established that customers may be willing to pay more than you are charging them, so always do research on your competition. The speaker introduced the profit equation in the form of: "sales price – profit = expenses". This new way of thinking was taught to not allow your expenses to be greater than your profit. We were told to put profit into a separate account from the general account. I enjoyed both talks as they were very entertaining as well as informative and full of life lessons.

Aside from the seminars, we were taken on a private tour of the Trane booth. We were introduced to many new technologies and equipment. First, we were introduced to the new control system implemented to help buildings operate more efficient. Then, we were taken around to the various VRF (variable refrigerant flow) and AHU (air handling unit) equipment, and new energy efficient pump. The most interesting part was a modular air handling system capable of redundancy, in case of any failure due to fitting-in tight vertically or flat horizontal to meet any type of situations provided by the customer.

Complimentary to the exposition, our group was invited to various hospitalities which included AAON's Showcase Royale, Cleaver Brooks, and Alerton. AAON's Showcase was filled with many impressive air handling units, packaged rooftop units, and different control systems. We were in awe of the enormity of some equipment that we were able to walk through and see the inner working of the pumps and controls. The other two hospitalities were great opportunities to meet engineers and enjoy each others company.

In closing, I would like to thank the corporate sponsors, the previous UHM ME 417 graduates, and the HVAC&R Community of Hawaii for all their generosity and support of this class. I would like to extend a special thanks to Paul & Linda Scott for their generous hospitality in showing us around and coordinating the shuttle meet-ups. Last, but not least, I would like to thank Professor Ting for making this expedition possible with his time and effort he has put into the class. This has definitely been one of the best classes I have taken in my college career. Not only have I enjoyed his class, but I have also learned from every experience in the entire process.

# 2016 UHM HVAC&R Career Fair – Mucho Mahalo

## Participating Individuals, Companies & Institution

### INDIVIDUAL SPONSORS (UHM Course ME 417)

Class of 2006: Todd Beiler (Censeo AV+Acoustics); Class of 2007: Garrett Lau

Class of 2008: Tony Rasabout; Class of 2009: Brandon Spalla, Matthew Tio

Class of 2010: Willie Diguc, Elad Ngujede; Class of 2011: Tara Lum

Class of 2012: Adam Akui, Jocelyn Gabriel, Kelsey Koshi, Diamond Pedro

Class of 2013: Lawrence Leung, Gaven Manalo, Daniel Murakami, Brandon Piriyaarnjanakul

Class of 2014 Frankie Chan, Sheryl Matsuo, Yiyang Xiao

Class of 2015: Thomas Cashman, Earl Cox, Alex Darigo, John Humel, Cody Ichimura, William Lewis

### CORPORATE SPONSORS (CONSULTING/CONTRACTING/MFR REP FIRMS)

ACS (Air-Conditioning Solutions) Supply Corporation

\*Admor HVAC Products, Inc.

\*Alakai Mechanical Corporation

\*Censeo AV+Acoustics

Coffman Engineers

DMG Hawaii

\*Dorvin D. Leis Company, Inc.

\*Douglas Engineering Pacific Inc.

Elite Mechanical

Engineered Systems Inc.

\*Hawaii Energy Systems

\*Hawthorne Pacific

Heat Transfer Equipment Company

\*Heide & Cook LLC

\*Johnson Controls Inc./York International

Island Controls, Inc.

Master Sheet Metal

MAPCO (Mechanical Accessory Products Company)

Preferred Mechanical, LLC

\*Sen Plex Corp - Oahu A/C Service, Inc., Oahu & Plumbing & Sheet Metal, Ltd

TAB Engineers LLC

\*Thermal Engineering Corporation

Trane Pacific

WSP Hawaii Inc.

### INSTITUTION

University of Hawaii at Manoa



## BOG MEETING MINUTES

### ISE Conference Room on 2<sup>nd</sup> Floor

828 Fort Street Mall, Suite 200

Honolulu, HI 96813

2/2/2017 (**Thursday**) – 5:00 pm to +/-6pm

Attendees: See attached Sign In Sheet

Call to Order: 5:00pm HST by Dean Borges, President

1. Welcome and Self Introductions (5 min)
2. Housekeeping notes (2 min)
  - a. Tech Seminar - Flyer to updated ASAP – Matt
  - b. Region X Opportunity Fund – Paid by Region X today, Ck Sustainability
  - c. Treasurer Report – Status of receipts/bills due/ 1099's, PE REFRESHER
- COURSE KICK-OFF MEETING
  - A. February Meetings - expect DRC Karine to present Winter Meeting Activities – Sustainability Event 2/21 Lunch – Free to attendees
  - B. B. HCES for engineering Week – there will be an ASHRAE booth at Windward Mall for us on Saturday Feb 18th ASHRAE Booth will be open from 10 am – 2 pm. General Liability Insurance Form filed from HQ's. Contact me if you need more information.

#### Committee Reports:

3. Nominating – Need names for Treasurer. Prepare a list for voting at Feb Mtg.
4. Sustainability – Josh, ASHRAE Standard 188, Legionella control & non-chemical treatments Tuesday, February 21<sup>st</sup> at Plaza Club 20<sup>th</sup> Floor – Call for Reserv.
5. Reviewed PAOE – reported activities (5 min)
6. RP – Pearl Country Club - 5/5/2017, Flyer posted/Activities/Budget/etc.
7. Chapter Programs for March, April & May – DL for May approved (15 min)
8. YEA – Daniel, events TBD
9. Student Activities – Diamond – opportunities TBD
10. Refrigeration – Tony Rasabout
11. Webmaster – issues David –
12. Newsletter – for March deadline 2/20/2017 Mofazzal.
13. Technology –Kelsey – Reports of Winter Meeting activities
14. Energy Awards –AJ said he will file for his Alaska Project, Mofazzal has one for the QMC
15. CTTC, MAY DL actions
16. GGAC, issues at Legislature
17. Other Committee Reports
  - a. Las Vegas – Society Winter Meeting Report - Everyone

Adjourned: 5:46 pm

Next BOG Meeting: Thursday March 2, 2017 – ISE Conf. Room 2<sup>nd</sup> fl – 5pm

Respectfully Submitted,

*W. Diguc*

Willie Diguc, Secretary



## Chapter Meeting Minutes

### Plaza Club Room on 20<sup>th</sup> Floor

900 Fort Street Mall, Suite 2000

Honolulu, HI 96813

2/9/2017 (**Thursday**) – 5:00 pm to +/-9pm

1. Gavel to OPEN 5:52pm - Self Introductions (5 min. Name & Favorite Actor/Actress)
2. Activities/discussions planned (2 min. each)
  - A. Welcome Karine LeBlanc, DRC Region X
    - Need volunteers to serve on a Society standing committee
    - Record breaking ASHRAE/AHR Expo in Las Vegas
    - Marites Calad to be next DRC 2017-2020
    - Education courses available online
    - Recent Publications – 90.1-2016 and more (see ASHRAE website)
    - ASHRAE 2017 Annual Conference – Long Beach, CA
    - CRC Aug 2017 – Sacramento, CA
  - B. Sustainability Committee Night, Josh Jackson (Katie Thul)
    - Projects – Bldg owner energy manual. Guidelines for recycling makeup water in CT. Eddy would Grow. Chemical Free HI.
  - C. Nominating Committee – Donna and Bill as Members to provide next year's officers roster for election at April Meeting
    - Nominees - President – Kevin Luoma, President Elect. – Mofazzal Mir, Vice President – Willie Diguc, Secretary – Samantha Nakamura, Treasurer – Matthew Tio
    - Voting in May 2017
3. Intro Tech Presentation by Les:
  - Keith Block, Program Engineering Manager, Hawaii Energy
4. Dinner - ~ 30 minutes
5. After Dinner – Intro Main Program Speaker – Les Taniyama, VP of PSIG-HI
  - Energy Use Verification for Unique Applications
6. Other Committee Reports:
  - a. Chapter Programs for March/April - RJ or Les (15 min)
    - March 24, 2017 – Technical Seminar at East West Center, UH Manoa
    - April 13, 2017 – VFD, Power Quality & Mitigation?
    - May 5, 2017 – 30<sup>th</sup> Annual Golf Tournament
    - May 11, 2017 – Chapter Meeting with DL, Victor Goldschmidt, Ph.D.
    - June 8, 2017 – Installation of Officers for 2017-2018 SY
  - b. YEA – Daniel, Planned events? Volleyball in Kailua? TBD
  - c. Student Activities – Diamond – TBD
  - d. Webmaster –David
  - e. Newsletter – Issues Mofazzal Deadline for March: 2/20/2017
  - f. Technology – Issues Kelsey
  - g. Energy Awards –Min – Need projects
  - h. CTTC – Kevin issues?
  - i. Other items?





7. Sustainability Luncheon on February 21<sup>st</sup> Free Seminar and HAPPY Valentine's Day!!!
8. March is the Technical Seminar at East West Center UH Manoa – Matt Tio
9. April Chapter Meeting is Membership Promotion Night
10. Adjournment – Gavel dropped 8:07pm

Next Chapter Meeting: Thursday March 24, 2017 – East West Center, UH Manoa –  
8:30am – 4pm

Respectfully Submitted,

*W. Diguc*

Willie Diguc, Secretary