

FOG DISPENSER

Golden Gate Chapter



ASHRAE

VOLUME XL - NUMBER 6

MARCH 2002

March Meeting Notice

Date: Thursday, March 7, 2001 at 5:30pm
Joint Meeting with Redwood Empire

Place: **Embassy Suites**
101 McInnis Parkway
San Rafael, CA 94903

Cost: \$35 for GGASHRAE members and guests **w/ advance reservations**
\$42 for non-members and **all w/o reservations.**

Time:
5:00 pm Pre-meeting Topic: UV - PCO (Photo Catalytic Oxidation) by our Guest Speaker, Dan Int-Hout
5:30 pm Social Hour
6:30pm Dinner
7:30pm Guest Speaker, Dan Int-Hout, Carrier

All reservations must be received by **Tuesday February 26th**. Contact Robin James via e-mail (ggashrae@hotmail.com) or fax (707-745-5999). Please provide your name, phone number, total number of reservations and the names of those in your party.

March Program:

Speaker: Dan Int-Hout III
Carrier Corporation

Selecting VAV for Acceptable IAQ

In order to meet the increased expectations of building occupants, designers must be aware of the conflicts between first cost economics, occupant productivity and life cycle costs. Buildings that do not meet the needs of the occupants often result in expensive redesign or worse, result in lawsuits against all parties involved. Recent court cases make it imperative that designers understand the changing "rules" of the road. Recent Specifications for VAV components are often flawed, and meeting the specification will result in unacceptable spaces, and poor IAQ.

With the release a number of new VAV terminals, we are getting a number of questions



regarding the proper selection and interpretation of VAV terminal specifications. Dan will discuss proper engineering specifications and designs for this broad product range, with updates on the latest

rules and knowledge regarding VAV box type, linings, accessories and air flow limitations. Additionally, the latest Industry understandings of the proper application of Demand Controlled Ventilation will be discussed.

Golden Gate Chapter President's Message

March 2002



Get out the Vote! Be Heard!

Would you believe that our ASHRAE chapter couldn't comment on any legislation that directly affects our profession? It's true! One of the many mantras of ASHRAE is that "a Chapter cannot speak for Society". In other words, the Golden Gate Chapter can't comment on the upcoming changes proposed for California's Title 24 building regulations. While this message is not the forum for discussing changes in our society, it can be a call for action to our membership!

If you or your firm performs Title 24 calculations as part of your deliverables, the proposed changes could directly affect your designs and equipment selections. I urge you to visit the following website set up by the Energy Commission to review the proposed changes:

http://www.energy.ca.gov/2005_standards/notices/index.html

For your information, the chapter does have an active codes committee, headed by Scott Wayland of Glumac, which has done a great job of reviewing various code changes and issuing comments about them. How can they do this? As a member of ASHRAE, you can write letters, go to hearings, and voice your opinion as a member of ASHRAE! You just can't say that it's ASHRAE's opinion that you are voicing. If you are interested in attending the next meeting of the codes committee, call Scott at 415-398-7667.

The February meeting held at Scott's Seafood, in my opinion, rated 2 thumbs up! We had the honor of hosting our 3 Winter Meeting travel grant winners who each related to the members their experiences from attending their first ASHRAE convention. The East Bay location was convenient for Jim Nemechek to attend, and it was great seeing this great former board member who also happened to nominate me to serve you on this board back in 1996! We were also fortunate to have some 5 people attending their first Golden Gate chapter meeting.

This month we travel north to the Embassy Suites in San Rafael for our first meeting with our Redwood Empire Section. I am very excited about this joint meeting, as I have thoroughly enjoyed the Section's meetings that I have attended. The chapter can be very proud to be associated with such an enthusiastic group!

In April we have our Annual Product Show at the Pacific Energy Center. If you haven't reserved your table yet, send Shaun Webster of York Equipment an email at shaun.webster@york.com. I hope to see you in San Rafael!

Respectfully submitted,
Joseph R. Olivier, P.E.
Chapter President

2002 PROGRAMS GOLDEN GATE CHAPTER OF ASHRAE

DATE	LOCATION	PRE-MEETING	MAIN PROGRAM	SPEAKER
Mar 7	Embassy Suites San Rafael Joint with Redwood Empire Section	Dan Int-Hout Carrier UV - PCO (Photo Catalytic Oxidation)	Effective Ventilation Design: Diffusers, Box Minimums, OSA Damper Control	Dan Int-Hout Carrier Selecting VAV for Acceptable IAQ
Apr 4	PEC San Francisco	Product Show	Scholarship Winners Science Fair Award Winners	Winners
May 2	Social Night, Location TBA	None	Genentech, South San Francisco Field Trip	Mark Hannon Genentech
Jun 6	Carnelian Room San Francisco	Technical Presentation on Hydronics System and Control Valves by Robin James of "Belimo"	The Seven Habits of Highly Effective People Spouse's night	Werner Buck Belimo

PRE-MEETING

**Presenter: Dan Int-Hout III, Carrier Corporation
(same guy as main presentation)**

Topic: UV - PCO (Photo Catalytic Oxidation)

The use of UVC light to reduce or eliminate biological contaminants has been understood for some time. When UV light is exposed to a surface containing a high concentration of Titanium Dioxide, however, the surface acts as a catalyst to oxidize nearby compounds, into CO₂ and Water, significantly faster than with the light alone. When properly configured, there is an opportunity to create an effective air cleaning system. Such a device is being tested at present, and possibilities will be discussed.

MINUTES OF FEBRUARY 7, 2002 GOLDEN GATE CHAPTER MEETING

Location – Scott's Seafood Restaurant, Jack London Square, Oakland

??Pre-Meeting Technical Seminar by Patrick Hale of Yazaki Absorption Chillers

??Meeting called to order at 6:50 p.m.

??Self Introductions

??Three UCB students, Rodney Martin, Gwelen Paliaga, and Jane Lin reported on their Chapter sponsored trip to Atlantic City for the Winter Meeting and AHR Expo.

??Minutes from January meeting were approved.

??David Dacus, Research Promotion Chair, described how donating to ASHRAE Research can help your love life.

??Cory Palmer made a plea for a volunteer to run the Product Show in April.

??Edgar DeGuzman announced that the Annual Golf Tournament will be held at Sharp Park in Pacifica on Friday, June 21st.

??Carl Jordan announced the upcoming ASME meeting on February 13th.

??Scott Wayland, Code Committee Chair, commented on the 2003 Proposals for UMC

??Marble Draw – No one won the prize

??Danny Nielson of ACCO was the main speaker. His presentation was about Process Utilities in the Pharmaceutical and High Tech Markets.

??Meeting adjourned at 9:01 p.m.

Minutes by Bob Levi

Snapshots of the February Meeting



Cory Palmer and Joe Olivier



Student Reports on the ASHRAE Winter Meeting in Atlantic City (Jane Lin)



Speaker Patrick Hale

ASHRAE Research Report

At the monthly meetings please take notice of the table cards. The cards list every individual and corporation that has given to ASRHAE Research, on any level, this campaign year.

The following corporations and individuals have donated on the honor level in the last month. Due to a computer glitch at ASHRAE Headquarters some investors may be left out. We will recognize the omitted contributors in next month's Fog Dispenser.

Corporate Honor Roll Investors (\$150.00 or more)

R. F. McDonald

York International

Individual Honor Roll Investors (\$100.00 or more)

Lynn Longley

Mike Scofield

If you have any questions or would like to donate please contact:



ASHRAE Research
c/o David Dacus
Taylor Engineering
1305 Marina Village Parkway, Suite 101
Alameda, CA 94501
(510) 749-9135 phone
ddacus@taylor-engineering.com

2002 Golden Gate Chapter Tennis Tournament

The Chapter tennis tournament is being revived by popular demand! This year's tournament will be held at the San Francisco Tennis Club on Friday, May 17, 2002, from 9:00 a.m. to 12:00 noon. Registration is first come, first serve, until the tournament bracket is full. Listen for announcements at the monthly meetings and please contact Jason Daters with any questions.

Jason Daters
Tennis Committee Chair
510-723-7728
tennis@ggashrae.org

*****Sponsors Needed*****

We are in search of Companies willing to sponsor a monthly meeting by donating prizes for the "Marble Game" raffle. The majority of the money raised at each meeting is donated to our scholarship fund. Posters will be made advertising the company name and logo of that month's sponsor. If you or your company are interested in helping, please contact Nicolina Guiliano @ 650-872-5246 or email nicolina.guiliano@ebward.com.

Last meeting donors are:
Dave Attard of "Cal Hydronics" for donating (2) \$100 Dinner Certificates
The "Scott Company" with a donation of a Swiss Army Utility Knife
Thanks for your generous gifts!

Register **NOW** for the 2002 ASHRAE Product Show!

The annual Product Show will be held on Thursday, April 4 at the PG&E Pacific Energy Center in San Francisco. More than one hundred attendees are expected, including mechanical contractors, consulting engineers, architects, building owners, and sales representatives.

If your firm has exhibited at past Product Shows, you may be familiar with this annual ASHRAE event. If 2002 will be your first year as an exhibitor, you should be prepared to generate interest in your product or firm, answer questions from other ASHRAE members, and enjoy the exposure you will receive.

The schedule for April 4, 2001 will be as follows:

2:00 – 4:00 p.m. Exhibitor Setup
5:00 – 6:30 p.m. Table Top Displays/Social Hour/Hors d'oeuvres (bar opens at 5:00)
6:30 p.m. Dinner (make payment and reservations through ASHRAE)
7:30 – 8:30 p.m. Student Night / After Dinner Program for ASHRAE

Letters and applications will be sent to all 2001 Product Show exhibitors by March 1. New participants are welcome. We are striving for a mix of equipment manufacturers, consulting engineers / design firms; technology companies (internet and/or software geared to the engineering and construction industries), and HVAC service companies.

Potential exhibitors should contact the 2002 Product Show Chair, Shaun Webster, with any questions.
Phone: 925-417-7223, Fax: 425-426-1188, shaun.webster@york.com

ASHRAE GOLDEN GATE CHAPTER - DINNER RESERVATION FAX

For March 7, 2002

Email: Robin James (ggashrae@hotmail.com)
FAX: (707) 745-5999

Please cancel your reservation if you cannot attend the meeting.

Cancellations must be received by the Tuesday prior to the meeting.

FROM: _____

COMPANY: _____ Phone: _____

Please make _____ reservation(s) for the following people (fill in names below):

Change of Address?

All members who wish to make changes in their membership data (change of address or change of employer are the most common) must make those changes through the national ASHRAE site <http://www.ashrae.org>. In order to do this, 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 web site, log in, then to Membership Records. If you don't have your pin or membership card, please call Customer Service Section: 1-800-5-ASHRAE (US and Canada).

Employment Opportunities

Taylor Engineering is looking for HVAC design engineers to join our team. We specialize in innovative large building HVAC and control system design, energy and indoor air quality analysis, and system commissioning.

Recent projects include the UC Merced Office/Classroom, Master Specifications and commissioning, GAP Headquarters building in San Francisco, GAP San Bruno Phase II, Electronic Arts II in Redwood City and the Title-24 Energy Standard for 2005.

Prospective candidates must have a degree in mechanical engineering or a related degree, a thorough understanding of thermodynamics and fluid flow fundamentals and excellent presentation and writing skills.

Candidates must be PC literate and have a working knowledge of Windows, Word, Excel, and AutoCAD. Design/build or field experience is also desirable. Excellent work environment in Alameda. High salaries for top performers.

Please send resume to:

Glenn Friedman

Taylor Engineering
1305 Marina Village Pkwy
Suite 101

Alameda, CA 94501-1028

Fax: 510-749-9136.

E-mail: gfriedman@taylor-engineering.com

OUTSTANDING OPPORTUNITIES IN SACRAMENTO!

?? Growing metropolitan area

?? Healthy outdoor lifestyles

?? Affordable housing/cost of living

?? Close to urban and resort centers (San Francisco Bay Area, Lake Tahoe, Napa Valley)

If you have the desire to excel and advance your career with a dynamic, leading-edge mechanical engineering firm, then come grow with us!

Capital Engineering Consultants, Inc., a 65 person consulting firm, is seeking top quality **HVAC Engineers** and **Project Managers** to work on challenging and innovative projects, including healthcare, laboratory, education, government, and sustainable design projects. CECI offers excellent compensation, benefits, flexible hours, and a great work environment.

Please send resume to:

Capital Engineering Consultants, Inc.

Tom Duval

7300 Folsom Blvd.

Sacramento, CA 95826

Fax: 916.386.2610

E-mail: tduval@capital-engineering.com

Employment Opportunity at Acutherm

Application Engineer responsible for customer technical support including assisting with design of systems using VAV diffusers and troubleshooting.

Require engineer with P.E. in process or in place and with 1 to 5 years experience in either a design build contracting firm or consulting firm.

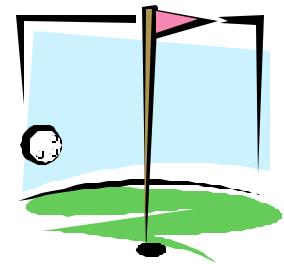
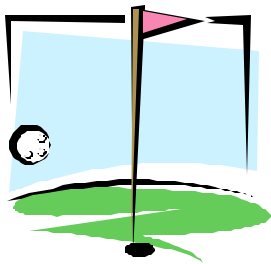
Acutherm website is

<http://www.acutherm.com>

Send resumes to Jim Kline

Fax 510-785-2517

Email jimkline@acutherm.com



ASHRAE Golden Gate Chapter 2002 Golf Tournament

Friday, June 21, 2002 ? 12:00pm Shotgun Start

Sharp Park Golf Course

Registration starts at 9:30 a.m.

Awards Dinner ? Scramble Tournament

? Two "Longest Drive" Contests ? Two "Closest to the Pin" Contests
\$5,000 Putting Green Contest ? Two shots at a \$10,000 Hole in One ? Prize Raffle

Pricing:

(all packages include dinner and golf goodies):

Gold Sponsor..... \$1,800
(4 foursomes, 2 tee sponsorships)

Silver Sponsor..... \$1,400
(3 foursomes, 1 tee sponsorship)

Bronze Sponsor..... \$ 950
(2 foursomes)

Basic Team..... \$ 500
(1 foursome)

Single Player.....\$ 130

Contest Sponsors, Tee Sponsors, and Prize Donations are graciously requested

All proceeds benefit ASHRAE Research

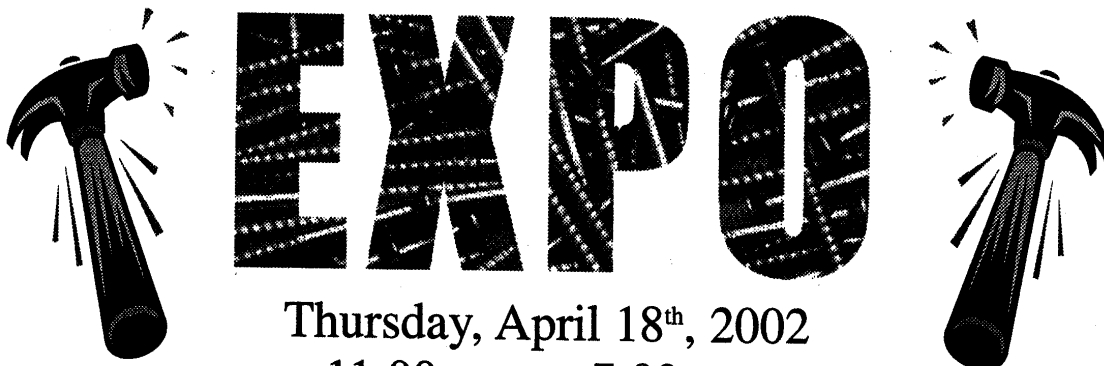
NOTE: THIS COURSE IS LIMITED TO 168 PLAYERS ONLY.

LAST YEAR WE HAVE 180 PLAYERS

MAKE YOUR RESERVATION EARLY SO YOU WON'T BE DISAPPOINTED

For more information, or to sign up your team, please contact Kirk Peterson at 650.872.5207 or via e-mail: golf@ggashrae.org

We invite you to be a "Friends of Construction" sponsor of our
"Careers in Construction"



Thursday, April 18th, 2002

11:00 A.M. – 7:00 P.M.

Veterans Memorial Building, Santa Rosa

Get ready for the biggest construction job fair ever held in the North Bay! Leading building industry associations and dozens of suppliers are joining the North Coast Builders Exchange to help tackle our biggest ongoing problem – not enough good, qualified workers.

The show will include booths where Expo attendees can learn about exciting career opportunities in construction...live demonstrations of framing, plumbing, electrical work, roofing, tiling, painting...displays of heavy equipment...and more!

To help make it happen, we'd like you to become a "Friends of Construction" Sponsor, at a cost of \$250.

You'll be listed in the extensive publicity (radio, newspaper ads, and a special 12-page section that will run in a Sunday edition of the Press Democrat), as well as being identified in all signage and printed material at the event.

Just fill out the form below and return it with your check no later than Friday, March 1st. You'll be helping all of these sponsors listed below make the Expo a reality:



- North Coast Builders Exchange
- American Society of Heating/Refrigeration/Air Conditioning Engineers
- Associated General Contractors
- Civil Engineers & Land Surveyors of California
- Engineering Contractors Association
- Home Builders Association
- Redwood Empire American Subcontractors Association
- Redwood Empire Independent Electrical Contractors

Yes, We'd Like To Be A "Friends Of Construction" Expo Sponsor!

Company Name _____

Key Contact _____ Title _____

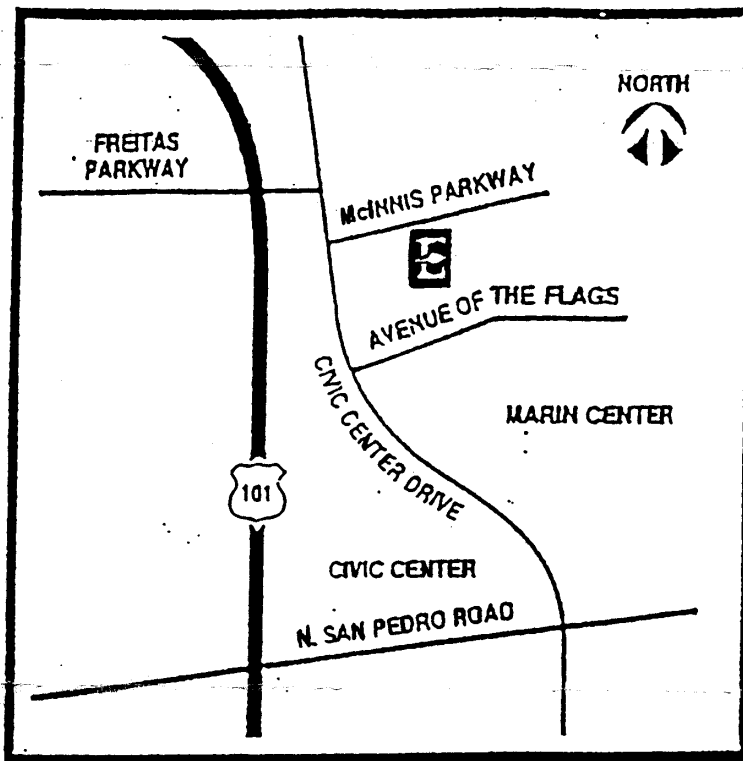
Address _____ Phone _____ Fax _____

Make \$250 sponsorship check payable to: "Careers in Construction Expo", P.O. Box 6025, Santa Rosa, CA 95406

EMBASSY SUITES®

EMBASSY SUITES SAN RAFAEL

101 McInnis Parkway
San Rafael, CA 94903
Tel (415) 499-9222
(415) 472-4746



Directions:

From U.S. 101 North, exit East on North San Pedro Road. Turn left on Civic Center Drive. Turn right on McInnis Parkway.

From U.S. 101 South, exit at Freitas Parkway, turn left over freeway. Left at intersection, then right on Civic Center Drive. Turn left on McInnis Parkway.



Taylor Engineering and its employees proudly support ASHRAE Research

Steven T. Taylor, P.E., Principal
Glenn Friedman, P.E., Principal
Mark Hydeman, P.E., Principal
Allan Daly, P.E., Principal
Jeff Stein, P.E., Engineer
Vali Sorell, P.E., Engineer
Marc Fountain, PhD, Engineer
David Dacus, P.E., Engineer
Todd Lay, Technical Assistant

Taylor Engineering applauds the efforts of ASHRAE and its members to provide the information and tools our industry needs to design healthier, more energy efficient, more comfortable buildings.

Taylor Engineering is a nationally recognized engineering firm specializing in HVAC systems design, energy conservation, indoor air quality, controls, and commissioning.