

# FOG DISPENSER

Golden Gate Chapter



ASHRAE

VOLUME XLV - NUMBER 6

MAR 2007

## March Meeting Details

This dinner meeting is our annual combined meeting with the Redwood Empire Section on the *first* Thursday of the month.

Date: Thursday, Mar 1, 2007

Place: Embassy Suites Hotel  
101 McInnis Parkway, San Rafael, CA 94903  
([map and directions](#))

### Schedule:

- 5:30 PM: Registration and social hour
- 6:30 PM: Dinner with announcements and introductions
- 7:45 PM: Break
- 8:00 PM: Speaker presentation
- 9:00 PM: Adjourn

### Cost:

	Before noon Fri., Feb 23	After noon Fri., Feb 23
ASHRAE members	\$40	\$47
Non-members	\$47	\$50
Students	Free with registration	
Voucher holder	Free with registration	

Please make your reservation via our Web site. Visit the Event Calendar at [www.ggashrae.org/calendr.htm](http://www.ggashrae.org/calendr.htm), click March 1, and fill out and submit the form. Purchase your voucher at the meeting or online using your credit card and PayPal after you submit the form. The season voucher is \$320 for members; that's 9 meetings for the price of 8. The voucher is transferable among co-workers and may be used for student sponsorship.

Remember – if you make a reservation and cannot attend, you need to cancel in advance, or you will be billed. Scott Wayland will be taking reservations. If you need to CANCEL, please send a message to Scott at [cancellation@ggashrae.org](mailto:cancellation@ggashrae.org).

## March Program

### Successful Projects: Why So Hard?



**Jay Santos**  
Facility Dynamics Engineering

This presentation will look at the changes that have taken place in the DDC industry over the past decade and the impacts that this has had on HVAC projects. The presenter will discuss issues that contribute to problems with the typical DDC project. The overall process of a DDC project will be discussed including key aspects of:

- o Master Planning
- o Defining the control system for the project
- o Owner's decisions & input
- o Engineer specifications, sequences and details
- o Contractor responsibilities
- o Commissioning
- o Documentation, operation and maintenance

The focus of the presentation will be on ways to improve the process by all parties participating in the project - owner, engineer, contractors, & operators.

*Biography of Speaker on page 3.*

## Golden Gate Chapter President's Message, March 2007

---



### Know Yourself

This month, for the second time in my life, I was involved in giving someone CPR (cardio pulmonary resuscitation). The first time, the victim was my father, who I am pleased to say is still alive. CPR saved his life and bypass surgery solved his heart troubles. That was 21 years ago.

The second time was January 20<sup>th</sup>. I was at Club One Oakland City Center playing racquetball, and a person collapsed outside the court. I gave him mouth-to-mouth resuscitation while someone else did CPR chest compressions. Unfortunately, fire fighter Kevin Reed, 47, did not survive. When the rescue workers arrived at the scene I thought their reaction was intense, but did not understand until I found out later that the lead rescue person was the deceased's best friend and the entire crew was from the deceased's firehouse.

This was a random incident that I thought would not touch the rest of my life since I did not know the person. I found out later he was married to my mother's best friend's daughter, who I knew growing up. He also had an eight-year-old daughter who is in one of my friend's son's classes at school. Even random incidents can be closer to home than you expect.

I am happy I could try to help and want to share with you the benefits of knowing CPR and what to do in an emergency. Even though there were other club members to help, none had the skills or presence in that situation to help. One member tried to blow into the mouth without making a seal or squeezing the nose, and the staff person, in the chaos, used a breathing apparatus incorrectly. I stepped in twice to breathe for the victim. If you have never done mouth-to-mouth resuscitation and CPR, think about learning. It isn't easy, but it isn't hard; anyone can do it. I learned how as a lifeguard and swim instructor in my teens and the training has lasted a lifetime.

As engineers and people, helping others is our social responsibility. I urge you to learn emergency response techniques and in doing so, make yourself better able to deal with a crisis, both practically and emotionally. The more you know, the more confident and focusing you will be on what needs to happen rather than being overwhelmed by the adrenaline rush. Your response can affect your conscience. In my case I am comforted that I did everything I was trained to do.

I look forward to seeing you at our March GGC dinner meeting joint with the Redwood Empire Section in San Rafael at the Embassy Suites. The presentation is on DDC controls and the speaker is nationally known celebrity Jay Santos, principal and chief controls engineer of Columbia, Md. based Facility Dynamics Engineering Corp. If you have never heard Jay speak, you will not want to miss this event.

*Respectfully submitted,*  
*[Glenn Friedman](#), Chapter President*

## February Program Continued – Speaker Biography

---

### J. Jay Santos, P.E.

Jay is a principal and co-founder of Facility Dynamics Engineering. Facility Dynamics is active in commissioning, controls design, controls master planning, and Fault Diagnostic software. Jay has led the development of DDC/controls master plans for numerous institutions. These plans deal with procurement issues associated with DDC controls and typically include standardized approaches to system sequences, documentation and specifications. He teaches DDC courses for the University of Wisconsin, North Carolina State, and the PG&E Energy Center. He has also developed an Advanced Commissioning Course focused on teaching the skills necessary to functionally test HVAC systems and controls in the field. Jay developed the DDC Online website for the Iowa Energy Center. Jay is member of the HPAC Engineering Editorial Advisory Board. He is also a member of ASHRAE's Professional Development and DDC Guideline Committees.

# ASHRAE Research Report

---

Fahad Rizqi, Resource Promotion Chair, Golden Gate ASHRAE

To everyone that wants to donate to ASHRAE Research, I look forward to talking with you. Remember, all donations are tax deductible, and you may use a check or credit card. Now you can make your donation online at <http://www.ashrae.org>.

Topical Areas and Example Research Projects:

## Energy and Resource Efficiency

- Develop guides for energy efficiency by building and system type
- Generate baseline data and ratings that quantify the performance of existing buildings and systems
- Develop methods for resource conservation and recycling of building components
- Determine the environmental impact of buildings and their materials
- Determine the cost of energy resources: buildings, systems, transportation, power generation and distribution

You can email me if any of you would like more information on the details of the research themes and possible research projects.

See you at the next meeting!!!

Fahad Rizqi, [fahad.rizqi@siemens.com](mailto:fahad.rizqi@siemens.com), 510-723-7833

# Membership Promotion

---

Kristin DeMartini, Membership Promotion Chair

Thanks to Tyler Bradshaw for bringing Pius Kao to join the Golden Gate chapter at our February meeting!

You and colleagues can still take advantage of the special new member offer. We provide two ASHRAE dinners for the price of one (half off each person's meal) for active members that bring a new member with his or her completed ASHRAE application and dues.

Please contact me if you are an active member and still need a name badge.

If you have any questions or suggestions, please contact me directly at [Kristin.S.DeMartini@jci.com](mailto:Kristin.S.DeMartini@jci.com) or 415-672-1048. Thank you!

# Student Activities

---

Tim Goepfner

First, the student turnout for last month's Golden Gate Chapter meeting (Student Night) at Scotts Seafood in Oakland was almost double last year's attendance. Thank you very much to the student chapter advisors for promoting this event. It's really nice to see all those young, fresh, bright-eyed engineers anxious to start their careers in HVAC engineering.

It is time to start taking applications for this year's Don Bryant and Erik Thor Andresen student scholarships. Please promote this scholarship program to any students you feel may be deserving of this award. We want as many applicants as we can get. The instructions for applying and the application are downloadable from the GG web site, under [Scholarships & Awards](#). The deadline for both is March 31, 2007.

## Emergency Code Regulations

---

On January 16, 2007, the California Building Standards Commission approved the emergency adoption of amendments to 2001 California Mechanical Code, Section 407.4.1.3. These regulations, which became **effective on January 18, 2007**, allow the conveyance of the air from corridors to serve toilet rooms of up to 50 square feet, in hospitals, skilled nursing facilities, licensed clinics and correctional treatment centers. This code change will provide a cost savings to these healthcare facilities for the construction of toilet rooms that are accessible to persons with disabilities. The regulations were adopted pursuant to SB 1659 (Chapter 678, Statute of 2006).

## UC Extension HVAC Courses

---

Coming soon...a practical course on HVAC control system design and verification co-taught by Steve Taylor, PE, FASHRAE and Mark Hydeman, PE, FASHRAE. This course starts on Wednesday March 21<sup>st</sup> and runs for 10 weeks (6:30pm-9:30pm each night). This is the fourth year that we have co-taught this course. The previous courses were very well received; we have had a mix of practicing consulting engineers, commissioning agents, general contractors and control system contractors in attendance. This is a completely different course for the one taught by Frank Mayhew many years ago.

This course is only taught once a year. X473 Temperature Controls for Heating and Air Conditioning Systems (EDP 313349) is one of the three core courses for the HVAC/R Certificate program co-sponsored by UC Berkeley Extension Service and the Golden Gate Chapter of ASHRAE. This course will be offered at the UC Berkeley Extension Service at 425 Market Street (at Fremont Street) in San Francisco. This classroom is conveniently located near the Embarcadero BART and MUNI stations. The course costs \$625.

Registration information for the course is located at the UC Berkeley Extension Service website at: <http://www.unex.berkeley.edu/cat/course159.html>

Information on the HVAC/R Certificate Program is located at: <http://www.unex.berkeley.edu/cert/hvac.html>  
Please contact Steve Taylor ([staylor@taylor-engineering.com](mailto:staylor@taylor-engineering.com)) or Mark Hydeman ([mhydeman@taylor-engineering.com](mailto:mhydeman@taylor-engineering.com)) if you have any questions.

## Announcements

---

Congratulations to David McMinn of Santa Rosa, who has recently been honored with the distinguished Fifty-Year Member Award. This award recognizes individuals who have been an ASHRAE member for a minimum of fifty years, a past Society President, Fellow, recipient of the Distinguished Service Award, or otherwise performed outstanding service for the Society.

Congratulations also to Donald Fisher of San Ramon, as co-author along with Richard Swierczyna and Paul Sobiski, of "Effects of Appliance Diversity and Position on Commercial Kitchen Hood Performance," and "Effects of Range Top Diversity, Range Accessories, and Hood Dimensions on Commercial Kitchen Hood Performance" was selected to receive an ASHRAE Technical/Symposium Paper Award.

The presentation of both awards will take place at the summer Meeting in June in Long Beach, California.

## From the Chapter Historian

---

Tom Gilbertson, GGASHRAE Historian

Experience is invaluable...and so is good judgment! History, i.e. the purview of the Historian, allows one to reflect on how both are achieved. ASHRAE, the “science” of heating, ventilating, air-conditioning, and refrigeration is full of opportunities to demonstrate both—experience, and good judgment. Both are related, but not directly! Experience, by my thinking, most frequently comes from bad judgment—all too frequently in my experience.

Water hammer can be a vicious experience.

Working on the Gulf Coast in 1961 (without adequate supervision, I can report), I gained valuable experience, driven home by my bad judgment. In an effort to contain job costs, I selected a three-way mixing valve to replace a diverting valve by having it installed backwards in the 2-pipe changeover system that I was working on. Mixing valves have two inlets and one outlet, and diverting valves have one inlet and two outlets, and cost about twice as much as the mixing valve.

So I simply placed the 6-inch mixing valve in the line backwards. Bear in mind that at the time the minimum wage was \$1.00 an hour and our steam-fitter foreman commanded the lordly sum of \$2.17 per hour, so saving \$480.00 was a big deal—I thought. From this judgment call I gained valuable experience!

When the mixing valve, now closing with the flow of water in the line, slammed and set off a water hammer, it moved the 6-inch lines over 2 feet—and knocked down a portion of the mechanical room’s brick wall. My unanticipated cost to pay for the repair was \$940.00 plus the cost of a new diverting valve and a back-charge of \$370.00 to have it installed—at my expense.

However, I did gain valuable experience which came from my bad judgment—this while learning about the “science” applying the principles learned in ASHRAE.

## ASHRAE Washington Fellowship Program

---

Want to make a difference? Uncle Sam needs YOU! This program will enable selected ASHRAE members to devote a year working in government providing engineering and technical advice to policy makers in Congress, federal agencies (e.g., DOE, DHS, GSA), and the White House Office of Science and Technology Policy.

Federal Government Fellowships provide a valuable public service to the nation while at the same time providing engineers with a unique opportunity to participate directly in the policy making process. This is an exciting, rewarding, and educational period in their professional careers. This enriching experience enables fellows to bring back to their employers an insider's perspective on government decision making that can contribute significantly to the mission and vision of the organization.

There are three types of fellowships available: congressional, White House and federal agency. Fellows may be placed in a Congressional office or committee, the White House Office of Science and Technology Policy, or a Federal Agency. Placement will be based on the needs of the offices and the skills of the applicant.

All Fellowship applicants must be a US citizen and ASHRAE member at the time of application. The following credentials are encouraged: at least five years of professional experience, advanced engineering degree, professional engineer registration, and public policy experience preferred.

ASHRAE members interested in applying for the Fellowship should contact Doug Read, ASHRAE Program Director of Government Affairs, 202-833-1830, [dread@ashrae.org](mailto:dread@ashrae.org)

## Employment Opportunities

---

### Commissioning Engineer: Position available

Work with established commissioning team on challenging projects, as part of a consulting engineering firm committed to green, sustainable, and LEED projects.

2 – 5 years design experience, including controls; field experience desirable. Good technical writing and verbal communication skills. Some travel in greater Bay Area required.

BS degree in mechanical or controls systems engineering preferred; EIT or PE a plus. LEED accreditation a plus.

Excellent work environment in San Francisco, with good transit connections; EOE. Compensation commensurate with experience, with comprehensive benefits package.

Questions about commissioning? Go to [www.bcxa.org](http://www.bcxa.org) or [www.cacx.org](http://www.cacx.org)

E-mail your resume to: [mgorokhovsky@gb-eng.com](mailto:mgorokhovsky@gb-eng.com).

Guttman & Blaevoet Consulting Engineers

2351 Powell Street, San Francisco, CA 94133

[www.gb-eng.com](http://www.gb-eng.com)

Positions also available for experienced HVAC and Electrical engineers.

## Minutes of Golden Gate Chapter Meeting—February 1, 2007

---

Dinner Meeting, Scott's Seafood, Jack London Square, Oakland, CA

- Glenn Freidman, Chapter President, called the meeting to order at 7:00 PM.
- Self introductions.
- Announcements
  - Approve the meeting minutes from January 11 Lunch meeting, which were published in the February Fog Dispenser.
  - Scott Wayland – CTTC
  - Kristin DeMartini – Membership
  - Fahad Rizqi – Research Promotion
  - Tim Goepner – Student Activities
  - Sam Borgeson spoke about his Student Travel Grant to the ASHRAE Winter Meeting.
- 7:30 PM – Ten minute break
- 7:40 PM – Program - Robert Marcial, President-Elect of the Golden Gate ASHRAE Chapter introduced speaker, Charles Eley on the topic of “HVAC Title 24 Requirements: Now and 2008”.
- 8:40 PM – Marble draw, Becky Carta
- 8:45 PM – Next meeting: Dinner Meeting Thurs., March 1. Joint with Redwood Empire Embassy Suites, San Rafael. “DDC Controls” by Jay Santos of Facility Dynamics.
- 8:45 PM – Meeting Adjourned

*Jeff Blaevoet*

## 2006 - 2007 Event Calendar

---

<i>Date</i>	<i>Venue</i>	<i>Presentation Topic</i>	<i>Speaker(s)</i>
Thursday, Mar 1, 2007 Dinner with Redwood Empire Section	Embassy Suites, San Rafael	Successful Control Projects: Why so hard?	Jay Santos, Facility Dynamics
Thursday, Apr 5, 2007 Dinner & Student Night	Pacific Energy Center, S.F.	Awards Night and Vendor Showcase	Vendors and Award Winners
Thursday, May 3, 2007 California Culinary Academy	Annual Field Trip	Tour of the SF Federal Building	Craig Anderson and Staff
Thursday, Jun 7, 2007 Dinner & Spouse & Significant Other Night	Carnelian Room, S.F.	The Asian Century: Current Economic Development and Its Impact on Global Energy	Clark Bisel Flack & Kurtz (S.F.)

Visit <http://www.ggashrae.org/calendr.htm> for updates, presentation summaries, speaker biographies and to register for the meetings. If you have suggestions for meeting topics, please contact Robert Marcial at [rmarcial@pacbell.net](mailto:rmarcial@pacbell.net)

## Change of Address?

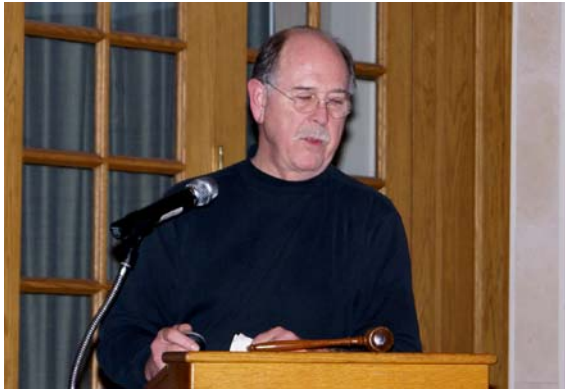
---

All members who wish to make changes in their membership data (change of email address, change of address or change of employer are the most common) must make those changes through the national ASHRAE site <http://www.ashrae.org>.

### **THE GOLDEN GATE CHAPTER CANNOT MAKE THESE CHANGES FOR YOU**

In order to change your membership data, you will need your ASHRAE member number and confidential PIN number, both of which are on the ASHRAE card issued to you each year. Go to the Change of Address link of the ASHRAE website, log in, and then go to Membership Records. If you don't have your PIN or membership card, please call Customer Service: 1-800-5-ASHRAE (US and Canada).

Photos from the February 2007 Golden Gate Chapter ASHRAE Meeting



Left:  
Speaker  
Charles  
Eley.

Right:  
Kristin  
DeMartini  
and Edgar  
DeGuzman



Left: Edda  
Mehaescu  
and Carl  
Jordan.

Right: Erik  
Tuzzio and  
Paul O'Neil



Left: Brahim  
Satootah  
and GG  
guest

Right: Anna  
Levitt and  
Eleanor  
Branch



Left: Two  
delighted  
GG  
members

Right: Dave  
Nazzaro and  
Dick  
Charles.

