

FOG DISPENSER

Golden Gate Chapter



ASHRAE

VOLUME XLVI- NUMBER 1

OCT 2007

October Meeting Details

This is the first meeting of Golden Gate ASHRAE's 2007-2008 year.

Date: Thursday, Oct 4, 2007

Place: Pacific Energy Center
851 Howard Street between 4th and 5th Street

Schedule:

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

Cost:

	Before noon Fri., Sep 28	After noon Fri., Sep 28
ASHRAE members	\$40	\$47
Non-members	\$47	\$50
Students	Free with registration	
Voucher holder	Free with registration	

Remember – if you make a reservation and cannot attend, you need to cancel in advance, or you will be billed. Kristin DeMartini will be taking reservations. If you need to CANCEL, please send a message to Scott at cancellation@ggashrae.org.

Please make your reservation via our Web site.

<http://www.ggashrae.org>.

October Program

Solar Thermal Heating & Cooling



Scott Wayland, P.E., Wayland Engineering
Golden Gate Chapter Secretary

Scott will present the recent advancements in Solar Thermal Heating and Cooling and how this technology can help improve building energy performance and reduce greenhouse emissions. In addition to domestic hot water, a high performance Solar Thermal array can deliver energy to a building's radiant heating system during the winter and a thermally driven cooling system during the summer.

He will review the current and pending policies and incentives related to renewables and carbon, the global solar thermal market and future trends, the recent work on Solar Heating and Cooling and the main barriers preventing greater use.

October Speaker Biography

This year Scott Wayland continues serving on the Board of Governors as the 2007/2008 Golden Gate ASHRAE Secretary. Prior to working here in the SF Bay Area as an HVAC Mechanical Engineer, Scott went to Cal Poly San Luis Obispo. While working on his BSME from 89-93, he concentrated on a few topics focusing around solar energy. His senior project was a solar collector that he built and tested on campus called a salinity gradient solar pond. His concentration also included solar power systems, energy conversion and advanced thermal dynamics. Scott will share his passion about how solar heating and cooling can improve building performance and significantly help reduce carbon emissions by bringing renewables and efficiency together.

Golden Gate Chapter President's Message, October 2007



Welcome back from what I hope was a fun, memorable and productive summer! I hope you were able to strike a healthy balance between your careers, your Self and loved ones.

I'm personally excited about the 2007-2008 season as it will give me an opportunity to serve you and the Chapter as President. One of the main reasons I am looking forward to this season is because of the people I have supporting me and the Chapter. Those people include the Chapter Officers, Board of Governors, and the various dedicated Committee Chairpersons. Those are the people that make things work and I'm deeply grateful for their volunteering spirit. Please take the

time to thank them for the work that they have done and will take on this year. ASHRAE is nothing without members committed to their profession. And this Chapter wouldn't be much without them.

I have my own ideas about what I would like to do in the next 9 months, however, I need to know what you want from me, too. In the spirit of hearing from you, I have implemented an electronic "suggestion box" in the right margin of our Chapter's home page (www.ggashrae.org) for you to tell me what you like, don't like, and would like to see from me as your President and the Chapter as a whole. What's working well? What's not working well? I'd like to know what makes you come to our monthly meetings or (other than providing childcare and 25 hours in a day) what the Chapter can do to get you to come to meetings. Would you like to have shorter and earlier meetings, or perhaps a specific speaker or topic that you'd like to learn more about?

I'd like to call attention to two events happening in the next few weeks. The first is the [Chapter's annual seminar](#) on Friday, September 28. It will be at the Pacific Energy Center at 9:00 a.m. The topic should be of interest to everyone in ASHRAE. We have six speakers speaking on the topic of climate change and what you can do at the personal, professional and political level to improve the quality of buildings such that they reduce their negative impact upon climate change.

The second event is our [first Chapter meeting](#). It, too, will be at the Pacific Energy Center and I invite you to join me in hearing Scott Wayland talk about "Solar Thermal Heating and Cooling". Scott Wayland is very passionate about this topic and will discuss this lower energy alternative.

I've gotten to know some of you over the years and look forward to meeting many more as Chapter President. In future newsletters, I'll say a little more about myself and how I became involved with ASHRAE. In the meantime, I look forward to your comments and suggestions.

Best regards,

Robert A. Marcial

ASHRAE Research Report

Fahad Rizqi, Research Promotion Chair, GGASHRAE

2006/2007 GOLDEN GATE RESEARCH PROMOTION ANNUAL REPORT

Congratulations and thank you to those individuals and firms that donated towards Golden Gate Chapter's Research Promotion goals.

A special thank you to our honor roll investors listed below:

CORPORATE HONOR ROLL (\$250+)

<i>York International</i>	<i>Advanced Cooling Tower Tech</i>	<i>Siemens</i>
<i>Taylor Engineering</i>	<i>R F Macdonald Co</i>	<i>Flack & Kurtz</i>
<i>Norman S. Wright</i>	<i>Air Treatment</i>	
<i>Nazzaro & Nazzaro & Assoc.</i>	<i>ASHRAE-Redwood chapter</i>	

INDIVIDUAL HONOR ROLL (\$100+)

<i>Edgar DeGuzman</i>	<i>Scott Wayland</i>	<i>Dennis Thompson</i>	<i>Steve Taylor</i>
<i>Jeff Blaevoet</i>	<i>Robert Marcial</i>	<i>James T. Macdonald</i>	<i>Richard Charles</i>
<i>Dr. Max Sherman</i>	<i>Gary Harbison</i>	<i>Carl Jordan</i>	<i>Mike Scofield</i>
<i>Glenn Friedman</i>	<i>Ed Arens</i>	<i>Shlomo Rosenfeld</i>	<i>John C Cross</i>
<i>Cory palmer</i>	<i>Robert Phillips</i>	<i>Bernard Beckius</i>	<i>Jonathan Malkovich</i>
<i>Dale Missimer</i>	<i>Alonzo Laws</i>	<i>Bob Levi</i>	

I'm looking forward to a great year with the Golden Gate Chapter and the continued support from its board members, local firms and individuals. This will be another challenging year, as I will be working towards a new 2007-2008 goal of around \$20,000.

Please contact me if you are interested in sponsoring one of the fog dispenser issues, all advertisement slots are currently available.

To make a contribution towards the 2007-2008 campaign please contact me via phone or e-mail.

Thank you and see you at the next meeting!

Fahad Rizqi
Resource Promotion Chair
Golden Gate Chapter
fahad.rizqi@siemens.com
(510) 723-7833

Membership Promotion

Becky Courter - Membership Recruitment Chair GG ASHRAE

This is my third year of involvement with GG ASHRAE. I have previously done the Marble draw at the meetings. This has given me the chance to meet and talk with many people already involved with ASHRAE. This year I will be your membership promotion chair and I am excited about the opportunity to promote and get more people involved with our Golden Gate chapter of ASHRAE.

For all of the existing members, we appreciate your continued support. Do you have a colleague, coworker or friend that is interested in joining? We encourage you to bring them to ANY dinner meeting this year to become a member. If you bring them to a meeting the new member will receive a complimentary dinner. To receive the complementary dinner, the candidate must bring a completed application or fill in an application at the door. A \$165 society membership fee is also required. Please bring cash or a check made payable to ASHRAE.

Please pass this along to anyone you know who might be interesting in joining:

BECOME A MEMBER

The American Society of Heating, Refrigerating and Air-Conditioning Engineers advances the arts and sciences of heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world. Membership is open to any person associated with the field including indoor air quality, building design and operation, and environmental control for food processing and industry.

Membership in ASHRAE allows access to information about state-of-the-art HVAC&R technology and provides many opportunities to participate in the development of that technology. Participation is available locally, through chapters, and through membership on Society committees, such as standards projects committees, which are responsible for the development of standards, and technical committees which advise the Society on research needs, emerging technologies, and technical matters.

If you have any questions about Membership or need an application, you can contact me at BCourter@norman-wright.com or 415-407-5726.

Chapter Technology Transfer Committee (CTTC)

Tyler Bradshaw, ASHRAE Golden Gate CTT Committee Chair

<http://www.ashrae.org/cttc>

<http://ggashrae.org/cttc>

2007/2008 Technology Awards

The Technology Transfer Committee would like to encourage all members to consider participating in the Technology Awards this year. **Entries must be submitted to the Golden Gate TEGA Committee by February 28th 2008.** There are three stages of competition and awards—Chapter, Region and Society. The first step in this process is to submit your project to the chapter level competition.

First place winners from the Chapter competition move onto the Region X Award Competition. Then the Regional first place winners are eligible to move onto the Society competition.

Every year ASHRAE conducts the Technology Awards program to:

- Recognize ASHRAE members who design and/or conceive innovative technological concepts that are proven through actual operating data;
- Communicate innovative systems designs to other ASHRAE members;
- Highlight technological achievements of ASHRAE to others, including associated professionals and societies worldwide, as well as building and facility owners.

Each year Society presents awards in some of the thirteen categories: Commercial Buildings (New and Existing); Institutional Buildings (New and Existing); Health Care Facilities (New and Existing); Industrial Facilities or Processes (New and Existing); Public Assembly (New and Existing); Residential (New and Existing); Alternative or Renewable Energy Use.

For each category a first, second, and honorable mention winner may be named. Also, one of the category first place winners may be selected to receive the ASHRAE Award of Engineering Excellence. The recipient will have demonstrated the best overall compliance with the judging criteria.

The submitted project should be completed and occupied for one year by the due date for the Society award application - September 2008. Therefore, your project should have been occupied by September 2007. By that time there should be good measurement and verification data available. This is not a requirement for the Chapter award but it is a strong suggestion. This is a requirement for the Society award competition. Please see our CTTC website or the following links for more info.

<http://www.ashrae.org/publications/detail/14703>

<http://www.ashrae.org/publications/detail/14704>

<http://www.ashrae.org/publications/detail/14692>

<http://xp20.ashrae.org/STANDCOM/ShortForm.pdf>

<http://resourcecenter.ashrae.org/store/ashrae/newstore.cgi?categoryid=1174&loginid=10995378>

Join the CTTC Committee

If you like to assist the chapter and get involved with ASHRAE, the Chapter Technology Transfer Committee is one of the best places and could use your help. Talk to a board member or contact Tyler Bradshaw at tbradshaw@rumseyengineers.com.

From the Chapter Historian

Tom Gilbertson – Historian GG ASHRAE

History seems to happen much faster as one grows older.

Our industry...heating, refrigerating, ventilating, and air-conditioning, (ASHRAE's fields) provides more opportunities to apply engineering fundamentals than any other industry that I can think of...and more opportunities to experience "life".

If you look at the Handbook series you see that the areas covered are virtually in every endeavor that one can engage. Think about it, schools, hospitals, offices, fruit and vegetable storage, brewing, baking, air filtration, mine and tunnel ventilation, ship-board refrigeration, power plant operation, engine testing, applied thermodynamics, heat and mass transfer, instrumentation and controls, energy efficiencies, system design, and all of the additional related human comfort concerns of heat and humidity. This is like no other field can that one become directly involved.

Looking back at the opportunities that presented themselves in past 50 years, I am amazed at the situations that arose, and also at how the cost of just doing business has changed. In 1962, in San Francisco, one could ride the "Jitney" up an down Mission Street for 20 cents; as I did, to go down town to call on consulting engineering firms the likes of Kasin & Guttman, Ralston & Dwyer, Chamberlain & Painter, G. M. & T. R. Simonson, Leonard Lewis, Ed. Hill, Robert Earl, Charles & Braun, Bentley Engineers, Garretson-Elmendorff, Buonaccoursi & Murray, K. T. Belotelkin, Gayner Engineers, Codington Company, and Keller & Gannon. The 20-cent Jitney rides (the Jitney went from the Embarcadero to Army Street, up an down Mission Street, and you simply flagged then down at any spot, and exited wherever you chose) in those 1948-Desoto's with their interesting collection of passengers was a facet of transportation that has disappeared...like most of the firms that once were the core of the San Francisco consulting engineering community. San Francisco was alleged to have more consulting engineering firms than any other City in the US.

The "trips" almost always included a "lunch" at the Hoffman on Market, for the lordly sum of \$2.75. That's the restaurant that the one-time dishwasher reportedly bought from the owner on his retirement for sum of \$250,000.00..."all-in" as we would now say...and the one big painting on the north wall turned out to be worth \$250,000.00 all by itself! (Lunch was an important activity because the faithful expense account provided reimbursement, not only for the \$0.20 Jitney rides, but even \$0.06 per mile, if I happened to drive my own 40 hp VW.)

All that activity of calling on the engineering firms trying to "provide engineering guidance" to sell temperature controls" when "political correctness" was not the order of the day gave rise to unusual situations. Like the time the FBI wanted to know just how I happened to know Gil Meins, Leo Dwyer's chief assistant. (Ask me about this sometime.)

My concept of fairness precipitated an unusual "run-in" with Don McCloud, the chief engineer for Simpson & Stratta over the Signettic's Project. All I did was infuriate Don, and cause my boss's boss to offer to kill me, in an effort to keep the peace. Sales engineering to consulting engineering firms certainly did test all sorts of skills. This was over a \$600.00 dispute...I guess the dollar went further in those days.

And we did pretty much what were told...like the time my boss's boss...by now we were on a first name basis; I called him MR. Smith, and referred to me as "Mister". Gilbertson"...called me to the front office and said that the Federal Government had requested that I be made available to them for a special project...and I would be going to Johnston Island! It never occurred to me to object.

So I made the necessary arrangements, hired a cabinet maker to produce special, water-tight shipping containers for all the material that I would need, and packed it off for shipment so that I could join the material later on the

Island. The “cabinet maker” that I hired turned out to be the same fellow that made all of the test samples for the furniture cabinets that Hewlett-Packard used, back when they were in the commercial “hi-fi” business. When **MR.** Smith finally heard about my selection of a cabinet maker he was reduced to just shaking his head. The trips to Johnston Island were “enlightening” to say the least. But none of these interesting things (interesting to me anyway) happened to my friends who were not in that old heating, refrigerating & air-conditioning business.

The HVAC business provided opportunities to see the world, and experience any number of engineering calamities, all on an “expense paid” basis. I wonder if the same situation exists today.

Marble Draw

Thanks to everyone who donated prizes last year for the marble draw. We appreciate your support and are looking forward to your support again this year.

The pot for the October meeting is \$500.00, and the odds are 6-1 so be ready to buy your raffle tickets! If you would like to donate a prize for a future meeting please contact Becky Courter at 415-407-5726 or bcarta@nroman-wright.com.

Awards

San Ramon Engineer Receives ASHRAE Paper Awards

LONG BEACH - The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) presented Donald Fisher, P.Eng., with two ASHRAE Best Paper Awards at the Society’s Annual Meeting held here June 23-27.

The award recognizes the authors of the best papers presented at Society meetings.

Fisher is president/CEO, Fisher-Nickel, San Ramon, Calif.

He receives an award for *Effects of Appliance Diversity and Position on Commercial Kitchen Hood Performance (RP-1202)*.

This paper summarizes results from ASHRAE Research Project RP-1202, a laboratory investigation into the effects that appliance diversity and position have on exhaust hood performance. The objective was to quantify the impact that appliance position and diversity, side panels, and front overhang had on the minimum exhaust rate required to provide capture and containment. By making what might appear to be subtle changes in appliance position and/or hood configuration, a wide range in the exhaust rates required for complete capture and containment was demonstrated.

He also receives a paper award for *Effects of Range Top Diversity, Range Accessories and Hood Dimensions on Commercial Kitchen Hood Performance*. This study was a co-funded supplement to ASHRAE Research Project RP-1202.

ASHRAE, founded in 1894, is an international organization of some 50,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.

2007-2008 GG ASHRAE Climate Change Seminar

Friday, September 28 (9:00 am to 4:30 pm), PG&E Pacific Energy Center, San Francisco

Personal, Professional, and Political Climate Solutions

Friday, September 28 (9:00 am – 4:30 pm)
San Francisco, PG&E Pacific Energy Center
Free of charge, pre-registration required

Climate change has swept into America's consciousness. Every day the news carries stories about looming world catastrophes. A panel of speakers will explore what you can do personally, professionally, and politically. Join us to examine the 40% of the United State's energy consumed in buildings and where buildings can help solve the climate solutions puzzle.

We will examine strategies and technologies for greenhouse gas mitigation in buildings and the market transformations underway as governments, academics, businesses, and the public focus on solutions. For more information and to register, visit www.ggashrae.org/climatechange.



Kent Peterson, ASHRAE Society President
The Power of the People: Taking Control of Global Warming



Severin Borenstein, ET Grether Prof. of Business Administration & Public Policy at Haas School of Business, Director of the UC Energy Institute
Global Warming Solutions



Scott Shell, Principal, EHDD Architecture
Building Solutions



Peter Rumsey, Principal, Rumsey Engineers
Building Solutions



Maurice Gunderson, Sr. Partner, CMEA Ventures
The Future Economy of Global Warming Solutions



Panama Bartholomy, California Energy Commission
Future Policy of Global Warming Solutions

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- Taylor Engineering, LLC
- Trane



ASHRAE Golden Gate Chapter
www.ggashrae.org

* All proceeds will go to ASHRAE research & local student scholarships

2007 - 2008 Chapter Meeting Calendar

Date	Venue	Topic	Speaker(s)
October 4, 2007 (dinner)	Pacific Energy Center	Solar Thermal HVAC	Scott Wayland
November 1, 2007 (lunch)	Pacific Energy Center	Geothermal Systems	Mike Erickson
December 13, 2007 (dinner)	San Mateo Marriott	Carbon Neutral	Kent Peterson
January 10, 2008 (dinner)	Scott's Seafood	TBD	TBD
February 7, 2008 (lunch)	Pacific Energy Center	TBD	TBD
March 6, 2008 (dinner)	San Rafael Embassy Suites	TBD	TBD
April 3, 2008 (product show/dinner)	Pacific Energy Center	TBD	TBD
May 1, 2008 (dinner/virtual bldg tour)	Scott's Seafood	TBD	TBD
June 5, 2008 (dinner)	Pacific Energy Center	TBD	TBD

Pictures from the 2007 GG ASHRAE Golf Tournament

Steve Leao – Golf Tournament Chair



Thanks to Steve Leao of Norman S. Wright, the summer golf tournament was a great success. Thank you, Steve for your efforts and thank you to all who participated in the event. Some of those participants appear on this page.

